Concise Explanatory Statement
Chapter 363-116 WAC Pilotage Rules

Summary of Rulemaking and Response to Comments

Washington State Department of Ecology
Olympia, Washington

November 2025, Publication 25-08-016

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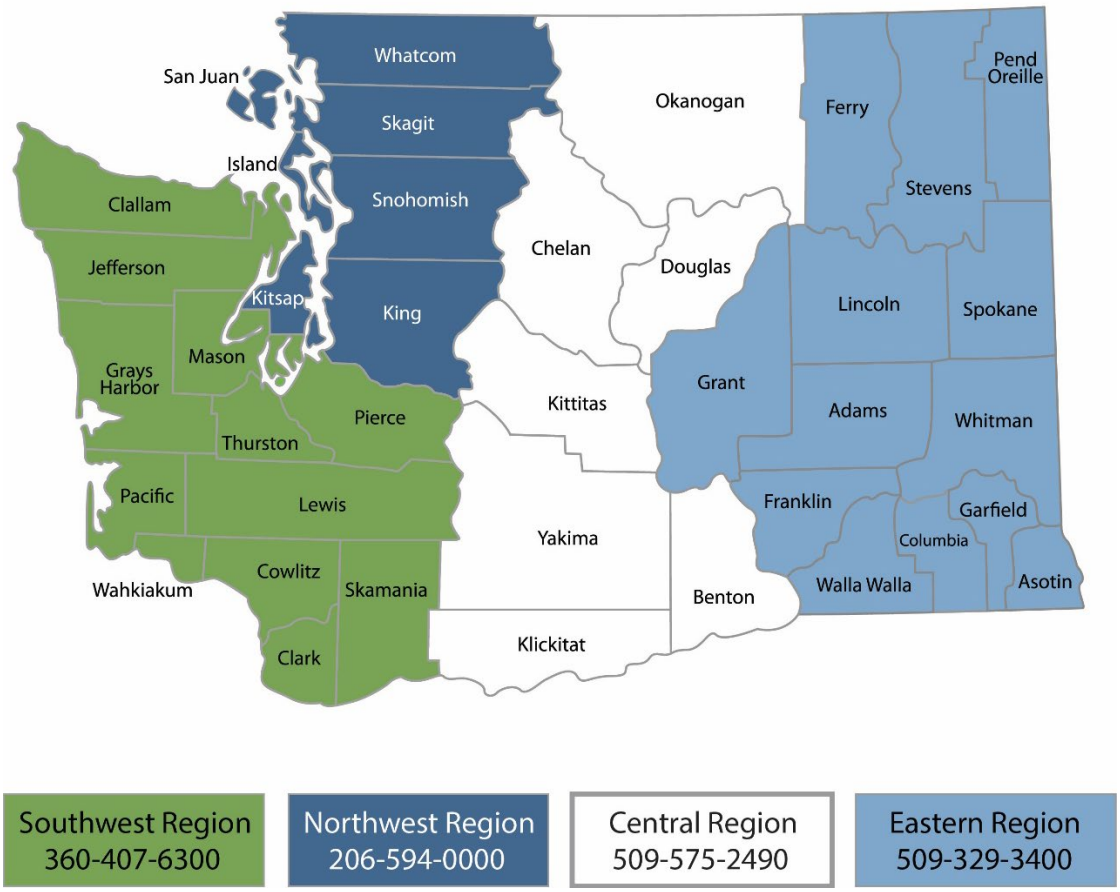
Map of Counties Served



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Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	PO Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	PO Box 330316 Shoreline, WA 98133	206-594-0000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 W Alder St Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 N Monroe Spokane, WA 99205	509-329-3400
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Concise Explanatory Statement

Chapter 363-116 WAC
Pilotage Rules

Spill Prevention, Preparedness, and Response Program
Washington State Department of Ecology
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Introduction

The purpose of a Concise Explanatory Statement is to:

- Meet the Administrative Procedure Act (APA) requirements for agencies to prepare a Concise Explanatory Statement (RCW 34.05.325).
- Provide reasons for adopting the rule.
- Describe any differences between the proposed rule and the adopted rule.
- Provide the Board of Pilotage Commissioners (BPC) and the Department of Ecology's (Ecology) response to public comments.

This Concise Explanatory Statement provides information on the BPC's rule adoption for:

Title:	Pilotage Rules
WAC Chapter(s):	WAC 363-116
Adopted date:	November 20, 2025
Effective date:	December 21, 2025

To see more information related to this rulemaking or other Ecology rulemakings please visit our website: https://ecology.wa.gov/About-us/How-we-operate/Laws-rules-rulemaking.

Reasons for Adopting the Rule

The adopted rule implements updates required by Chapter 88.16.260 RCW, which authorizes the Board of Pilotage Commissioners (BPC) to adopt rules for tug escorts in consultation with the Department of Ecology (Ecology) by December 31, 2025. This rulemaking fulfills a key directive of Engrossed Substitute House Bill (ESHB) 1578, which aims to reduce the risk of major oil spills from small to medium-sized oil-carrying vessels operating in Washington waters.

In passing ESHB 1578, the Legislature stated its intent 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 whales, violate the treaty interests and fishing rights of potentially affected federally recognized Indian tribes, damage commercial fishing prospects, undercut many aspects of the economy that depend on the Salish Sea, and otherwise harm the health and wellbeing of Washington residents."

The law outlines several requirements for the rule, including:

- Achieving Best Achievable Protection (BAP), as defined in RCW 88.46.010.
- Establishing operational and functionality requirements for tug escorts.
- Consulting with Tribal governments, the U.S. Coast Guard, and other stakeholders.
- Minimizing additional underwater noise and protecting Tribal treaty rights and fishing areas.
- Making decisions based on geographic risk zones, especially focusing on Rosario Strait and Haro Strait.
- Using Ecology's vessel traffic risk model to analyze oil spills risk and inform the rule content.

The adopted rule applies to:

- Oil tankers between 5,000 and 40,000 deadweight tons (DWT).
- Articulated tug barges (ATBs) and towed waterborne vessels or barges greater than 5,000 DWT.

The adopted rule is designed to meet BAP and reflects additional considerations outlined in ESHB 1578. This rule updates existing tug escort requirements established in RCW 88.16.190(2)(a)(ii), effective September 1, 2020, and includes the following key changes:

- Expands the tug escort area by about 28.9 square miles to include Rosario Strait and connected waterways to the east, increasing the protected area by approximately 11 percent.
- Establishes minimum horsepower (hp) requirements for tugs escorting these vessels based on the escorted vessel's deadweight tonnage:
    - 2,000 hp for vessels between 5,000 and 18,000 DWT, and
    - 3,000 hp for vessels greater than 18,000 DWT.
- Requires escort tugs to have twin screw propulsion (at least two propellers) for better maneuverability.
- Requires a pre-escort conference between the escort tug and the tank vessel to coordinate operational details of the transit.

Differences Between the Proposed Rule and Adopted Rule

RCW 34.05.325(6)(a)(ii) requires an agency to describe the differences between the text of the proposed rule as published in the Washington State Register and the text of the rule as adopted, other than editing changes, stating the reasons for the differences.

There are some differences between the proposed rule filed on June 11, 2025, and the adopted rule filed on November 20, 2025. The BPC made these changes for all or some of the following reasons:

- In response to comments we received.
- To ensure clarity and consistency.
- To meet the intent of the authorizing statute.

The following content describes the changes and BPC's reasons for making them.

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.

We made the following changes to the pre-escort conference requirement (WAC 363-116-600(7)):

- Added subsection (vii) Recent whale sightings under subsection (b) Navigation to raise awareness of the presence of whales when vessel operators are conducting a pre-escort conference.
- Modified subsection (v) under subsection (c) Operations to add clarifying language related to tethering operations.

> (v) ~~Relative~~ Tethering location (if applicable), relative position, and direction of travel~~, and tethering locations~~ of the tug(s) during the transit.

List of Commenters and Response to Comments

Organization of comments and responses

The BPC and Ecology accepted comments on the proposed rule from June 11, 2025, to August 1, 2025. During this 52-day comment period, we accepted comments by mail, through our online public comment form, and verbally at three public hearings that were held both via webinar and in-person.

We received 14 comment submissions on this rulemaking, including form letter comments and one verbal testimony. Comments and responses are grouped together and organized by topic. We responded to comments below each verbatim excerpt of the comment. For each topic below, commenters are identified before their comment by name or affiliation and by the comment code assigned through the online public comment tool.

We also received 550 duplicate comments from an individual commenter. Some of these duplicate comments were not exactly identical but did not differ substantially. We summarized these comments and provided a single response.

You can see the original comments we received on our online public comments website.[2] Comments are available through this page until two years after the rule adoption date.

We grouped comments together by the following topics:

1. General support of this rulemaking
2. Rulemaking process
    - 2.1. Comments on this rulemaking process
    - 2.2. Comments on future rulemaking and engagement opportunities
3. Comments on the rule language
4. Comments on the Draft Environmental Impact Statement (DEIS)
    - 4.1. General comments on the DEIS
    - 4.2. Comments on modeling related to the DEIS
    - 4.3. Comments on Vessel Traffic Section of the DEIS
    - 4.4. Comments on Underwater Noise Section of the DEIS
    - 4.5. Comments on Plants and Animals Section of the DEIS
    - 4.6. Comments on Air Quality Section of the DEIS
    - 4.7. Comments on Tribal Resources Section of the DEIS
    - 4.8. Comments on Cumulative Impacts Section of the DEIS
5. Comments on the Preliminary Regulatory Analyses (PRA)
6. Other comments

List of commenters

Commenters are listed in Table 1 below in alphabetical order by affiliation or individual's last name. Comment topics are identified by the section and comment number as they are listed in

[2] https://sppr.ecology.commentinput.com/comment/extra?id=HihgcrTsY

the following section, comments and responses. Comments that were submitted as letter attachments are included in Appendix A of this document.

Table 1. List of commenters

Commenter Name or Affiliation	Comment Topic
American Waterways Operators (O-1-1)	**General support of this rulemaking** 1.1 **Rulemaking process** 2.2.1 **Comments on the rule language** 3.1 **Comments on the Draft EIS** 4.1.1, 4.1.6, 4.2.1 **Other comments** 6.1
CDonaldson, Chloe (I-1-1)	**General support of this rulemaking** 1.2 **Comments on the rule language** 3.2 **Comments on the Draft EIS** 4.1.1, 4.4.7, 4.7.7, 4.8.1 **Other comments** 6.2
Doherty, Mike (I-3-1)	**General support of this rulemaking** 1.3 **Rulemaking process** 2.1.1 **Comments on the Draft EIS** 4.1.1, 4.7.1 **Other comments** 6.3
Felleman, Fred (O-2-1)	**General support of this rulemaking** 1.4 **Rulemaking process** 2.1.2 **Comments on the rule language** 3.3 **Comments on the Draft EIS**

	4.1.1, 4.1.2, 4.1.8, 4.1.10, 4.2.2, 4.3.2, 4.5.5, 4.4.2, 4.4.4, 4.7.1
Friends of the Earth[3] (O-3-1)	**General support of this rulemaking** 1.5 **Comments on the Draft EIS** 4.1.1
Friends of the San Juans (O-5-1)	**General support of this rulemaking** 1.6 **Rulemaking process** 2.1.3 **Comments on the rule language** 3.4 **Comments on the Draft EIS** 4.1.1, 4.1.12, 4.2.3, 4.5.1, 4.4.5, 4.6.1, 4.7.1, 4.8.2, 4.8.3 **Comments on the PRA** 5.1 **Other comments** 6.4
Green, Marta (I-2-1)	**General support of this rulemaking** 1.7 **Comments on the rule language** 3.5 **Comments on the Draft EIS** 4.1.1 **Other comments** 6.7
Joint Environmental NGOs[4] (O-7-1)	**General support of this rulemaking** 1.8 **Rulemaking process** 2.2.2 **Comments on the rule language** 3.6 **Comments on the Draft EIS**

[3] Commenter submitted one comment, which included eight individual comment letters and one comment letter signed by 542 individuals. All the comment letters are included in Appendix A.

[4] A comment letter was submitted jointly by nine individuals representing various environmental non-governmental organizations. For the full list of signers and their affiliations, see the comment letter included in Appendix A.

	4.1.1, 4.1.7, 4.1.9, 4.1.11, 4.2.4, 4.3.1, 4.3.3, 4.3.4, 4.5.3, 4.4.1, 4.4.3 **Comments on the PRA** 5.2 **Other comments** 6.5
Lummi Indian Business Council (T-3-1)	**General support of this rulemaking** 1.9 **Rulemaking process** 2.1.4 **Comments on the Draft EIS** 4.1.1, 4.1.5, 4.7.1, 4.7.3
Makah Tribal Council (T-1-1)	**General support of this rulemaking** 1.10 **Rulemaking process** 2.1.5, 2.2.3 **Comments on the Draft EIS** 4.1.1, 4.1.3, 4.7.1, 4.7.4, 4.7.5 **Other comments** 6.6
Quiet Sound (O-6-1)	**Comments on the rule language** 3.7 **Comments on the Draft EIS** 4.5.2, 4.4.6
Swinomish Indian Tribal Council (T-2-1)	**General support of this rulemaking** 1.11 **Rulemaking process** 2.2.4 **Comments on the Draft EIS** 4.1.1, 4.1.4, 4.7.2, 4.7.6, 4.7.8
U.S. Coast Guard (A-1-1)	**Other comments** 6.8
Western States Petroleum Association (O-4-1)	**Rulemaking process** 2.1.6, 2.2.5

Comments and responses

1. General support of this rulemaking

American Waterways Operators (O-1-1)

Comment 1.1

AWO appreciates the Washington State Department of Ecology (ECY) and BPC for engaging with us throughout the rulemaking process. The avoidance of overly prescriptive and limiting language in the draft will ensure vessels can comply with the amendments in a manner that is safe, feasible, and efficient for maritime operations.

CDonaldson, Chloe (I-1-1)

Comment 1.2

Writing as the Environmental Program Manager for the Port Gamble S'Klallam Tribe, I submit this comment regarding measures to reduce the risk of oil spills within the Tribe's Usual and Accustomed (U&A) fishing area. Tug escorts are a proactive strategy that may help prevent spills from grounding or loss of control in marine ecosystems, including treaty protected fishing areas, as well as in areas that have sensitive eelgrass beds. We support risk management plans that reduce the possibility of spills from incidents where a ship may lose steerage or otherwise run aground. The Tribe acknowledges, with the level of ship traffic in the area, it is not if but when a spill may occur. Risk mitigation is as important as post-incident response when it comes to protecting these waters and the ecosystems and wildlife of the region. Reducing the chances for catastrophe is essential to protecting PGST treaty protected rights in the Tribe's lands, waters, and usual and accustomed area. Spill prevention is especially important, as some common spill response measures, such as using dispersals that sink heavier oil. A reduction in spills means a reduction in the chance that spills may sink, either on their own or through chemical dispersant deployment, into these sensitive habitats. Sinking oil may devastate submerged vegetation like eelgrass, which supports forage fish, juvenile fish and crab, and the broader food web stability.

Doherty, Mike (I-3-1)

Comment 1.3

I appreciate the several improvements made in recent decades to the oil transshipment system, but much more must be done. However, I agree with other parties that low probability events can have the potential for very high consequences, at least partially because of the record. The record of spilled oil in Washington's waters in the 1980's and 1990's justifies our concern. Communities, local governments and tribal governments have regularly supported efforts to strengthen Washington State oil spill prevention, preparedness, response; monitoring and damage assessment capabilities. U. S. and Canadian tribal governments have express legal rights related to treaties and certain governmental forums.

I also appreciate the actions of the State Legislature, the Governor, the Department of Ecology Spills Program, the Board of Pilotage Commissioners, and numerous organizations and citizens urging additional safeguards.

1. General support of this rulemaking

The Northern Salish Sea and the Strait of Juan ed Fuca are experiencing increasing congestion in shipping lanes. The expansion of the transshipment of tar sands oil and products will raise additional risks. I support the expansion of tug escort regulations required of offshore oil tankers, to smaller oil tankers and articulated tug barges (ATBs) as well as tow barges between 5,000-40-000 dwt (other than those engaged in bunkering operations).

Felleman, Fred (O-2-1)

Comment 1.4

I definitely appreciate the legislation that led to this, which actually spawned out of the Governor's Orca Task Force that I had the pleasure of participating in and see these recommendations as advancing the conservation of the whale and other species of concern. I support Alternative C. I am going to be at this point representing the Friends of the Earth and we will be providing public comment probably for a broader environmental community.

I also just want to just say, you know, why are we even doing this? You know, just quickly that, you know, from 2012 to 2021, the number of ATBs entering the waterway went from 184 to 316. The movements within the waterway from 2011 went from 87 to 300 plus in 2021. The barges entering the waterway, they went from 321 to 2011 to 91 in 2023. So as the ATBs went up, the barges went down. Intra-movements: 303,554 in 2019 down to 2,617 in 2023. Still a lot of movements, but clearly ATBs were beginning to become more popular as time went on. We all know that. ATBs, called rule breakers by the committee of Congress, being that we're moving tanker volumes of oil with reduced crew sizes. While they do have twin propulsion and are faster, they have other challenges associated with them. So I believe that's a good enough reason to be talking about escorting small tankers through this waterway.

Friends of the Earth (O-3-1)

Commenter submitted one comment, which included eight individual comment letters and one comment letter signed by 542 individuals. Below is the summarized comment.

Comment 1.5

Thank you for this opportunity to provide public comment on the proposed rule change to extend the tug escort requirement to smaller oil tankers, ATBs, and towed barges between 5,000 - 40,000 dwt other than those engaged in bunkering operations.

I appreciate your work, effort, and diligence on this long process and believe that the proposed rule changes meet the primary intent of ESHB 1578 and will add needed safety measures to the rising risk of an oil spill from the increased transportation of oil in the Salish Sea. We both know that even one large oil spill would be catastrophic to the highly endangered Southern Resident orca population, as witnessed with the Exxon Valdez oil spill in Prince Williams Sound in 1989 that resulted in a functionally extinct orca population.

Our region, our Salish Sea Ecosystem, the Coast Salish Tribes, and our marine economies are too fragile for even one major oil spill.

Of the four alternatives evaluated in the Draft Environmental Impact Statement, I support Alternative C (Expansion of Tug Escort Requirements) which provides the greatest assurances to

protect Southern Resident orcas from an oil spill — the primary intent of this rule implementing legislation (ESHB 1578) and Governor Inslee's Orca Task Force recommendations.

Friends of the San Juans (O-5-1)

Comment 1.6

Friends of the San Juans supports the Board of Pilotage Commissioners' proposed rule to expand the existing tug escort requirements (Alternative C in the DEIS). Friends of the San Juans advocated for the passage of the 2019 Engrossed Substitute House Bill 1578 *Reducing threats to southern resident killer whales by improving the safety of oil*. Based on Governor Inslee's Southern Resident Killer Whale Recovery and Task Force recommendation 24, this legislation established initial tug escort requirements in 2020 for small- to medium-sized oil tank vessels in RCW 88.16.190(2)(a)(ii), and included direction for the evaluation of the rules currently being adopted and potential future rulemakings to update tug escort rules.

Tug Escorts for laden (oil cargo carrying) tank vessels are an important and effective accident and oil spill prevention measure. Oil spill prevention is critical to the protection of the Southern Resident killer whales. An oil spill could severely impact and potentially cause the extinction of the Southern Residents […].

Green, Marta (I-2-1)

Comment 1.7

I support the proposed rulemaking based on the clear benefit of reducing the risk of spilling oil in transport.

Joint Environmental NGOs (O-7-1)

Comment 1.8

The undersigned organizations and our thousands of members have worked on environmental issues in Washington State for decades. We are providing these comments because of our commitment to protecting the Salish Sea and all those dependent on it. In particular, we are deeply concerned about the potential for a major oil spill to result in the extinction of the critically endangered population of Southern Resident Killer Whales as occurred to a population in Alaska resulting from the 1989 Exxon Valdez oil spill in Prince Williams Sound.

We appreciate the work of the Board of Pilotage Commissioners (BPC) and the Department of Ecology (Ecology) during this long and inclusive public process. We believe that the proposed amendments to the Pilotage Rules meet the primary intent of the legislation passed in July 2019 (ESHB 1578)[…].

As stated in the June 2024 CR 102 implementing RCW 34.05.320, the proposed rule will "Achieve best achievable protection," as defined in RCW 88.46.010. These requirements are designed to balance compliance costs with the goal of effectively reducing the risk of a catastrophic oil spill in Puget Sound.

Of the four proposed alternative changes to the Pilotage Rules that were evaluated in the Draft Environmental Impact Statement (DEIS), we support Alternative C (Geographic Expansion of

Tug Escort Requirements to tank vessels between 5,000-40,000 deadweight tons) (figure 1). We believe it provides the Best Achievable Protection (BAP) for the critically endangered Southern Resident Killer Whales from an oil spill – the primary intent of this rule.

(Comment includes Figure 1. page xxxiii excerpt showing Alternative C)

By reducing the grounding risk of the target vessels in the area covered in the rule 90.5%, and 11.84% in the entire study area (from Olympia to Port Angeles, north to the Canadian border), Alternative C clearly achieves the BAP. It also advances our region's long-term commitment to help ensure our maritime safety regime is responsive to changes in vessel traffic and associated risk of an oil spill. This is especially important as the likelihood of an oil spill in the Salish Sea has significantly increased recently with the expansion of the Trans Mountain Pipeline, including transits to refineries in Washington, as well as the growing trend to use Articulated Tug Barges (ATBs), which were not required to have tug escorts prior to 2020.

It is also important to note that while the tank vessels subject to this rule represent a small percentage of the total vessel traffic in the study area, these smaller vessels carry a disproportionate amount of oil when compared to those vessels transiting the region not already required to have tug escorts.

While our region has been fortunate not to have been subject to many large oil spills, given the dynamic nature of the maritime industry, the past is not a reliable indicator of the future. Washington State has an aspirational zero oil spill policy. We acknowledge the efforts that have been taken over the years which have certainly contributed to our admirable oil spill record to date. The proposed changes to the Pilotage rules continue that tradition of continuous improvement. However, as previously stated, our region's oil spill risk exposure is not reflected just by the frequency or size of oil spills and our past record does not necessarily represent the future.

Lummi Indian Business Council (T-3-1)

Comment 1.9

On behalf of the Lummi Nation, we thank the WA State Board of Pilotage Commissioners for the opportunity to comment on the proposed Tugboat Escort Rulemaking. The Lummi Nation is a sovereign federally recognized Indian tribe and signatory to the Point Elliot Treaty of 1855 which protects our right to fish in our usual and accustomed areas. The Lummi Nation considers it of highest priority to protect and preserve natural resources that are part of our tradition and are required to sustain and enhance the quality of life of the Lummi people.

The Lummi Nation appreciates the policy objectives to respect treaty-protected fishing rights and resources and intent to minimize vessel traffic impacts to tribal treaty fishing areas. The Lummi Nation supports the expansion of tugboat requirements and the additional functional and operational requirements including involuntary slowdowns during peak migration periods for salmon and orcas.

Makah Tribal Council (T-1-1)

Comment 1.10

1. General support of this rulemaking

The Makah community has witnessed firsthand the devastating effects of oil pollution, with over two million gallons of oil spilled in the Makah treaty area since 1970. The MTC strives to protect Makah treaty rights and resources as they were understood and handed down by Makah leaders at the signing of the 1855 Treaty of Neah Bay. As such, the MTC has invested significant resources in strengthening the Tribe's oil spill prevention, preparedness, and response capacities, including developing close working relationships with the US Coast Guard (USCG), Environmental Protection Agency, and Washington State Department of Ecology (ECY). **The MTC supports the proposed rule language as it raises the protection standard of Makah treaty resources from the threat of oil pollution, even if only marginally.**

The MTC supports the proposed rule language because it raises the protection standard against the threat of oil pollution in the Makah area of interest, even if only marginally. After reviewing the Draft Environmental Impact Statement associated with the rule and other materials, the MTC considers the benefits of extending the tug escort requirements for target vessels (i.e., tankers weighing 5-40K deadweight tons, articulated tug and barges and towed vessels or barges weighing 5K deadweight tons) northward 28.9 square miles and adding functional and operational requirements for tug escorts to be greater than the costs.

Swinomish Indian Tribal Council (T-2-1)

Comment 1.11

Swinomish supports the adoption of Option C, with the expanded Tug Escort Zone and addition of Functional and Operational Requirements, as a reasonable additional safeguard against an unlikely but devastating oil spill. Overall vessel traffic would essentially be unchanged from the existing baseline due to the extension of existing tug escorts rather than adding new escorts. We are also pleased that commutes from Anacortes to Cherry Point would be reduced. The minimal increase in vessel activity is offset by the reduced possibility of a catastrophic oil spill due to a drift grounding in Swinomish U&A.

Response to comments 1.1 through 1.11

The BPC and Ecology appreciate the broad support expressed by commenters for expanding tug escort requirements. We recognize the shared commitment to reducing the risk of a major oil spill, as reflected in the 2019 legislation (ESHB 1578) and the importance of oil spill prevention to protect Washington’s waters, the Southern Resident killer whales, treaty-protected resources, marine ecosystems, and coastal economies. We also recognize the importance of a maritime safety regime that responds to changing traffic patterns and associated risks, and we acknowledge the comments regarding both the benefits and potential unintended consequences of the adopted rule. This general support has been considered alongside all public comments and technical analyses in finalizing the rule language.

2. Rulemaking process

2.1 Comments on this rulemaking process

Doherty, Mike (I-3-1)

Comment 2.1.1

I encourage tribal consultations throughout this process.

Felleman, Fred (O-2-1)

Comment 2.1.2

I want to express appreciation to the BPC and Ecology for a very inclusive process that I think has informed all the participants for both the OTSC as well as the broader community with your workshops as well as others and appreciate your tribal outreach. And hopefully we encourage to take those concerns the tribes have raised to heart. I believe the course of this conversation has elevated some of those concerns and I believe there will be a net benefit even though there will be more tugs on the water. I hope that's felt likewise, but I see definitely benefits the conversation.

Friends of the San Juans (O-5-1)

Comment 2.1.3

Friends of the San Juans supports the comments submitted by the Lummi Indian Business Council. Friends of the San Juans urges the Board of Pilotage Commissioners to comply with the request for a formal government-to-government consultation with Lummi Nation to develop solutions to the impacts to tribal treaty fishing rights.

Friends of the San Juans urges the Board of Pilotage Commissioners to conduct formal government-to-government consultations with all Tribes that request this.

Response to comments 2.1.1 through 2.1.3

We appreciate the recognition of, and support for, Tribal consultation throughout the rulemaking process. Our extensive process included eleven workshops, direct outreach, and formal letters at each phase of the rulemaking, including the EIS scoping phase. We also conducted formal government-to-government consultations with Tribal governments that requested them. This process ensured Tribal governments had opportunities to understand our decision-making, share their perspectives, and provide input on the requirements. Engagement with Tribes has been, and will continue to be, an essential part of both shaping and implementing the rule.

Lummi Indian Business Council (T-3-1)

Comment 2.1.4

We urge the inclusion of mandatory tribal consultation regarding the development of risk models to identify preventive measures and mitigating actions to address potential impacts to tribal treaty fishing rights.

As noted, the Lummi Nation is already experiencing serious adverse impacts to our treaty reserved fisheries. These impacts are in the forms of:

- loss of access to our usual and accustomed grounds and stations (fishing areas) — vessel interference/obstruction with vessel access
- loss of fishing gear from vessel strikes and the like
- loss of harvest opportunity and economic hardship for fishers from loss of catch / income due to both of the above
- economic hardship — gear replacement can cost tens of thousands of dollars annually per fisher
- danger to tribal fishers and fishing vessels from vessel traffic.

Increased vessel traffic can only be expected to exacerbate these intolerable impacts. With these unresolved issues before us, the Lummi Nation will submit a request a formal government-to-government consultation to begin the process for developing solutions to these problematic impacts. We appreciate the opportunity to comment on the proposed rulemaking.

Response to comment 2.1.4

We appreciate the Lummi Nation's expressed concerns and acknowledge the serious adverse impacts to treaty-reserved fisheries from vessel traffic, as outlined in the comment letter. We recognize the importance of Tribal consultation and government-to-government engagement to ensure that these significant concerns are appropriately considered in this rulemaking and future risk modeling efforts. Please see response to comment 4.7.3 for additional information on how the Tribal Treaty fisheries information you provided is incorporated into the EIS.

Makah Tribal Council (T-1-1)

Comment 2.1.5

We extend our appreciation for the tribal engagement provided by BPC and ECY on this rulemaking and the consideration of impacts to tribal rights and resources in the EIS. Tribal workshops began early and occurred often enough that our staff were informed and able to review documents and ideas with sufficient time. BPC and ECY staff made themselves available for staff-level meetings with Makah in addition to their tribal workshop series throughout this process, adding needed flexibility for Makah participation. Additionally, we appreciated that the EIS documented the impact of vessel traffic, including tug transits, on treaty fishing even if outside the Makah U&A. The Makah Tribe is a participant in the ad hoc Tribal Fisheries Lost Gear Subcommittee of the Puget Sound Harbor Safety Committee that aims to explore these impacts and potential solutions.

Thank you for the opportunity to provide comments on the proposed rule language for the tug escort rulemaking. The MTC supports the proposed rule language and appreciates the early, continuous, and flexible tribal engagement provided throughout the rulemaking from BPC and ECY. We look forward to further partnership to raise the protection standard for Makah treaty resources against the threat of oil pollution.

Response to comment 2.1.5

We appreciate the Makah Tribe's support for the proposed rule language and recognition of the early, continuous, and flexible engagement provided throughout the rulemaking process.

Comments related to the Draft Environmental Impact Statement (DEIS) are addressed in Section 4.

Western States Petroleum Association (O-4-1)

Comment 2.1.6

The Western States Petroleum Association (WSPA) appreciates the opportunity to comment on the CR-102 filing proposing amendments to WAC 363-116, Pilotage Rules (the "Tug Escort Rule"), undertaken by the Board of Pilotage Commissioners (BPC) in coordination with the Washington Department of Ecology (Ecology).

WSPA is a trade association representing companies that supply a diverse range of transportation energy sources across the western United States, including Washington. This includes the transportation and marketing of petroleum, petroleum products, natural gas, and other energy supplies.

WSPA has actively participated in this rulemaking process through its membership in BPC's Oil Transportation Safety Committee (OTSC), as well as through stakeholder engagement workshops.

WSPA values the transparent efforts taken by the BPC and Ecology throughout this process. The agencies have demonstrated commendable diligence through multiple meetings, workshops, and the development of the draft Environmental Impact Statement (EIS) and have shown a consistent willingness to address questions and concerns. We appreciate these efforts as we work together toward the shared goal of implementing safe, reasonable, and effective measures to protect Southern Resident Killer Whales from the threat of oil spills.

Response to comment 2.1.6

We appreciate the Western States Petroleum Association's recognition of the transparency and diligence of the rulemaking process. The agencies remain committed to ongoing engagement with our stakeholders and the Oil Transportation Safety Committee to ensure that the adopted rule implements safe, effective, and practicable measures to reduce the risk of oil spills and protect Southern Resident killer whales.

2.2 Comments on future rulemaking and engagement opportunities

American Waterways Operators (O-1-1)

Comment 2.2.1

AWO requests that BPC and ECY conduct a thorough data analysis beginning in the 2028 review cycle to verify all conclusions drawn from the study. Data verification is of primary importance to ensure that the rule's requirements reflect actual oil spill threats and appropriate mitigation measures, especially in the event that lawmakers propose to extend the requirements therein.

Canada requires that tethered tugs accompany laden tankers while transiting certain waters, including the Boundary Pass and Haro Strait. Considering this overlap and for the sake of consistency, AWO asks that BPC consider aligning its tug escort requirements with Canadian requirements in the future.

Response to comment 2.2.1

We acknowledge AWO's recommendation to conduct a thorough data analysis as part of the rule effectiveness assessment required under RCW 88.46.260(1) and to also reconsider aligning with Canada regarding tethering practices. We also want to clarify that the proposed tug escort requirements under this rulemaking only apply in Washington waters. Please see the response to comment 4.1.6 for additional information.

Joint Environmental NGOs (O-7-1)

Comment 2.2.2

We are also concerned that operators of vessels subject to this rule will elect to use Haro Strait rather than Rosario Strait to avoid the additional expense of employing a tug escort. We have already observed such alterations to traditional operations and call on the BPC to monitor its prevalence to determine whether it will be necessary to extend this rule to tank vessels between 5,000 and 40,000 dwt bound to US ports through Haro Strait when the impact of the rule is revaluated in October 2026.

In addition to supporting the BPC's call for the voluntary adoption of Best Management Practices detailed in the Puget Sound Harbor Safety Plan for larger tank vessels, we strongly encourage the BPC to request the Puget Sound Harbor Safety Committee establish an ad hoc cetacean working group to develop a more complete list of voluntary measures commercial vessel operators can make to reduce impacts on all cetacean species for incorporation in the Puget Sound Harbor Safety Plan.

Response to comment 2.2.2

We acknowledge the Environmental NGO's concern regarding operator avoidance of the tug escort rule via Haro Strait and recommendation to evaluate patterns of avoidance as part of the rule effectiveness assessment required under RCW 88.46.260(1). Comment 4.3.4 also addresses route switching and includes the specific sections of the EIS where route switching is discussed.

We also acknowledge your request for a Puget Sound Harbor Safety Committee ad hoc cetacean working group. Please see the response to comment 4.4.3 for information on how we have incorporated this suggestion into the EIS.

We also want to clarify that RCW 88.46.260(1) requires the BPC and Ecology to consider the effects of the rule and whether an update is necessary by October 1, 2028.

Makah Tribal Council (T-1-1)

Comment 2.2.3

While we recognize that industry and oil spill contingency planning requirements have improved since the catastrophic spills that the Makah Tribe endured in the 1970s-1990s, we remain concerned about oil spill risk due to our valuable resources and the response challenges associated with the remote Washington Outer Coast region. For example, although the US oil spill contingency plan framework is based on planning standards, the MTC continues to look for opportunities to develop performance standards, as doing so would heighten the protection standard for Makah treaty-protected resources. Additionally, we remain concerned that some response assets stationed in our area to meet planning requirements are not fit for the operating environment, specifically for open ocean conditions and inclement weather. We continue to research response assets in areas with harsh operating environments (e.g., Alaska) to identify assets that may be better suited for operations on the Outer Coast of Washington. While the area directly impacted by the proposed rulemaking is located outside the Makah U&A, it is inside the Makah area of interest. Pursuant to Makah Ocean Policy, the Makah area of interest includes all areas that Makah treaty resources migrate through. This includes the Alaska and California Current Ecosystems, Strait of Juan de Fuca, and the Puget Sound area including the San Juan Islands region. Ultimately, the Makah Tribe is interested in any opportunity to raise the protection standard for Makah treaty resources from the threat of oil pollution.

Response to comment 2.2.3

We appreciate the Makah Tribal Council's comments and acknowledge the importance of raising concerns about oil spill impacts on Makah treaty-protected resources. Chapter 173-182 WAC, Oil Spill Contingency Plan, requires Ecology to review planning standards at five-year intervals to identify updates that strengthen preparedness and response.

The 2019 legislation narrows this rulemaking's geographic scope to "waters east of a line extending from Discovery Island light south to New Dungeness light and all points in the Puget Sound area, including but not limited to the San Juan Islands and connected waterways and the waters south of Admiralty Inlet to the extent that these waters are within the territorial boundaries of Washington."

Swinomish Indian Tribal Community (T-2-1)

Comment 2.2.4

We understand the challenges in addressing mitigation measures specifically for Tribal resources and appreciate the inclusion of supporting the Puget Sound Harbor Safety Committee's Tribal Fisheries Lost Gear Subcommittee. Support and participation from the Board of Pilotage

Commissioners in that subcommittee will be a positive development in assisting Tribes to recover from the significant impacts of oil shipments and other vessel traffic.

We are pleased to see that protection of the waters, wildlife, and peoples of Washington from catastrophic oil spills is the highest priority for the Board of Pilotage Commissioners. While the adoption of Option C is an important new safeguard, Swinomish believes expanding the tug escort requirement to include Haro Straight, and coordination with Canada on similar rules, is an appropriate future effort. Thank you for this opportunity to comment on the rule making within Swinomish U&A and directly adjacent to the Swinomish Reservation.

Western States Petroleum Association (O-4-1)

Comment 2.2.5

With the June 11, 2025 filing of the CR-102 formally proposing the new Tug Escort Rule under Chapter 363-116 WAC, WSPA requests continued opportunities for engagement in the rulemaking process.

In early 2025, the OTSC discussed its intention to convene at future undetermined dates to explore potential mitigation measures associated with the Tug Escort Rule, such as strategies to minimize impacts of tug operations on treaty fishing and underwater noise. WSPA looks forward to participating in these important discussions.

In accordance with RCW 88.46.260, a reevaluation of the Tug Escort Rule is scheduled to occur by October 1, 2028, and no less frequently than every ten years thereafter. WSPA welcomes the opportunity to engage with both BPC and Ecology during this re-evaluation process, which should allow for the consideration of actual vessel traffic and incident data related to tug escorts under the rule.

As emphasized in WSPA's prior comment letters, we encourage BPC and Ecology to collaborate with the Puget Sound Harbor Safety Committee in updating or developing new protocols and Standards of Care. These measures could help reduce the risk of drift groundings and oil spills from laden tank vessels, while also addressing the increased tug traffic required for compliance. We believe these efforts, along with considerations such as self-repair capabilities for tugs or tank vessels, emergency anchoring procedures, and rescue by a tug of opportunity, can provide a comprehensive safety net to enhance spill prevention without imposing undue operational burdens.

Response to comment 2.2.4 and 2.2.5

RCW 88.46.260(1) requires the BPC and Ecology to consider the effects of the rule and whether an update is necessary by October 1, 2028, and we encourage broad participation in future discussions to help ensure the rule remains effective and protective.

The BPC's Oil Transportation Safety Committee will reconvene after the rule is adopted to develop mitigation measure recommendations for the Board.

3. Comments on the rule language

American Waterways Operators (O-1-1)

Comment 3.1

[…] we also ask that language be added to Section 7. C.V., which is entitled "Relative position, direction of travel, and tethering locations of the tug(s) during the transit." The use of "tethering" implies that at some point, a tug escort will tether to a tank vessel, though this is not true in all cases. To amend this and prevent unforeseen requirements, we advise adding qualifying language such as "if needed" or "if appropriate" to reflect operational realities.

Under Alternative C, BPC is proposing to expand its tug escort requirements for oil tankers northwest towards Patos Island, which includes the Haro Strait and Strait of Georgia. These waterways, and others already covered by the existing tug escort requirements, are transboundary and extend into Canadian territory.

Response to comment 3.1

Thank you for your suggested rule language change. We edited the pre-escort conference topic in the rule language from "Relative position, direction of travel, and tethering locations of the tug(s) during the transit" to "Tethering location (if applicable), relative position, and direction of travel of the tug(s) during the transit."

We also want to clarify that the proposed tug escort requirements under this rulemaking only apply in Washington waters. Please see the response to comment 4.1.6 for additional information.

CDonaldson, Chloe (I-1-1)

Comment 3.2

We respectfully request that the final rulemaking addresses underwater noise pollution and vessel disturbance. Noise pollution is a major impact to marine life, whether salmonids or marine mammals, and increasing vessel traffic could have additional environmental impacts. Speed reduction, acoustic quieting technologies, and designated low-noise zones or communications for low-noise due to the detection of orcas in the area, are important ways to mitigate noise pollution. This helps protect marine animals, including the resident killer whales for which this rulemaking was designed to protect. It is important that noise be recognized and regulated as a form of marine pollution.

[…] we request that the rulemaking consider a strategic tugboat placement near Port Gamble Bay. A standby tug in proximity to the Tribe's waters would ensure timely response capacity for incidents that threaten PGST's hatchery operations, shellfish beds, culturally important sites, and traditional fisheries. This would be an appreciated step in continued inter-governmental cooperation and spill prevention as we work together to protect these ecosystems.

Response to comment 3.2

Ecology and the BPC evaluated a variety of requirements, including requirements for underwater noise certifications, and decided to not include this requirement in the rule due to implementation

challenges. Formally designating low-noise areas is outside the scope of BPC authority and this rulemaking.

We recognize the importance of protecting whales from negative vessel interactions. However, mandatory reduction in vessel speed is outside the scope of this rulemaking. To raise awareness of the presence of whales with vessel operators, we edited the pre-escort conference rule language to add "(vii) recent whale sightings" under Section (7)(b) Navigation.

Please see the response to comment 4.4.7 for information on how your suggestions for mitigating the impact of underwater noise and vessel interactions on SRKW have been incorporated into the Final EIS as voluntary mitigation measures.

The BPC and Ecology acknowledge the request to consider strategic tugboat placement near Port Gamble Bay; however, that is outside of the scope of this rulemaking process.

Felleman, Fred (O-2-1)

Comment 3.3

[…] I feel strongly that in the pre-escort conference, we should include whether or not there's a sighting of the whales. And so we should also be supportive of the sighting networks so that the pilot, or whomever is the master, would have that information. So we would know if there's a fishery, and we would know if there is a whale sighting, and we should proceed accordingly. Clearly, if you come back from an escort a little slower, you're reducing the noise, you're reducing greenhouse gas emissions, you're saving fuel, and you're probably more likely to see fixed fishing gear because you have more time to proceed.

Response to comment 3.3

Upon consideration, we edited the pre-escort conference rule language to add "(vii) recent whale sightings" under Section (7)(b) Navigation.

Please see the response to comment 4.4.4 for information on how your suggestions for mitigating the impact of underwater noise and vessel interactions on SRKW have been incorporated into the Final EIS as voluntary mitigation measures.

Friends of the San Juans (O-5-1)

Comment 3.4

The entire list of recommended mitigations should be addressed in trainings for new tug operators and on-going annual trainings for all tug operators as a required mitigation. This will provide tug operator awareness of the precautions needed to protect Southern Resident killer whales and other marine wildlife.

Another voluntary mitigation measure that should be mandatory is the use of the Whale Report Alert System.

Response to comment 3.4

We acknowledge the recommendation to require mandatory training for tug operators as mitigation measures. Ecology and the BPC evaluated a variety of requirements, including

training and exercise requirements, and decided to not include a training requirement in the rule due to compliance and enforcement challenges and to avoid prescribing how operators manage their work.

We acknowledge the recommendation to make use of the Whale Report Alert System mandatory. To raise awareness of the presence of whales with vessel operators, we edited the pre-escort conference rule language to add "(vii) recent whale sightings" under Section (7)(b) Navigation.

Please see the response to comment 4.4.5 for information on how your suggestions for mitigating the impact of underwater noise and vessel interactions on SRKW have been incorporated into the Final EIS as voluntary mitigation measures.

Green, Marta (I-2-1)

Comment 3.5

This spill prevention measure is limited to 'target' vessels, specifically to assist oil laden tankers and barges 'during propulsion failures or navigational error'. The rulemaking does not appear to reduce the risk of a potential large spill from oil transported as fuel in a cargo or service vessel that—as recently occurred with fatal crashes in Baltimore and NYC—also experience propulsion failures.

The rulemaking intends to balance 'environmental protection, technical feasibility, and operational practicality consistent with industry standards and best practices in spill protection'. Increasing the use the escort tugs is deemed by BCP as a 'Low ' Cost Measure consistent with Best Industry Practice'. Was the option of spill prevention from escort tugs on every target vessel compared to the protection afforded to Rosario Strait and SRKW, mitigating environmental impact, and potential lower cost from an Emergency Rescue Towing Vessel (ERTV) optimally located potentially in Anacortes ever evaluated and if not should this be evaluated in the future?

Response to comment 3.5

This rulemaking applies to oil tankers between 5,000 and 40,000 DWT; articulated tug barges that are designed to transport oil in bulk internal to the hull and greater than 5,000 DWT; and towed waterborne vessels or barges that are designed to transport oil in bulk internal to the hull and greater than 5,000 DWT.

We acknowledge the idea of comparing protection provided by tug escorts to the protection provided by an Emergency Rescue Towing Vessel (ERTV). That comparison was not conducted since it is outside of the scope of this rulemaking.

Joint Environmental NGOs (O-7-1)

Comment 3.6

Maintaining sighting networks and adding whether whales are in the vicinity during the pre-escort conference could also alert the vessel operators of opportunities to exercise best management practices when the whales are present.

Such measures can include traveling at reduced speeds and maximizing distance from the whales while transiting to and from an escort job and turning off the echo sounder when safe to do so.

Reducing speed will reduce noise both above and below water, reduce air and greenhouse gas emissions, as well as save fuel. It would also afford more time for tug operators to see and avoid fishing gear.

Response to comment 3.6

Upon consideration, we edited the pre-escort conference rule language to add "(vii) recent whale sightings" under Section (7)(b) Navigation.

Please see the response to comment 4.4.3 for information on how we have incorporated your suggestions for mitigating impacts to SRKW from underwater noise and vessel interaction into the Final EIS.

Quiet Sound (O-6-1)

Comment 3.7

Quiet Sound's study of the overlap between vessel intensity and whale presence shows that tugs in Rosario Strait are likely to share the waters with Southern Resident killer whales between February-October, with a potential peak in March and April. We recommend that tug escorts and tank vessels be required to review real-time whale presence information in the Whale Report Alert System in the pre-escort conference. Tugs running lite on their way to/from escorting should use the Whale Report Alert System and understand that it is a best practice to avoid whales by steering away if they sight a fin or blow.

Response to comment 3.7

Upon consideration, we edited the pre-escort conference rule language to add "(vii) recent whale sightings" under Section (7)(b) Navigation.

We acknowledge the recommendation to require tugs running lite on their way to/from escorting to use the Whale Report Alert System and to understand that it is a best practice to avoid whales by steering away if they sight a fin or blow. Please see the response to comment 4.4.6 for information on how your suggestions for mitigating the impact of underwater noise and vessel interactions on SRKW have been incorporated into the Final EIS as voluntary mitigation measures.

4. Comments on the Draft Environmental Impact Statement

4.1 General Comments on the Draft EIS

Comments on the Draft EIS

Comment 4.1.1

Several commentors indicated support for the rule language and the rulemaking process (O-1-1, O-2-1, O-3-1, O-5-1, O-7-1, I-1-1, I-2-1, I-3-1, T-1-1).

Additionally, several commentors mentioned support for Alternative C in the Draft EIS specifically in their comments. These include commentors O-2-1, O-3-1, O-5-1, O-7-1, T-2-1, T-3-1.

Response to comment 4.1.1

The BPC and Ecology appreciate the broad support expressed by commenters for expanding tug escort requirements, including specifically for the analysis described in the EIS. We recognize the shared commitment to reducing the risk of a major oil spill, as reflected in the 2019 legislation (ESHB 1578) and the importance of oil spill prevention to protect Washington's waters, the Southern Resident killer whales, treaty-protected resources, marine ecosystems, and coastal economies. This general support has been considered alongside all public comments and technical analyses in finalizing the rule language.

Environmental Trade-Offs Described in the Draft EIS

The following comments reflect perspectives on balancing various environmental impacts of the proposed rule.

Felleman, Fred (O-2-1)

Comment 4.1.2

And the EIS was specifically what I was saying. There are in unanticipated consequences but there are net benefits as well.

Makah Tribal Council (T-1-1)

Comment 4.1.3

The MTC is concerned about the impacts of underwater noise on Makah natural and cultural resources, including the Southern Resident Killer Whales (SRKW), and understands that the proposed rule language will create only minimal increases in underwater noise in the expansion area in the Strait of Georgia. The MTC has partnered closely with the Enhancing Cetacean Habitat and Observation Program as well as Quiet Sound to reduce underwater noise in and near the Makah U&A. However, the MTC views the threat of oil pollution to SRKW (and other Makah cultural and natural resources) as a more significant threat than underwater noise, with longer-lasting and potentially more widespread impacts. The MTC provided similar input to

Transport Canada on their study investigating potential changes to the Strait of Juan de Fuca Traffic Separation Scheme to reduce underwater noise impacts to foraging SRKW.

The MTC supports the proposed rule language because it raises the protection standard against the threat of oil pollution in the Makah area of interest, even if only marginally. After reviewing the Draft Environmental Impact Statement associated with the rule and other materials, the MTC considers the benefits of extending the tug escort requirements for target vessels (i.e., tankers weighing 5-40K deadweight tons, articulated tug and barges and towed vessels or barges weighing 5K deadweight tons) northward 28.9 square miles and adding functional and operational requirements for tug escorts to be greater than the costs.

Swinomish Indian Tribal Community (T-2-1)

Comment 4.1.4

The Swinomish Reservation is within the area studied for this DEIS and all the area studied is within Swinomish U&A. Swinomish has a strong incentive to both limit additional vessel traffic in this already overburdened area and to limit the potential for a catastrophic oil spill in the study area which would fundamentally alter the Swinomish way of life and further impair its Treaty rights.

Swinomish supports the adoption of Option C, with the expanded Tug Escort Zone and addition of Functional and Operational Requirements, as a reasonable additional safeguard against an unlikely but devastating oil spill. Overall vessel traffic would essentially be unchanged from the existing baseline due to the extension of existing tug escorts rather than adding new escorts. We are also pleased that commutes from Anacortes to Cherry Point would be reduced. The minimal increase in vessel activity is offset by the reduced possibility of a catastrophic oil spill due to a drift grounding in Swinomish U&A.

Lummi Indian Business Council (T-3-1)

Comment 4.1.5

The Lummi Nation considers it of highest priority to protect and preserve natural resources that are part of our tradition and are required to sustain and enhance the quality of life of the Lummi people. While we support the inclusion of increased mitigation steps (Alternative C in the DEIS) to prevent a catastrophic oil spill in the Puget Sound, we also acknowledge that we are already experiencing adverse impacts to our treaty-reserved fisheries due to the increased vessel traffic [...].

Response to comments 4.1.2 through 4.1.5

Although the EIS does not weigh benefits and costs, it does provide an impartial and scientific analysis of probable significant adverse impacts. It is intended to support decision-making. We're glad it helped these organizations and governments make their individual assessments of environmental trade-offs.

Geographic Scope of Alternative C

American Waterways Operators (O-1-1)

Comment 4.1.6

Under Alternative C, BPC is proposing to expand its tug escort requirements for oil tankers northwest towards Patos Island, which includes the Haro Strait and Strait of Georgia. These waterways, and others already covered by the existing tug escort requirements, are transboundary and extend into Canadian territory. Canada requires that tethered tugs accompany laden tankers while transiting certain waters, including the Boundary Pass and Haro Strait. Considering this overlap and for the sake of consistency, AWO asks that BPC consider aligning its tug escort requirements with Canadian requirements in the future.

Response to comment 4.1.6

The tug escort requirements in all of the alternatives analyzed in the EIS, including Alternative C (rule language), only apply to waters within Washington's territorial boundaries (RCW 11.16.260, see Location of Rulemaking in the EIS Summary and Section 2.2.1 of the EIS). None of the requirements apply in Canadian waters, nor do they overlap with Canadian tug escort requirements. In the Final EIS, we have updated Figure 1 to include the US-Canadian border in response to this comment.

The EIS Study Area, where impacts are described, does extend into Canadian waters in order to capture potential transboundary impacts (e.g. oil pollution, water quality, etc.).

We agree it's important to continue coordinating with Canadian authorities to align tug escort requirements where possible.

Order of Information Presented in the EIS, EIS Scope, Alternatives, Clarification of Calculations

Joint Environmental NGOs (O-7-1)

Comment 4.1.7

Burying the Lead

While we support the proposed draft rule amendments, we are concerned that the DEIS does not present the evidence supporting the recommendation until page 35 in the DEIS PDF. Rather than having the benefits described in the Executive Summary or Fact Sheet in the DEIS or Fact Sheet provided to the OTSC, the first time the actual reduction of the risk of groundings by target vessels is buried within table 2 under the section of Environmental Health Releases. Even there it is presented in an obscure manner:

"Under Alternative D, the probability of a target vessel drift grounding increases by 11.84% over Alternative A across the entirety of the EIS Study Area. In the rulemaking area in particular, Alternative D would result in a 90.5% increase in drift grounding probability."

The DEIS uses this same language in the Major Findings section found on page 78 in the PDF of the DEIS. By limiting the focus of the DEIS to the negative consequences of removing the escort requirement, rather than the benefits of retaining it, the only way of understanding the true value of the escort requirement for the target vessels in the area covered by the rule is by analyzing the increased likelihood of a grounding if the requirement is removed.

This is a result of the fact that Alternative A, the “no action” alternative, actually reflects the new tug escort regime in place since 2020 for tank vessels between 5,000 and 40,000 dwt as called for in ESHB 1578.

However, since this requirement could be removed or modified as a result of this rule making, we suggest the no action alternative should reflect the condition prior to when the temporary escort requirement was implemented, which is currently represented as Alternative D. This has significant impact on the regulatory analysis which we describe later in our comment letter.

While the results are the same, a far more understandable way of representing the findings is that the risk of a drift grounding is reduced by 90.5% by preserving the current escort regime in those regions in which the tug escorts are deployed and 11.84% in the entire study area. This statement is not found until page 85 in the PDF.

In addition, since the focus of the DEIS was to analyze the impact of the proposed rule changes, which is limited primarily to adding just 28.9 square miles to the area in which escorts are already required, the risk of a grounding in the rule area is only reduced by 1.6% when the extension is added to Alternative A as reflected in Alternative C. Based on the estimates presented in the regulatory analysis, which we also take issue with, the likelihood of a drift to occur increased from once every 189 years to once every 186 years for the entire study area.

The benefit of retaining the (temporary) post 2020 escort requirement is further misrepresented on page 48 in the DEIS by the statement that the elimination of the current tug escort requirement (Alternative D) increases the likelihood of a drift grounding of target vessels from 186 years to 167 years (11.84%) for the entire study area as compared “no action” Alternative A. This reflects that a smaller interval between events is a greater likelihood of a grounding to occur which would be a much clearer way of stating the finding.

The DEIS continues in its double negative representation of the benefit of tug escorts to estimate the removal of the current (post 2020) requirement will result in the likelihood of an oil spill recurring from a drift grounding to decrease from an unimaginable 25,546-year event to a 22,841- year event. In addition, this remarkable characterization of the rarity in which a grounding results in an oil spill is clearly a reflection of the few spills with which they had to calibrate the model.

Commentor O-7-1's letter also included the following comments regarding the EIS’s focus on probable significant adverse impacts to the environment and benefits associated with tug escorts.

While the DEIS does not clearly depict the benefit of the proposed rule for reasons previously described, there are also unintended consequences associated with the addition of more tugs plying the region, which was the primary focus of the DEIS. We strongly believe that those consequences are far outweighed by preventing the long-term catastrophic impacts of a major oil spill while only increasing the number of vessels large enough to carry AIS transmitters by less than one percent according to the DEIS.

[...] In addition, we urged the BPC to accurately characterize the benefit of tug escorts in the beginning of the DEIS for the proposed rule rather than what would happen if they were removed.

Commentor O-7-1 also included a summary of recommendations at the end of their letter. Relevant excerpts to this section of the comment letter are included below:

Present the results in the beginning of the document and fact sheet in terms of the result of the proposed rule to reduce the likelihood of a grounding and oil spill rather than what would occur if the rule was not implemented.

Felleman, Fred (O-2-1)

Comment 4.1.8

[...] I do believe that we buried the punchline in both the fact sheet as well as in the EIS in terms of the net oil spill reduction measure.

[...] This is a…I saw this 90% that was presented. I don't know where that is in the document. It certainly should be on the fact sheet and it's a very important thing.

[...] I believe we should really focus on that and actually put the punchline in the front of the document. And the EIS was specifically what I was saying. There are in unanticipated consequences but there are net benefits as well.

Response to comments 4.1.7 and 4.1.8

We understand commentor O-7-1 to be making four primary points in this section of their comments. Commentor O-2-1 also provided comment on points 1 and 2 below. We respond to these comments together:

1. Order of Information Presented in the EIS and Specific Language Used:

The language referencing the 11.84 percent and 90.5 percent change in risk as a result of removing current tug escort requirements for target vessels appears in the Major Conclusions section of the EIS summary both explicitly (Table 2, Summary of impacts and proposed mitigation) and in narrative form with a reference to "significant and unavoidable increase in oil spill risk under Alternative D" (EIS Summary, Major Conclusions). This summary document follows SEPA requirements and agency practices for how the information is presented. Please see WAC 197-11-440 (EIS Contents) for information on required elements of the EIS, including the summary. Other required components of the summary (background, location of the rulemaking, roles, site background and project history, purpose and need, environmental review process, scoping, and summary of alternatives) come first in this document structure to lay the groundwork for understanding the major conclusions. We also included the EIS Summary as a separately linked document on the SEPA Register for easy access to key information, with the same information appearing there as well. WAC 197-11-440 and agency practices also require that publication and ADA accessibility information, Ecology contact information, a signed cover letter, fact sheet, and table of contents precede the summary. The information emphasized by commentor O-7-1 appears as early as possible in both the Summary and the Draft EIS.

The results of the oil pollution analysis are presented clearly and in multiple locations. They appear in the EIS Summary and Section 4.2 of the EIS. They are also referenced in Section 4.3, Section 4.5, Section 4.7, Section 4.8, and Section 4.9 of the EIS. A more in-depth discussion is presented in Appendix C, including the summary table and supporting technical sections.

Both commentors also reference a fact sheet provided to the Oil Transportation Safety Committee (OTSC), an advisory body to the BPC. This was a preliminary draft shared in January 2025 to support early decision-making and was clearly marked as subject to change before publication of the EIS.

2. Inclusion of Environmental Benefits and Benefits of Tug Escort Requirements:

Environmental benefits are an important consideration in the rulemaking process. However, under SEPA, we are required to identify and evaluate probable significant adverse environmental impacts (see e.g. WAC 197-11-402 or WAC 197-11-408) and to consider environmental consequences associated with agency action. Because of this, EIS's do not include a detailed assessment of the benefits of a proposed action nor do they weigh the impacts against benefits. The EIS is intended to present scientific information in a clear and impartial manner that meets SEPA requirements and is internally consistent with identified alternatives.

A description of the role of tug escorts in the maritime safety system is described in the EIS as part of the context and background for the rulemaking. Please see the Site Background and Project History in the EIS Summary, Section 1.2.1, and Section 2.3.1. Section 1.5.2.2 in Appendix B also describes tug escorts as part of a marine safety system, including a summary of recent analyses and studies.

Information about environmental benefits will come from several sources including in the Preliminary Regulatory Analyses (PRA) and Final Regulatory Analyses (FRA), previous studies and references, and input from Tribes, stakeholders, the OTSC, and the public. Please see "Benefits analysis", Chapter 4 of the Preliminary Regulatory Analyses[5] for more information.

3. Request to change the No Action Alternative:

We acknowledge that considering removal of the post 2020 requirements as an alternative introduces some nuance to the analysis. However, in consultation with the BPC and Ecology's Assistant Attorneys General, we determined that the alternative structure used in the EIS is the best approach. The SEPA Rules refer to describing the impact of an agency's action, in this case the BPC's rulemaking on tug escort requirements for target vessels (see e.g. WAC 197-11-060). The No Action Alternative assumes that the ongoing activity or the "status quo" would continue if the agency action does not occur.

Commentor O-7-1 refers to the current tug escort requirements for target vessels as "(temporary) post 2020 requirements." This statement is incorrect. ESHB 1578 does not include a sunset date on the tug escort requirements the Legislature implemented in 2020. If the BPC were to do nothing or make no changes under this rulemaking, the tug escort requirements for target vessels put into place by the Legislature under ESHB 1578 would continue (i.e., the "status quo"). Alternative A is therefore an appropriate No Action Alternative because it reflects the

[5] https://apps.ecology.wa.gov/publications/documents/2508011.pdf

requirements established in 2020 (status quo). Unlike Alternative A, Alternative D departs from the five-year status quo established under ESHB 1578.

Furthermore, the alternatives assessed in the EIS are the result of a BPC vote that occurred in March 2024[6]. The OTSC specifically included Alternative D (Removal) in their recommendation and the legislation explicitly gives the BPC the option to consider removing the existing requirements. Please see Section 2.4 through 2.9 in the EIS for information on the rulemaking alternatives and their development.

4. Clarification of Risk Calculations around Communication:

Commentor O-7-1 provided comments on the way drift grounding risk results are presented. Communicating about the very low risk (but high consequence) events can be challenging. As the EIS describes, drift groundings are rare and oil spills from drift groundings specifically are even more rare.. The information is presented in a clear, concise, and impartial manner across the EIS, consistent with WAC 197-11-400 to support decision-making. The EIS does not take a position on the alternatives or seek to prioritize one over others.

For representing target vessel drift groundings, we elected to present the results using a measure of probability called a "recurrence interval." Recurrence intervals are most commonly used to describe flood magnitude and probability. For example, a "100-year flood" means that a flood of that magnitude has a 1 percent chance of occurring in any given year. Recurrence intervals are not predictive of how frequently a specific event will occur or the number of years between such an event. Recurrence intervals are useful for describing low-probability events like oil spills because they put probability into a more easily understandable format. For more information about recurrence intervals, please see Section 4.2.1 of the EIS or Section 3.1.4.1 of Appendix C.

We also want to clarify a couple of points in commentor O-7-1's comments. The reduction in drift grounding risk for the EIS Study Area between Alternative A (No Action) and Alternative C (Expansion) is 1.6 percent. A drift grounding in Alternative A is a 186-year event. A drift grounding in Alternative C is a 189-year event. A shorter recurrence interval corresponds with a higher probability of the event occurring. The risk of an oil spill from a drift grounding in Alternative A (No Action) is a 25,546-year event. The risk of an oil spill from a drift grounding in Alternative D (Removal) is a 22,841-year event. Again, a shorter recurrence interval corresponds with a higher probability of the event occurring.

Commentor O-7-1's comments about model calibration are addressed in comment 4.2.4. For more information about the preliminary regulatory analysis, which commentor O-7-1 references, see response to comment 5.2.

Request for OTSC Information

Joint Environmental NGOs (O-7-1)

Comment 4.1.9

Previous Concerns Were Not Addressed in the Primary Findings

[6] https://pilotage.wa.gov/

This approach was taken despite the fact that the BPC and Ecology received comments from the environmental community at the 13 February 2024 OTSC meeting criticizing the way in which Ecology presented the modeling results in its reports to the legislature on this rulemaking and that for the Emergency Response Towing Vessel (ERTV). These concerns were reiterated in letters to the BPC dated 19 August 2024 and 16 December 2024.

The primary focus of those comments pertained to Ecology's failure to focus on documenting the percent to which the implementation of the current tug escort requirements reduced the risk of a drift grounding in the waterways in which the escorts were deployed and not conflate the results with the impacts of removing the provision throughout the study area (Olympia-Port Angeles Canadian border). It is hard to imagine how an escort in Rosario Strait will have any impact on a drift grounding in Tacoma. [...]

Benefits of Tug Escorts to Prevent Groundings by Target Vessel Type:

Ecology conducted more detailed analyses of its model in response to the feedback it received from the OTSC, which are not presented in the DEIS. The results from Summary #2 of the filtering analysis they conducted, presented below, show how the tug escort requirement reduces the likelihood of a drift grounding by tank vessel type within the rule area in which the escorts are deployed.

The first results from the filtering analysis evaluated the likelihood a tug escort could prevent a drift grounding in the rule area by vessel type.

(*Comment letter contains a table of results in response to"Question 1: If results for Rosario Strait; Bellingham Channel, Sinclair Islands & waters east; Guemes Channel and Saddlebags combined, what is the percent (absolute) change in risk from Sceneario 1 to Scenario 2?")*

The results from Ecology's additional modeling analysis revealed that the proposed escort requirement in the rule area reduces the risk of a drift grounding by 42.56% for barges, 26.47% for ATBs, 57.89% for chemical tankers, 36.36% for all tank ships, and 42.01%. for all tank vessels.

Commentor O-7-1 also included a summary of recommendations at the end of their letter. Relevant excerpts to this section of the comment letter are included below:

Include analysis of the likelihood tug escorts could prevent a drift grounding by vessel type within the rule area.

Eliminate the study area wide analysis or emphasize the importance of focusing on the rule area.

Felleman, Fred (O-2-1)

Comment 4.1.10

[...] I do not understand why we did not use the, what do you call it, the analysis that the OTSC specifically asked for because the, what do you call the term, I forget the… Question 1 of the filtering summary of #2. Right, so if you just look at that, it breaks it out for just the area where the escorts are occurring and by tank vessel type. And so the total for all laden tank ships, we have a 36% reduction for all laden tank vessels, a 42% reduction. It goes as high as 57% for laden chemical carriers, 26 for ATBs and tank barges have 52%.

[...] The data that break it up by waterways on page 48, I don't understand.

Response to comments 4.1.9 and 4.1.10

We understand commentor O-7-1 to be making three primary points in this section of their comments. Commentor O-2-1 makes similar points and responses to these comments are included in part 1 and 2 of the response below. We respond to these comments below:

1. Presentation of Results by Zone vs. by Entire Study Area:

Modeling results for vessel traffic and oil pollution are presented and described both by zone and for the EIS Study Area in the Draft EIS. We determined that providing this information both by zone and for the entire EIS Study Area is the most complete and impartial approach to sharing information about changes in vessel traffic and risk.

For distribution of escort tug underway time associated with target vessels both by zone and for the entire EIS Study Area, please see Table 5 and Table 6 and associated discussion in the EIS. For distribution of oil spill risk probabilities (loss of propulsion events, drift groundings, and oil spills from drift groundings) both by zone and for the entire EIS Study Area, please see Table 9, Table 10, and Table 11 and associated discussion in the EIS. Additional information and discussion is provided in Appendix B and Appendix C. The EIS also included maps which show the distribution of modeled vessel traffic (Table 6, 8, 9), and distribution of oil in various worst case discharge scenarios (Figures 14-17 in Appendix C).

Additional summaries of the OTSC discussion of early zone-based risk calculations, prior to the development of specific alternatives, are publicly available and part of the rulemaking record. They can be found in the OTSC meeting minutes from February 13- 28, 2024, available on the BPC website at: https://pilotage.wa.gov/resources.html.

2. Materials Provided to the OTSC to Support Decision-Making:

During the OTSC's process of developing rulemaking recommendations for the BPC, Ecology prepared a series of ad hoc analyses based on questions that arose during those preliminary discussions (called "Tug Escort Analysis Filtering Results Summary #2)." This document, which included results summarized by vessel type, was presented at an OTSC meeting, and served as one input the OTSC used to inform the development of the rulemaking alternatives they recommended to the BPC.

The EIS does not include modeling results by vessel type because none of the alternatives identified by the OTSC and voted on by the BPC differentiated by vessel type. Differentiating risk by vessel type is therefore not relevant to the analysis of reasonable alternatives in the EIS. However, the OTSC materials that commentor O-7-1 references are part of the rulemaking record and a summary is publicly available as part of the OTSC meeting minutes for January 10, 2024, on the BPC website at: https://pilotage.wa.gov/resources.html.

Appendix Titles, Publication Practices

Joint Environmental NGOs (O-7-1)

Comment 4.1.11

Ecology reviewed data on tank vessel incidents and oil spills in the EIS study area to evaluate how well the model was calibrated to represent whether a tug escort could have been of assistance to reduce the risk of a grounding and oil spills. The results are presented in Appendix C "Environmental Health: Releases Discipline Report."

We find this to be a misleading title for a title in an appendix with such important information, and like all the other appendices it is not included on Ecology's or the BPC's websites with the DEIS, no less hot-linked as is often the case to facilitate review of such voluminous documents.

Instead, the appendices can only be found in the SEPA Register (https://apps.ecology.wa.gov/separ/Main/SEPA/Search.aspx).

Commentor O-7-1 also included a summary of recommendations at the end of their letter. Relevant excerpts to this section of the comment letter are included below:

Include the appendices in the DEIS.

Hotlink the table of contents to the sections in the DEIS and Regulatory Analysis.

Response to comment 4.1.11

Wherever possible, we used the standard terminology for elements of the environment in WAC 197-11-444 for titles of the appendices and EIS sections. This allows for consistency across Ecology's environmental impact documents and for continuity with the SEPA Determination of Significance/CR-101 documentation issued as part of this rulemaking in 2024.

WAC 197-11-440(7) (Appendices) states that "Technical reports and supporting documents need not be circulated with an EIS (WAC 197-11-425(4) and 197-11-440 (2)(k)), but shall be readily available to agencies and the public during the comment period." Under WAC 197-11-580, Ecology is required to publish all environmental documents, including EISs in the SEPA Register (the link referenced in this comment). The SEPA Register page for this EIS includes the EIS, EIS Summary, and all technical appendices. Both the BPC (https://pilotage.wa.gov/) and Ecology (https://ecology.wa.gov/about-us/who-we-are/our-programs/spills-prevention-preparedness-response/legislative-work/bpc-tug-escort-rulemaking) websites link directly to the SEPA Register page where the EIS, EIS Summary, and all published appendices are listed.

Specific Language Recommendations

Friends of the San Juans (O-5-1)

Comment 4.1.12

DEIS Section 2.2.1 RCW Geographic Scope and throughout:

The DEIS' interchangeable use of "Salish Sea" as defined in Chapter 237-990 WAC and "Puget Sound" as defined in WAC 220-300-280 is confusing. The DEIS should be revised to reference the Washington State waters of the Salish Sea (as detailed in footnote 4, page 6).

Response to comment 4.1.12

The footnote this comment references explains that the EIS will use "Salish Sea" unless otherwise noted. This specific footnote was developed in coordination with the Makah Tribe, which has previously provided comments regarding the use of the term "Salish Sea." For

consistency and use of plain language, we explain the term and then use it where it is applicable in the EIS. However, some of the studies we cite in the EIS use the terms “Puget Sound” and/or “Salish Sea” and/or variations thereof, which is why these terms occur throughout the document. Furthermore, while the scope of the rulemaking is limited to waters within Washington’s territorial boundaries (RCW 88.16.260), the EIS describes impacts that extend into Canadian waters where relevant to the analysis (e.g. worst case oil spill distribution modeling). The use of the term “Salish Sea” here is also consistent with the language in ESHB 1578 and RCW 88.16.260(6) (the RCW uses both Salish Sea and Puget Sound). Please see response to comment 4.1.6 which clarifies that we have added the U.S.-Canadian border to Figure 1 of the EIS.

4.2 Comments on modeling related to the Draft EIS

American Waterways Operators (O-1-1)

Comment 4.2.1

[…] concerns and inconsistencies remain with the data used to develop the proposed language. ECY concluded that drift groundings and resulting spills are especially infrequent, with only four such groundings occurring between 2002-2019, none of which resulted in a spill. A summary of the Tug Escort Analysis states, "Tank vessels make up only a portion of drift grounding risk, and drift grounding risk makes up only a small part of overall maritime oil spill risk."

Given the low rate of drift grounding incidents, ECY included the frequency of other incident types involving tug escorts themselves in its Environmental Impact Statement (EIS) analysis, including collisions and allisions, sinkings and capsizing, and more, stating: "The scope of the escort tug incident analysis is broad - it looks at reportable collisions, groundings, oil spills, equipment malfunctions, fires, and other types of incidents. This is in contrast to the evaluation of target vessels, which focuses on a single incident type: drift groundings." The inclusion of such data might be appropriate if the rulemaking were focused on mitigating risks from non-drift grounding incidents, but the EIS and CR-102 rely on drift grounding risk as the primary justification for the tug escort requirements, arguably making the added data superfluous.

To quantify oil spill risks resulting from tug escort activity, ECY relied upon a simulation model of vessel traffic patterns and resulting spill risks, with a particular focus on drift groundings in its EIS. As noted by ECY in the report, the oil spill risk model relies heavily on hypothetical scenarios and simulated vessel behavior rather than empirical evidence. To achieve this, the agency used models outside of the scope area to collect percentages reflecting incident probability. This type of scenario modeling allows the agency to identify what type of tug escort requirements can reduce the risk of spills, though such conclusions are, at best, speculative, and at worst, inaccurate and unreliable.

Response to comment 4.2.1

This comment addresses both the analysis of the risk reduction to target vessels provided by tug escorts and the analysis of the risk resulting from increased tug escort activity. These are two separate analyses, completed for different reasons.

The *Summary of Tug Escort Analysis Results* is a report to the Legislature that evaluated the potential change in oil spill risk from certain tank vessels resulting from the use of tug escorts in Washington waters. The analysis centered on how escorts can prevent vessels from drifting aground after unexpectedly losing propulsion.

The report presented the results of model-based simulations. The model relied on simulating vessel traffic patterns and applying tug escorts for specific vessel types while they were laden with oil. Ecology used parameters for loss of propulsion frequency, laden status, and self-repair time that were all developed using data from the local area only. Ecology did not use incidents or models from outside the region to collect percentages related to drift grounding probability.

Tug escort requirements are primarily intended to prevent drift groundings in target vessels. However, changing tug escort requirements means that the amount of time escort tugs spend on the water will also change. The EIS analyzes the impact of tug escorts on target vessel drift groundings because that type of incident is the type primarily affected by the rule. However, we also needed to analyze the broader impact of the changing tug underway time. For example, additional tug presence could increase the potential for incidents (of any type) involving the tugs themselves. For this reason, the EIS intentionally looks broadly at the risk of any incidents involving the escort tugs themselves which range, as this comment states, from collisions to oil spills to other reportable incident types. Including this range of potential hazard types is essential to understanding the impact of changing escort tug underway time under all alternatives.

The tugs are unaffected by changes in drift grounding rate because they are providing the additional safety measure that reduces drift grounding risk for target vessels, rather than benefitting from it.

Felleman, Fred (O-2-1)

Comment 4.2.2

We're talking about these numbers of reoccurrence that I believe are beyond the model's capabilities. We're a victim of our own success with only four groundings since 2002. It's really hard to calibrate this reoccurrence number and the addition of the 190 from around North America is a good place to go, but 2.6% end up in an oil spill. So going from probability of a grounding to probability of an oil spill and the size of the oil spill that continues to extrapolate beyond I believe this model's capabilities. Looking specifically at the relative reduction that occurs from these different scenarios, I think is where the strength of a modeling exercise with all the parallel simulations that occurred.

Response to comment 4.2.2

Thank you for these comments. Ecology agrees that the strength of simulation modeling is derived from comparing different scenarios, which is why the analysis is primarily based on comparing different tug escort scenarios (or in the case of the EIS, different alternatives). We used different scenarios to represent past, present, and possible future tug escort requirements to show how each could potentially influence oil spill risk. Our goal was to present information about oil spill risk in a clear, concise, and impartial manner consistent with WAC 197-11-400 to support decision-making. For this reason, we have included loss of propulsion, drift grounding, and oil spill from drift grounding information in all relevant tables in the EIS (see e.g. Tables 9, 10, and 11). Most of our discussion about change in risk focuses on changes in drift grounding risk, based on a similar comment raised by the OTSC in the rule development process.

Additionally, although the model is capable of providing oil spill sizes, we did not use this functionality in the EIS. The ESHB 1578 uses the term "catastrophic" oil spill. To better align with the legislative intent, we focused our analysis on the potentially significant spills that could

result from a target vessel drift grounding. We completed trajectory modeling for worst case discharge spill scenarios, which have a specific definition under WAC 173-182-030, using the National Oceanic and Atmospheric Administration's (NOAA) General NOAA Operational Modeling Environment (GNOME) modeling tool. The methods are described in the EIS in Section 4.2.1and a summary of the impacts and the potential distribution of these impacts is in Section 4.2.2.3, as well as in the description of each alternative in Section 4.2. Additional detail on the methods and distribution of impacts under each modeled worst case discharge spill is available in Appendix C.

Friends of the San Juans (O-5-1)

Comment 4.2.3

Any reliance in the DEIS on Ecology's risk model is concerning. Ecology staff have refused to conduct a peer review of the model and the previous report, Analysis of an Additional Emergency Response Towing Vessel, that relied on it. Feedback on discrepancies in that report which indicated the need for revisions has not been acted on. Ecology should be open and transparent with the risk model itself, as is the stated intent for the modules:

> As a research team, we're committed to developing a model capable of providing the most informative risk assessments possible, given the data and knowledge that is available, and within the modeling framework that we've selected. We're also committed to developing the modules in an open and transparent way, using sound methodology, and documenting our work.

Response to comment 4.2.3

From the outset of model development, Ecology prioritized robust outreach and consultation. Our outreach process was used to gather information about what potentially affected federally recognized Tribes, the USCG, and what stakeholders wanted to learn from the model. We also asked for their ideas about what should be included in the model, and about concerns they had about model development. The model development process laid the foundation for the modeling effort. The outreach and consultation that we completed during that time helped determine the structure of the tug escort analysis.

Ecology held public events that were open to all interested parties and were designed to be a venue for open dialogue and knowledge sharing. We documented and considered feedback received during that process. Between developing the model and the tug escort analysis, we organized more than 25 events attended by more than 200 individual attendees affiliated with over 150 different organizations. At these events, we answered over 300 questions with real time and written responses.

Since the publication of the two legislative reports based on model results, Ecology has held multiple events to share the results and answer questions. Ecology has also provided additional information and clarification in response to multiple requests, including in connection to the referenced discrepancies. Ecology also published a correction statement that sought to provide insight into the identified issues (link).[7]

[7] https://apps.ecology.wa.gov/publications/documents/2408013.pdf

Ecology has also sought to fully describe the structure, function and parameterization of the model through over 100 pages of appendices available in the reports to the Legislature. Ecology has also engaged in dialogue with academics and experts through publication of papers and posters, and attendance at conferences as presenters:

> Leahy, JD Ross. (2022). A Collaborative Approach to Developing a Model for Oil Spill Policy Decision Support: Building a better model while learning together. Presentation at Salish Sea Ecosystem Conference (2022: Online).
>
> Vasile-Alexandru Suchar, JD Ross Leahy, Alex Hess, James Murphy, Adam Byrd; Estimation of Marine Incidents and Oil Spills: Counts and Probabilities for Coastal Waters of US and Canada. *International Oil Spill Conference Proceedings* 1 July 2024; 2024 (1): 178s1. doi:https://doi.org/10.7901/2169-3358-2024.1.178
>
> JD Ross Leahy, Vasile-Alexandru Suchar, Alex Hess, Adam Byrd, James Murphy; Developing a self-repair distribution for use in modeling loss of propulsion events. *International Oil Spill Conference Proceedings* 1 July 2024; 2024 (1): 2024135. doi: https://doi.org/10.7901/2169-3358-2024.1.000135
>
> Vasile-Alexandru Suchar, JD Ross Leahy, Alex Hess, James Murphy, Adam Byrd; Communicating uncertainty to non-statisticians: estimating rare-event probabilities for oil spill risk assessment in WA State waters. Presentation at Conference on Statistical Practice (CSP) 2024. American Statistical Association. https://ww3.aievolution.com/AMSTATevents/Events/viewEv?ev=2876

Joint Environmental NGOs (O-7-1)

Comment 4.2.4

While all maritime safety models have limitations, a major limitation of Ecology's model is the lack of accident and oil spill data on which to calibrate it. We are a victim of our own success. Because there were only four major oil spills involving tank vessels in Washington between 2002-2019, Ecology created a simulation utilizing vessels' traffic data and other parameters to estimate the likelihood of a drift grounding to occur and the likelihood of a grounding resulting in an oil spill.

However, we are far more confident in the model's use of actual vessel tracking and tidal data to estimate the likelihood of a grounding than whether it resulted in an oil spill. Furthermore, it is difficult to be confident of the estimates of the likelihood of a grounding or oil spill to reoccur over hundreds and thousands of years. No matter how good our oil spill record has been we cannot simply rely on history and modeling to predict the future, especially when the only constant is change.

Oil Tanker Incidents: In section 3.1.3.1 Ecology reports that between 2017 and 2023, there were 31 oil tanker casualties and oil spills involving tankers within the EIS Study Area. Twelve of which occurred while the vessel was underway. Fifteen incidents were identified as a vessel casualty. Of those, seven were loss of propulsion or electrical power events, two were collisions or near collisions, two were allisions or allision/loss of propulsion, and four documented fitness for service issues.

Ecology determined that an escort tug might have been helpful during the full or partial loss of propulsion events, which made up four of the 31 incidents. All of those incidents occurred while the vessel was underway, and all four incidents were of oil tankers over 40,000 DWT.

Tank Barge Incidents: In Section 3.1.3.2 Ecology reports that between 2017 and 2023, there were 16 tank barge casualties and oil spills involving tank barges within the EIS Study Area. Two of the incidents were identified as a vessel casualty. One was an allision, and one was a loss of propulsion event. Ecology determined a tug escort may have been able to help in both situations.

Ecology determined that an escort tug might have been helpful in four of the incidents, all of which occurred while the barge was underway.

ATB Incidents: In Section 3.1.3.3 Ecology found that between 2017 and 2023, there were five vessel casualty and oil spills involving ATBs within the EIS Study Area. Three incidents were identified as a vessel casualty. One was a partial loss of propulsion, one was a grounding, and one was a grounding/flooding/safety threat event.

Ecology determined that an escort tug might have been helpful in the one loss of propulsion event. The ATB was underway when this incident occurred.

Lessons Learned

While only some of these incidents resulted in oil spills, none resulted in a large volume of oil entering the water. This underscores the point that incidents are a far better indicator than oil spills because without adequate interventions in place, the likelihood of an incident becoming a spill can be a matter of luck, which is not a form of prevention to be relied on.

Our maritime safety net must continue to evolve to meet new challenges as they arise. While Ecology's summary of incidents and oil spills provides valuable insights, it is not clear which incidents they used since they did not include descriptions of them. Washington State has an excellent oil spill record because we are all committed to continuous improvement, so it is important to also recognize the changes that have been made over the years to prevent maritime accidents.

Commentor O-7-1 also included a summary of recommendations at the end of their letter. Relevant excerpts to this section of the comment letter are included below:

Qualify the limitations of the model to predict the likelihood of a grounding to become an oil spill and its size as well as the likelihood of one to reoccur over thousands of years.

Response to comment 4.2.4

Thank you for the comments summarizing the recent incident history data included in the EIS.

The comment "because there were only four major oil spills involving tank vessels in Washington between 2002-2019" appears to be based on a misunderstanding of a data point presented in the tug escort analysis legislative report. The original sentence reads: "four covered vessel drift groundings between 2002 and 2019 were identified within the Model Domain...and

none were associated with an oil spill" (Summary of Tug Escort Analysis Results, pg A-14 and Section 4.2.2.3 of the EIS).

Please see response to comments 4.1.7 and 4.1.8 for information about the use of recurrence intervals as a risk communication approach. Please see response to comment 4.2.2 for information on how the model's functionality around loss of propulsion, drift grounding, and oil spill probabilities were used in the EIS. Oil spill estimates use the reported rate of oil spills from groundings for tank vessels in the continental US and Canada between 2000 and 2020. See Appendix B of ERTV and/or tug escort reports for more detail.

Our analysis is primarily based on comparing different tug escort scenarios. We used different scenarios to represent past, present, and possible future tug escort requirements to compare their potential to influence oil spill risk.

4.3 Comments on Vessel Traffic Section of the Draft EIS

Articulated Tug Barge (ATB) Use – Descriptive

Joint Environmental NGOs (O-7-1)

Comment 4.3.1

Based on Ecology's analysis of its Vessel Entries and Transits data (VEAT) from 2011-2023, as summarized below, ATBs have progressively become preferred to oil barges as a means of oil transportation. This is due to their ability to save money for the oil industry by carrying tanker volumes of oil with fewer crew.

(*Data included in original comment letter shows the comparison between the frequency of barges and ATB transits within the Salish Sea and the frequency of barges and ATBs entering the Strait of Juan de Fuca.)*

ATBs also spend more time transiting throughout the study area as compared to other tank vessels.

(*Original comment letter includes a table from DEIS that shows time tank vessels underway within the study area in 2023.)*

The increased use of these "rulebreakers," as they are described in the 1994 Congressional Research Services (CRS) report, more than justifies the legislation (ESHB 1578) requiring the 4 State to revisit its escort rules if we are to maintain our commitment to making continuous improvements.

Felleman, Fred (O-2-1)

Comment 4.3.2

I just also want to just say, you know, why are we even doing this? You know, just quickly that, you know, from 2012 to 2021, the number of ATBs entering the waterway went from 184 to 316. The movements within the waterway from 2011 went from 87 to 300 plus in 2021. The barges entering the waterway, they went from 321 to 2011 to 91 in 2023. So as the ATBs went up, the barges went down. Intra-movements 303,554 in 2019 down to 2,617 in 2023. Still a lot of

movements, but clearly ATBs were beginning to become more popular as time went on. We all know that. ATBs, called rule breakers by the committee of Congress, being that we're moving tanker volumes of oil with reduced crew sizes. While they do have twin propulsion and are faster, they have other challenges associated with them. So I believe that's a good enough reason to be talking about escorting small tankers through this waterway.

Response to comments 4.3.1 and 4.3.2

Trends in ATB use, including recent increases in ATB use, are described in Section 4.1.2.1 of the EIS and in more detail in Appendix B.

Request for Clarification of Commute vs. Active Escort Time

Joint Environmental NGOs (O-7-1)

Comment 4.3.3

However, it is unclear how, on page 24 in the DEIS, it was estimated that 36.78% of the time tug escorts are in the area they would be actively escorting a vessel and 63.22% of the time they would be in transit between escort jobs? One would expect tugs would be in the rule area a similar amount of time returning from an escort as they would escorting a vessel. In fact, it is likely that instead of dead heading, the escort would wait for another vessel to escort before returning to its point of origin. Regardless of the proportion of these transits, the DEIS estimates that the total amount of time additional tug escorts are underway represents less than one percent of all large vessels are making noise enroute through in the area. This puts in context the degree the impacts of this rule have on the underwater noise to which the whales are already exposed.

Response to comment 4.3.3

Simulated data from the Ecology risk model was used to develop estimates of the amount of time escort tugs spent commuting to and/or from an escort job vs. time spent actively escorting a target vessel. The distinction between whether a tug was actively escorting a target vessel or commuting was used to estimate other environmental impacts in the EIS (e.g. underwater noise, air emissions) and was critical to our analysis. Additional information about this data is provided in Appendix B, and specifically in footnote 14:

> "Commute" for the purpose of modeling impacts assumes that each escort job requires a tug to travel from a "home" berth to a rendezvous point with the escorted vessel, and back to an end point (not necessarily the same one) after the escort job is completed. This is a simplification of the existing system, in which escort jobs could be scheduled consecutively. However, input from the OTSC at the early stage of methods development highlighted the complexity and uncertainty of real-world decision-making regarding tug escort scheduling (see related scoping comments in Appendix A for details). Modeling this level of complex decision-making is not feasible and would be a departure from the existing modeling approach, which has already undergone stakeholder and expert review. Longer commute routes and less consecutively scheduled escort jobs may account for some of the increase in total escort time in the simulated data vs. the 2023 historical data. Because the intent of the EIS is to document potential negative impacts to the environment resulting from proposed rule, a conservative approach ensures that impacts are not under-represented.'

For a more detailed and technical explanation of how the model simulates commutes, please see the Summary of Tug Escort Analysis Results (2023) see page B-44 – B-45.[8]

We also want to clarify that escort tug underway time associated with target vessels accounts for approximately 0.96 percent (Alternative A) to 0.99 percent (Alternative C) of total underway time for all AIS traffic, based on 2023 AIS data. This is not necessarily equivalent to "all large vessels are making noise enroute through in the area" as stated in the comment. Vessels that do not carry AIS may be significant contributors to underwater noise. Please see Section 4.1.1. of the EIS and Appendix B for a short description of AIS requirements.

Route Switching

Joint Environmental NGOs (O-7-1)

Comment 4.3.4

We are also concerned that operators of vessels subject to this rule will elect to use Haro Strait rather than Rosario Strait to avoid the additional expense of employing a tug escort. We have already observed such alterations to traditional operations and call on the BPC to monitor its prevalence to determine whether it will be necessary to extend this rule to tank vessels between 5,000 and 40,000 dwt bound to US ports through Haro Strait when the impact of the rule is revaluated in October 2026.

Commentor O-7-1 also included a summary of recommendations at the end of their letter. Relevant excerpts to this section of the comment letter are included below:

Monitor diversions to Haro Strait and evaluate the benefit of extending the rule to tank vessels bound to U.S. ports in this zone, where the model estimated tug escorts would have the highest likelihood of preventing a drift grounding, when the rule is revisited in October 2026.

Response to comment 4.3.4

Route switching as a potential impact of the alternatives was discussed with the OTSC and is included in the EIS in the following sections: Section 4.1.2.1, Section 4.1.3.3, and Section 4.1.5.1. A more detailed discussion of potential route switching is provided in Appendix B.

Comments on future rule effectiveness assessments are outside the scope of the EIS for the current rulemaking. We also want to clarify that RCW 88.46.260(1) requires the BPC and Ecology to consider the effects of the rule and whether an update is necessary by October 1, 2028.

4.4 Comments on Underwater Noise Section of the Draft EIS

Physics of Underwater Noise and Analysis Details

[8] https://apps.ecology.wa.gov/publications/documents/2308009.pdf

Joint Environmental NGOs (O-7-1)

Comment 4.4.1

In addition, it is important to note that the masking effects of underwater noise generated by the tug escort are not simply additive to that generated by the vessel being escorted. The reason for this is that there is a far greater difference between the increase in underwater noise generated by the unescorted vessel, in an otherwise quiet sea, than the inclusion of the noise generated by an escort to that of the noise made by the vessel it is escorting.

While it is easy to hear a tug from a distance on a hydrophone, the increase in noise it generates is rarely distinguishable from the vessel it is escorting, which has already reduced the whales' foraging volume and communication. That is not to say the whales cannot hear the tug escort, rather it is just not directly additive in this sense.

The above is true as long as neither vessel nor tug has unusual underwater sound source levels or acoustic frequency distributions. Monitoring of individual vessel and tug underwater noise levels is needed to identify and protect against significant noise polluters.

Felleman, Fred (O-2-1)

Comment 4.4.2

But at the same time, I think what's most important is when the tugs are returning from an escort job, when they are present with the vessel being escorted, the relative increase in noise from a quiet sea to having one, a tank vessel and then the addition of the escort, it's not additive in terms of one plus the other. It is a small increment of increase, unless of course the vessel has a unique noise characteristic. And I believe we should be monitoring because the most egregious vessels, there's a handful of egregious vessels that account for the majority of the bad noise. And similarly, so we should be monitoring that.

Response to comments 4.4.1 and 4.4.2

We would like to clarify the 10 percent threshold referenced in comment 4.4.1. The "10 percent increase in the occurrence of periods" threshold for marine mammals in the EIS pertains to the National Marine Fisheries Service (NMFS) marine mammal behavioral disturbance acoustic threshold (i.e., 120 dB broadband sound pressure level). This is in the broadband frequency band and not specifically in the SRKW echolocation and communication frequency bands. In general, it is correct that an increase in noise can reduce the effective range of communication calls and echolocation clicks, if it is in the same frequency range. However, in this case, Ecology is evaluating the amount of time the broadband sound levels are above a level deemed sufficient to potentially cause a behavioral disturbance. More detail about changes in the SRKW communication and echolocation bands are included in Appendix E.

Ecology agrees that underwater noise impacts during both escorting and commuting phases must be taken into consideration. The modeling and analysis performed by Ecology and JASCO does account for all phases (i.e., escorting target vessels and commuting alone). Ecology agrees that, typically, the underwater noise caused by the introduction of a target vessel would be greater than the incremental noise increase caused by adding an escort tug to that target vessel. However, the generated noise and masking effects are also dependent on the noise and frequency profiles of the different vessel types. For example, large commercial vessels produce more low frequency noise (e.g., less than 100 hertz) while tugs also produce mid-frequency noise (e.g.,

approximately 1,000 hertz). The underwater noise modeling conducted by JASCO used a vessel source level model. The model was created using hundreds to thousands (depending on the class) of vessel measurements, which accounts for the fact that some individual vessels may have unusual sound characteristics. Although the model does not use an individual vessel signature, it has incorporated all the acoustic signatures from validated vessel transits recorded on JASCO's permanent recorder in Boundary Pass.

Both commentors suggest that individual vessels should be monitored for noise. Please see the response to comments 4.4.3 through 4.4.7 below for information on proposed underwater noise and vessel interaction mitigation measures, including monitoring of noise levels from individual vessels.

Underwater Noise and Vessel Interaction Mitigation Measures

Several commentors (O-7-1, O-2-1, O-5-1, O-6-1, I-1-1) recommended specific mitigation measures to avoid or reduce underwater noise and vessel interaction with SRKW. We respond to these comments together in the below response to comments.

Joint Environmental NGOs (O-7-1)

Comment 4.4.3

The above is true as long as neither vessel nor tug has unusual underwater sound source levels or acoustic frequency distributions. Monitoring of individual vessel and tug underwater noise levels is needed to identify and protect against significant noise polluters.

Maintaining sighting networks and adding whether whales are in the vicinity during the pre-escort conference could also alert the vessel operators of opportunities to exercise best management practices when the whales are present.

Such measures can include traveling at reduced speeds and maximizing distance from the whales while transiting to and from an escort job and turning off the echo sounder when safe to do so. Reducing speed will reduce noise both above and below water, reduce air and greenhouse gas emissions, as well as save fuel. It would also afford more time for tug operators to see and avoid fishing gear.

In addition to supporting the BPC's call for the voluntary adoption of Best Management Practices detailed in the Puget Sound Harbor Safety Plan for larger tank vessels, we strongly encourage the BPC to request the Puget Sound Harbor Safety Committee establish an ad hoc cetacean working group to develop a more complete list of voluntary measures commercial vessel operators can make to reduce impacts on all cetacean species for incorporation in the Puget Sound Harbor Safety Plan.

Commentor O-7-1 also included a summary of recommendations. Relevant points for this comment theme are included below.

- Add whether there have been reports of whale sightings to the pre-escort conference.
- Support whale sighting networks to inform the pre-escort conferees of the presence of whales.
- Monitor the noise generated by escort tugs and vessels being escorted.

- Recommend that vessels returning from escort jobs slow down and turn off their echosounders when safe to do so.
- Recommend the creation of an ad hoc cetacean workgroup to the Puget Sound Harbor Safety Committee to make recommendations for inclusion of best management practices to the Puget Sounf [*sic*] Harbor Safety Plan for all cetacean species.

Felleman, Fred (O-2-1)

Comment 4.4.4

And then finally, because this is called for the protection of killer whales, certainly there needs to be attention to the mitigation measures for those unanticipated consequences. And I believe that it's a really good idea to have the Harbor Safety Committee not just implement these specific recommendations, but they're talking about a marine mammal working group to look at best management practices not just for killer whales, but for Cetacea in general.

[…] And I believe we should be monitoring because the most egregious vessels, there's a handful of egregious vessels that account for the majority of the bad noise. And similarly, so we should be monitoring that. And also I feel strongly that in the pre-escort conference, we should include whether or not there's a sighting of the whales. And so we should also be supportive of the sighting networks so that the pilot, or whomever is the master, would have that information. So we would know if there's a fishery, and we would know if there is a whale sighting, and we should proceed accordingly. Clearly, if you come back from an escort a little slower, you're reducing the noise, you're reducing greenhouse gas emissions, you're saving fuel, and you're probably more likely to see fixed fishing gear because you have more time to proceed. So, thank you.

Friends of the San Juans (O-5-1)

Comment 4.4.5

The DEIS relies on tugs' compliance with existing federal and state requirements to mitigate impacts. To help to ensure that the expanded tug escort requirements provide oil spill prevention benefits without unnecessary tug traffic impacts, this recommended mitigation should be revised: "Encouraging or requiring escort tug operators to take trainings to promote wildlife awareness, such as those provided by the Vancouver Fraser Port Authority or Be Whale Wise (Puget Sound Partnership & Governor's Salmon Recovery Office, 2022)." The entire list of recommended mitigations should be addressed in trainings for new tug operators and on-going annual trainings for all tug operators as a required mitigation. This will provide tug operator awareness of the precautions needed to protect Southern Resident killer whales and other marine wildlife.

Another voluntary mitigation measure that should be mandatory is the use of the Whale Report Alert System.

If the intent of the mitigation to "encourage transition to hybrid electric and fully electric propulsion as technological readiness and cost make them feasible" also intends to address the tugs' emissions that impact air quality and the marine ecosystem, this mitigation should be revised to also include tugs' transition to zero emission fuels, which may prove to be more feasible than electric propulsion.

The mitigation to "encourage participation in voluntary slowdowns, which reduces underwater noise, ship strike risk, and fuel use" should note that currently there are no ECHO (Enhancing

Cetacean and Habitat Observation) or Quiet Sound voluntary slowdown areas in the existing or proposed expansion of the tug escort Study Area. The mitigation that encourages tugs and target vessels to comply with Washington State's distance and speed regulations (RCW 77.15.740) where safe and feasible to do so, is essential, despite the exemption for tugs and target vessels operating under the VTS (Vessel Traffic Service). To achieve this mitigation, Ecology recommends that the Puget Sound Harbor Safety Committee consider a Standard of Care for escort tugs to maintain a 1,000-yard distance from Southern Resident killer whales where safe and feasible to do so. This recommendation to the PSHSC should also include vessel speeds.

The state should take responsibility for continuous improvement by identifying funding to support the transition to tugs with quieter engines and propellers, and that use low- or zero-emission fuels, and the certification in programs aiming to protect the environment (e.g., Green Marine).

Quiet Sound (O-6-1)

Comment 4.4.6

Tugs running lite on their way to/from escorting should use the Whale Report Alert System and understand that it is a best practice to avoid whales by steering away if they sight a fin or blow.

CDonaldson, Chloe (I-1-1)

Comment 4.4.7

We respectfully request that the final rulemaking addresses underwater noise pollution and vessel disturbance. Noise pollution is a major impact to marine life, whether salmonids or marine mammals, and increasing vessel traffic could have additional environmental impacts. Speed reduction, acoustic quieting technologies, and designated low-noise zones or communications for low-noise due to the detection of orcas in the area, are important ways to mitigate noise pollution. This helps protect marine animals, including the resident killer whales for which this rulemaking was designed to protect. It is important that noise be recognized and regulated as a form of marine pollution.

Response to comments 4.4.3 through 4.4.7

- **Monitoring Individual Vessel Noise:** Comments 4.4.3 and 4.4.4 recommended that individual vessel and tug underwater noise levels should be monitored. It is outside the scope of this rulemaking to install hydrophones and perform noise monitoring of individual vessels throughout the EIS Study Area.
- **Whale Sightings in Pre-Escort Conference:** Comments 4.4.3 and 4.4.4 recommended including a discussion of whether whales are in the vicinity during the pre-escort conference. Comment 4.4.7 also suggested communications to promote noise reduction when orcas are detected in the area. Upon consideration, Ecology has edited the pre-escort conference rule language to include discussion of recent whale sightings.
- **Echosounders:** Comment 4.4.3 suggested that vessels turn off the echosounder when safe to do so. This recommendation is included in the Puget Sound Harbor Safety Plan for recreational boaters, in Washington Department of Fish & Wildlife (WDFW) guidance for fishing vessels, and Be Whale Wise guidelines. The PSHSC Standard of Care on this topic explicitly states that it does not apply to commercial vessels. Although turning off the

echosounder would potentially reduce noise impacts, echosounders are used as part of critical safety and navigational practices. Therefore, we chose not to include this as a recommended mitigation measure in the EIS.

- **PSHSC Cetacean Work Group:** Comment 4.4.3 requested that the PSHSC establish an ad hoc cetacean workgroup. The PSHSC has created this workgroup, which has held some initial meetings. Ecology recommends that the PSHSC and the cetacean workgroup continue these efforts to create and promote recommendations for reducing impacts to cetaceans, including SRKW. We have revised Table 2 and Section 4.5.3.2 of the Final EIS and Section 3.2.2 of Appendix F to reflect this recommendation.
- **Whale Report Alert System:** Comment 4.4.5 recommended mandatory use of the Whale Report Alert System (WRAS). Comment 4.4.6 also recommended that commuting tugs (i.e., those "running light" and not actively escorting) use the WRAS and steer away from whales. As a voluntary measure, Ecology encourages escort tug operators to use this system when safe and practical to do so and avoid whales when sighted. We revised Section 4.5.3.2 of the EIS and Section 3.2.2 of Appendix F to add and clarify these recommendations. However, mandatory use of WRAS is outside the scope of this rulemaking.
- **Trainings for Wildlife Awareness:** Comment 4.4.5 recommended mandatory trainings to promote wildlife awareness. The OTSC discussed specific training requirements when they looked at various functional and operational requirements. They determined that mandating training would be difficult to require, costly for companies to comply with, and difficult and costly for BPC to enforce compliance. Meeting minutes on these discussions are provided on the BPC webpage. Ecology can continue to recommend that tug companies pursue these trainings, but it is outside of our scope to require them. However, other agencies are involved in the coordination of these trainings (e.g., NOAA, Department of Fisheries and Oceans Canada, WDFW, Transport Canada, the United States Coast Guard, CETUS Research and Conservation/Straitwatch, and The Whale Museum/Soundwatch) and it may be within their scope to work towards standardized and required trainings. Ecology has also revised Table 2 and Section 4.5.3.2 of the Final EIS and Section 3.2.2 of Appendix F to recommend that training agencies evaluate whether their training materials should be expanded to encompass more of the mitigation measures presented in the EIS.
- **Funding Industry to Adopt Cleaner Technology:** Comment 4.4.5 includes a recommendation that the state should identify funding sources to incentivize certain changes in industry practices. Ecology and the BPC considered a variety of functional and operational requirements for the tugs providing escorts and discussed the concept of incentivizing cleaner technology on tugs during their 5/15/2024 OTSC meeting (link[9]) The OTSC did not include these topics in their recommendations to the Board.
- **Location of Voluntary Slow-Down Trials:** Comment 4.4.5 requested that we clarify the geographic scope of the existing voluntary slow-down trials. While there are currently no ECHO Program or Quiet Sound program voluntary slowdown areas in the current rulemaking area or expanded rulemaking area, there are and have been slowdown programs

[9] https://nebula.wsimg.com/43388f1c08caf037c7d773ef181c27b0?AccessKeyId=F86D0A1E7A0091C2061F&disposition=0&alloworigin=1

elsewhere in the EIS Study Area in the EIS Study Area where escort tugs may be commuting (e.g. Admiralty Inlet). Therefore, Ecology included this recommended mitigation measure in the Draft EIS and has retained the measure (with no additional edits) for the Final EIS.

- **Vessel Speed and Distance From Marine Mammals, Wildlife Sighting Networks:** Several commentors recommended mitigation measures to avoid or reduce underwater noise and vessel interactions with SRKW. Comment 4.4.3, comment 4.4.4, and comment 4.4.5, provided specific recommendations for reducing vessel speeds, maximizing distances from whales, and supporting wildlife sighting networks. Comment 4.5.6 also specified that commuting tugs should limit their speed to 10 knots. The Draft EIS included recommended mitigation measures relevant to these topics, which have been retained in the Final EIS. We have also revised Section 4.5.3.2 of the EIS to acknowledge this specific speed recommendation as part of voluntary mitigation measures and to include the recommendation that the PSHSC consider developing a Standard of Care for escort tugs to reduce speed when near SRKW and other marine mammals, where safe and feasible to do so.
- **Acoustic Quieting Technologies:** Comment 4.4.7 recommended acoustic quieting technologies to reduce noise pollution. Ecology understands that noise-damping hull coatings are an emerging technology that can reduce underwater radiated noise. Because these technologies are still under development, Ecology has refrained from including this specific recommendation. However, Ecology has revised Table 2 and Section 4.4.3.2 of the Final EIS and Section 3.2.2 of Appendix E to recommend that escort tug companies two additional best practices for noise management. These include following the most up-to-date International Maritime Organization (IMO) Underwater Noise Management Guidelines (available on the IMO website). The current 2024 guidelines provide several recommendations on noise reduction opportunities, including developing vessel-specific underwater noise management plans. Additionally, Ecology recommends that escort tug companies should maintain propellers in good condition, use standard methods of ensuring machinery is mounted with vibration isolation systems, and apply engine room soundproofing.
- **Designated Low-Noise Zones:** Comment 4.4.7 suggested the use of designated low-noise zones to reduce noise impacts to marine wildlife. Formally designating low-noise areas is outside the scope of BPC authority and this rulemaking.
- **Zero-Emission Propulsion:** See Section 4.6 (below) for a response to the comment regarding the transition to zero-emission propulsion.

4.5 Comments on Plants and Animals Section of the Draft EIS

This section includes responses specific to the plants and animals section. We received several recommendations related to reducing the impacts of underwater noise and vessel interaction on SRKW. These are all included in the Underwater Noise section of the response to comments, but will be reflected in both the Plants and Animals and Underwater Noise sections of the Final EIS as relevant.

Details on Endangered Species Act Listing of SRKW

Friends of the San Juans (O-5-1)

Comment 4.5.1

Appendix F or the DEIS should be revised to specifically address the fact that Southern Resident killer whales were listed under the Endangered Species Act (ESA), in part, because of these "Human-Made Factors Affecting Continued Existence" – the oil spill risk from the refineries and associated oil transportation in the Salish Sea, given the impacts to killer whales from the Exxon Valdez oil spill. This section addresses the impacts from the Exxon Valdez oil spill to killer whales but does not include how the impacts to these killer whales in Alaska informed the listing of Southern Residents under the ESA.

The National Marine Fisheries Service's Recovery Plan for Southern Resident Killer Whales (Orcinus orca) identifies several direct and indirect impacts of oil spills on killer whales, including:

- "Exposure to petroleum hydrocarbons released into the marine environment via oil spills and other discharge sources represents another potentially serious health threat for killer whales in the northeastern Pacific."
- "Oil spills are also potentially destructive to prey populations and therefore may adversely affect killer whales by reducing food availability."
- "Major oil spills are potentially catastrophic to killer whales and their environment, as illustrated by the probable impacts on the main resident and transient pods frequenting the area of the massive Exxon Valdez oil spill in Prince William Sound, Alaska, which occurred in 1989. Six of the 36 members of AB pod were missing within one week of the spill after being seen in heavily oiled waters and eight more disappeared within two years (Dahlheim and Matkin 1994, Matkin et al. 1994, 1999a, 2003, Matkin and Saulitis 1997)."

According to NOAA researchers and marine biologists, exposure to oil from the Exxon Valdez oil spill contributed to high killer whale mortality rates, particularly among immature whales and breeding females. The killer whale pods that were impacted by the Exxon Valdez oil spill have not recovered, and the killer whale pod known as AT-1 group has experienced zero reproduction since the spill.

Response to comment 4.5.1

Ecology appreciates the information provided in this comment. We have revised the EIS documents to acknowledge that human-made factors, including oil spill risks, contributed to the listing of the SRKW under the ESA. Please see the revised content in Section 3.1.1 and Section 3.5.1 of Appendix F.

Comments on SRKW Distribution

Quiet Sound (O-6-1)

Comment 4.5.2

Quiet Sound's study of the overlap between vessel intensity and whale presence shows that tugs in Rosario Strait are likely to share the waters with Southern Resident killer whales between February-October, with a potential peak in March and April.

Joint Environmental NGOs (O-7-1)

Comment 4.5.3

There is also the challenge of accurately estimating the amount of time the whales will be in proximity to the additional tugs resulting from this rule given the duration of their occurrence in the area covered by the rule which they do not frequent often. However, it should be noted, based on most recent trends in the whales' movements, when traveling south from the Fraser River region, the inclusion of the geographic extension defined in Alternative C will slightly increase the likelihood of the whales' proximity to the additional escort tugs. According to the EIS, Alternative C will increase the amount of time tug escorts are on the water by 2.4%, though not limited to that area.

While the whales' occurrence in the northern portion of the Salish Sea has been declining in recent years, the number of commercial vessels, especially oil tankers from the expanded Trans Mountain Pipeline, including those bound to Washington refineries, has significantly increased. These ships must make a significant turn to the west as they move from Georgia Strait to Boundary Pass in proximity to a location ominously known as "boiling reef." The increased presence of tug escorts can also be helpful in assisting unescorted ships in this region (e.g. Continental Spirit) on an opportunistic basis.

Felleman, Fred (O-2-1)

Comment 4.5.4

And then I do want to speak to the one issue about the significance threshold for noise in the waterway. We just had the killer whales show up for the first time in three months. I was very happy to be there to see that. The propensity of them to be in Rosario Strait when the tugs are there is very low.

Response to comments 4.5.2 through 4.5.4

- **Vessel Intensity x Whale Presence:** Comment 4.5.2 provided information regarding the overlap between vessel intensity and whale presence. We agree that it is important to note those potential areas and times of overlap, and we have added reference to the overlap in Section 4.5.2 of the Final EIS, Section 3.1.2 of Appendix E, and Section 3.1.1 of Appendix F.
- **SRKW Presence in Expansion Area:** Comment 4.5.3 provided information regarding the presence of SRKWs relative to the expansion area. The EIS and Appendix F discuss cetacean activity in areas where escort tug underway time would increase under Alternative C.
- **SRKW Distribution (General), Critical Habitat, Significance Finding:** Comment 4.5.3 and comment 4.5.4 included information regarding the propensity of SRKWs to be exposed to increases in underwater noise from the rulemaking. While SRKWs are not present in the EIS Study Area year-round and do not use the entire critical habitat area at all times, it is important to note that most of the EIS Study Area (including the entire rulemaking area) has been designated as SRKW critical habitat. Further, most of the rulemaking area has been designated as SRKW Summer Core Area. Ecology has revised Section 4.5.2 of the EIS and Section 3.1.1 of Appendix F to note this. NOAA made these designations based on their best available science. Because the entire rulemaking area is designated critical habitat, Ecology's evaluation assumed that SRKWs could be present anywhere in the rulemaking area. Ecology modeled significant increases in noise at three locations in the Summer Core Area, with an approximate 25 percent increase in harmful levels of underwater noise at the Rosario location

in the summer. The modeling showed that the area that would exceed the 120 dB threshold under Alternative A in the summer would measure approximately 80.7 square kilometers. The EIS is not intended to predict the specific timing and locations where an SRKW may encounter noise from an escort tug; rather, the purpose of the EIS is to identify the potential for significant adverse impacts. Ecology understands that underwater noise is one of the main stressors for SRKW and that harmful levels of underwater noise increase under this rulemaking in their critical habitat. Ecology has therefore identified this noise increase as a significant impact, even if we cannot state conclusively whether, where, or when there would be an overlap between underwater noise from escort tugs and SRKWs.

- **SRKW and Trans Mountain Expansion Project:** Comment 4.5.3 provided comments regarding the Trans Mountain Expansion Project. Ecology has considered the potential cumulative impacts of this project in Section 5.1 of the EIS. Please also see the response to comment 4.8.3 below. Ecology would also like to clarify that the rulemaking area does not extend into Canadian waters (see comment 4.1.6) and therefore does not encompass the "boiling reef" area referenced in this comment (immediately east of Saturna Island).

4.6 Comments on Air Quality Section of the Draft EIS

Friends of the San Juans (O-5-1)

Comment 4.6.1

If the intent of the mitigation to "encourage transition to hybrid electric and fully electric propulsion as technological readiness and cost make them feasible" also intends to address the tugs' emissions that impact air quality and the marine ecosystem, this mitigation should be revised to also include tugs' transition to zero emission fuels, which may prove to be more feasible than electric propulsion.

Response to comment 4.6.1

This recommended mitigation is already included in the EIS in appendices and sections of the EIS where fuel use and air emissions from escort tugs are key considerations in the analysis. This includes Section 4.6 and Section 4.7 of the EIS and Appendices G and H. We discussed the recommended transition to hybrid electric and fully electric propulsion in the appendices and sections of the EIS where noise is a key consideration. This includes Section 4.4 and Section 4.5 and Appendices E and F.

4.7 Comments on Tribal Resources Section of the Draft EIS

Requests and/or Support for Tribal Consultation

Comment 4.7.1

Several commentors (I-3-1, O-2-1, O-5-1, T-3-1, and T-1-1) indicated support for Tribal consultation and Tribal outreach and engagement as part of this process. One commentor, Lummi Indian Business Council, also requested formal government-to-government consultation.

Response to comment 4.7.1

Please see responses to comments 2.1.1 – 2.1.5 above.

Additional Information on Impacts to Tribal Treaty Fishing

Swinomish Indian Tribal Community (T-2-1)

Comment 4.7.2

Fish and fish habitat are crucial to the cultural, spiritual, subsistence and commercial activities of the Swinomish Tribe, and the Tribe exercises Treaty-protected fishing rights in its usual and accustomed fishing areas ("U&A"), which include an extensive portion of the Salish Sea and the entirety of the Skagit River and its tributaries. See *United States v. Washington*, 459 F. Supp. 1020, 1049 (W.D. Wash. 1975). For generations, Tribal fishers have fished Puget Sound and the Salish Sea for a variety of fish and shellfish species, including but not limited to Chinook, coho, and chum salmon, steelhead trout, halibut, and Dungeness crab. Over the last 75 years, oil transportation, storage, and refinement has dramatically increased on Puget Sound. The Tribe has been directly impacted by that increase.

Today, more than 27% of the Tribe's U&A is now occupied by traffic lanes for vessels and anchorages. The Swinomish Tribe is regularly forced to forgo fishing in areas in which it has a Treaty-protected right to fish because the safety of its fishers and fishing gear is routinely threatened by or lost to vessel traffic. Danger to fishers, lost gear, and missed fishing opportunities are now a way of life for the Tribe, and one that impairs the rights secured to the Tribe by the Treaty. Additionally, the existence of four oil refineries within the Tribe's U&A, and the increase in oil shipped to and from Canada, means the threat of an oil spill is a constant for Tribal fisheries, Tribal fishers, and Tribal lands. Ensuring that the quality of the marine waters in Puget Sound remain free of oil spills and hazardous contamination is of the utmost importance to the Swinomish Tribe.

Lummi Indian Business Council (T-3-1)

Comment 4.7.3

While we support the inclusion of increased mitigation steps (Alternative C in the DEIS) to prevent a catastrophic oil spill in the Puget Sound, we also acknowledge that we are already experiencing adverse impacts to our treaty-reserved fisheries due to the increased vessel traffic since the .

As noted, the Lummi Nation is already experiencing serious adverse impacts to our treaty reserved fisheries. These impacts are in the forms of:

- loss of access to our usual and accustomed grounds and stations (fishing areas) — vessel interference/obstruction with vessel access
- loss of fishing gear from vessel strikes and the like
- loss of harvest opportunity and economic hardship for fishers from loss of catch / income due to both of the above

- economic hardship — gear replacement can cost tens of thousands of dollars annually per fisher
- danger to tribal fishers and fishing vessels from vessel traffic.

Increased vessel traffic can only be expected to exacerbate these intolerable impacts.

Makah Tribal Council (T-1-1)

Comment 4.7.4

Additionally, we appreciated that the EIS documented the impact of vessel traffic, including tug transits, on treaty fishing even if outside the Makah U&A.

Response to comments 4.7.2 through 4.7.4

Thank you for these comments providing information related to the issues faced by the Swinomish Indian Tribal Community within the Tribe's U&A due to the threats to the safety of its fishers and fishing gear (comment 4.7.2), and those issues faced by the Lummi Nation (comment 4.7.3). Ecology agrees that these impacts should be considered, and we have incorporated additional details in Section 4.10.2 of the EIS and Section 3.1.5 of Appendix K.

Ecology acknowledges and thanks the Makah Tribal Council for their comment (comment 4.7.4).

Mitigation Related to Tribal Resources Impacts

Makah Tribal Council (T-1-1)

Comment 4.7.5

The Makah Tribe is a participant in the ad hoc Tribal Fisheries Lost Gear Subcommittee of the Puget Sound Harbor Safety Committee that aims to explore these impacts and potential solutions.

Swinomish Indian Tribal Community (T-2-1)

Comment 4.7.6

We understand the challenges in addressing mitigation measures specifically for Tribal resources and appreciate the inclusion of supporting the Puget Sound Harbor Safety Committee's Tribal Fisheries Lost Gear Subcommittee. Support and participation from the Board of Pilotage Commissioners in that subcommittee will be a positive development in assisting Tribes to recover from the significant impacts of oil shipments and other vessel traffic.

CDonaldson, Chloe (I-1-1)

Comment 4.7.7

The Port Gamble S'Klallam Tribe also supports continued transparency in vessel tracking and monitoring to safeguard treaty protected rights regarding fishing and harvesting in the Tribe's waters and U&A. Real time information about marine traffic helps ensure that Tribal fishers

have access to treaty protected fishing areas and maintains safety for humans, wildlife, and resources.

Response to comments 4.7.5 through 4.7.7

Ecology acknowledges and thanks the Makah Tribal Council (comment 4.7.5) and the Swinomish Indian Tribal Community (4.7.6) for their comments. We agree that the Tribal Fisheries Lost Gear Subcommittee is an important voluntary mitigation measure and appreciate your continued participation in and leadership of this forum.

Ecology thanks commentor I-1-1 for providing information related to the Port Gamble S'Klallam Tribe's support for continued transparency in real-time vessel tracking and monitoring. Ecology agrees that escort tug operators should consider improved real-time communication protocols about vessel movement to help avoid or minimize interruptions to Tribal fisheries. We have made corresponding edits in Section 4.10.2 of the EIS and Section 3.2.2 of Appendix K.

Treaty Status and Federal Recognition

Swinomish Indian Tribal Community (T-2-1)

Comment 4.7.8

One specific statement in the DEIS is patently incorrect and must be corrected in the final EIS. In the Tribal Resources Discipline Report, the table on page 23 of the report, pdf page 25, lists the Samish Indian Nation as established through the Treaty of Point Elliott, 1855. While the Samish Indian Nation gained Federal Recognition in 1996 and has long claimed to be a party to the Treaty of Point Elliott, since 1979 at the urging of the United States, the Federal courts have held repeatedly and consistently that the *Samish Indian Nation is not a successor to any tribe that participated in the Treaty of Point Elliott*, including the aboriginal Samish tribe and the Nuwhaha or Stick Samish tribes. *See, e.g., United States v. Washington*, 476 F. Supp. 1101, 1104 (W. D. Wash. 1979), aff'd 641 F.2d 1369 (9th Cir. 1981); *Samish Indian Nation v. United States*, 58 Fed. Cl. 114, 120 (2003); *United States v. Washington*, 593 F.3d 790, 799-800 (9th Cir.) (*en banc*). Stated another way, the Samish Indian Nation is not a Treaty Tribe, does not have Treaty rights, and does not own or manage Treaty resources and should not be included in any table or text referencing such rights or resources.

Response to comment 4.7.8

Based on these comments, we have converted Table 4 in Appendix K to a list and updated and condensed the information presented to be more directly related to impacts identified in the EIS. Based on EIS impacts, the adjusted information reflects treaty fishing status and focuses primarily on federally recognized Tribes.

4.8 Comments on Cumulative Impacts Section of the Draft EIS

Sinking Oils

CDonaldson, Chloe (I-1-1)

Comment 4.8.1

Spill prevention is especially important, as some common spill response measures, such as using dispersals that sink heavier oil. A reduction in spills means a reduction in the chance that spills may sink, either on their own or through chemical dispersant deployment, into these sensitive habitats. Sinking oil may devastate submerged vegetation like eelgrass, which supports forage fish, juvenile fish and crab, and the broader food web stability.

Friends of the San Juans (O-5-1)

Comment 4.8.2

This section should be updated with more information re: "The spill risk for laden vessels associated with the Trans Mountain Expansion Project is a particular concern because they would be transporting diluted bitumen." The December 20, 2024, comments also included references to the 2022 National Academies report, Oil in the Sea IV as well as the USCG's Risk Assessment of Transporting Canadian Oil Sands, specifically page 18:

From an oil spill response perspective, it is important to have awareness of the environmental fate and behavior of Canadian oil sands products once they are released into the aquatic environment. Currently, there is scientific uncertainty about how Canadian oil sands products would weather and behave in aquatic environments at different ranges of temperatures, salinity, and sedimentation. There is also uncertainty about the extent that the diluent will separate from Canadian oil sands products under different spill conditions. These uncertainties can pose a major challenge to oil spill responders. Typically, oil sands products are classified as Group IV oil for contingency planning, but during a spill may not behave as such. Additionally, the evaporation of volatile components of the diluents in Canadian oil sands products results in potentially toxic and/or flammable VOCs in atmosphere above the spill. The initial portion of an oil sand product response would emphasize minimizing public and responder hazards from light VOCs that would volatize in the first several hours/days of the event.

The cost of diluted bitumen spill response, remediation, and restoration was also addressed:

The response, remediation, and restoration costs for the 2010 pipeline spill of tar sands crude oil into the Kalamazoo River was over $1,208,000,000 or $60,153 dollars per barrel (see the UNITED STATES SECURITIES AND EXCHANGE COMMISSION. FORM 10-Q. September 30, 2014, Quarterly Report (page 19)). This amount far exceeds the average response, remediation, and restoration costs of a conventional crude oil spill.

The DEIS should also be updated to address the higher costs of diluted bitumen spill response, remediation, and restoration.

Response to comments 4.8.1 and 4.8.2

Comments 4.8.1 and 4.8.2 provided additional information regarding the environmental fate and behavior of oil spills, including those of Canadian oil sands products, and associated impacts to sensitive habitats like eelgrass. We agree that sinking oils pose specific environmental risks and are an important consideration for oil spill prevention, preparedness, and response. We have

incorporated new content in Section 5.2 of the EIS to further acknowledge the potential cumulative impacts of sinking or submerged oil that could result from spills of diluted bitumen.

Comment 4.8.2 requested that the EIS should address the costs of diluted bitumen spill response, remediation, and restoration. Economic analyses are outside of the EIS scope and are addressed through the PRA for this rulemaking. Please see the response to comment 5.1 below for a response to this portion of the comment.

Trans Mountain Expansion Vessel Traffic

Friends of the San Juans (O-5-1)

Comment 4.8.3

DEIS Section 5.1 Past, Present, and Reasonably Foreseeable Future Actions, Trans Mountain Expansion Project – Burnaby, British Columbia:

This section states, "All of these tankers would be greater than 40,000 DWT and don't affect escort tug traffic associated with this proposed rulemaking." Comments were submitted on December 20, 2024, stating, "it is imperative that this rulemaking address the changes in tank vessel traffic that have recently occurred as a result of the completion of the Trans Mountain pipeline expansion project." This section should be revised to address the fact that from May 11, 2024, to May 14, 2025, there were 21 laden tank vessels between 5,000 and 40,000 DWT, including Trans Mountain target vessels. The increased oil spill prevention provided by tug escorts is critical for tank vessels transporting Canadian tar sands diluted bitumen.

Response to comment 4.8.3

We agree that the Trans Mountain Expansion Project (TMX) is important to consider when assessing cumulative impacts as it will add significant non-target vessel (tankers over 40,000 DWT) traffic to the EIS Study Area and the broader, as described in the EIS. Some TMX traffic, including from target vessels, is already underway and is captured in the AIS data used in the EIS. The next portion of the EIS Section 5.1 that this comment references provides additional context. It reads:

> "Oil barge traffic is expected to be unchanged at approximately three per month. If these barges transit through the current rulemaking area while laden, they are required to have an escort tug. Vessels would transport heavy crude oil, also called diluted bitumen. The majority of the additional Trans Mountain vessel traffic is not expected to call on Washington ports but is likely to represent a slight increase in non-target vessel calls to Washington refineries."

In response to this comment, Ecology also reviewed available data on vessels associated with TMX. The comment refers to data from the Pilotage Report presented at the May 2025 BPC meeting. While this data is useful, it doesn't provide specifics on whether laden vessels are coming from TMX at the Westridge Terminal. We believe that the Pacific Pilotage Association (PPA) provides more useful data for answering this question. According to the PPA (https://www.ppa.gc.ca/vessel-movement-data), there were seven target tank vessel (all ATBs or towed oil barges) transits from the Westridge terminal during the nearly one-year timeframe referenced in the comment. Compared to Ecology's ANT data, only four of those transits traveled to a Washington refinery, delivering crude oil to U.S. Oil in Tacoma or HF Sinclair

Puget Sound Refinery in March Point. Seven transits in a one-year period is well below the three transits per month already described in the EIS (see section cited above).

As noted in the cited paragraph above, the tug escort rule requirements include the route that those barges or other target tank vessels might take if traveling through Rosario Strait.

5. Comments on the Preliminary Regulatory Analyses

Friends of the San Juans (O-5-1)

Comment 5.1

The cost of diluted bitumen spill response, remediation, and restoration was also addressed [in DEIS Section 5.2 Cumulative Impacts]:

The response, remediation, and restoration costs for the 2010 pipeline spill of tar sands crude oil into the Kalamazoo River was over $1,208,000,000 or $60,153 dollars per barrel (see the UNITED STATES SECURITIES AND EXCHANGE COMMISSION. FORM 10-Q. September 30, 2014, Quarterly Report (page 19)). This amount far exceeds the average response, remediation, and restoration costs of a conventional crude oil spill.

The DEIS should also be updated to address the higher costs of diluted bitumen spill response, remediation, and restoration.

Response to comment 5.1

In the Preliminary Regulatory Analyses (PRA), estimated costs of oil spill cleanup and damages were considered from multiple sources. The cost estimate used in the analysis, $50,000 per barrel, was near the upper end of the range of costs reported. This is not dramatically dissimilar to costs cited in the comment for the pipeline spill of diluted bitumen into the Kalamazoo River.

Regarding diluted bitumen, we state in Section 1.1.2.3 of the PRA: “Ecology estimates that diluted bitumen is almost exclusively transported on vessels larger than the vessels this rulemaking applies to.” This continues to be our understanding.

We consider the current cleanup cost estimate appropriate, given our assessment of what the small to medium sized oil carrying tank vessels that the adopted rule applies to will be transporting.

Joint Environmental NGOs (O-3-1)

Comment 5.2

The BPC and Ecology produced a separate study in May 2025 entitled, Preliminary Regulatory Analysis which included a cost-benefit analysis and least burdensome analysis as required by the Washington Administrative Procedure Act (APA; RCW 34.05.328(1)(d)).

Given the DEIS used the tug escort regime that has been in place since 2020 as the no action alternative (Alternative A), this analysis was limited to an evaluation of the impact of expanding the escort area by 28.9 square miles (11%) to include a portion of Boundary Pass to the 273.6 square mile initial rule area.

There were two primary costs analyzed associated with the rule. Those costs were based on estimates of the impact of the expansion for the rule area to include: a 2.4% increase in the use of tug escorts which amounts to 244.6 hours a year or .67 hours per day. The other cost was associated with the increased time it took to conduct the pre-escort conference.

The additional time needed for the increased number of tug charters in the rule area was estimated to cost $835 million dollars a year with a net present value (NPV) cost of $16 million over 20 years.

The cost of the time it takes to conduct approximately 800 pre-escort conferences (10 minutes/escort) was estimated to be $15,851 per year based on crew salaries. This results in a NPV of $303,773 over 20 years.

Based on Ecology's estimates, which we refute, the rule results in a reduction of the chance of a drift grounding from a 189-year event, down from a 186-year event.

The volume of a worst-case spill is estimated to be 259,000 barrels. Estimates of the economic impacts of spilling this much oil considered many variables including a special value placed on the public's interest in protecting the Southern Resident Killer Whale population. Despite the difficulties of estimating the costs from a wide variety of impacts associated with a worst-case spill and the frequency one would occur, the analysis estimates a NPV of $26.8 million over 20 years.

We find this analysis to be flawed regardless of assumptions used to estimate the cost of spilling. The reason for this is based on the previously mentioned criticisms we have with the DEIS. The three primary ones being the DEIS only estimates the benefits of expanding the use of tug escorts by 28.9 square miles. The model estimates the benefit of a tug escort over this small area to only reduce the likelihood of a grounding by three years over a 189-year period. Furthermore, the estimated likelihood of the grounding to result in an oil spill is estimated in tens of thousands of years.

Despite these fundamental concerns, the result of the analysis estimates the avoided oil spill costs range from $3,000 per year to $1.4 million per year. This net positive result was sufficient for the BPC to recommend the proposed changes to the Pilotage Rules which we support.

Response to comment 5.2

When evaluating the impact of a proposed rule, Ecology uses the current state of affairs without the rule as our baseline. This approach is applied consistently across all rulemakings.

In this instance, the current state of affairs is the law that's been in effect since September 1, 2020, which created the current tug escort requirements in the Rosario Strait for the small to medium sized oil carrying tank vessels under consideration. This is denoted as Alternative A in the DEIS. As noted, for the Preliminary Regulatory Analyses, it is only the proposed change relative to the status quo which is considered. In this instance that is the additional area described in the comment, plus the functional and operational requirements.

We acknowledge that the directive to consider removal of the post 2020 requirements introduces some nuance, but in consultation with Assistant Attorneys General, the current requirements were determined to be the baseline for our regulatory analyses.

For additional information regarding the impact relative to other considered alternatives, please see our response to comments 4.1.7 and 4.1.8 in the DEIS section of this document.

Ecology's Spill Risk Model was built at the directive of the Legislature in 2019's EHSB 1578 and has been used in developing previous analyses of oil spill risk and the effectiveness of tug

escorts in reducing that risk. It is described in detail on the Department of Ecology's website[10] and we note no specific objection as to its methodology in the comment.

[10] https://ecology.wa.gov/spills-cleanup/spills/oil-spill-prevention/safety-of-oil-transportation-act/risk-modeling

6. Other comments

American Waterways Operators (O-1-1)

Comment 6.1

The American Waterways Operators (AWO) is the tugboat, towboat, and barge industry's advocate, resource, and united voice for safe, sustainable, and efficient transportation on America's waterways, oceans, and coasts. As the largest segment of the nation's 40,000-vessel domestic maritime fleet, our industry safely and efficiently moves 665 million tons of cargo each year and enables the flow of goods through ports on the inland and intracoastal waterways; the Atlantic, Pacific and Gulf coasts; and the Great Lakes. On behalf of our more than 300 member companies, we appreciate the opportunity to comment on the Board of Pilotage Commissioners' (BPC) draft proposed Tug Escort Rulemaking to amend Chapter 363-116 WAC, Pilotage Rules.

The escort requirements addressed by BPC's Tug Escort Rulemaking are intended to provide preventative measures to reduce the risk of a major oil spill. AWO members share this commitment to mitigating spill risks and are proud to be a part of the most environmentally safe and efficient mode of freight transportation. In the spirit of our shared goals of environmental safety and efficiency, we offer the following comments…[comments appear in other sections of the Response to Comments].

CDonaldson, Chloe (I-1-1)

Comment 6.2

The Port Gamble S'Klallam Tribe also supports continued transparency in vessel tracking and monitoring to safeguard treaty protected rights regarding fishing and harvesting in the Tribe's waters and U&A. Real time information about marine traffic helps ensure that Tribal fishers have access to treaty protected fishing areas and maintains safety for humans, wildlife, and resources.

Doherty, Mike (I-3-1)

Comment 6.3

For many residents of the North Olympic Peninsula, oil spill risks are taken seriously. In December 1985, the Tank Vessel Arco Anchorage, carrying 814,000 barrels of Alaskan North Slope crude oil, entered Port Angeles harbor, ran aground and tore open two cargo holds, spilling 5690 barrels, or 239,000 gallons, into the Port Angeles harbor. Oil drifted as far west as Neah Bay, and east to Dungeness Spit. The 24/7 cleanup lasted over four months.

In December, 1988, a spill occurred from the 300 foot tank barge, Nestucca, loaded with nearly 300,000 gallons of bunker oil from Cherry Point, when a tow line broke. An "insurance wire" that should have been available to deploy in such circumstances was not available. In maneuvers to reconnect the tow, the barge was ruptured by the tug's rudder (a six foot by 18" gash). The "fingerprint" of the oil was found from the Oregon Coast to Vancouver Island. 230,000 gallons spilled. A federal judge found that the "responsible party" had caused the spill.

In 1991, the fish processing vessel Tenya Maru, loaded with 450,000 gallons of fuel oil, rammed a Chinese freighter, 22 miles northwest of Cape Flattery, in Canadian waters. The vessel sank to

the ocean floor near the mouth of the Strait of Juan de Fuca. Nearly 65% of the diesel oil and bunker fuel remains unaccounted for. The ship remains 500 feet under water.

Friends of the San Juans (O-5-1)

Comment 6.4

Thank you for this opportunity to comment on the Tug Escort Rulemaking Draft Environmental Impact Statement (DEIS) and the Board of Pilotage Commissioners' proposed rule that would amend Chapter 363-116 WAC, Pilotage Rules, to address critical safety gaps for vessels carrying oil in bulk and to reduce the risk of a catastrophic oil spill.

Friends of the San Juans is a nonprofit organization established in 1979 and based in Friday Harbor, Washington, with the mission to bring people and nature together to protect the San Juan Islands and the Salish Sea through education, science, policy, and law. Friends of the San Juans was a co-petitioner that led to the federal listing of the Southern Resident killer whales as an endangered species under the Endangered Species Act. The protection and recovery of the Southern Residents continues to be one of our top priorities.

The increase in Trans Mountain tanker traffic intensifies the need for expanding tug escort requirements:

The changes in tank vessel traffic that have recently occurred because of the completion of the Trans Mountain pipeline expansion project intensifies the need for this proposed expansion of the tug escort requirements for small- to medium-size oil tankers, ATBs (Articulated Tug Barges) and towed barges between 5,000 – 40,000 DWT (dead weight tons). Tank vessels that are exporting Canadian tar sands crude oil are directly entering Washington State, contrary to the vessel traffic route included in the permitted application for Trans Mountain's expansion project. At the May 15, 2025, Board of Pilotage Commissioners meeting, information was provided on tankers transiting between Canada and Washington State from May 11, 2024, to May 14, 2025. There were 21 laden tank vessels between 5,000 and 40,000 DWT. Some of the Trans Mountain tank vessels transit from British Columbia to Washington State via Georgia Strait and Rosario Strait. The tug escorts requirements are proposed to expand into the U.S. waters of Georgia Strait, in addition to Rosario Strait and connected waterways to the east.

Joint Environmental NGOs (O-3-1)

Comment 6.5

Changing with the Times

Based on Ecology's analysis of its Vessel Entries and Transits data (VEAT) from 2011-2023, as summarized below, ATBs have progressively become preferred to oil barges as a means of oil transportation. This is due to their ability to save money for the oil industry by carrying tanker volumes of oil with fewer crew.

(*Data included in original comment letter shows the comparison between the frequency of barges and ATB transits within the Salish Sea and the frequency of barges and ATBs entering the Strait of Juan de Fuca.)*

ATBs also spend more time transiting throughout the study area as compared to other tank vessels.

(*Original comment letter includes a table from DEIS that shows time tank vessels underway within the study area in 2023)*

The increased use of these "rulebreakers," as they are described in the 1994 Congressional Research Services (CRS) report, more than justifies the legislation (ESHB 1578) requiring the 4 State to revisit its escort rules if we are to maintain our commitment to making continuous improvements.

Details of Incidents and Oil Spills in the Region

To better illustrate the nature of our region's oil spill risk exposure and the reason for our support of this rulemaking, we provide some examples of incidents which occurred in Washington and British Columbia. We also include some of the proactive and reactive safety measures that have been taken over the years.

Following the discovery of oil in Alaska in the 1970s, ARCO built its refinery at Cherry Point to receive North Slope crude oil by tankers, as did three existing refineries which previously received crude primarily by pipeline, which they also continue to do. This major change in risk to our waterways, as reflected by the 239,000-gallon *ARCO Anchorage* oil spill in 1985, was addressed by Washington State requiring tug escorts for oil tankers larger than 40,000 dwt.

In the winter of 1988 the barge *Nestucca* broke its tow line and spilled 230,000 gallons of heavy fuel oil, fouling 110 miles of the Olympic coast, which significantly impacted the four coastal Treaty Tribes and Olympic National Park.

This was followed shortly thereafter by the *Exxon Valdez* catastrophe in the spring of 1989. Two laden, single hull Exxon oil tankers went adrift off Cape Flattery within months following that disaster. "Tugs of opportunity" had to be deployed because the tankers were west of the area covered by the escort requirement.

The year following the 11 million-gallon Exxon Valdez oil spill, major changes were made to maritime safety nationally with the passage of the Oil Pollution Act of 1990 (OPA 90). These included the requirement for single hull tankers to have two tug escorts in Prince William Sound and Puget Sound.

However, with the phase in of double hull tankers there is no longer a federal double tug escort requirement in Washington state, while it has been retained in Prince William Sound. Tankers greater than 40,000 dwt in Washington are still required to retain a single escort due to the Pilotage Rules being expanded in this rule making.

There are many more lower profile incidents (e.g. mechanical or human error) that did not result in oil spills and are a better reflection of oil spill risk than actual spills.

In 1988, due to the threat of an oil spill like the *Nestucca* and a federal proposal for oil and gas development off the coasts of Oregon and Washington, Congress mandated the creation of the Olympic Coast National Marine Sanctuary. The 3,188 square mile Sanctuary was officially designated in 1994. In 1995 the International Maritime Organization (IMO) established an Area To Be Avoided (ATBA) requiring tank vessels to remain 25 miles off the coast. The J-Bouy was

subsequently moved 12 miles further offshore, and the ATBA was expanded to prevent tank vessels from “cutting the corner” around Cape Flattery.

Beginning with a Navy contract in 2007, State funding in 2009, and after 11 years of further public funding and extensive studies, the State required vessels greater than 300 gross tons to have a contract with an Emergency Response Towing Vessel (ERTV) in Neah Bay to respond to incidents like the Exxon tankers that went adrift off the coast. Having assisted over 80 vessels in distress on both sides of the border, the ERTV continues to prove itself an essential addition to our region’s maritime safety net.

The Government of Canada has also established two ERTVs to prevent groundings off the northern coast of British Columbia in response to the sinking of a bulk carrier in the region which significantly impacted the Haidi First Nation.

There have also been a series of oil spills and incidents within the Salish Sea which further underscore the importance of this current rule making. In December 1994 the Crowley Barge 101 leaked 26,900 gallons of oil after being towed across a reef in Boundary Pass.

In 1997 there was a very close call in the same vicinity when the coal carrier, *Continental Spirit*, lost power and drifted for three miles in 30 minutes before dropping its anchor and coming to a stop within 500 yards of shoals around Patos and Sucia Islands.

Between October 2011 and September 2013 there were at least seven incidents with tugs towing a variety of cargos along Rosario Strait, including collisions with navigational aids. However, the Coast Guard only issued a Notice to Mariners providing barge operators with best management practices as to how to navigate the Strait during ebb currents.

There were also two incidents we are aware of in British Columbia involving ATBs which also support the implementation of this rule making. On October 13, 2016, the U.S.-flagged ATB *Nathan E. Stewart*, enroute to Alaska, ran aground and sank near Bella Bella, B.C. While not laden, it spilled 29,000 gallons of fuel and lube oil that significantly impacted the Heiltsuk First Nation.

On Nov. 26, 2017, the U.S.-flagged ATB *Jake Shearer*, which had replaced the sunken barge *Nathan E. Stewart*, lost power and almost grounded yet again in the biologically rich Heiltsuk Territory. In addition to 125,000 gallons of fuel, the *Jake Shearer* held more than 790,000 gallons of oily cargo but was capable of carrying 3.4 million gallons.

Makah Tribal Council (T-1-1)

Comment 6.6

The ancestral homeland of the Makah Tribe, who are known as the "People of the Cape,"is located at the Northwest point of the Olympic Peninsula in Washington State. The Makah Reservation is approximately 47 square miles and the Makah Usual and Accustomed Treaty Fishing Area (U&A) extends north to include La Perouse and Swiftsure Banks, west approximately 40 nautical miles offshore into the Pacific Ocean, east into the Strait of Juan de Fuca to Tongue Point, and south along the State of Washington Outer Coast to the Norwegian Memorial, or 48° 02' 15" S, approximately 21 miles south of Cape Flattery, covering

approximately 1,550 square miles of marine territory in US waters (Figure 1). However, Makah traditional use of the ocean extends north through the Bering Sea, south to the Columbia River, and into Puget Sound. The overall health of our treaty resources depends upon the interconnected ecosystems of the California Current, Alaska Current, and the Strait of Juan de Fuca, which come to a confluence in our Treaty U&A.

(*Original comment letter includes a map of present-day Makah Usual and Accustomed Fishing Area (U&A)*)

The cultural and traditional existence and well-being of the Makah people have always been closely tied to our relationship with the natural environment, especially the ocean. The Makah hold a spiritual reverence and have inexorable ties to the ocean and its bountiful natural resources. The Makah relationship to the ocean continues today, in part through our robust and valuable treaty fisheries, which directly support over 60% of our local economy, nutritional security, cultural practices, and the overall health of our community. Makah's extensive treaty fisheries include commercial, ceremonial, and subsistence harvest of a wide range of species including salmon, halibut, sablefish, hake, rockfish, and other groundfish. Community surveys indicate that 99% of the Makah community rely on fishing, harvesting shellfish, or hunting for a portion of their diet.

The 1855 Treaty of Neah Bay reserves the Makah's right to retain and exercise inherent sovereign authority over our treaty-protected area and ownership of the resources therein. The Treaty is the legal agreement between the Makah Tribe and the United States that recognizes the Makah Tribe's status as a sovereign nation and therefore a resource trustee. It reserved inherent sovereign rights to natural resources, cultural practices, and other services and benefits in exchange for the cession of 469 square miles of territory to the United States. Explicitly, the Treaty reserves the Makah Tribe's perpetual rights to hunt, fish, whale, seal, and gather within our U&A. These rights have repeatedly been confirmed and interpreted in federal court decisions. See, e.g., United States v. Washington, 384 F. Supp. 312 (W.D. Wash. 1974).

Unfortunately, the Makah Tribe has experience with the devastating impacts of oil spills on treaty-protected resources and important places. Over two million gallons of oil have been spilled within the Makah U&A since the 1970s, primarily from the 1972 USS General MC Meigs spill, the 1988 Nestucca spill, and the 1991 Tenyo Maru spill. Previous studies have indicated that the entrance to the Strait of Juan de Fuca is a particularly high-risk area for vessel traffic, and inclement weather and ocean conditions have contributed to major spills (e.g., 1972 USS General MC Meigs spill) and complicated responses (e.g., 2024 Tug Luther and Barge Lafarge Trader response). The history of oil spills in this region, as well as the frequency and location of deployments of the Emergency Response Towing Vessel from Neah Bay, continue to confirm this risk profile. In 1994, in recognition of this risk, NOAA and the USCG established an Area to be Avoided adjacent to the Makah Reservation to protect sensitive ecological resources and prevent maritime casualties. However, the Canadian government continues to invest in maritime infrastructure projects that will increase vessel traffic and associated risk in our transboundary waters. The Trans Mountain Pipeline Expansion Project, now active, increased tanker traffic in or adjacent to the Makah U&A approximately seven-fold.

Response to comments 6.1 through 6.6

The BPC and Ecology acknowledge and appreciate the comments submitted. These comments highlight important context regarding maritime safety, oil spill prevention, and protection of Tribal Treaty rights, cultural resources, and ecological health.

Green, Marta (I-2-1)

Comment 6.7

Thank you for the opportunity to comment on the proposed rulemaking WSR 25-13-042 related to the BPC's proposing new section of Chapter 363-116 WAC. I recognize the tremendous effort by many in addressing the 2019 legislation ESHB 1578 to protect the Southern Resident Killer Whale from extinction resulting from an oil spill in or near Washington State waters.

An ERTV is proven best practice for spill prevention in WA, Canadian, and International shipping lanes around the world. An ERTV oil spill prevention measure—if it were to be implemented as recommended by WA's Orca Whale Task Force with an ERTV in Sidney—has been demonstrated as effective over 80% of the time to respond to and prevent a disabled vessel from grounding in Haro Strait and Boundary Pass. The drift modeling that demonstrates this ERTV effectiveness is based on the University of WA Puget Sound Institute Salish Sea Modeling Center's current and wind models which, importantly, were calibrated by NOAA. The WA Department of Ecology were provided and initially stated their intent to use the same UW, high resolution and best available, current and wind models. They chose instead to model their vessel drift times and spill risk from drift grounding on a lower resolution dataset from Live Ocean. Live Ocean is a rectangular structured grid, course resolution, and potentially not suited to complex inland waters and shorelines. Nor is Live Ocean known to be validated by NOAA. So it is requested that the WA Department of Ecology both justify the use of Live Ocean instead of the WA State's superior wind and current data model in their drift model. I also recommend that the WA Department of Ecology provide to BCP and all parties the detailed results of their modeled vessel drift times—that is the time for vessels to drift to ground in the ESHB legislation's cited waters of Rosario Strait, Haro Strait, and Boundary Pass— that are foundational to the risk modeling of a drift grounding resulting in a spill and still omitted in their tug escort and ERTV analysis reports.

In addition to the drift model, numerous aspects of WA Department of Ecology's oil spill risk model are not documented and the reporting lacks traceability of untested assumptions. Sensitivity analyses and scientific peer review of the model and results are needed, absent which the model and reporting should not be used as a basis for regulatory analyses and decisions.

Response to comment 6.7

Consideration of an ERTV program is outside the scope of this rulemaking.

With respect to modeled vessel drift times, the Tug Escort Analysis report was conducted under a scope of work approved by the BPC. That scope did not include drift time calculations, as they were not necessary for evaluating potential tug escort requirements. For this reason, drift times were not published as part of the legislative report or provided as supplemental material for this rulemaking.

Ecology used the University of Washington's LiveOcean model, with direct support from the LiveOcean research team. LiveOcean is a peer-reviewed, widely used regional ocean model, with outputs distributed through NOAA and other federal data platforms. Neither LiveOcean nor

the Salish Sea Model is inherently superior; both are well-regarded within the scientific community. The choice between them depends on availability, familiarity, and the research question being addressed.

Ecology also notes that while ocean currents and winds are important inputs for drift analyses, other factors—including vessel draft, wind area, wave drag, bathymetry, and momentum—are equally influential. At the scale of this analysis, differences between regional ocean models would not have meaningfully changed the results. More detail is provided in Appendix B of the following legislative reports: Summary of Tug Escort Analysis Results[11] and Analysis of an Additional Emergency Response Towing Vessel.[12]

For information on the model development process and the outreach and engagement that supported it, see response to comment 4.2.3.

U.S. Coast Guard (A-1-1)

Comment 6.8

The Coast Guard continues to appreciate the cooperative relationship that it shares with the State of Washington Department of Ecology and the Board of Pilotage Commissioners. Through these productive relationships, we have worked together to protect the Puget Sound, its adjoining waterways, and its marine life from various threats, including oil pollution. Puget Sound is a crucial waterway to the citizens of Washington State, our sovereign tribal communities and to the Nation. The Coast Guard supports the State of Washington's forward-leaning stance regarding environmental safety and protection, including its desire to mitigate oil spill risks in Puget Sound. Through our respective authorities, we have protected the pristine nature of Puget Sound and established effective rules to mitigate oil spill risks in the Puget Sound and its adjoining waters throughout the State. These comments are related to the findings in the Summary of Tug Escort Analysis Results that were released to the Coast Guard and the Public in September 2023. The primary concern is that the study model shows, under simulated circumstances, the overall reduction in oil spill incidents is negligible while significantly increasing vessel traffic. The increase in vessel traffic will result in increased vessel interactions and potentially cause a higher rate of marine casualties in the Puget Sound and adjacent waters. Due consideration should be given to the national and international existing tug escort requirements within the proposed area to ensure duplicative efforts are not being made for regulatory requirements.

Thank you for the opportunity to comment on this rulemaking. The Coast Guard looks forward to our continued relationship in jointly working to protect all the waters of the Puget Sound, the marine life, and the navigability for the various of vessels that work and recreate within these waters.

Commentor A-1-1 also included a letter, which is provided in full below as an excerpt.

The U.S. Coast Guard greatly appreciates the cooperative relationship it shares with the State of Washington Department of Ecology and Board of Pilotage Commissioners. Through these productive relationships, we have worked together to protect Puget Sound and its marine life

[11] https://apps.ecology.wa.gov/publications/documents/2308009.pdf
[12] https://apps.ecology.wa.gov/publications/documents/2308008.pdf

from various threats, to include oil pollution. Puget Sound is a critical body of water to both the citizens of Washington and the people who use it for navigation purposes. The U.S. Coast Guard supports the State of Washington's forward-leaning stance regarding environmental safety and protection, to include its desire to mitigate oil spill risks in Puget Sound. Through our respective regulatory authorities, we have protected the pristine nature of Puget Sound and established effective rules to mitigate oil spill risks in its waters.

This letter is to inform and hopefully open a productive dialogue to discuss RCW 88.16.190 and 88.16.260 and the findings in the Summary of Tug Escort Analysis Results released to the Coast Guard and the public in September 2023 [hereinafter, "Summary"]. The U.S. Coast Guard appreciates the work and research done to create the 196-page report and would like to discuss those findings. The primary concern is that the study model shows, under simulated circumstances, the overall reduction in oil spill incidents is negligible while significantly increasing vessel traffic in Puget Sound and adjacent waters.

The Coast Guard has regulatory authority over the navigable waterways of Puget Sound and adjacent waters under 33 CFR § 165.1303, to include the power to regulate tug escort requirements for tank vessels. We respect the State of Washington's desire to protect waterways from oil spills, but the Coast Guard does not find the Summary supports expanding current tug escort requirements in Puget Sound. Instead, it suggests more collisions and spills could result due to increased vessel traffic and risks to safety of navigation in congested waterways. If the State intends to proceed with expanding current tug escort requirements as proposed, the Coast Guard is prepared to submit public comments documenting our concerns while emphasizing our support to preserving the pristine Pacific Northwest waters.

The Coast Guard values its relationship with the State of Washington in executing our shared goals to protect Washington's waters from environmental damage. We look forward to continued cooperation on this matter.

Response to comment 6.8

The BPC and Ecology appreciate the cooperative relationship with the USCG and the shared goal of protecting Puget Sound and its marine life.

For context, in response to the letter submitted to accompany this comment, Ecology and BPC met with the USCG on February 27, 2024, to discuss the findings of the *Summary of Tug Escort Analysis Results* concerns were shared in the USCG's February 2, 2024, letter to the Ecology and the BPC. Thank you for submitting this letter again as part of your public comment to document your feedback in the rule record.

We acknowledge that while tug escorts reduce oil spill risk, they can also increase vessel traffic, and more vessels could result in impacts to the environment. Please see Section 4.1 of the EIS for an analysis of vessel traffic changes under each alternative. The EIS found that while some small areas could experience moderate increases in vessel traffic under some alternatives, overall the changes in vessel traffic from the alternatives assessed in the EIS were not significant. The EIS considered the impact of the adopted rule on air and water quality, underwater noise, plants and animals including SRKWs, Tribal resources, and other environmental elements that might be adversely impacted. The BPC reviewed the impacts identified in the DEIS and the PRA and voted to adopt Alternative C (expansion of escort area by 28.9 square miles) as achieving Best Achievable Protection for the SRKWs and other sensitive resources.

6. Other comments

The BPC and Ecology appreciate the cooperative relationship our state agencies have with the USCG and the shared goal to promote best practices for vessel spill prevention.

Appendix A: Comment Letters

This section contains all the comment letters submitted as attachments, and one comment letter we received in the mail.

The American Waterways Operators

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Seattle, WA 98103

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Peter J. Schrappen, CAE
Pacific Region Vice President & Regional Team Lead

July 29, 2025

Ms. Jaimie Bever
Executive Director
Board of Pilotage Commissioners
2901 Third Avenue, Suite 500
Seattle, WA 98121

RE: Board of Pilotage Commissioners Tug Escort Rulemaking, proposal to amend Pilotage Rules (Chapter 363-116 WAC)

Dear Ms. Bever:

The American Waterways Operators (AWO) is the tugboat, towboat, and barge industry's advocate, resource, and united voice for safe, sustainable, and efficient transportation on America's waterways, oceans, and coasts. As the largest segment of the nation's 40,000-vessel domestic maritime fleet, our industry safely and efficiently moves 665 million tons of cargo each year and enables the flow of goods through ports on the inland and intracoastal waterways; the Atlantic, Pacific and Gulf coasts; and the Great Lakes. On behalf of our more than 300 member companies, we appreciate the opportunity to comment on the Board of Pilotage Commissioners' (BPC) draft proposed Tug Escort Rulemaking to amend Chapter 363-116 WAC, Pilotage Rules.

The escort requirements addressed by BPC's Tug Escort Rulemaking are intended to provide preventative measures to reduce the risk of a major oil spill. AWO members share this commitment to mitigating spill risks and are proud to be a part of the most environmentally safe and efficient mode of freight transportation. In the spirit of our shared goals of environmental safety and efficiency, we offer the following comments.

AWO appreciates the Washington State Department of Ecology (ECY) and BPC for engaging with us throughout the rulemaking process. The avoidance of overly prescriptive and limiting language in the draft will ensure vessels can comply with the amendments in a manner that is safe, feasible, and efficient for maritime operations.

We note, however, that concerns and inconsistencies remain with the data used to develop the proposed language. ECY concluded that drift groundings and resulting spills are especially infrequent, with only four such groundings occurring between 2002-2019, none of which resulted in a spill. A summary of the Tug Escort Analysis states, "Tank vessels make up only a

portion of drift grounding risk, and drift grounding risk makes up only a small part of overall maritime oil spill risk."[1]

Given the low rate of drift grounding incidents, ECY included the frequency of other incident types involving tug escorts themselves in its Environmental Impact Statement (EIS) analysis, including collisions and allisions, sinkings and capsizing, and more, stating: "The scope of the escort tug incident analysis is broad – it looks at reportable collisions, groundings, oil spills, equipment malfunctions, fires, and other types of incidents. This is in contrast to the evaluation of target vessels, which focuses on a single incident type: drift groundings."[2] The inclusion of such data might be appropriate if the rulemaking were focused on mitigating risks from non-drift grounding incidents, but the EIS and CR-102 rely on drift grounding risk as the primary justification for the tug escort requirements, arguably making the added data superfluous.

To quantify oil spill risks resulting from tug escort activity, ECY relied upon a simulation model of vessel traffic patterns and resulting spill risks, with a particular focus on drift groundings in its EIS. As noted by ECY in the report, the oil spill risk model relies heavily on hypothetical scenarios and simulated vessel behavior rather than empirical evidence. To achieve this, the agency used models outside of the scope area to collect percentages reflecting incident probability. This type of scenario modeling allows the agency to identify what type of tug escort requirements can reduce the risk of spills, though such conclusions are, at best, speculative, and at worst, inaccurate and unreliable. AWO requests that BPC and ECY conduct a thorough data analysis beginning in the 2028 review cycle to verify all conclusions drawn from the study. Data verification is of primary importance to ensure that the rule's requirements reflect actual oil spill threats and appropriate mitigation measures, especially in the event that lawmakers propose to extend the requirements therein.

Additionally, we also ask that language be added to Section 7. c.v., which is entitled "Relative position, direction of travel, and tethering locations of the tug(s) during the transit."[3] The use of "tethering" implies that at some point, a tug escort will tether to a tank vessel, though this is not true in all cases. To amend this and prevent unforeseen requirements, we advise adding qualifying language such as "if needed" or "if appropriate" to reflect operational realities.

Under Alternative C, BPC is proposing to expand its tug escort requirements for oil tankers northwest towards Patos Island, which includes the Haro Strait and Strait of Georgia. These waterways, and others already covered by the existing tug escort requirements, are transboundary and extend into Canadian territory. Canada requires that tethered tugs accompany laden tankers while transiting certain waters, including the Boundary Pass and Haro Strait. Considering this overlap and for the sake of consistency, AWO asks that BPC consider aligning its tug escort requirements with Canadian requirements in the future.

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[1] Washington State Department of Ecology. (2023). Summary of Tug Escort Analysis Results. https://apps.ecology.wa.gov/publications/documents/2308009.pdf

[2] Board of Pilotage Commissioners. (2025). Board of Pilotage Commissioners Tug Escort Rulemaking (Chapter 363-116 WAC) State Environmental Policy Act Environmental Impact Statement. https://apps.ecology.wa.gov/separ/Main/SEPA/Record.aspx?SEPANumber=202502240

[3] Board of Pilotage Commissioners. (2025). Proposed Rule Language. https://ecology.wa.gov/getattachment/0af74d14-3b72-4509-92bc-b3a3cbb723bb/RDS-6256-1-For-Filing.pdf

Thank you again for the opportunity to comment on the draft proposed Tug Escort Rulemaking to amend Chapter 363-116 WAC, Pilotage Rules. We appreciate BPC's consideration of our comments and would be pleased to answer any questions or provide further information to assist in your decision-making.

Sincerely,

Peter Schrappen
Pacific Region Vice President & Regional Team Lead

Joint Environmental NGOs (Keith Curl-Dove)

Please see attached comments.

August 1, 2025

Jaimie Bever
Board of Pilotage Commissioners
2901 3rd Avenue, Ste 500
Seattle, Washington 98121

Dear Board of Pilotage Commissioners,

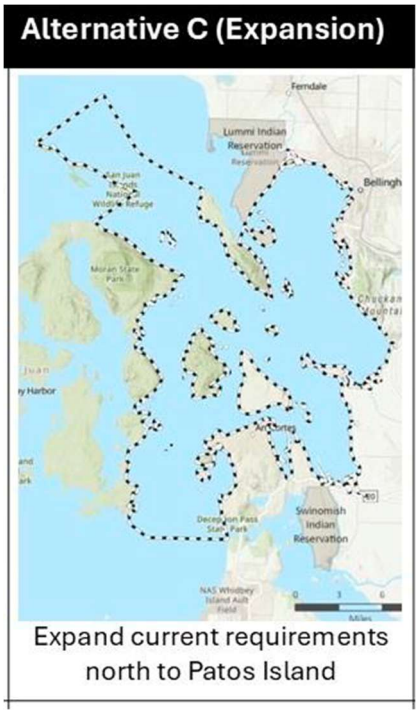
Thank you for this opportunity to provide public comment on the Draft Environmental Impact (DEIS) evaluating the impacts of your proposed amendments to the Pilotage Rules found in Chapter 363-116 WAC. The proposal extends tug escort regulations required of oil tankers greater than 40,000 dwt, to smaller oil tankers, articulated tug barges (ATBs), and towed barges between 5,000 - 40,000 dwt (other those engaged in bunkering operations).

The undersigned organizations and our thousands of members have worked on environmental issues in Washington State for decades. We are providing these comments because of our commitment to protecting the Salish Sea and all those dependent on it. In particular, we are deeply concerned about the potential for a major oil spill to result in the extinction of the critically endangered population of Southern Resident Killer Whales as occurred to a population in Alaska resulting from the 1989 Exxon Valdez oil spill in Prince Williams Sound.

We appreciate the work of the Board of Pilotage Commissioners (BPC) and the Department of Ecology (Ecology) during this long and inclusive public process. We believe that the proposed amendments to the Pilotage Rules meet the primary intent of the legislation passed in July 2019 (ESHB 1578), but we urge your attention to our additional recommendations.

As stated in the June 2024 CR 102 implementing RCW 34.05.320, the proposed rule will "Achieve best achievable protection," as defined in RCW 88.46.010. These requirements are designed to balance compliance costs with the goal of effectively reducing the risk of a catastrophic oil spill in Puget Sound.

Of the four proposed alternative changes to the Pilotage Rules that were evaluated in the Draft Environmental Impact Statement (DEIS), **we support Alternative C (Geographic Expansion of Tug Escort Requirements to tank vessels between 5,000-40,000 deadweight tons) (figure 1).** We believe it provides the Best Achievable Protection (BAP) for the critically endangered Southern Resident Killer Whales from an oil spill – the primary intent of this rule.



(Figure 1. page xxxii excerpt)

By reducing the grounding risk of the target vessels in the area covered in the rule 90.5%, and 11.84% in the entire study area (from Olympia to Port Angeles, north to the Canadian border), Alternative C clearly achieves the BAP. It also advances our region's long-term commitment to help ensure our maritime safety regime is responsive to changes in vessel traffic and associated risk of an oil spill. This is especially important as the likelihood of an oil spill in the Salish Sea has

significantly increased recently with the expansion of the Trans Mountain Pipeline, including transits to refineries in Washington, as well as the growing trend to use Articulated Tug Barges (ATBs), which were not required to have tug escorts prior to 2020.

Changing with the Times

Based on Ecology's analysis of its Vessel Entries and Transits data (VEAT) from 2011-2023, as summarized below, ATBs have progressively become preferred to oil barges as a means of oil transportation. This is due to their ability to save money for the oil industry by carrying tanker-volumes of oil with fewer crew.

Comparison between the frequency of barges and ATB transits WITHIN the Salish Sea:

ATBs 2011 (87) 2023 (756) High 2021 – (809)

Barges 2011 (2,775) 2023 (2,617) High 2019 - (3,554)

Comparison between the frequency of barges and ATBs ENTERING the Strait of Juan de Fuca:

ATBs 2011 (224) 2023 (250) High 2021- (316)

Barges 2011 (321) 2023 (91)

ATBs also spend more time transiting throughout the study area as compared to other tank vessels.

Time tank vessels underway within the study area in 2023

Target Vessel Type	Historical AIS Underway Minutes
Oil Tanker – Chemical	41,215
Oil Tanker – Crude	867
Oil Tanker – Product	13,715
ATB	657,606
Towed Oil Barge	520,114
Total	**1,233,517**

Table 1 DEIS p.23

The increased use of these "rulebreakers," as they are described in the 1994 Congressional Research Services (CRS) report, more than justifies the legislation (ESHB 1578) requiring the

State to revisit its escort rules if we are to maintain our commitment to making continuous improvements.

Burying the Lead

While we support the proposed draft rule amendments, we are concerned that the DEIS does not present the evidence supporting the recommendation until page 35 in the DEIS PDF. Rather than having the benefits described in the Executive Summary or Fact Sheet in the DEIS or Fact Sheet provided to the OTSC, the first time the actual reduction of the risk of groundings by target vessels is buried within table 2 under the section of Environmental Health Releases. Even there it is presented in an obscure manner:

> *"Under Alternative D, the probability of a target vessel drift grounding increases by 11.84% over Alternative A across the entirety of the EIS Study Area. In the rulemaking area in particular, Alternative D would result in a 90.5% increase in drift grounding probability."*

The DEIS uses this same language in the Major Findings section found on page 78 in the PDF of the DEIS. By limiting the focus of the DEIS to the negative consequences of removing the escort requirement, rather than the benefits of retaining it, the only way of understanding the true value of the escort requirement for the target vessels in the area covered by the rule is by analyzing the increased likelihood of a grounding if the requirement is removed.

This is a result of the fact that Alternative A, the "no action" alternative, actually reflects the new tug escort regime in place since 2020 for tank vessels between 5,000 and 40,000 dwt as called for in ESHB 1578.

However, since this requirement could be removed or modified as a result of this rule making, we suggest the no action alternative should reflect the condition prior to when the temporary escort requirement was implemented, which is currently represented as Alternative D. This has significant impact on the regulatory analysis which we describe later in our comment letter.

While the results are the same, a far more understandable way of representing the findings is that the risk of a drift grounding is reduced by 90.5% by preserving the current escort regime in those regions in which the tug escorts are deployed and 11.84% in the entire study area. This statement is not found until page 85 in the PDF.

In addition, since the focus of the DEIS was to analyze the impact of the proposed rule changes, which is limited primarily to adding just 28.9 square miles to the area in which escorts are already required, the risk of a grounding in the rule area is only reduced by 1.6% when the extension is added to Alternative A as reflected in Alternative C. Based on the estimates presented in the regulatory analysis, which we also take issue with, the likelihood of a drift to occur increased from once every 189 years to once every 186 years for the entire study area.

The benefit of retaining the (temporary) post 2020 escort requirement is further misrepresented on page 48 in the DEIS by the statement that the elimination of the current tug escort requirement (Alternative D) increases the likelihood of a drift grounding of target vessels from 186 years to 167 years (11.84%) for the entire study area as compared "no action" Alternative A. This reflects that a smaller interval between events is a greater likelihood of a grounding to occur which would be a much clearer way of stating the finding.

The DEIS continues in its double negative representation of the benefit of tug escorts to estimate the removal of the current (post 2020) requirement will result in the likelihood of an oil spill recurring from a drift grounding to decrease from an unimaginable 25,546-year event to a 22,841-year event. In addition, this remarkable characterization of the rarity in which a grounding results in an oil spill is clearly a reflection of the few spills with which they had to calibrate the model.

Previous Concerns Were Not Addressed in the Primary Findings

This approach was taken despite the fact that the BPC and Ecology received comments from the environmental community at the 13 February 2024 OTSC meeting criticizing the way in which Ecology presented the modeling results in its reports to the legislature on this rulemaking and that for the Emergency Response Towing Vessel (ERTV). These concerns were reiterated in letters to the BPC dated 19 August 2024 and 16 December 2024.

The primary focus of those comments pertained to Ecology's failure to focus on documenting the percent to which the implementation of the current tug escort requirements reduced the risk of a drift grounding in the waterways in which the escorts were deployed and not conflate the results with the impacts of removing the provision throughout the study area (Olympia-Port Angeles-Canadian border). It is hard to imagine how an escort in Rosario Strait will have any impact on a drift grounding in Tacoma. In addition, we urged the BPC to accurately characterize the benefit of tug escorts in the beginning of the DEIS for the proposed rule rather than what would happen if they were removed.

Benefits of Tug Escorts to Prevent Groundings by Target Vessel Type:

Ecology conducted more detailed analyses of its model in response to the feedback it received from the OTSC, which are not presented in the DEIS. The results from Summary #2 of the filtering analysis they conducted, presented below, show how the tug escort requirement reduces the likelihood of a drift grounding by tank vessel type within the rule area in which the escorts are deployed.

The first results from the filtering analysis evaluated the likelihood a tug escort could prevent a drift grounding in the rule area by vessel type.

Question 1: If results for Rosario Strait; Bellingham Channel, Sinclair Islands & waters east; Guemes Channel and Saddlebags are combined, what is the percent (absolute) change in risk from Scenario 1 to Scenario 2?

Question 1 Results

Vessel Type/Status	Drift Groundings	(Drift Groundings)	Oil Volume at Risk	(Oil Volume at Risk)	Oil Outflow	(Oil Outflow)
Laden Tank Barges	-52.56%	-0.000219	-51.43%	-1.502	-51.43%	-0.011
Laden ATBs	-26.47%	-0.000036	-29.34%	-6.156	-26.47%	-0.004
Laden Chemical Tanker	-57.89%	-0.000147	-64.50%	-1569.924	-57.89%	-0.144
Laden Product Tanker	0.00%	0.000000	0.00%	0.000	0.00%	0.000
Laden Crude Tanker	NA	0.000000	NA	0.000	NA	0.000
All Laden Tank Ships	-36.36%	-0.000147	-40.49%	-1569.924	-36.36%	-0.144
All Laden Tank Vessels	-42.01%	-0.000401	-40.44%	-1577.582	-36.77%	-0.159
All Covered Vessels	-4.84%	-0.000644	-1.92%	-5349.229	-3.04%	-0.314

The results from Ecology's additional modeling analysis revealed that the proposed escort requirement in the rule area reduces the risk of a drift grounding by 52.56% for barges, 26.47% for ATBs, 57.89% for chemical tankers, 36.36% for all tank ships, and 42.01%. for all tank vessels.

Model Limitations

While all maritime safety models have limitations, a major limitation of Ecology's model is the lack of accident and oil spill data on which to calibrate it. We are a victim of our own success. Because there were only four major oil spills involving tank vessels in Washington between 2002-2019, Ecology created a simulation utilizing vessels' traffic data and other parameters to estimate the likelihood of a drift grounding to occur and the likelihood of a grounding resulting in an oil spill.

However, we are far more confident in the model's use of actual vessel tracking and tidal data to estimate the likelihood of a grounding than whether it resulted in an oil spill. Furthermore, it is difficult to be confident of the estimates of the likelihood of a grounding or oil spill to reoccur over hundreds and thousands of years. No matter how good our oil spill record has been we cannot simply rely on history and modeling to predict the future, especially when the only constant is change.

Recognizing the limitations of the model, it is important to learn from actual events that have occurred to understand why this rule is needed.

Summary of Tank Vessel Incidents

Ecology reviewed data on tank vessel incidents and oil spills in the EIS study area to evaluate how well the model was calibrated to represent whether a tug escort could have been of assistance to reduce the risk of a grounding and oil spills. The results are presented in Appendix C "Environmental Health: Releases Discipline Report."

We find this to be a misleading title for a title in an appendix with such important information, and like all the other appendices it is not included on Ecology's or the BPC's websites with the DEIS, no less hot-linked as is often the case to facilitate review of such voluminous documents.

Instead, the appendices can only be found in the SEPA Registry (https://apps.ecology.wa.gov/separ/Main/SEPA/Record.aspx?SEPANumber=202502240).

Oil Tanker Incidents: In section 3.1.3.1 Ecology reports that between 2017 and 2023, there were 31 oil tanker casualties and oil spills involving tankers within the EIS Study Area. Twelve of which occurred while the vessel was underway. Fifteen incidents were identified as a vessel casualty. Of those, seven were loss of propulsion or electrical power events, two were collisions or near collisions, two were allisions or allision/loss of propulsion, and four documented fitness for service issues.

Ecology determined that an escort tug might have been helpful during the full or partial loss of propulsion events, which made up four of the 31 incidents. All of those incidents occurred while the vessel was underway, and all four incidents were of oil tankers over 40,000 DWT.

Tank Barge Incidents: In Section 3.1.3.2 Ecology reports that between 2017 and 2023, there were 16 tank barge casualties and oil spills involving tank barges within the EIS Study Area. Two of the incidents were identified as a vessel casualty. One was an allision, and one was a loss of propulsion event. Ecology determined a tug escort may have been able to help in both situations.

Ecology determined that an escort tug might have been helpful in four of the incidents, all of which occurred while the barge was underway.

ATB Incidents: In Section 3.1.3.3 Ecology found that between 2017 and 2023, there were five vessel casualty and oil spills involving ATBs within the EIS Study Area. Three incidents were identified as a vessel casualty. One was a partial loss of propulsion, one was a grounding, and one was a grounding/flooding/safety threat event.

Ecology determined that an escort tug might have been helpful in the one loss of propulsion event. The ATB was underway when this incident occurred.

Lessons Learned

While only some of these incidents resulted in oil spills, none resulted in a large volume of oil entering the water. This underscores the point that incidents are a far better indicator than oil spills because without adequate interventions in place, the likelihood of an incident becoming a spill can be a matter of luck, which is not a form of prevention to be relied on.

Our maritime safety net must continue to evolve to meet new challenges as they arise. While Ecology's summary of incidents and oil spills provides valuable insights, it is not clear which incidents they used since they did not include descriptions of them. Washington State has an excellent oil spill record because we are all committed to continuous improvement, so it is important to also recognize the changes that have been made over the years to prevent maritime accidents.

Details of Incidents and Oil Spills in the Region

To better illustrate the nature of our region's oil spill risk exposure and the reason for our support of this rulemaking, we provide some examples of incidents which occurred in Washington and British Columbia. We also include some of the proactive and reactive safety measures that have been taken over the years.

Following the discovery of oil in Alaska in the 1970s, ARCO built its refinery at Cherry Point to receive North Slope crude oil by tankers, as did three existing refineries which previously received crude primarily by pipeline, which they also continue to do. This major change in risk to our waterways, as reflected by the 239,000-gallon *ARCO Anchorage* oil spill in 1985, was addressed by Washington State requiring tug escorts for oil tankers larger than 40,000 dwt.

In the winter of 1988 the barge *Nestucca* broke its tow line and spilled 230,000 gallons of heavy fuel oil, fouling 110 miles of the Olympic coast, which significantly impacted the four coastal Treaty Tribes and Olympic National Park.

This was followed shortly thereafter by the *Exxon Valdez* catastrophe in the spring of 1989. Two laden, single hull Exxon oil tankers went adrift off Cape Flattery within months following that

disaster. “Tugs of opportunity” had to be deployed because the tankers were west of the area covered by the escort requirement.

The year following the 11 million-gallon Exxon Valdez oil spill, major changes were made to maritime safety nationally with the passage of the Oil Pollution Act of 1990 (OPA 90). These included the requirement for single hull tankers to have two tug escorts in Prince William Sound and Puget Sound.

However, with the phase in of double hull tankers there is no longer a federal double tug escort requirement in Washington state, while it has been retained in Prince William Sound. Tankers greater than 40,000 dwt in Washington are still required to retain a single escort due to the Pilotage Rules being expanded in this rule making.

There are many more lower profile incidents (e.g. mechanical or human error) that did not result in oil spills and are a better reflection of oil spill risk than actual spills.

In 1988, due to the threat of an oil spill like the *Nestucca* and a federal proposal for oil and gas development off the coasts of Oregon and Washington, Congress mandated the creation of the Olympic Coast National Marine Sanctuary. The 3,188 square mile Sanctuary was officially designated in 1994. In 1995 the International Maritime Organization (IMO) established an Area To Be Avoided (ATBA) requiring tank vessels to remain 25 miles off the coast. The J-Bouy was subsequently moved 12 miles further offshore, and the ATBA was expanded to prevent tank vessels from “cutting the corner” around Cape Flattery.

Beginning with a Navy contract in 2007, State funding in 2009, and after 11 years of further public funding and extensive studies, the State required vessels greater than 300 gross tons to have a contract with an Emergency Response Towing Vessel (ERTV) in Neah Bay to respond to incidents like the Exxon tankers that went adrift off the coast. Having assisted over 80 vessels in distress on both sides of the border, the ERTV continues to prove itself an essential addition to our region’s maritime safety net.

The Government of Canada has also established two ERTVs to prevent groundings off the northern coast of British Columbia in response to the sinking of a bulk carrier in the region which significantly impacted the Haidi First Nation.

There have also been a series of oil spills and incidents within the Salish Sea which further underscore the importance of this current rule making. In December 1994 the Crowley Barge 101 leaked 26,900 gallons of oil after being towed across a reef in Boundary Pass.

In 1997 there was a very close call in the same vicinity when the coal carrier, *Continental Spirit*, lost power and drifted for three miles in 30 minutes before dropping its anchor and coming to a stop within 500 yards of shoals around Patos and Sucia Islands.

Between October 2011 and September 2013 there were at least seven incidents with tugs towing a variety of cargos along Rosario Strait, including collisions with navigational aids. However, the Coast Guard only issued a Notice to Mariners providing barge operators with best management practices as to how to navigate the Strait during ebb currents.

There were also two incidents we are aware of in British Columbia involving ATBs which also support the implementation of this rule making. On October 13, 2016, the U.S.-flagged ATB *Nathan E. Stewart,* enroute to Alaska, ran aground and sank near Bella Bella, B.C. While not laden, it spilled 29,000 gallons of fuel and lube oil that significantly impacted the Heiltsuk First Nation.

On Nov. 26, 2017, the U.S.-flagged ATB *Jake Shearer*, which had replaced the sunken barge *Nathan E. Stewart*, lost power and almost grounded yet again in the biologically rich Heiltsuk Territory. In addition to 125,000 gallons of fuel, the *Jake Shearer* held more than 790,000 gallons of oily cargo but was capable of carrying 3.4 million gallons.

Unintended Consequences

While the DEIS does not clearly depict the benefit of the proposed rule for reasons previously described, there are also unintended consequences associated with the addition of more tugs

plying the region, which was the primary focus of the DEIS. We strongly believe that those consequences are far outweighed by preventing the long-term catastrophic impacts of a major oil spill while only increasing the number of vessels large enough to carry AIS transmitters by less than one percent according to the DEIS.

It is also important to note that while the tank vessels subject to this rule represent a small percentage of the total vessel traffic in the study area, these smaller vessels carry a disproportionate amount of oil when compared to those vessels transiting the region not already required to have tug escorts.

The impacts of adding, what the DEIS estimates to be four additional tug escorts a day transiting the rule area, should still be minimized. We support the BPC's efforts to address the long-term concerns raised by Tribal governments regarding vessel traffic impacting their treaty protected fisheries, attention to which have been elevated by this rule making process. This includes supporting the recommendation to include whether there is an active fishery during the pre-escort conference between the operators of the tug escort and the vessel to be escorted so that they can be alerted to the presence of fishing gear in the water.

We are also concerned that operators of vessels subject to this rule will elect to use Haro Strait rather than Rosario Strait to avoid the additional expense of employing a tug escort. We have already observed such alterations to traditional operations and call on the BPC to monitor its prevalence to determine whether it will be necessary to extend this rule to tank vessels between 5,000 and 40,000 dwt bound to US ports through Haro Strait when the impact of the rule is revaluated in October 2026.

Southern Resident Killer Whale (*Orcinus orca*) Mitigation Measures

As previously noted, the results from the Department of Ecology's vessel traffic model document show that this rule will reduce the likelihood of drift groundings by 90.5% in the geographic regions in which they are deployed, which is an incredibly significant achievement.

However, since the title of ESHB 1578, which required this rulemaking, is “Reducing the Threats to South Resident Kiler Whales by Improving the Safety of Oil Transportation,” there also needs to be special consideration of ways to minimize associated impacts to this critically endangered species.

In its analysis for the BPC, Jasco estimated that tugs generate underwater noise overlapping with killer whale echolocation and communication calls ten percent of the time in the rule area which triggered the adverse impact determination in the DEIS. This reduces the volume of water the whales can ensonify, thereby limiting their ability detect and capture prey when in appropriate proximity and orientation to the tug. It also reduces the range over which killer whales can communicate. Those impacts must be taken into consideration when the tug is escorting a vessel and even more importantly when it is in transit and not providing the additional protection against drift groundings.

However, it is unclear how, on page 24 in the DEIS, it was estimated that 36.78% of the time tug escorts are in the area they would be actively escorting a vessel and 63.22% of the time they would be in transit between escort jobs? One would expect tugs would be in the rule area a similar amount of time returning from an escort as they would escorting a vessel. In fact, it is likely that instead of dead heading, the escort would wait for another vessel to escort before returning to its point of origin. Regardless of the proportion of these transits, the DEIS estimates that the total amount of time additional tug escorts are underway represents less than one percent of all large vessels are making noise enroute through in the area. This puts in context the degree the impacts of this rule have on the underwater noise to which the whales are already exposed.

In addition, it is important to note that the masking effects of underwater noise generated by the tug escort are not simply additive to that generated by the vessel being escorted. The reason for this is that there is a far greater difference between the increase in underwater noise generated by the unescorted vessel, in an otherwise quiet sea, than the inclusion of the noise generated by an escort to that of the noise made by the vessel it is escorting.

While it is easy to hear a tug from a distance on a hydrophone, the increase in noise it generates is rarely distinguishable from the vessel it is escorting, which has already reduced the whales' foraging volume and communication. That is not to say the whales cannot hear the tug escort, rather it is just not directly additive in this sense.

The above is true as long as neither vessel nor tug has unusual underwater sound source levels or acoustic frequency distributions. Monitoring of individual vessel and tug underwater noise levels is needed to identify and protect against significant noise polluters.

There is also the challenge of accurately estimating the amount of time the whales will be in proximity to the additional tugs resulting from this rule given the duration of their occurrence in the area covered by the rule which they do not frequent often. However, it should be noted, based on most recent trends in the whales' movements, when traveling south from the Fraser River region, the inclusion of the geographic extension defined in Alternative C will slightly increase the likelihood of the whales' proximity to the additional escort tugs. According to the EIS, Alternative C will increase the amount of time tug escorts are on the water by 2.4%, though not limited to that area.

While the whales' occurrence in the northern portion of the Salish Sea has been declining in recent years, the number of commercial vessels, especially oil tankers from the expanded Trans Mountain Pipeline, including those bound to Washington refineries, has significantly increased. These ships must make a significant turn to the west as they move from Georgia Strait to Boundary Pass in proximity to a location ominously known as "boiling reef." The increased presence of tug escorts can also be helpful in assisting unescorted ships in this region (e.g. *Continental Spirit*) on an opportunistic basis.

Maintaining sighting networks and adding whether whales are in the vicinity during the pre-escort conference could also alert the vessel operators of opportunities to exercise best management practices when the whales are present.

Such measures can include traveling at reduced speeds and maximizing distance from the whales while transiting to and from an escort job and turning off the echo sounder when safe to do so. Reducing speed will reduce noise both above and below water, reduce air and greenhouse gas emissions, as well as save fuel. It would also afford more time for tug operators to see and avoid fishing gear.

In addition to supporting the BPC's call for the voluntary adoption of Best Management Practices detailed in the Puget Sound Harbor Safety Plan for larger tank vessels, we strongly encourage the BPC to request the Puget Sound Harbor Safety Committee establish an ad hoc cetacean working group to develop a more complete list of voluntary measures commercial vessel operators can make to reduce impacts on all cetacean species for incorporation in the Puget Sound Harbor Safety Plan.

Cost Benefit and Least Burdensome Analysis

The BPC and Ecology produced a separate study in May 2025 entitled, Preliminary Regulatory Analysis which included a cost-benefit analysis and least burdensome analysis as required by the Washington Administrative Procedure Act (APA; RCW 34.05.328(1)(d)).

Given the DEIS used the tug escort regime that has been in place since 2020 as the no action alternative (Alternative A), this analysis was limited to an evaluation of the impact of expanding the escort area by 28.9 square miles (11%) to include a portion of Boundary Pass to the 273.6 square mile initial rule area.

There were two primary costs analyzed associated with the rule. Those costs were based on estimates of the impact of the expansion for the rule area to include: a 2.4% increase in the use of tug escorts which amounts to 244.6 hours a year or .67 hours per day. The other cost was associated with the increased time it took to conduct the pre-escort conference.

The additional time needed for the increased number of tug charters in the rule area was estimated to cost $835 million dollars a year with a net present value (NPV) cost of $16 million over 20 years.

The cost of the time it takes to conduct approximately 800 pre-escort conferences (10 minutes/escort) was estimated to be $15,851 per year based on crew salaries. This results in a NPV of $303,773 over 20 years.

Based on Ecology's estimates, which we refute, the rule results in a reduction of the chance of a drift grounding from a 189-year event, down from a 186-year event.

The volume of a worst-case spill is estimated to be 259,000 barrels. Estimates of the economic impacts of spilling this much oil considered many variables including a special value placed on the public's interest in protecting the Southern Resident Killer Whale population. Despite the difficulties of estimating the costs from a wide variety of impacts associated with a worst-case spill and the frequency one would occur, the analysis estimates a NPV of $26.8 million over 20 years.

We find this analysis to be flawed regardless of assumptions used to estimate the cost of spilling. The reason for this is based on the previously mentioned criticisms we have with the DEIS. The three primary ones being the DEIS only estimates the benefits of expanding the use of tug escorts by 28.9 square miles. The model estimates the benefit of a tug escort over this small area to only reduce the likelihood of a grounding by three years over a 189-year period. Furthermore, the estimated likelihood of the grounding to result in an oil spill is estimated in tens of thousands of years.

Despite these fundamental concerns, the result of the analysis estimates the avoided oil spill costs range from $3,000 per year to $1.4 million per year. This net positive result was sufficient for the BPC to recommend the proposed changes to the Pilotage Rules which we support.

Conclusion

While our region has been fortunate not to have been subject to many large oil spills, given the dynamic nature of the maritime industry, the past is not a reliable indicator of the future. Washington State has an aspirational zero oil spill policy. We acknowledge the efforts that have been taken over the years which have certainly contributed to our admirable oil spill record to

date. The proposed changes to the Pilotage rules continue that tradition of continuous improvement. However, as previously stated, our region's oil spill risk exposure is not reflected just by the frequency or size of oil spills and our past record does not necessarily represent the future.

Despite the significant challenges we have with the methodology used in the DEIS Preliminary Regulatory Analysis, we would like to reiterate our support for Alternative C. We hope that you will be able to address the comments we have summarized below in the Final Environmental Impact Statement.

Sincerely,

Fred Felleman
NW Consultant
Friends of the Earth

Keith Curl-Dove
Climate and Communities Manager
Washington Conservation Action

Lovel Pratt
Marine Protection and Policy Manager
Friends of the San Juans

Marlene Finley
Board President
Evergreen Islands

Arthur (R.D.) Grunbaum,
President
Friends of Grays Harbor

Logan Danzek
Policy Manager
Communities for a Healthy Bay

Ander Russell
Co-Executive Director
RE Sources

Barbara Church
Leadership Team
The Conversation 253

Shaun Hubbard
Co-founder
San Juan Islanders for Safe Shipping

Summary of Recommendations

- Present the results in the beginning of the document and fact sheet in terms of the result of the proposed rule to reduce the likelihood of a grounding and oil spill rather than what would occur if the rule was not implemented.
- Include analysis of the likelihood tug escorts could prevent a drift grounding by vessel type within the rule area.
- Base the regulatory analysis on the no action alternative being the pre-2020 escort requirements.
- Qualify the limitations of the model to predict the likelihood of a grounding to become an oil spill and its size as well as the likelihood of one to reoccur over thousands of years.
- Eliminate the study area wide analysis or emphasize the importance of focusing on the rule area.
- Monitor diversions to Haro Strait and evaluate the benefit of extending the rule to tank vessels bound to U.S. ports in this zone, where the model estimated tug escorts would have the highest likelihood of preventing a drift grounding, when the rule is revisited in October 2026.
- Add whether there have been reports of whale sightings to the pre-escort conference.
- Support whale sighting networks to inform the pre-escort conferees of the presence of whales.
- Monitor the noise generated by escort tugs and vessels being escorted.
- Recommend that vessels returning from escort jobs slow down and turn off their echosounders when safe to do so.
- Recommend the creation of an ad hoc cetacean workgroup to the Puget Sound Harbor Safety Committee to make recommendations for inclusion of best management practices to the Puget Sounf Harbor Safety Plan for all cetacean species.
- Include the appendices in the DEIS.
- Hotlink the table of contents to the sections in the DEIS and Regulatory Analysis.
- Continue Tribal consultation.

Friends of the Earth (John Kaltenstein)

To whom it may concern,
Attached are two documents showing support from 550 individuals (eight in the first and 542 in the latter) for Alternative C with respect to the expanded tug escort requirements at issue. We appreciate your consideration of the public's opinion on this important matter.

Thank you,
John Kaltenstein
Friends of the Earth

Friends of the Earth United States

Re: Approve proposed rule to extend tug escort requirement to smaller oil tankers

Dear Washington Board Pilotage Commissioners,

Thank you for this opportunity to provide public comment on the proposed rule change to extend the tug escort requirement to smaller oil tankers, ATBs, and towed barges between 5,000 - 40,000 dwt other than those engaged in bunkering operations. I appreciate your work, effort, and diligence on this long process and believe that the proposed rule changes meet the primary intent of ESHB 1578 and will add needed safety measures to the rising risk of an oil spill from the increased transportation of oil in the Salish Sea. We both know that even one large oil spill would be catastrophic to the highly endangered Southern Resident orca population, as witnessed with the Exxon Valdez oil spill in Prince Williams Sound in 1989 that resulted in a functionally extinct orca population. We HAVE to protect these orcas any way we can.Our region, our Salish Sea Ecosystem, the Coast Salish Tribes, and our marine economies are too fragile for even one major oil spill. Of the four alternatives evaluated in the Draft Environmental Impact Statement, I support Alternative C (Expansion of Tug Escort Requirements) which provides the greatest assurances to protect Southern Resident orcas from an oil spill - the primary intent of this rule implementing legislation (ESHB 1578) and Governor Inslee's Orca Task Force recommendations.

Thank you.

Jill Hein

Coupeville, WA 98239-9557

Friends of the Earth United States

Re: Approve proposed rule to extend tug escort requirement to smaller oil tankers

Dear Washington Board Pilotage Commissioners,

Thank you for this opportunity to provide public comment on the proposed rule change to extend the tug escort requirement to smaller oil tankers, ATBs, and towed barges between 5,000 - 40,000 dwt other than those engaged in bunkering operations. We need to take better care of what is left of our environment, for wildlife, marine life, plant life, and people.I appreciate your work, effort, and diligence on this long process and believe that the proposed rule changes meet the primary intent of ESHB 1578 and will add needed safety measures to the rising risk of an oil spill from the increased transportation of oil in the Salish Sea. We both know that even one large oil spill would be catastrophic to the highly endangered Southern Resident orca population, as witnessed with the Exxon Valdez oil spill in Prince Williams Sound in 1989 that resulted in a functionally extinct orca population. Our region, our Salish Sea Ecosystem, the Coast Salish Tribes, and our marine economies are too fragile for even one major oil spill. Of the four alternatives evaluated in the Draft Environmental Impact Statement, I support Alternative C (Expansion of Tug Escort Requirements) which provides the greatest assurances to protect Southern Resident orcas from an oil spill - the primary intent of this rule implementing legislation (ESHB 1578) and Governor Inslee's Orca Task Force recommendations.

Thank you.

priscilla martinez

Snoqualmie, WA 980659718

Friends of the Earth United States

Re: Approve proposed rule to extend tug escort requirement to smaller oil tankers

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Thank you for this opportunity to provide public comment on the proposed rule change to extend the tug escort requirement to smaller oil tankers, ATBs, and towed barges between 5,000 - 40,000 dwt other than those engaged in bunkering operations. I appreciate your work, effort, and diligence on this long process and believe that the proposed rule changes meet the primary intent of ESHB 1578 and will add needed safety measures to the rising risk of an oil spill from the increased transportation of oil in the Salish Sea. We both know that even one large oil spill would be catastrophic to the highly endangered Southern Resident orca population, as witnessed with the Exxon Valdez oil spill in Prince Williams Sound in 1989 that resulted in a functionally extinct orca population. Our region, our Salish Sea Ecosystem, the Coast Salish Tribes, and our marine economies are too fragile for even one major oil spill. Of the four alternatives evaluated in the Draft Environmental Impact Statement, I support Alternative C (Expansion of Tug Escort Requirements), which provides the greatest assurances to protect Southern Resident orcas from an oil spill - the primary intent of this rule implementing legislation (ESHB 1578) and Governor Inslee's Orca Task Force recommendations.

Thank you.

Kevin Gallagher

Lake Forest Park, WA 98155

Friends of the Earth United States

Re: Approve proposed rule to extend tug escort requirement to smaller oil tankers

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Thank you.

Sarah Habel

Lacey, WA 985034131

Friends of the Earth United States

Re: Approve proposed rule to extend tug escort requirement to smaller oil tankers

Dear Washington Board Pilotage Commissioners,

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Thank you!

B. Jackson

Normandy Park, WA 981663927

Friends of the Earth United States

Re: Approve proposed rule to extend tug escort requirement to smaller oil tankers

Dear Washington Board Pilotage Commissioners,

As a native Washingtonian who is committed to the preservation of our iconic species and ecosystems, I thank you for this opportunity to provide public comment on the proposed rule change to extend the tug escort requirement to smaller oil tankers, ATBs, and towed barges between 5,000 - 40,000 dwt other than those engaged in bunkering operations. I appreciate your work, effort, and diligence on this long process and believe that the proposed rule changes meet the primary intent of ESHB 1578 and will add needed safety measures to the rising risk of an oil spill from the increased transportation of oil in the Salish Sea. We both know that even one large oil spill would be catastrophic to the highly endangered Southern Resident orca population, as witnessed with the Exxon Valdez oil spill in Prince Williams Sound in 1989 that resulted in a functionally extinct orca population. Our region, our Salish Sea Ecosystem, the Coast Salish Tribes, and our marine economies are too fragile for even one major oil spill. Of the four alternatives evaluated in the Draft Environmental Impact Statement, I support Alternative C (Expansion of Tug Escort Requirements) which provides the greatest assurances to protect Southern Resident orcas from an oil spill - the primary intent of this rule implementing legislation (ESHB 1578) and Governor Inslee's Orca Task Force recommendations.

Thank you.

Linda Carroll

Spokane, WA 992053178

Friends of the Earth United States

Re: Approve proposed rule to extend tug escort requirement to smaller oil tankers

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Thank you for this opportunity to provide public comment on the proposed rule change to extend the tug escort requirement to smaller oil tankers, ATBs, and towed barges between 5,000 - 40,000 dwt other than those engaged in bunkering operations. I appreciate your work, effort, and diligence on this long process and believe that the proposed rule changes meet the primary intent of ESHB 1578 and will add needed safety measures to the rising risk of an oil spill from the increased transportation of oil in the Salish Sea. We both know that even one large oil spill would be catastrophic to the highly endangered Southern Resident orca population, as witnessed with the Exxon Valdez oil spill in Prince Williams Sound in 1989 that resulted in a functionally extinct orca population. Our region, our Salish Sea Ecosystem, the Coast Salish Tribes, and our marine economies are too fragile for even one major oil spill. Of the four alternatives evaluated in the Draft Environmental Impact Statement, I support Alternative C (Expansion of Tug Escort Requirements) which provides the greatest assurances to protect Southern Resident orcas from an oil spill - the primary intent of this rule implementing legislation (ESHB 1578) and Governor Inslee's Orca Task Force recommendations. JoAnn Polley

Thank you.

JoAnn Polley

Poulsbo, WA 98370

Friends of the Earth United States

Re: Approve proposed rule to extend tug escort requirement to smaller oil tankers

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Thank you.

Richie Mahoney

Longview, WA 98632

Friends of the Earth United States

Attached, please find the signatures of 542 Friends of the Earth supporters:

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Our region, our Salish Sea Ecosystem, the Coast Salish Tribes, and our marine economies are too fragile for even one major oil spill.

Of the four alternatives evaluated in the Draft Environmental Impact Statement, I support Alternative C (Expansion of Tug Escort Requirements) which provides the greatest assurances to protect Southern Resident orcas from an oil spill — the primary intent of this rule implementing legislation (ESHB 1578) and Governor Inslee's Orca Task Force recommendations.

Thank you.

Title	First Name	Last Name	City	State	Zip Code
Miss	Alessandra	Paolini	Sammamish	WA	980746324
Ms.	Sari Rose	Schneider	Mercer Island	WA	980402802
	Caroline	Das Neves		Washington	0
	Andrea	Hanfman	Olympia	WA	985025876
	Rosina	Marmo		Sicilia	98050
Ms.	Susan	Sargis	Friday Harbor	WA	982508943
Dr.	Tracy	Ouellette	Bow	WA	982329246
Mr.	Lyle	Wirtanen	Walla Walla	WA	993629232
Ms.	Susan	Loomis	Renton	WA	980587834
mrs	sally	windecker	Clinton	WA	982360100
Ms.	Leti	B	Spokane	WA	992015015
Mr.	Dessi	Armstrong	Vancouver	WA	986820737
Ms.	Debbie	Spear	Monroe	WA	98272
Ms.	Rachel	Wolf	Seattle	WA	981254366
Mr.	Brenda	Bachman	Seattle	WA	981163316
Mr.	Miriam	Danu	Bellingham	WA	982297776
Mr.	C.	DeMaris	Olympia	WA	985072344
Ms.	Janis	Swalwell	Freeland	WA	982490778
Mr.	Charles	Muzio	Seattle	WA	981035220
Ms.	PATRICIA	DORSEY	Oak Harbor	WA	982772641
Ms.	Cecile	ervin	Walla Walla	WA	993628645
Mr.	norris	carlson	Eastsound	WA	982458735
Ms.	Debbi	Pratt	Seattle	WA	981992153
Ms.	Nance	Nicholls	Davenport	WA	991228681
Ms.	Christine	Rudolph	Kirkland	WA	980338305
	palmer	Koon	Tacoma	WA	984651513
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Ms.	Theresa	Skager	Lakewood	WA	984992626
Mrs.	Kathy	Wilson	Port Ludlow	WA	983659775
Ms.	Y	Z	Port Orchard	WA	983671501
Ms.	Sylvia	Ford	Lakewood	WA	98498
Mrs.	Dagmar	Fabian	Bellingham	WA	982251387
Mr.	Curt	Given	Everett	WA	982014800
Ms.	DORI	BAILEY	Chimacum	WA	983250374
Mr.	Gregory	Jindrich	Vancouver	WA	986629209
Mr.	John	Mcgill	Sequim	WA	983828618
Ms.	Robin	Layton	Seattle	WA	98144
Ms.	Chloe	Greene	Silverdale	WA	983838912
	Carol	Cole	Renton	WA	980562376
Mr.	Heather	Allison	Bainbridge Island	WA	981102316
Miss	Michelle	Carfagno	Twisp	WA	988560901
Mr.	Lois	MacLeod	Grapeview	WA	985468918

Mr.	Mike	Niewiarowicz	Sequim	WA	983827870
Mr.	Brian	Baltin	Seattle	WA	981024698
Mr.	Craig	Britton	Port Townsend	WA	983686610
Mrs.	Nancy	Hayden	Spokane	WA	992248372
Ms.	Marie	Colvin	Kennewick	WA	993372560
Mrs.	Hayley	Mills-Lott	Woodland	WA	986742952
Mr.	Marquam	Krantz	Bainbridge Island	WA	981103689
Mrs.	Suzanne	Wittmann	Seattle	WA	981164815
Ms.	Lynda	Littlefield	Seattle	WA	98177
Mrs.	Elaine	Green	Bellingham	WA	982297954
Ms.	Kathleen	Lee	Lacey	WA	98503
Dr.	Laura	Toussaint	Vancouver	WA	986838456
Ms.	Millie	Magner	Seattle	WA	98199
Mrs.	teri	tomasek	Everett	WA	982012033
Ms.	Kat	thomas	Seattle	WA	981225367
Ms.	Sheryl	Sparling	Lynden	WA	982649121
	Susan	Hubbs	Lynnwood	WA	98036
Mrs.	Judy	Masbaum	North Bend	WA	980458727
Mr.	Warren	Muller	Kingston	WA	983468621
Mr.	Shawn	Tuthill	Mountlake Terrace	WA	980435241
Mr.	Helga	burkhardt	White Salmon	WA	986728708
Ms.	Lynne	Roberson	Port Angeles	WA	983639776
Ms.	Gail	Atkins	Raymond	WA	985779492
Ms.	Katherine	Wright	Freeland	WA	982491106
Mrs	Carol	Redmill	Longview	WA	986329314
Ms.	Linda	Martin	Colville	WA	991149621
Ms.	Katie	Ellis	Indianola	WA	983429740
Mrs.	Lisa	Crum-Freund	Port Townsend	WA	983689584
	Lauren	Sloan	Seattle	WA	98115
Ms.	Fay	Payton	College Place	WA	993241842
Ms.	Barbara	Tountas	Shoreline	WA	981551531
Mr.	Bill	Schaff	Vancouver	WA	986631046
Ms.	Susan	McRae	Olympia	WA	98506
Mr.	Richard	Snook	Tumwater	WA	985014589
Mr.	Rod	Tharp	Olympia	WA	98506-3382
Mr.	Dale	Beasley	Newport	WA	991569344
Mr.	Russ	Thomas	Kirkland	WA	980334759
Mr.	Steve	Bear	Port Townsend	WA	983688833
Ms.	Susan	Scott	Vancouver	WA	986644138
Mr.	Robert	Young	Cle Elum	WA	989221152
Mrs.	Chris	Clark	Rochester	WA	985799667
Mr.	Andrew	Unruh	Seattle	WA	981130887
Ms.	Nancy	Miller	Seattle	WA	98125
Mrs.	Christine	Mirkhani	Snohomish	WA	982904411

Mrs.	Jana	Doak	Renton	WA	980593932
Mr.	Deborah	Grotzinger	Vancouver	WA	986826489
	Marsha	Beck	Spokane	WA	992089320
	Leti	B	Spokane	WA	992015015
Mrs.	Peggy	Swayne	Bellevue	WA	980045444
	Linda	Elliott	Campbell River	WA	V9W 2Y8
Mr.	Kent	Bass	Yelm	WA	985971120
Mrs.	Eleanor	Israel	Rainier	WA	985769404
Ms.	Sarah	Polda	Normandy Park	WA	981984730
	Jack	Cooley	Squamish	WA	V8B0S2
Mr.	John	Loeser	Mercer Island	WA	98040
Dr.	Lin	Higley	Mead	WA	990219445
	Jennifer	Gorman			98155
Ms.	Kathryn	DeWees	Spokane	WA	992234939
Mr.	Glenn	Phillips	Seattle	WA	981444612
Mr.	Barbara	Wallesz	Bellingham	WA	982298952
Mr.	Virginia	Larson	Mercer Island	WA	980403304
Mr.	Barry	Hutchinson	Deming	WA	982449514
Ms.	Jennifer	Calvert	Spokane Valley	WA	992063122
Ms.	Sharon	Johnson	Kennewick	WA	993369451
	Heide	Grace	Tacoma	WA	98403
	Dena	Dahlke	Spokane	WA	99208
Ms.	Crystal	Schaffer	Lacey	WA	985037136
Ms.	Stephanie	Peace	Lynnwood	WA	980377222
Ms.	Cynthia	Kester	Puyallup	WA	983734299
Mrs.	Maureen	Knutson	La Center	WA	98629
Mr.	Ronald	Scheyer	Seattle	WA	981224050
Mrs.	Marian	Frobe	Spokane	WA	992055214
Mr.	Peggy	Ashton-Parker	Anacortes	WA	982219575
Mrs.	Alice	Gray	Port Orchard	WA	983660797
Mrs.	Eleanor	Dowson	Mill Creek	WA	98012
Ms.	Rebecca	Stocker	Tacoma	WA	984052210
Ms.	Mary Margaret	OConnell	Olympia	WA	985062932
Ms.	Deborah	Parker	Bellingham	WA	98229
Ms.	Ellen	Hopkins	Kenmore	WA	98028
Mr.	Nancy	Peters	Kirkland	WA	980337169
Ms.	Amy	Kiba	Vancouver	WA	986851339
Mrs.	Shawn	Brown	Snohomish	WA	982966904
Mr.	Richard	Monroe	Bellevue	WA	98006
Mr.	Travis	Miller	Seattle	WA	981223264
Mrs.	Linda	Wylie	Seattle	WA	981337731
Ms.	Cheryl	Olson	Spokane Valley	WA	992065995
Mrs.	Dorothy	Lipsky	Kenmore	WA	980284845
Dr.	Robert	Aline	Puyallup	WA	983716697

Mrs.	Margaret	Woll	Bellingham	WA	982255414
	Jim	Cronin	Spokane	WA	992012966
Mr.	clemence	perslin	Vancouver	WA	986861416
Mr.	John	Nelson	Graham	WA	983387754
Mr.	Bill	Niemuth	Richland	WA	993523957
Mr.	Richard	Lipsky	Kenmore	WA	980284845
Mr.	Ferenc	Farkas	Seattle	WA	981175801
Mr.	Gary	MacDonald	Lummi Island	WA	982628630
Ms.	Marilyn	Heuser	Snohomish	WA	982902044
Ms.	Rebecca	Willow	Kirkland	WA	980335529
Dr.	Diane	Berreth	Redmond	WA	980522997
Mr.	Jeannine	Frazier	Kenmore	WA	98028
Mrs.	Darcy	Johnson	Kittitas	WA	989340774
Mr.	Paul	Vazquez	Shelton	WA	985849311
Ms.	Alice	Hassel	Camano Island	WA	98282
	Alan	Newberg	Bremerton	WA	98311
Ms.	Cera	Jackson	Mountlake Terrace	WA	980433552
Mrs.	Ruth	Norris	Tacoma	WA	984073412
Mrs.	Cynthia	Rezac	Kennewick	WA	993377067
Mr.	Steve	Hamlin	Shoreline	WA	981552214
Mrs.	Margaret	Woll	Bellingham	WA	982255414
Mr.	Lisa	Di Lauro	Sammamish	WA	980746843
Mr.	K.	Eggers	Addy	WA	991019712
Mrs.	Janette	Hammond	Port Ludlow	WA	98365
Mr.	Raul	de la Rosa	Olympia	WA	985025807
Miss	Shaun	Sparkman	Sequim	WA	983828017
Mrs.	Toni	Penton	Snohomish	WA	982964924
Mr.	Therese	Nielsen	Spokane	WA	992031761
Mr.	SCOTT	SELBY	Snohomish	WA	982911840
Mr.	Peggy	Reynolds	Ferndale	WA	982489819
Ms.	Bronwen	Evans	Seattle	WA	981042211
Ms.	Julia	McLaughlin	Rochester	WA	985799588
Mrs.	Catherine	Harper	Port Angeles	WA	983622615
Mrs.	J..	Eggers	Addy	WA	991019712
Mr.	Phil and Lynn	Ritter	Sammamish	WA	980744215
Mrs.	Kay	Ellison	Vancouver	WA	986633606
Mr.	Tom	Harper	Port Angeles	WA	983622615
Mrs.	Christina	Davis	Spanaway	WA	983875775
Mr.	Ben	Moore	Mountlake Terrace	WA	980435648
Ms.	Brandie	Deal	Bothell	WA	980218353
Miss	Stephani	Hemness	Olympia	WA	985121818
Ms.	Connie	Corrick	Seattle	WA	981062203
Mr.	Erik	LaRue	Burlington	WA	982339670
Mrs.	Jody	Caicco	Vancouver	WA	986829548

Mr.	Robert	Austin	Randle	WA	983770047
Mr.	Steve	Williams	Tacoma	WA	984068210
	Suzan	Robertson	Tacoma	WA	98443
Mr.	Noah	Ehler	Carnation	WA	980148742
Mr.	Asko	Hamalainen	Bellingham	WA	982257430
Ms.	Taen	Scherer	Seattle	WA	981184115
Ms.	Mallory	Robinson	Spokane	WA	992071566
Mr.	Andrea	Amdal	Clinton	WA	982369716
Mr.	Lloyd	Johnston	Seattle	WA	981254307
Mr.	Michael	Thompson	Shelton	WA	985849221
	Antony	Lyttle	West Vancouver	WA	V7W 3G8
Dr.	Richard	Frye	Yakima	WA	989081803
Mrs.	Yvette	Goot	Colville	WA	991145031
Mrs.	T	Eanes	Kent	WA	980425731
Mr.	Keith	Robillard	Vancouver	WA	986825799
Mr.	Ken	Zontek	Yakima	WA	989022322
Ms.	Wynann	Brownell	Olympia	WA	985163746
Ms.	Carole	Olson	Marysville	WA	982703878
Mr.	Pawiter	Parhar	Sammamish	WA	980745009
	Lisa	Bedker	ARLINGTON	WA	98223
Mr	Larry	Lawton	Aberdeen	WA	985209639
Mr.	Joel	Konikow	Mercer Island	WA	980405530
Mr.	Michael	Lampi	Bellevue	WA	980085516
Mr.	Joseph	Huss	Vancouver	WA	986621625
Mrs.	Emily	Austin	West Richland	WA	993537405
Ms.	Rebecca	Evans	Seattle	WA	981174957
Mrs.	Gloria	Skouge	Shoreline	WA	981773527
Ms.	Lynn	Stiglich	Vancouver	WA	986862618
Mr.	Steve	Green	Burlington	WA	982333824
	Chris	Parker			98221
Mr.	James	French	Seattle	WA	981033345
Ms.	Barbara	Cardarelli	Redmond	WA	980522632
Ms.	Carol	Ellis	Spokane	WA	992034407
Mr.	donald	wanlin	Bellingham	WA	982251616
Ms.	Rita	Violette	Walla Walla	WA	993621619
Mr.	Wayne	Ellis	Bellingham	WA	982254844
Mr.	Edward	Kaeufer	Blaine	WA	982309696
Dr.	sibyl	james	Seattle	WA	981444514
	Deborah	Efron			98004
Mrs.	Judith	Anderson	Tacoma	WA	984186812
Ms.	Susan	Thiel	Spanaway	WA	983877630
Ms.	Elizabeth	Ketcham	Moses Lake	WA	988371565
Mr.	Mark	Revard	Vancouver	WA	986621806
Ms.	Sue	Brown	Mount Vernon	WA	982739273

	Doug	Swanson	White Salmon	WA	98672
Mr.	Carolyn	Hatcher	Port Angeles	WA	983631711
Mr.	Gary	Kelly	Bothell	WA	980116707
Dr.	Tamar	Lowell	Port Townsend	WA	983687326
Mr.	Cynthia	Reynolds	Seattle	WA	981161870
Ms.	Eufemia	Scarfone	Seattle	WA	981774223
Mrs.	Kerry	McCool	Sequim	WA	983823054
Dr.	Diana	Fries	Othello	WA	993448613
Ms.	Mickey	Riley	Seattle	WA	98105
Ms.	Heidi	Lehwalder	Mountlake Terrace	WA	98043
	Barbara	Trapp	Tacoma	WA	984091549
Mrs.	Susan	Palmen	Seattle	WA	981185058
Ms.	Kevin	Milam	Seattle	WA	981172901
Ms.	Andrea	Avni	Vashon	WA	980703019
Mr.	r	wood	Seattle	WA	981054764
Ms.	Brenda	Lewis	Chelan	WA	988168609
Ms	Cynthia	Zimmermann	Lynnwood	WA	98037
Mr.	J	Mcconaughy	Bellingham	WA	982257237
Ms.	Anita	Scheunemann	Rochester	WA	985798693
Miss	Christine	Plemmons	Kirkland	WA	980336533
Ms.	Nicole	Marble	Seattle	WA	981152603
Mr.	Aileen	Taylor	Spokane Valley	WA	992160485
Mrs.	Leslie	Monroe	Lynnwood	WA	980875233
Mr.	Cece	P	Seattle	WA	981184118
Mr.	Paul	Ferrari	Edmonds	WA	980266026
Mr.	James	Mulcare	Clarkston	WA	99403
	Lisa	Messinger	Port Townsend	WA	983687153
Mrs.	Melanie	Hammond	La Center	WA	986293074
Ms.	Laura	Shell	Port Townsend	WA	983680229
Mrs.	Rebecca	Cronkhite	Auburn	WA	98092
	Kira	Derhgawen	Bellingham	WA	98226
	Ron	Cronkhite			98092
Ms.	Mari	Lewis	Lynnwood	WA	98036
Mrs.	Lindy	Von Dohlen	Pasco	WA	993014638
Mrs.	Sarah	Robinson	Issaquah	WA	980273672
	Barbara	Sim	Seattle	WA	981054953
Ms.	Patricia	Kinkelaar	Graham	WA	983388778
Ms.	Karen	Jones	Seattle	WA	981173691
Mr.	Ronald	Schulz	Shoreline	WA	981555111
Ms.	Jude	Green	Bellingham	WA	982252625
	Leigh Ann	Mehan	Olympia	WA	985065279
	Glen	Williams	Yakima	WA	989089647
	Jean	Gorecki	Seattle	WA	98144
Ms.	Jaime	Vaughn	Rainier	WA	985769745

Mr.	Paul	von Szalay	Bothell	WA	980126553
Ms.	Marsha	Houk	Woodinville	WA	980779453
Mr.	Linda	Brown	Sumas	WA	98295
	Frances	Smitchko	Blaine	WA	982309555
	Joanne	Smitchko	Blaine	WA	98230
Ms.	Kari	Darvill-Coate	Sequim	WA	983828627
Mr.	Perry	Wong	Kent	WA	980314139
	Gail	Wrede	Olympia	WA	985024400
Ms.	CheChe	Luckini	Ridgefield	WA	986428964
	LS	Strange	POINT ROBERTS	WA	V6K 1K1
Mrs.	Rose	Thygesen	Shoreline	WA	981553733
Ms.	Barbara	Bonfield	Tacoma	WA	984072515
	Kay	Morgan	Carlton	WA	988140061
Ms.	Valentina	Mazza	Vancouver	WA	986612638
Ms.	Claire	Morency	Vancouver	WA	986621373
Mr.	Grant	Moninger	Seattle	WA	981993825
Miss	Monica	Miklova	Seattle	WA	981162158
Mr.	Alun	Vick	Vashon	WA	980707175
Ms.	Ursula	Mass	La Conner	WA	982578927
Miss	Alice	Nicholson	Seattle	WA	981054831
Ms.	Sue	Nickerson	Battle Ground	WA	986044824
Mr.	Bruce	Tipton	Marysville	WA	982702118
Ms.	Lin	Simpson	Burton	WA	980130334
	Mary	Kita	Redmond	WA	98053-2026
Ms.	Lisa	Winters	Black Diamond	WA	980109211
Mr.	Steve	Shapiro	Seattle	WA	981445517
Mr.	ERIC	FELLOWS	Tacoma	WA	98406
Mr.	Wally	Tomlinson	Walla Walla	WA	993620300
Mr.	Angela	Hoy	Maple Valley	WA	98038
Mr.	Bobby	Fries	Port Angeles	WA	98362
Mr.	Rich	Lague	Seattle	WA	981173014
Mrs.	Pamela	Carlson	Orting	WA	983607496
	Jane	Frazer			98404
	Yvette	LaRose	Vancouver	WA	986852815
Mrs.	Susan	Wilson	Kent	WA	980311116
Mrs.	Adola	Mc.William	Bainbridge Island	WA	981102609
Mr.	Ben	Tanler	Seattle	WA	981038235
Mr.	Ernetta	Skerlec	Lakewood	WA	984992345
Ms.	Myrna	Lipman	Shoreline	WA	981335671
mrs.	micheline	gibbons	Bothell	WA	98011
Miss	Brandy	Marty	Yelm	WA	985979796
Ms.	Lois	Hanson	Seattle	WA	981052214
Ms.	Angela	Kelly	Olympia	WA	985012943
Ms.	Susan	Scott	Vancouver	WA	986644138

Ms.	Nicole	McLeod-LeRoux	Bellingham	WA	982256308
Mr.	James	Howard	Vancouver	WA	986825081
Ms.	Tina	Tierson	Vancouver	WA	986617557
Ms.	Tanara	Saarinen	Gig Harbor	WA	983351802
Mrs.	Ellen	Prior	Covington	WA	980424986
Ms.	Kathryn	Lambros	Seattle	WA	981174444
Ms.	Rebecca	Rose	Seattle	WA	981550177
Mr.	Doreen	Harwood	Bothell	WA	980218514
Ms.	Arly	Crawte	Poulsbo	WA	983704502
Mr.	Brian	Cox	Pullman	WA	991633344
Mrs.	Susan	Hampel	Eastsound	WA	982458824
Ms.	Julia	McLaughlin	Rochester	WA	985799588
Mr.	Greg	Espe	Seattle	WA	981156908
Mrs.	suzann	m bailey	Oak Harbor	WA	982779064
	suzann	bailey			98277
Mr.	Sandy	Gese	Ione	WA	991390623
Mr.	C. David	Cook	Seattle	WA	981081505
Mr.	Elizabeth	Johnson	Stevenson	WA	986480707
Mrs.	nadine	wallace	Tacoma	WA	984076338
Ms.	Sandra	Aseltine	Bremerton	WA	983102032
Ms.	Vanessa	Jamison	Marysville	WA	982708067
Mr.	F	T	Orting	WA	983608201
Ms.	Sam	MacKenzie	Vancouver	WA	986613502
Mr.	Allen	Franzen	Wenatchee	WA	988011276
Ms.	Andrea	Speed	Tacoma	WA	984452443
Miss	TRICIA	FLODQUIST	Shoreline	WA	981557025
Mrs.	JOAN	HUNT	Edmonds	WA	980268101
Mr.	James	Adams	Olympia	WA	985023013
Ms.	Marlys	Reid	Puyallup	WA	98375
Mr.	Tessa	Gowans	Port Townsend	WA	983689649
Mr.	William	McGunagle	Spokane	WA	992074133
Dr.	Karla	Potter	Mineral	WA	983559714
Mr.	Chris	Guillory	Port Angeles	WA	983622803
Miss	Sarah	Dallosto	Tukwila	WA	981888031
Dr.	Ardith	Cole	Port Townsend	WA	983681203
Mr.	ZOE	DAILEY	Olympia	WA	985025805
Ms.	Cornelia	Teed	Bellingham	WA	982257154
Mrs.	Joan	Hunt	Edmonds	WA	98026
Dr.	MARIANNE	JACOBS	Steilacoom	WA	983882912
Mr.	Phil	Pennock	Seattle	WA	981174418
	Rebecca	Brownlie		WA	98226
Mr.	evan	Neptune	Vancouver	WA	986833908
Mrs.	Judy	Bluhm	Auburn	WA	980921912
Ms.	Angie	Dixon	Clinton	WA	982369622

Mr.	Gill	Fahrenwald	Olympia	WA	98507
Ms.	Kasey	McGill	Bainbridge Island	WA	981102319
Ms.	Marie	Hoffman	Seattle	WA	981033193
Ms.	BONNIE	SMYTH	Spokane	WA	992234939
Mr.	PETER	Ring-Revotskie	Port Townsend	WA	983688050
Mrs.	Barbara	Douma	Greenbank	WA	982539702
Ms.	Patricia	Warming	Edmonds	WA	980203640
Ms.	Barbara	Mckee	Vancouver	WA	986642548
Ms.	Daniela	Roth	Anacortes	WA	982211617
Ms.	Kathryn	Gill	Snohomish	WA	982901822
Mrs.	Susan	Harmon	Bellingham	WA	982294415
Ms.	Ruth	King	Lacey	WA	985033025
Mr.	Denise	Di Santo	Snoqualmie	WA	980659746
Mrs.	Gayle	Keller	Lynnwood	WA	980367244
Mr.	Lea	Davidson	Mount Vernon	WA	982744419
Mrs.	Catherine	Madole	Walla Walla	WA	993621719
Mr.	Steven	Uyenishi	Seattle	WA	981156009
Mr.	Elyette	Weinstein	Olympia	WA	98501
Ms.	Sheri	Dotson Parker	Bonney Lake	WA	983917572
Ms.	Wendy	Van de Sompele	Vashon	WA	980704126
Ms.	Donna	Hamilton	Maple Valley	WA	980385848
Dr.	Jane	Cornman	Poulsbo	WA	983707089
Ms.	K	Penaluna	Langley	WA	982601053
Mrs.	Kathy	Golic	North Bend	WA	980458866
Ms.	Daniela	Roth	Anacortes	WA	982211617
Mrs.	sonia	cobo	Redmond	WA	980522341
Dr.	Kjersten	Gmeiner	Seattle	WA	981255019
Mr.	William	Obrien	Vancouver	WA	986852999
Mrs.	Sharalee	Mathews-Malloy	Lynnwood	WA	980876641
Ms.	Eileen	Scollard	Seattle	WA	981784304
Mr.	Sally	DuBois	Olympia	WA	985028829
Mr.	Derek	Benedict	Lynnwood	WA	980368606
Miss	Michelle	Pavcovich	Seattle	WA	981256553
Mrs.	Linda	Hiser	Freeland	WA	982498765
Mrs.	Barbara	Blackwood	Spokane Valley	WA	992065728
Mr.	Holiday	Lammon	Enumclaw	WA	980228719
Mr.	Randall	Daugherty	Aberdeen	WA	985201700
Ms.	Pat	Belair	Spokane Valley	WA	990379321
Mr.	Brandee	Chase	Lynnwood	WA	980374605
Ms.	Dina	Pearl-Thomas	Bellingham	WA	982252603
Ms.	Susan	Shouse	Everett	WA	982012546
Mr.	Shelley	Eckersley	Point Roberts	WA	982818505
Mrs.	Laurie	Gogic	Kirkland	WA	980346336
Ms.	shelly	blazich	Poulsbo	WA	983709305

Ms.	Lorraine	DeGloria	Seattle	WA	981336986
Ms.	Candice	Cassato	Olympia	WA	985029690
Mr.	Evangelina	Cuevas	Yakima	WA	989083783
	Barbara	Paulson	Pullman	WA	991633525
Mr.	Mike	Oras	Anacortes	WA	982217407
	Candace	Hamilton			98022
Mrs.	Molly	Sutor	Spokane	WA	992248211
Mr.	H	HANSEN	Olympia	WA	985163026
Mr.	Holger	Mathews	Seattle	WA	981185959
Ms.	Susan Leslie Pitiger	Pitiger	Vashon	WA	980706446
Ms.	Carol	Ragsdale	Lynnwood	WA	980364540
Ms.	Carol Lynne	Armstrong	Seattle	WA	981256147
Ms.	Dori	Rea -Doble	Edmonds	WA	98026
Ms.	Emily	Raymond	Seattle	WA	98103
Mr.	Mark	McKole	Oak Harbor	WA	982778109
Ms.	Erin	Braybrook	Arlington	WA	982238172
Ms.	Sierra	Sanchez	Seattle	WA	981253934
Ms.	Christine	Klein	Bothell	WA	980219269
Ms.	Diane	Cucinotta	Brush Prairie	WA	986069542
Ms.	Alyce	Fritch	Seattle	WA	981257624
Mr.	Valerie	Lovejoy	Bellingham	WA	982253659
Mr.	John	Gieser	Seattle	WA	981174420
	Jenny	Dinas	Washougal	WA	98671
Mr.	Kenlee	Ducoing	Seattle	WA	981162531
Mr.	Marc	Ladd	La Conner	WA	982579510
Ms.	Sherry	Pennington	Kent	WA	98032
Ms.	Maria	Kjaerulff	Gig Harbor	WA	983353685
Ms.	Diana	Talbott	Fircrest	WA	984666013
Mrs.	Susan	Ring	Seattle	WA	981262761
	Sharmayne	Busher	Vancouver	WA	986621881
	Gale	Peterson	Kirkland	WA	98034
Ms.	Alena	Schoonmaker	Mead	WA	99021
Ms.	Linda	Bassett	Buckley	WA	983217509
Ms.	diane	marks	Port Angeles	WA	983623502
Ms.	Dianne	Faletti	Silverdale	WA	983838905
Ms.	Jacqueline	Alston	Spokane	WA	992236996
	Gill	Bourne	Johannesburg	WA	2192
Mr.	Christina	CoudÃ©r	Port Orchard	WA	983661825
Ms.	Karen	Stoos	Bow	WA	982329591
Mr.	D	Valdez	Snoqualmie	WA	980659675
Mr.	Phillip	Leija	Spokane Valley	WA	99216
Mr	Keith	Horton	North Bend	WA	98045
Mrs.	Lin	Norris	Sequim	WA	983823769
Ms.	Roberta R	Czarnecki	Everett	WA	982048614

Mrs.	Sybil	Kohl	Seattle	WA	981158112
Dr.	Bee	Evans	Oak Harbor	WA	982774550
Mr.	John	Rose	Lynnwood	WA	980871616
Mr.	Michelle	Schafte	Vancouver	WA	986614313
	Michelle	Schafte			98661
Mr.	John	Simanton	Spokane	WA	992043519
	Kathy	Golic			98045
Mrs.	Sarah	Cutler	Blaine	WA	982309770
Ms.	Linda	Dodson	Seattle	WA	981042049
Mr.	Cole	Grabow	Vashon	WA	980703933
Ms.	Dawn	Wojciechowski	Kirkland	WA	980341006
Mrs.	Nicole	Bickel	Graham	WA	983388962
Ms.	Mj	Sutcliffe	Lacey	WA	985032575
Miss	Gale	Kordowski	Coupeville	WA	982390146
Mrs.	Janice	Denk	Snohomish	WA	982906164
Ms.	Lorelette	Knowles	Everett	WA	982011560
Ms.	Heidi	Shuler	Vancouver	WA	986829544
	Jaynee	Erickson	Vancouver	WA	986851733
Mr.	Mary Kristin	Michael	Seattle	WA	981263190
Mrs.	Gianina	Graham	Cle Elum	WA	98052
	Aislinn	Melchior	Tacoma	WA	984031413
Ms.	Lynn	Offutt	Everett	WA	982087427
Mrs.	Claire	Alkire	Sequim	WA	98382
	D	Kerbow			98042
Mr.	Mark	Ogloff	Sumas	WA	982954000
Mr.	Richard	Moorhead	Silverdale	WA	983839239
Miss	Calista	Whitney	Spokane	WA	992086789
Mrs.	Kerry	Mitchell	Bellingham	WA	982297826
Ms.	Lori	Bellamy	Seattle	WA	981174125
Ms.	j	h	Port Angeles	WA	983638647
Ms.	Patricia	Perron	Seattle	WA	981226805
Mrs.	Carolyn & Rich	Tamler	Freeland	WA	982499541
Mr.	Brian	Baltin	Seattle	WA	981024698
	Kay	S.	Lacey	WA	98503
Dr.	Jimmye	Angell	Walla Walla	WA	993622106
	Scott	Morrison	Lacey	WA	98503
Ms.	Alycia	Staats	Seattle	WA	981034115
Ms.	Ellen	Boyle	Seattle	WA	981083029
Mrs.	Ethel	Felty	Mill Creek	WA	980125656
Ms.	Karen	Howard	Blaine	WA	982306502
Mrs.	Maura	Monk	Richland	WA	993525133
	Heather	Kreeck	Snohomish	WA	982967089
Ms.	Danielle	Anderson	Moses Lake	WA	988370872
	Steven	Storms	Maple Valley	WA	980383249

Mr.	James	Loppnow	Bonney Lake	WA	983917764
Ms.	Barbara	Rosenkotter	Deer Harbor	WA	98243
Mrs.	Judy	Palmer	Tonasket	WA	988559440
Ms.	Lois	Jones	Seattle	WA	981035577
Ms.	Michelle	Schweitzer	Seattle	WA	981081538
Mr.	H. Lehman	Holder Jr.	Vancouver	WA	986642411
Ms.	shawn	olsen	Lakewood	WA	984991988
Mr.	Mike	Bottemiller	Seattle	WA	981181721
Ms.	Natalie	Niblack	Mount Vernon	WA	982739518
Mrs.	Pamela	Reckers	Camano Island	WA	982827615
Ms.	T	Heck	Renton	WA	980562435
Mr.	Dan	Hoey	Seattle	WA	981036854
Ms.	Evelyn	Lemoine	Seattle	WA	981224627
Ms.	Kim	Howe	Seattle	WA	981157136
Ms.	Mare	Wahosi	Gig Harbor	WA	983295742
	Christine	Dunchak	Seattle	WA	981172015
Dr.	Jonathan	Hartman	Camas	WA	986072534
Mr.	Kiel	Villeneuve	Yelm	WA	985978920
Ms.	Deborah	Wells	Ocean Park	WA	986405811
Mrs.	Joyce	Grajczyk	Kent	WA	980312272
Ms.	Liubov	Roberson	Everett	WA	982033830
Mrs.	Shelly	Vallem	Port Angeles	WA	983624611
Dr.	Vanessa	Edrich	Seattle	WA	98112
Mr.	Sylvia	Wiedemann	Seatac	WA	981684287
	Lori	McKole			98277
Dr.	Bob	Gillespie	Mount Vernon	WA	98273
Ms.	Gail	Tedford	Bremerton	WA	983122358
Mrs.	Kathryn	Godwin	Auburn	WA	980929118
Mr.	Sallie	Graham	Blaine	WA	982309741
Mrs.	Wendy	Anderson	Oak Harbor	WA	982777123
Mr.	Mark	MacDonald	Seattle	WA	981461113
Ms.	Jennifer	Henry	Friday Harbor	WA	982509240
Mr.	Miho	Reed	Sammamish	WA	980757970
Mr.	Richard	Hodgin	Seattle	WA	981254086
Ms.	Barbara	Jones	Spokane	WA	992239214
Ms.	joanne	klein	Seattle	WA	981186111
Mrs.	Cathy	Garry	Centralia	WA	985318906
Mr.	Kim	Chapman	Port Angeles	WA	983628983
	Robert	Murano			98070-4425
Dr.	Bob	Gillespie	Mount Vernon	WA	982735817
Mr.	Diane	Lang	Seattle	WA	981255904
Mr.	Bradley	Carr	Bellevue	WA	980054192
Ms.	Susan	Froeschner	Seattle	WA	981034320
Mrs.	Kathryn	Kirschner	Bremerton	WA	983129613

Mr.	Marvin	Foland	Oroville	WA	988449408
Mr.	diane v	paul	Olympia	WA	985022736
Mr.	Percy	Hilo	Seattle	WA	981113761
Mr.	Bruce	White	Kirkland	WA	98034
	B	Baldez	Gig harnor	WA	98329
	Lara	Fitzgerald	Kirkland	WA	980342043
Miss	Lisa	Nemeth	Spokane	WA	992057309
Ms.	Amanda	Dickinson	Yakima	WA	989025264
Mrs.	Julie	Pierce	Bothell	WA	980114143
Mr.	Dennis	Underwood	Tacoma	WA	984044914
Mrs.	Danielle	Hill	Vancouver	WA	986644363
Ms.	Pamela	Wohlman	Tacoma	WA	984082339
Mrs.	De	Kalahan	Renton	WA	980594850
Dr.	gloria	fischer	Pullman	WA	991632110
Mr.	Corine	Johnson	Seattle	WA	981175904

Friends of the San Juans (Lovel Pratt)

Attached please find comments from Friends of the San Juans

Friends of the San Juans
Protect this Place

August 1, 2025

Jaimie C. Bever
Executive Director
Washington State Board of Pilotage Commissioners
2901 Third Avenue, Suite 500
Seattle, WA 98121

Submitted via email: BeverJ@wsdot.wa.gov and the online comment portal: https://sppr.ecology.commentinput.com?id=HihgcrTsY

RE: Tug Escort Rulemaking Draft Environmental Impact Statement, SEPA #202502240

Dear Jaimie Bever,

Thank you for this opportunity to comment on the Tug Escort Rulemaking Draft Environmental Impact Statement (DEIS) and the Board of Pilotage Commissioners' proposed rule that would amend Chapter 363-116 WAC, Pilotage Rules, to address critical safety gaps for vessels carrying oil in bulk and to reduce the risk of a catastrophic oil spill.

Friends of the San Juans is a nonprofit organization established in 1979 and based in Friday Harbor, Washington, with the mission to bring people and nature together to protect the San Juan Islands and the Salish Sea through education, science, policy, and law. Friends of the San Juans was a co-petitioner that led to the federal listing of the Southern Resident killer whales as an endangered species under the Endangered Species Act.[1] The protection and recovery of the Southern Residents continues to be one of our top priorities.

Support for expanding tug escort requirements:
Friends of the San Juans supports the Board of Pilotage Commissioners' proposed rule to expand the existing tug escort requirements (Alternative C in the DEIS). Friends of the San Juans advocated for the passage of the 2019 Engrossed Substitute House Bill 1578 *Reducing threats to southern resident killer whales by improving the safety of oil*

[1] National Marine Fisheries Service (NMFS), Listing Endangered and Threatened Species and Designating Critical Habitat: Petition to List Southern Resident Killer Whales, 66 FR 42499. https://www.federalregister.gov/documents/2001/08/13/01-20282/listing-endangered-and-threatened-species-and-designating-critical-habitat-petition-to-list-southern.

transportation.[2] Based on Governor Inslee's Southern Resident Killer Whale Recovery and Task Force recommendation 24,[3] this legislation established initial tug escort requirements in 2020 for small- to medium-sized oil tank vessels in RCW 88.16.190(2)(a)(ii), and included direction for the evaluation of the rules currently being adopted and potential future rulemakings to update tug escort rules.[4]

Tug Escorts for laden (oil cargo carrying) tank vessels are an important and effective accident and oil spill prevention measure. Oil spill prevention is critical to the protection of the Southern Resident killer whales. An oil spill could severely impact and potentially cause the extinction of the Southern Residents (see also more comments below re. Plants and Animals Discipline Report Section 3.5.1 Impacts from Implementation).[5]

Support for the comments from the Lummi Indian Business Council:
Friends of the San Juans supports the comments submitted by the Lummi Indian Business Council. Friends of the San Juans urges the Board of Pilotage Commissioners to comply with the request for a formal government-to-government consultation with Lummi Nation to develop solutions to the impacts to tribal treaty fishing rights.

Friends of the San Juans urges the Board of Pilotage Commissioners to conduct formal government-to-government consultations with all Tribes that request this.

The increase in Trans Mountain tanker traffic intensifies the need for expanding tug escort requirements:
The changes in tank vessel traffic that have recently occurred because of the completion of the Trans Mountain pipeline expansion project intensifies the need for this proposed expansion of the tug escort requirements for small- to medium-size oil tankers, ATBs (Articulated Tug Barges) and towed barges between 5,000 – 40,000 DWT (dead weight tons). Tank vessels that are exporting Canadian tar sands crude oil are directly entering

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[2] Engrossed Substitute House Bill 1578: https://app.leg.wa.gov/billsummary/?BillNumber=1578&Year=2019&Initiative=false.
[3] Southern Resident Killer Whale Task Force website that tracks the implementation of Task Force recommendations: https://orca.wa.gov/; Recommendation 24: https://orca.wa.gov/recommendation/24/.
[4] ENGROSSED SUBSTITUTE HOUSE BILL 1578 Session Law. Section 5 (1). https://lawfilesext.leg.wa.gov/biennium/2019-20/Pdf/Bills/Session%20Laws/House/1578-S.SL.pdf.
[5] NOAA (National Oceanic and Atmospheric Administration) Fisheries webpages:

- https://www.fisheries.noaa.gov/west-coast/endangered-species-conservation/southern-resident-killer-whale-orcinus-orca
- https://www.fisheries.noaa.gov/species/killer-whale/spotlight

Federal Register Vol. 70, No. 222, November 18, 2005, page 69908, https://www.govinfo.gov/content/pkg/FR-2005-11-18/pdf/05-22859.pdf.

Washington State, contrary to the vessel traffic route included in the permitted application for Trans Mountain's expansion project. At the May 15, 2025, Board of Pilotage Commissioners meeting, information was provided on tankers transiting between Canada and Washington State from May 11, 2024, to May 14, 2025. There were 21 laden tank vessels between 5,000 and 40,000 DWT.[6] Some of the Trans Mountain tank vessels transit from British Columbia to Washington State via Georgia Strait and Rosario Strait. The tug escorts requirements are proposed to expand into the U.S. waters of Georgia Strait, in addition to Rosario Strait and connected waterways to the east.

Concerns about Ecology's risk model:
Any reliance in the DEIS on Ecology's risk model is concerning. Ecology staff have refused to conduct a peer review of the model and the previous report, *Analysis of an Additional Emergency Response Towing Vessel*, that relied on it. Feedback on discrepancies in that report which indicated the need for revisions has not been acted on. Ecology should be open and transparent with the risk model itself, as is the stated intent for the modules:

> As a research team, we're committed to developing a model capable of providing the most informative risk assessments possible, given the data and knowledge that is available, and within the modeling framework that we've selected. We're also committed to developing the modules in an open and transparent way, using sound methodology, and documenting our work.[7]

Additional comments for specific sections of the DEIS are included below. In order to more fully address the intent and requirements in ESHB 1578 and to ensure that the expanded tug escort requirements provide oil spill prevention benefits without unnecessary tug traffic impacts, changes are needed to the proposed voluntary mitigation measures.

Thank you for your attention to these comments.

Sincerely,

Lovel Pratt

Lovel Pratt
Marine Protection and Policy Director

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[6] Washington State Board of Pilotage Commissioners. May 15, 2025, meeting materials. Pages 4-6. https://nebula.wsimg.com/266aa6cb88cc71a26a32213c789e09c2?AccessKeyId=F86D0A1E7A0091C2061F&disposition=0&alloworigin=1.

[7] Ecology web page. ERTV and Tug Escort Analyses: Outreach. https://ecology.wa.gov/spills-cleanup/spills/oil-spill-prevention/safety-of-oil-transportation-act/risk-modeling/outreach-documentation.

DEIS Section 2.2.1 RCW Geographic Scope and throughout:
The DEIS' interchangeable use of "Salish Sea" as defined in Chapter 237-990 WAC and "Puget Sound" as defined in WAC 220-300-280 is confusing. The DEIS should be revised to reference the Washington State waters of the Salish Sea (as detailed in footnote 4, page 6).

DEIS Section 4.5.3.2 Mitigation Measures:
The DEIS relies on tugs' compliance with existing federal and state requirements to mitigate impacts. To help to ensure that the expanded tug escort requirements provide oil spill prevention benefits without unnecessary tug traffic impacts, this recommended mitigation should be revised: "Encouraging or requiring escort tug operators to take trainings to promote wildlife awareness, such as those provided by the Vancouver Fraser Port Authority or Be Whale Wise (Puget Sound Partnership & Governor's Salmon Recovery Office, 2022)."[8] The entire list of recommended mitigations should be addressed in trainings for new tug operators and on-going annual trainings for all tug operators as a required mitigation. This will provide tug operator awareness of the precautions needed to protect Southern Resident killer whales and other marine wildlife.

Another voluntary mitigation measure that should be mandatory is the use of the Whale Report Alert System.

If the intent of the mitigation to "encourage transition to hybrid electric and fully electric propulsion as technological readiness and cost make them feasible" also intends to address the tugs' emissions that impact air quality and the marine ecosystem, this mitigation should be revised to also include tugs' transition to zero emission fuels, which may prove to be more feasible than electric propulsion.

The mitigation to "encourage participation in voluntary slowdowns, which reduces underwater noise, ship strike risk, and fuel use" should note that currently there are no ECHO (Enhancing Cetacean and Habitat Observation) or Quiet Sound voluntary slowdown areas in the existing or proposed expansion of the tug escort Study Area.

The mitigation that encourages tugs and target vessels to comply with Washington State's distance and speed regulations (RCW 77.15.740) where safe and feasible to do so, is essential, despite the exemption for tugs and target vessels operating under the VTS (Vessel Traffic Service). To achieve this mitigation, Ecology recommends that the Puget

[8] Tug Escort Rulemaking Draft EIS. Page 79. TugEscort-DEIS-Final_June2025.pdf.

Sound Harbor Safety Committee consider a Standard of Care for escort tugs to maintain a 1,000-yard distance from Southern Resident killer whales where safe and feasible to do so. This recommendation to the PSHSC should also include vessel speeds.

The state should take responsibility for continuous improvement by identifying funding to support the transition to tugs with quieter engines and propellers, and that use low- or zero-emission fuels, and the certification in programs aiming to protect the environment (e.g., Green Marine).

DEIS Section 5.1 Past, Present, and Reasonably Foreseeable Future Actions, Trans Mountain Expansion Project – Burnaby, British Columbia:
This section states, "All of these tankers would be greater than 40,000 DWT and don't affect escort tug traffic associated with this proposed rulemaking." Comments were submitted on December 20, 2024, stating, "it is imperative that this rulemaking address the changes in tank vessel traffic that have recently occurred as a result of the completion of the Trans Mountain pipeline expansion project." This section should be revised to address the fact that from May 11, 2024, to May 14, 2025, there were 21 laden tank vessels between 5,000 and 40,000 DWT, including Trans Mountain target vessels. The increased oil spill prevention provided by tug escorts is critical for tank vessels transporting Canadian tar sands diluted bitumen.

DEIS Section 5.2 Cumulative Impacts:
This section should be updated with more information re: "The spill risk for laden vessels associated with the Trans Mountain Expansion Project is a particular concern because they would be transporting diluted bitumen." The December 20, 2024, comments also included references to the 2022 National Academies report, *Oil in the Sea IV* as well as the USCG's *Risk Assessment of Transporting Canadian Oil Sands*, specifically page 18:

> From an oil spill response perspective, it is important to have awareness of the environmental fate and behavior of Canadian oil sands products once they are released into the aquatic environment. Currently, there is scientific uncertainty about how Canadian oil sands products would weather and behave in aquatic environments at different ranges of temperatures, salinity, and sedimentation. There is also uncertainty about the extent that the diluent will separate from Canadian oil sands products under different spill conditions. These uncertainties can pose a major challenge to oil spill responders. Typically, oil sands products are classified as Group IV oil for contingency planning, but during a spill may not behave as such. Additionally, the evaporation of volatile components of the diluents in Canadian oil sands products results in potentially toxic and/or flammable VOCs in the

atmosphere above the spill. The initial portion of an oil sand product response would emphasize minimizing public and responder hazards from light VOCs that would volatize in the first several hours/days of the event.

The cost of diluted bitumen spill response, remediation, and restoration was also addressed:

> The response, remediation, and restoration costs for the 2010 pipeline spill of tar sands crude oil into the Kalamazoo River was over $1,208,000,000 or $60,153 dollars per barrel (see the UNITED STATES SECURITIES AND EXCHANGE COMMISSION. FORM 10-Q. September 30, 2014, Quarterly Report (page 19)). This amount far exceeds the average response, remediation, and restoration costs of a conventional crude oil spill.

The DEIS should also be updated to address the higher costs of diluted bitumen spill response, remediation, and restoration.

Appendix F - Plants and Animals Discipline Report Section 3.5.1 Impacts from Implementation:

Appendix F or the DEIS should be revised to specifically address the fact that Southern Resident killer whales were listed under the Endangered Species Act (ESA), in part, because of these "Human-Made Factors Affecting Continued Existence" – the oil spill risk from the refineries and associated oil transportation in the Salish Sea, given the impacts to killer whales from the Exxon Valdez oil spill.[9] This section addresses the impacts from the Exxon Valdez oil spill to killer whales but does not include how the impacts to these killer whales in Alaska informed the listing of Southern Residents under the ESA.

The National Marine Fisheries Service's *Recovery Plan for Southern Resident Killer Whales (Orcinus orca*) identifies several direct and indirect impacts of oil spills on killer whales, including:

- "Exposure to petroleum hydrocarbons released into the marine environment via oil spills and other discharge sources represents another potentially serious health threat for killer whales in the northeastern Pacific."[10]
- "Oil spills are also potentially destructive to prey populations and therefore may adversely affect killer whales by reducing food availability."[11]

[9] Federal Register Vol. 70, No. 222, November 18, 2005. Page 69908. https://www.govinfo.gov/content/pkg/FR-2005-11-18/pdf/05-22859.pdf.
[10] National Marine Fisheries Service (2008) *Recovery Plan for Southern Resident Killer Whales (Orcinus orca),* p.II-116. https://repository.library.noaa.gov/view/noaa/15975.
[11] *Ibid*., p.II-116.

- "Major oil spills are potentially catastrophic to killer whales and their environment, as illustrated by the probable impacts on the main resident and transient pods frequenting the area of the massive Exxon Valdez oil spill in Prince William Sound, Alaska, which occurred in 1989. Six of the 36 members of AB pod were missing within one week of the spill after being seen in heavily oiled waters and eight more disappeared within two years (Dahlheim and Matkin 1994, Matkin et al. 1994, 1999a, 2003, Matkin and Saulitis 1997)."[12]

According to NOAA researchers and marine biologists, exposure to oil from the Exxon Valdez oil spill contributed to high killer whale mortality rates, particularly among immature whales and breeding females.[13] The killer whale pods that were impacted by the Exxon Valdez oil spill have not recovered, and the killer whale pod known as AT-1 group has experienced zero reproduction since the spill.[14]

[12] *Ibid*., p. II-49.
[13] NOAA (National Oceanic and atmospheric administration) Office of Response and Restoration. More Than Two Decades Later, Have Killer Whales Recovered from the Exxon Valdez Oil Spill? https://response.restoration.noaa.gov/oil-and-chemical-spills/significant-incidents/exxon-valdez-oil-spill/more-two-decades-later-have-kil.
[14] Gulf Watch Alaska killer whale monitoring program: https://gulfwatchalaska.org/monitoring/pelagic-ecosystem/killer-whales/.

Joint Environmental NGOs (Keith Curl-Dove)

Please see attached comments.

August 1, 2025

Jaimie Bever
Board of Pilotage Commissioners
2901 3rd Avenue, Ste 500
Seattle, Washington 98121

Dear Board of Pilotage Commissioners,

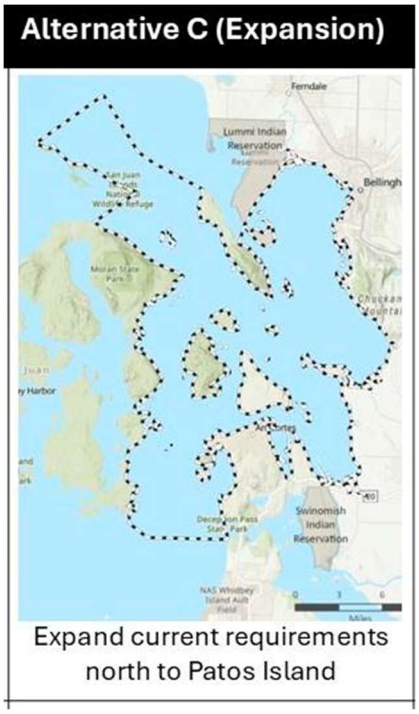
Thank you for this opportunity to provide public comment on the Draft Environmental Impact (DEIS) evaluating the impacts of your proposed amendments to the Pilotage Rules found in Chapter 363-116 WAC. The proposal extends tug escort regulations required of oil tankers greater than 40,000 dwt, to smaller oil tankers, articulated tug barges (ATBs), and towed barges between 5,000 - 40,000 dwt (other those engaged in bunkering operations).

The undersigned organizations and our thousands of members have worked on environmental issues in Washington State for decades. We are providing these comments because of our commitment to protecting the Salish Sea and all those dependent on it. In particular, we are deeply concerned about the potential for a major oil spill to result in the extinction of the critically endangered population of Southern Resident Killer Whales as occurred to a population in Alaska resulting from the 1989 Exxon Valdez oil spill in Prince Williams Sound.

We appreciate the work of the Board of Pilotage Commissioners (BPC) and the Department of Ecology (Ecology) during this long and inclusive public process. We believe that the proposed amendments to the Pilotage Rules meet the primary intent of the legislation passed in July 2019 (ESHB 1578), but we urge your attention to our additional recommendations.

As stated in the June 2024 CR 102 implementing RCW 34.05.320, the proposed rule will "Achieve best achievable protection," as defined in RCW 88.46.010. These requirements are designed to balance compliance costs with the goal of effectively reducing the risk of a catastrophic oil spill in Puget Sound.

Of the four proposed alternative changes to the Pilotage Rules that were evaluated in the Draft Environmental Impact Statement (DEIS), **we support Alternative C (Geographic Expansion of Tug Escort Requirements to tank vessels between 5,000-40,000 deadweight tons) (figure 1).** We believe it provides the Best Achievable Protection (BAP) for the critically endangered Southern Resident Killer Whales from an oil spill – the primary intent of this rule.



(Figure 1. page xxxii excerpt)

By reducing the grounding risk of the target vessels in the area covered in the rule 90.5%, and 11.84% in the entire study area (from Olympia to Port Angeles, north to the Canadian border), Alternative C clearly achieves the BAP. It also advances our region's long-term commitment to help ensure our maritime safety regime is responsive to changes in vessel traffic and associated risk of an oil spill. This is especially important as the likelihood of an oil spill in the Salish Sea has

significantly increased recently with the expansion of the Trans Mountain Pipeline, including transits to refineries in Washington, as well as the growing trend to use Articulated Tug Barges (ATBs), which were not required to have tug escorts prior to 2020.

Changing with the Times

Based on Ecology's analysis of its Vessel Entries and Transits data (VEAT) from 2011-2023, as summarized below, ATBs have progressively become preferred to oil barges as a means of oil transportation. This is due to their ability to save money for the oil industry by carrying tanker-volumes of oil with fewer crew.

Comparison between the frequency of barges and ATB transits WITHIN the Salish Sea:

ATBs 2011 (87) 2023 (756) High 2021 – (809)

Barges 2011 (2,775) 2023 (2,617) High 2019 - (3,554)

Comparison between the frequency of barges and ATBs ENTERING the Strait of Juan de Fuca:

ATBs 2011 (224) 2023 (250) High 2021- (316)

Barges 2011 (321) 2023 (91)

ATBs also spend more time transiting throughout the study area as compared to other tank vessels.

Time tank vessels underway within the study area in 2023

Target Vessel Type	Historical AIS Underway Minutes
Oil Tanker – Chemical	41,215
Oil Tanker – Crude	867
Oil Tanker – Product	13,715
ATB	657,606
Towed Oil Barge	520,114
Total	**1,233,517**

Table 1 DEIS p.23

The increased use of these "rulebreakers," as they are described in the 1994 Congressional Research Services (CRS) report, more than justifies the legislation (ESHB 1578) requiring the

State to revisit its escort rules if we are to maintain our commitment to making continuous improvements.

Burying the Lead

While we support the proposed draft rule amendments, we are concerned that the DEIS does not present the evidence supporting the recommendation until page 35 in the DEIS PDF. Rather than having the benefits described in the Executive Summary or Fact Sheet in the DEIS or Fact Sheet provided to the OTSC, the first time the actual reduction of the risk of groundings by target vessels is buried within table 2 under the section of Environmental Health Releases. Even there it is presented in an obscure manner:

> *"Under Alternative D, the probability of a target vessel drift grounding increases by 11.84% over Alternative A across the entirety of the EIS Study Area. In the rulemaking area in particular, Alternative D would result in a 90.5% increase in drift grounding probability."*

The DEIS uses this same language in the Major Findings section found on page 78 in the PDF of the DEIS. By limiting the focus of the DEIS to the negative consequences of removing the escort requirement, rather than the benefits of retaining it, the only way of understanding the true value of the escort requirement for the target vessels in the area covered by the rule is by analyzing the increased likelihood of a grounding if the requirement is removed.

This is a result of the fact that Alternative A, the "no action" alternative, actually reflects the new tug escort regime in place since 2020 for tank vessels between 5,000 and 40,000 dwt as called for in ESHB 1578.

However, since this requirement could be removed or modified as a result of this rule making, we suggest the no action alternative should reflect the condition prior to when the temporary escort requirement was implemented, which is currently represented as Alternative D. This has significant impact on the regulatory analysis which we describe later in our comment letter.

While the results are the same, a far more understandable way of representing the findings is that the risk of a drift grounding is reduced by 90.5% by preserving the current escort regime in those regions in which the tug escorts are deployed and 11.84% in the entire study area. This statement is not found until page 85 in the PDF.

In addition, since the focus of the DEIS was to analyze the impact of the proposed rule changes, which is limited primarily to adding just 28.9 square miles to the area in which escorts are already required, the risk of a grounding in the rule area is only reduced by 1.6% when the extension is added to Alternative A as reflected in Alternative C. Based on the estimates presented in the regulatory analysis, which we also take issue with, the likelihood of a drift to occur increased from once every 189 years to once every 186 years for the entire study area.

The benefit of retaining the (temporary) post 2020 escort requirement is further misrepresented on page 48 in the DEIS by the statement that the elimination of the current tug escort requirement (Alternative D) increases the likelihood of a drift grounding of target vessels from 186 years to 167 years (11.84%) for the entire study area as compared "no action" Alternative A. This reflects that a smaller interval between events is a greater likelihood of a grounding to occur which would be a much clearer way of stating the finding.

The DEIS continues in its double negative representation of the benefit of tug escorts to estimate the removal of the current (post 2020) requirement will result in the likelihood of an oil spill recurring from a drift grounding to decrease from an unimaginable 25,546-year event to a 22,841-year event. In addition, this remarkable characterization of the rarity in which a grounding results in an oil spill is clearly a reflection of the few spills with which they had to calibrate the model.

Previous Concerns Were Not Addressed in the Primary Findings

This approach was taken despite the fact that the BPC and Ecology received comments from the environmental community at the 13 February 2024 OTSC meeting criticizing the way in which Ecology presented the modeling results in its reports to the legislature on this rulemaking and that for the Emergency Response Towing Vessel (ERTV). These concerns were reiterated in letters to the BPC dated 19 August 2024 and 16 December 2024.

The primary focus of those comments pertained to Ecology's failure to focus on documenting the percent to which the implementation of the current tug escort requirements reduced the risk of a drift grounding in the waterways in which the escorts were deployed and not conflate the results with the impacts of removing the provision throughout the study area (Olympia-Port Angeles-Canadian border). It is hard to imagine how an escort in Rosario Strait will have any impact on a drift grounding in Tacoma. In addition, we urged the BPC to accurately characterize the benefit of tug escorts in the beginning of the DEIS for the proposed rule rather than what would happen if they were removed.

Benefits of Tug Escorts to Prevent Groundings by Target Vessel Type:

Ecology conducted more detailed analyses of its model in response to the feedback it received from the OTSC, which are not presented in the DEIS. The results from Summary #2 of the filtering analysis they conducted, presented below, show how the tug escort requirement reduces the likelihood of a drift grounding by tank vessel type within the rule area in which the escorts are deployed.

The first results from the filtering analysis evaluated the likelihood a tug escort could prevent a drift grounding in the rule area by vessel type.

Question 1: If results for Rosario Strait; Bellingham Channel, Sinclair Islands & waters east; Guemes Channel and Saddlebags are combined, what is the percent (absolute) change in risk from Scenario 1 to Scenario 2?

Question 1 Results

Vessel Type/Status	Drift Groundings	(Drift Groundings)	Oil Volume at Risk	(Oil Volume at Risk)	Oil Outflow	(Oil Outflow)
Laden Tank Barges	-52.56%	-0.000219	-51.43%	-1.502	-51.43%	-0.011
Laden ATBs	-26.47%	-0.000036	-29.34%	-6.156	-26.47%	-0.004
Laden Chemical Tanker	-57.89%	-0.000147	-64.50%	-1569.924	-57.89%	-0.144
Laden Product Tanker	0.00%	0.000000	0.00%	0.000	0.00%	0.000
Laden Crude Tanker	NA	0.000000	NA	0.000	NA	0.000
All Laden Tank Ships	-36.36%	-0.000147	-40.49%	-1569.924	-36.36%	-0.144
All Laden Tank Vessels	-42.01%	-0.000401	-40.44%	-1577.582	-36.77%	-0.159
All Covered Vessels	-4.84%	-0.000644	-1.92%	-5349.229	-3.04%	-0.314

The results from Ecology's additional modeling analysis revealed that the proposed escort requirement in the rule area reduces the risk of a drift grounding by 52.56% for barges, 26.47% for ATBs, 57.89% for chemical tankers, 36.36% for all tank ships, and 42.01%. for all tank vessels.

Model Limitations

While all maritime safety models have limitations, a major limitation of Ecology's model is the lack of accident and oil spill data on which to calibrate it. We are a victim of our own success. Because there were only four major oil spills involving tank vessels in Washington between 2002-2019, Ecology created a simulation utilizing vessels' traffic data and other parameters to estimate the likelihood of a drift grounding to occur and the likelihood of a grounding resulting in an oil spill.

However, we are far more confident in the model's use of actual vessel tracking and tidal data to estimate the likelihood of a grounding than whether it resulted in an oil spill. Furthermore, it is difficult to be confident of the estimates of the likelihood of a grounding or oil spill to reoccur over hundreds and thousands of years. No matter how good our oil spill record has been we cannot simply rely on history and modeling to predict the future, especially when the only constant is change.

Recognizing the limitations of the model, it is important to learn from actual events that have occurred to understand why this rule is needed.

Summary of Tank Vessel Incidents

Ecology reviewed data on tank vessel incidents and oil spills in the EIS study area to evaluate how well the model was calibrated to represent whether a tug escort could have been of assistance to reduce the risk of a grounding and oil spills. The results are presented in Appendix C "Environmental Health: Releases Discipline Report."

We find this to be a misleading title for a title in an appendix with such important information, and like all the other appendices it is not included on Ecology's or the BPC's websites with the DEIS, no less hot-linked as is often the case to facilitate review of such voluminous documents.

Instead, the appendices can only be found in the SEPA Registry (https://apps.ecology.wa.gov/separ/Main/SEPA/Record.aspx?SEPANumber=202502240).

Oil Tanker Incidents: In section 3.1.3.1 Ecology reports that between 2017 and 2023, there were 31 oil tanker casualties and oil spills involving tankers within the EIS Study Area. Twelve of which occurred while the vessel was underway. Fifteen incidents were identified as a vessel casualty. Of those, seven were loss of propulsion or electrical power events, two were collisions or near collisions, two were allisions or allision/loss of propulsion, and four documented fitness for service issues.

Ecology determined that an escort tug might have been helpful during the full or partial loss of propulsion events, which made up four of the 31 incidents. All of those incidents occurred while the vessel was underway, and all four incidents were of oil tankers over 40,000 DWT.

Tank Barge Incidents: In Section 3.1.3.2 Ecology reports that between 2017 and 2023, there were 16 tank barge casualties and oil spills involving tank barges within the EIS Study Area. Two of the incidents were identified as a vessel casualty. One was an allision, and one was a loss of propulsion event. Ecology determined a tug escort may have been able to help in both situations.

Ecology determined that an escort tug might have been helpful in four of the incidents, all of which occurred while the barge was underway.

ATB Incidents: In Section 3.1.3.3 Ecology found that between 2017 and 2023, there were five vessel casualty and oil spills involving ATBs within the EIS Study Area. Three incidents were identified as a vessel casualty. One was a partial loss of propulsion, one was a grounding, and one was a grounding/flooding/safety threat event.

Ecology determined that an escort tug might have been helpful in the one loss of propulsion event. The ATB was underway when this incident occurred.

Lessons Learned

While only some of these incidents resulted in oil spills, none resulted in a large volume of oil entering the water. This underscores the point that incidents are a far better indicator than oil spills because without adequate interventions in place, the likelihood of an incident becoming a spill can be a matter of luck, which is not a form of prevention to be relied on.

Our maritime safety net must continue to evolve to meet new challenges as they arise. While Ecology's summary of incidents and oil spills provides valuable insights, it is not clear which incidents they used since they did not include descriptions of them. Washington State has an excellent oil spill record because we are all committed to continuous improvement, so it is important to also recognize the changes that have been made over the years to prevent maritime accidents.

Details of Incidents and Oil Spills in the Region

To better illustrate the nature of our region's oil spill risk exposure and the reason for our support of this rulemaking, we provide some examples of incidents which occurred in Washington and British Columbia. We also include some of the proactive and reactive safety measures that have been taken over the years.

Following the discovery of oil in Alaska in the 1970s, ARCO built its refinery at Cherry Point to receive North Slope crude oil by tankers, as did three existing refineries which previously received crude primarily by pipeline, which they also continue to do. This major change in risk to our waterways, as reflected by the 239,000-gallon *ARCO Anchorage* oil spill in 1985, was addressed by Washington State requiring tug escorts for oil tankers larger than 40,000 dwt.

In the winter of 1988 the barge *Nestucca* broke its tow line and spilled 230,000 gallons of heavy fuel oil, fouling 110 miles of the Olympic coast, which significantly impacted the four coastal Treaty Tribes and Olympic National Park.

This was followed shortly thereafter by the *Exxon Valdez* catastrophe in the spring of 1989. Two laden, single hull Exxon oil tankers went adrift off Cape Flattery within months following that

disaster. “Tugs of opportunity” had to be deployed because the tankers were west of the area covered by the escort requirement.

The year following the 11 million-gallon Exxon Valdez oil spill, major changes were made to maritime safety nationally with the passage of the Oil Pollution Act of 1990 (OPA 90). These included the requirement for single hull tankers to have two tug escorts in Prince William Sound and Puget Sound.

However, with the phase in of double hull tankers there is no longer a federal double tug escort requirement in Washington state, while it has been retained in Prince William Sound. Tankers greater than 40,000 dwt in Washington are still required to retain a single escort due to the Pilotage Rules being expanded in this rule making.

There are many more lower profile incidents (e.g. mechanical or human error) that did not result in oil spills and are a better reflection of oil spill risk than actual spills.

In 1988, due to the threat of an oil spill like the *Nestucca* and a federal proposal for oil and gas development off the coasts of Oregon and Washington, Congress mandated the creation of the Olympic Coast National Marine Sanctuary. The 3,188 square mile Sanctuary was officially designated in 1994. In 1995 the International Maritime Organization (IMO) established an Area To Be Avoided (ATBA) requiring tank vessels to remain 25 miles off the coast. The J-Bouy was subsequently moved 12 miles further offshore, and the ATBA was expanded to prevent tank vessels from “cutting the corner” around Cape Flattery.

Beginning with a Navy contract in 2007, State funding in 2009, and after 11 years of further public funding and extensive studies, the State required vessels greater than 300 gross tons to have a contract with an Emergency Response Towing Vessel (ERTV) in Neah Bay to respond to incidents like the Exxon tankers that went adrift off the coast. Having assisted over 80 vessels in distress on both sides of the border, the ERTV continues to prove itself an essential addition to our region’s maritime safety net.

The Government of Canada has also established two ERTVs to prevent groundings off the northern coast of British Columbia in response to the sinking of a bulk carrier in the region which significantly impacted the Haidi First Nation.

There have also been a series of oil spills and incidents within the Salish Sea which further underscore the importance of this current rule making. In December 1994 the Crowley Barge 101 leaked 26,900 gallons of oil after being towed across a reef in Boundary Pass.

In 1997 there was a very close call in the same vicinity when the coal carrier, *Continental Spirit*, lost power and drifted for three miles in 30 minutes before dropping its anchor and coming to a stop within 500 yards of shoals around Patos and Sucia Islands.

Between October 2011 and September 2013 there were at least seven incidents with tugs towing a variety of cargos along Rosario Strait, including collisions with navigational aids. However, the Coast Guard only issued a Notice to Mariners providing barge operators with best management practices as to how to navigate the Strait during ebb currents.

There were also two incidents we are aware of in British Columbia involving ATBs which also support the implementation of this rule making. On October 13, 2016, the U.S.-flagged ATB *Nathan E. Stewart,* enroute to Alaska, ran aground and sank near Bella Bella, B.C. While not laden, it spilled 29,000 gallons of fuel and lube oil that significantly impacted the Heiltsuk First Nation.

On Nov. 26, 2017, the U.S.-flagged ATB *Jake Shearer*, which had replaced the sunken barge *Nathan E. Stewart*, lost power and almost grounded yet again in the biologically rich Heiltsuk Territory. In addition to 125,000 gallons of fuel, the *Jake Shearer* held more than 790,000 gallons of oily cargo but was capable of carrying 3.4 million gallons.

Unintended Consequences

While the DEIS does not clearly depict the benefit of the proposed rule for reasons previously described, there are also unintended consequences associated with the addition of more tugs

plying the region, which was the primary focus of the DEIS. We strongly believe that those consequences are far outweighed by preventing the long-term catastrophic impacts of a major oil spill while only increasing the number of vessels large enough to carry AIS transmitters by less than one percent according to the DEIS.

It is also important to note that while the tank vessels subject to this rule represent a small percentage of the total vessel traffic in the study area, these smaller vessels carry a disproportionate amount of oil when compared to those vessels transiting the region not already required to have tug escorts.

The impacts of adding, what the DEIS estimates to be four additional tug escorts a day transiting the rule area, should still be minimized. We support the BPC's efforts to address the long-term concerns raised by Tribal governments regarding vessel traffic impacting their treaty protected fisheries, attention to which have been elevated by this rule making process. This includes supporting the recommendation to include whether there is an active fishery during the pre-escort conference between the operators of the tug escort and the vessel to be escorted so that they can be alerted to the presence of fishing gear in the water.

We are also concerned that operators of vessels subject to this rule will elect to use Haro Strait rather than Rosario Strait to avoid the additional expense of employing a tug escort. We have already observed such alterations to traditional operations and call on the BPC to monitor its prevalence to determine whether it will be necessary to extend this rule to tank vessels between 5,000 and 40,000 dwt bound to US ports through Haro Strait when the impact of the rule is revaluated in October 2026.

Southern Resident Killer Whale (*Orcinus orca*) Mitigation Measures

As previously noted, the results from the Department of Ecology's vessel traffic model document show that this rule will reduce the likelihood of drift groundings by 90.5% in the geographic regions in which they are deployed, which is an incredibly significant achievement.

However, since the title of ESHB 1578, which required this rulemaking, is “Reducing the Threats to South Resident Kiler Whales by Improving the Safety of Oil Transportation,” there also needs to be special consideration of ways to minimize associated impacts to this critically endangered species.

In its analysis for the BPC, Jasco estimated that tugs generate underwater noise overlapping with killer whale echolocation and communication calls ten percent of the time in the rule area which triggered the adverse impact determination in the DEIS. This reduces the volume of water the whales can ensonify, thereby limiting their ability detect and capture prey when in appropriate proximity and orientation to the tug. It also reduces the range over which killer whales can communicate. Those impacts must be taken into consideration when the tug is escorting a vessel and even more importantly when it is in transit and not providing the additional protection against drift groundings.

However, it is unclear how, on page 24 in the DEIS, it was estimated that 36.78% of the time tug escorts are in the area they would be actively escorting a vessel and 63.22% of the time they would be in transit between escort jobs? One would expect tugs would be in the rule area a similar amount of time returning from an escort as they would escorting a vessel. In fact, it is likely that instead of dead heading, the escort would wait for another vessel to escort before returning to its point of origin. Regardless of the proportion of these transits, the DEIS estimates that the total amount of time additional tug escorts are underway represents less than one percent of all large vessels are making noise enroute through in the area. This puts in context the degree the impacts of this rule have on the underwater noise to which the whales are already exposed.

In addition, it is important to note that the masking effects of underwater noise generated by the tug escort are not simply additive to that generated by the vessel being escorted. The reason for this is that there is a far greater difference between the increase in underwater noise generated by the unescorted vessel, in an otherwise quiet sea, than the inclusion of the noise generated by an escort to that of the noise made by the vessel it is escorting.

While it is easy to hear a tug from a distance on a hydrophone, the increase in noise it generates is rarely distinguishable from the vessel it is escorting, which has already reduced the whales' foraging volume and communication. That is not to say the whales cannot hear the tug escort, rather it is just not directly additive in this sense.

The above is true as long as neither vessel nor tug has unusual underwater sound source levels or acoustic frequency distributions. Monitoring of individual vessel and tug underwater noise levels is needed to identify and protect against significant noise polluters.

There is also the challenge of accurately estimating the amount of time the whales will be in proximity to the additional tugs resulting from this rule given the duration of their occurrence in the area covered by the rule which they do not frequent often. However, it should be noted, based on most recent trends in the whales' movements, when traveling south from the Fraser River region, the inclusion of the geographic extension defined in Alternative C will slightly increase the likelihood of the whales' proximity to the additional escort tugs. According to the EIS, Alternative C will increase the amount of time tug escorts are on the water by 2.4%, though not limited to that area.

While the whales' occurrence in the northern portion of the Salish Sea has been declining in recent years, the number of commercial vessels, especially oil tankers from the expanded Trans Mountain Pipeline, including those bound to Washington refineries, has significantly increased. These ships must make a significant turn to the west as they move from Georgia Strait to Boundary Pass in proximity to a location ominously known as "boiling reef." The increased presence of tug escorts can also be helpful in assisting unescorted ships in this region (e.g. *Continental Spirit*) on an opportunistic basis.

Maintaining sighting networks and adding whether whales are in the vicinity during the pre-escort conference could also alert the vessel operators of opportunities to exercise best management practices when the whales are present.

Such measures can include traveling at reduced speeds and maximizing distance from the whales while transiting to and from an escort job and turning off the echo sounder when safe to do so. Reducing speed will reduce noise both above and below water, reduce air and greenhouse gas emissions, as well as save fuel. It would also afford more time for tug operators to see and avoid fishing gear.

In addition to supporting the BPC's call for the voluntary adoption of Best Management Practices detailed in the Puget Sound Harbor Safety Plan for larger tank vessels, we strongly encourage the BPC to request the Puget Sound Harbor Safety Committee establish an ad hoc cetacean working group to develop a more complete list of voluntary measures commercial vessel operators can make to reduce impacts on all cetacean species for incorporation in the Puget Sound Harbor Safety Plan.

Cost Benefit and Least Burdensome Analysis

The BPC and Ecology produced a separate study in May 2025 entitled, Preliminary Regulatory Analysis which included a cost-benefit analysis and least burdensome analysis as required by the Washington Administrative Procedure Act (APA; RCW 34.05.328(1)(d)).

Given the DEIS used the tug escort regime that has been in place since 2020 as the no action alternative (Alternative A), this analysis was limited to an evaluation of the impact of expanding the escort area by 28.9 square miles (11%) to include a portion of Boundary Pass to the 273.6 square mile initial rule area.

There were two primary costs analyzed associated with the rule. Those costs were based on estimates of the impact of the expansion for the rule area to include: a 2.4% increase in the use of tug escorts which amounts to 244.6 hours a year or .67 hours per day. The other cost was associated with the increased time it took to conduct the pre-escort conference.

The additional time needed for the increased number of tug charters in the rule area was estimated to cost $835 million dollars a year with a net present value (NPV) cost of $16 million over 20 years.

The cost of the time it takes to conduct approximately 800 pre-escort conferences (10 minutes/escort) was estimated to be $15,851 per year based on crew salaries. This results in a NPV of $303,773 over 20 years.

Based on Ecology's estimates, which we refute, the rule results in a reduction of the chance of a drift grounding from a 189-year event, down from a 186-year event.

The volume of a worst-case spill is estimated to be 259,000 barrels. Estimates of the economic impacts of spilling this much oil considered many variables including a special value placed on the public's interest in protecting the Southern Resident Killer Whale population. Despite the difficulties of estimating the costs from a wide variety of impacts associated with a worst-case spill and the frequency one would occur, the analysis estimates a NPV of $26.8 million over 20 years.

We find this analysis to be flawed regardless of assumptions used to estimate the cost of spilling. The reason for this is based on the previously mentioned criticisms we have with the DEIS. The three primary ones being the DEIS only estimates the benefits of expanding the use of tug escorts by 28.9 square miles. The model estimates the benefit of a tug escort over this small area to only reduce the likelihood of a grounding by three years over a 189-year period. Furthermore, the estimated likelihood of the grounding to result in an oil spill is estimated in tens of thousands of years.

Despite these fundamental concerns, the result of the analysis estimates the avoided oil spill costs range from $3,000 per year to $1.4 million per year. This net positive result was sufficient for the BPC to recommend the proposed changes to the Pilotage Rules which we support.

Conclusion

While our region has been fortunate not to have been subject to many large oil spills, given the dynamic nature of the maritime industry, the past is not a reliable indicator of the future. Washington State has an aspirational zero oil spill policy. We acknowledge the efforts that have been taken over the years which have certainly contributed to our admirable oil spill record to

date. The proposed changes to the Pilotage rules continue that tradition of continuous improvement. However, as previously stated, our region's oil spill risk exposure is not reflected just by the frequency or size of oil spills and our past record does not necessarily represent the future.

Despite the significant challenges we have with the methodology used in the DEIS Preliminary Regulatory Analysis, we would like to reiterate our support for Alternative C. We hope that you will be able to address the comments we have summarized below in the Final Environmental Impact Statement.

Sincerely,

Fred Felleman
NW Consultant
Friends of the Earth

Keith Curl-Dove
Climate and Communities Manager
Washington Conservation Action

Lovel Pratt
Marine Protection and Policy Manager
Friends of the San Juans

Marlene Finley
Board President
Evergreen Islands

Arthur (R.D.) Grunbaum,
President
Friends of Grays Harbor

Logan Danzek
Policy Manager
Communities for a Healthy Bay

Ander Russell
Co-Executive Director
RE Sources

Barbara Church
Leadership Team
The Conversation 253

Shaun Hubbard
Co-founder
San Juan Islanders for Safe Shipping

Summary of Recommendations

- Present the results in the beginning of the document and fact sheet in terms of the result of the proposed rule to reduce the likelihood of a grounding and oil spill rather than what would occur if the rule was not implemented.
- Include analysis of the likelihood tug escorts could prevent a drift grounding by vessel type within the rule area.
- Base the regulatory analysis on the no action alternative being the pre-2020 escort requirements.
- Qualify the limitations of the model to predict the likelihood of a grounding to become an oil spill and its size as well as the likelihood of one to reoccur over thousands of years.
- Eliminate the study area wide analysis or emphasize the importance of focusing on the rule area.
- Monitor diversions to Haro Strait and evaluate the benefit of extending the rule to tank vessels bound to U.S. ports in this zone, where the model estimated tug escorts would have the highest likelihood of preventing a drift grounding, when the rule is revisited in October 2026.
- Add whether there have been reports of whale sightings to the pre-escort conference.
- Support whale sighting networks to inform the pre-escort conferees of the presence of whales.
- Monitor the noise generated by escort tugs and vessels being escorted.
- Recommend that vessels returning from escort jobs slow down and turn off their echosounders when safe to do so.
- Recommend the creation of an ad hoc cetacean workgroup to the Puget Sound Harbor Safety Committee to make recommendations for inclusion of best management practices to the Puget Sounf Harbor Safety Plan for all cetacean species.
- Include the appendices in the DEIS.
- Hotlink the table of contents to the sections in the DEIS and Regulatory Analysis.
- Continue Tribal consultation.

Lummi Indian Business Council (Sharlaine Revey)

I have enclosed Lummi Nation's comments regarding the Tug Escort Rulemaking amendments signed by our Tribal Council Vice-Chairman Terrance Adams. Thank you for the opportunity to submit our comments.

LUMMI INDIAN BUSINESS COUNCIL
2665 KWINA ROAD BELLINGHAM, WASHINGTON 98226 (360) 312-2000

July 31, 2025

Submitted via online comment portal: https://sppr.ecology.commentinput.com?id=HihgcrTsY

Washington State Board of Pilotage Commissioners
2901 Third Avenue, Suite 500
Seattle, WA 98121

RE: Tug Escort Rulemaking Comments

Dear WA State Board of Pilotage Commissioners,

On behalf of the Lummi Nation, we thank the WA State Board of Pilotage Commissioners for the opportunity to comment on the proposed Tugboat Escort Rulemaking. The Lummi Nation is a sovereign federally recognized Indian tribe and signatory to the Point Elliot Treaty of 1855 which protects our right to fish in our usual and accustomed areas. The Lummi Nation considers it of highest priority to protect and preserve natural resources that are part of our tradition and are required to sustain and enhance the quality of life of the Lummi people.

While we support the inclusion of increased mitigation steps (Alternative C in the DEIS) to prevent a catastrophic oil spill in the Puget Sound, we also acknowledge that we are already experiencing adverse impacts to our treaty-reserved fisheries due to the increased vessel traffic since the . The Lummi Nation appreciates the policy objectives to respect treaty-protected fishing rights and resources and intent to minimize vessel traffic impacts to tribal treaty fishing areas. The Lummi Nation supports the expansion of tugboat requirements and the additional functional and operational requirements including involuntary slowdowns during peak migration periods for salmon and orcas. We urge the inclusion of mandatory tribal consultation regarding the development of risk models to identify preventive measures and mitigating actions to address potential impacts to tribal treaty fishing rights.

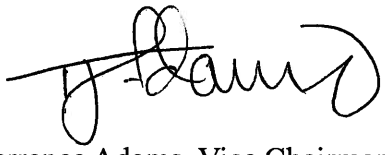
As noted, the Lummi Nation is already experiencing serious adverse impacts to our treaty-reserved fisheries. These impacts are in the forms of:

- loss of access to our usual and accustomed grounds and stations (fishing areas) – vessel interference/obstruction with vessel access
- loss of fishing gear from vessel strikes and the like
- loss of harvest opportunity and economic hardship for fishers from loss of catch / income due to both of the above
- economic hardship – gear replacement can cost tens of thousands of dollars annually per fisher
- danger to tribal fishers and fishing vessels from vessel traffic.

Increased vessel traffic can only be expected to exacerbate these intolerable impacts. With these unresolved issues before us, the Lummi Nation will submit a request a formal government-to-

government consultation to begin the process for developing solutions to these problematic impacts. We appreciate the opportunity to comment on the proposed rulemaking.

Sincerely,



Terrence Adams, Vice Chairman
Lummi Indian Business Council

MAKAH TRIBAL COUNCIL
P.O. BOX 115 • NEAH BAY, WA 98357 • 360-645-2201
The Makah Tribe is an equal opportunity employer.

Jaimie Bever
Board of Pilotage Commissioners
2901 Third Avenue, Suite 500
Seattle, WA 98121

July 30, 2025

Re: The Makah Tribal Council comments on the Board of Pilotage Commissioners Tug Escort Rulemaking (Chapter 363-116 WAC)

Dear Jaimie Bever,

The Makah Tribal Council (MTC) is writing to provide comments to the Board of Pilotage Commissioners' (BPC) proposed language for the rulemaking to amend Chapter 363-116 WAC, Pilotage Rules. The Makah community has witnessed firsthand the devastating effects of oil pollution, with over two million gallons of oil spilled in the Makah treaty area since 1970. The MTC strives to protect Makah treaty rights and resources as they were understood and handed down by Makah leaders at the signing of the 1855 Treaty of Neah Bay. As such, the MTC has invested significant resources in strengthening the Tribe's oil spill prevention, preparedness, and response capacities, including developing close working relationships with the US Coast Guard (USCG), Environmental Protection Agency, and Washington State Department of Ecology (ECY). **The MTC supports the proposed rule language as it raises the protection standard of Makah treaty resources from the threat of oil pollution, even if only marginally.** Below, we provide more details on the Makah Tribe and our history with oil spills, our support for the proposed rule language, and our appreciation for the tribal engagement offered in this process.

1. **The Makah Tribe**

The ancestral homeland of the Makah Tribe, who are known as the "People of the Cape," is located at the Northwest point of the Olympic Peninsula in Washington State. The Makah Reservation is approximately 47 square miles and the Makah Usual and Accustomed Treaty Fishing Area (U&A) extends north to include La Perouse and Swiftsure Banks, west approximately 40 nautical miles offshore into the Pacific Ocean, east into the Strait of Juan de Fuca to Tongue Point, and south along the State of Washington Outer Coast to the Norwegian Memorial, or 48º 02' 15" S, approximately 21 miles south of Cape Flattery, covering

approximately 1,550 square miles of marine territory in US waters (Figure 1). However, Makah traditional use of the ocean extends north through the Bering Sea, south to the Columbia River, and into Puget Sound. The overall health of our treaty resources depends upon the interconnected ecosystems of the California Current, Alaska Current, and the Strait of Juan de Fuca, which come to a confluence in our Treaty U&A.

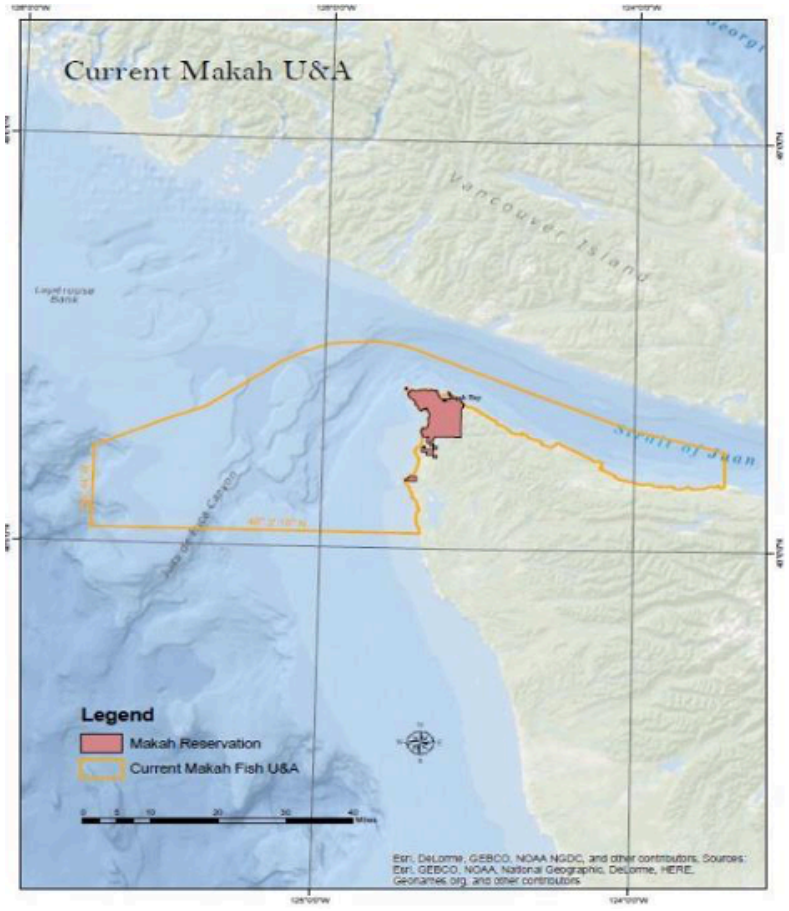


Figure 1: Map of present-day Makah Usual and Accustomed Fishing Area (U&A)

The cultural and traditional existence and well-being of the Makah people have always been closely tied to our relationship with the natural environment, especially the ocean. The Makah hold a spiritual reverence and have inexorable ties to the ocean and its bountiful natural resources. The Makah relationship to the ocean continues today, in part through our robust and valuable treaty fisheries, which directly support over 60% of our local economy, nutritional security, cultural practices, and the overall health of our community. Makah's extensive treaty fisheries include commercial, ceremonial, and subsistence harvest of a wide range of species including salmon, halibut, sablefish, hake, rockfish, and other groundfish. Community surveys indicate that 99% of the Makah community rely on fishing, harvesting shellfish, or hunting for a portion of their diet.

The 1855 Treaty of Neah Bay reserves the Makah's right to retain and exercise inherent sovereign authority over our treaty-protected area and ownership of the resources therein. The Treaty is the legal agreement between the Makah Tribe and the United States that recognizes the Makah Tribe's status as a sovereign nation and therefore a resource trustee. It reserved inherent sovereign rights to natural resources, cultural practices, and other services and benefits in exchange for the cession of 469 square miles of territory to the United States. Explicitly, the Treaty reserves the Makah Tribe's perpetual rights to hunt, fish, whale, seal, and gather within our U&A. These rights have repeatedly been confirmed and interpreted in federal court decisions. *See, e.g., United States v. Washington*, 384 F. Supp. 312 (W.D. Wash. 1974).

Unfortunately, the Makah Tribe has experience with the devastating impacts of oil spills on treaty-protected resources and important places. Over two million gallons of oil have been spilled within the Makah U&A since the 1970s, primarily from the 1972 *USS General MC Meigs* spill, the 1988 *Nestucca* spill, and the 1991 *Tenyo Maru* spill. Previous studies have indicated that the entrance to the Strait of Juan de Fuca is a particularly high-risk area for vessel traffic,[1] and inclement weather and ocean conditions have contributed to major spills (e.g., 1972 *USS General MC Meigs* spill) and complicated responses (e.g., 2024 Tug *Luther* and Barge *Lafarge Trader* response). The history of oil spills in this region, as well as the frequency and location of deployments of the Emergency Response Towing Vessel from Neah Bay, continue to confirm this risk profile.[2] In 1994, in recognition of this risk, NOAA and the USCG established an Area to be Avoided adjacent to the Makah Reservation to protect sensitive ecological resources and prevent maritime casualties. However, the Canadian government continues to invest in maritime infrastructure projects that will increase vessel traffic and associated risk in our transboundary waters. The Trans Mountain Pipeline Expansion Project, now active, increased tanker traffic in or adjacent to the Makah U&A approximately seven-fold.[3]

2. The MTC supports the proposed rule language

While we recognize that industry and oil spill contingency planning requirements have improved since the catastrophic spills that the Makah Tribe endured in the 1970s-1990s, we remain concerned about oil spill risk due to our valuable resources and the response challenges associated with the remote Washington Outer Coast region. For example, although the US oil spill contingency plan framework is based on *planning* standards, the MTC continues to look for opportunities to develop *performance* standards, as doing so would heighten the protection

[1] Van Dorp, J.R., Merrick, J. (2015), Final Report: Vessel Traffic Risk Assessment 2015. Prepared for the Washington State Department of Ecology. Retrieved May, 2020. https://fortress.wa.gov/ecy/publications/documents/1708009.pdf

[2] Washington State Department of Ecology, Spills Maps – Neah Bay Emergency Response Towing Vessel Call Outs. Retrieved May, 2020. https://fortress.wa.gov/ecy/coastalatlas/storymaps/spills/spills_sm.html?&Tab=nt2

[3] Trans Mountain projected that their Pipeline Expansion Project at the Westridge Marine Terminal would increase the number of partially laden or laden tankers from 60 to 408 per year. The Pipeline Expansion Project is now operational. See more details at https://docs.transmountain.com/314-Enhanced-Tug-Escort-Fact-Sheet-12_20_18-four-page-HR.pdf

standard for Makah treaty-protected resources. Additionally, we remain concerned that some response assets stationed in our area to meet planning requirements are not fit for the operating environment, specifically for open ocean conditions and inclement weather. We continue to research response assets in areas with harsh operating environments (e.g., Alaska) to identify assets that may be better suited for operations on the Outer Coast of Washington. While the area directly impacted by the proposed rulemaking is located outside the Makah U&A, it is inside the Makah area of interest. Pursuant to Makah Ocean Policy,[4] the Makah area of interest includes all areas that Makah treaty resources migrate through. This includes the Alaska and California Current Ecosystems, Strait of Juan de Fuca, and the Puget Sound area including the San Juan Islands region. Ultimately, the Makah Tribe is interested in any opportunity to raise the protection standard for Makah treaty resources from the threat of oil pollution.

The MTC is concerned about the impacts of underwater noise on Makah natural and cultural resources, including the Southern Resident Killer Whales (SRKW), and understands that the proposed rule language will create only minimal increases in underwater noise in the expansion area in the Strait of Georgia. The MTC has partnered closely with the Enhancing Cetacean Habitat and Observation Program as well as Quiet Sound to reduce underwater noise in and near the Makah U&A. However, the MTC views the threat of oil pollution to SRKW (and other Makah cultural and natural resources) as a more significant threat than underwater noise, with longer-lasting and potentially more widespread impacts. The MTC provided similar input to Transport Canada on their study investigating potential changes to the Strait of Juan de Fuca Traffic Separation Scheme to reduce underwater noise impacts to foraging SRKW.[5]

The MTC supports the proposed rule language because it raises the protection standard against the threat of oil pollution in the Makah area of interest, even if only marginally. After reviewing the Draft Environmental Impact Statement associated with the rule and other materials, the MTC considers the benefits of extending the tug escort requirements for target vessels (i.e., tankers weighing 5-40K deadweight tons, articulated tug and barges and towed vessels or barges weighing 5K deadweight tons) northward 28.9 square miles and adding functional and operational requirements for tug escorts to be greater than the costs.

3. The MTC appreciates the tribal engagement provided throughout this rulemaking

We extend our appreciation for the tribal engagement provided by BPC and ECY on this rulemaking and the consideration of impacts to tribal rights and resources in the EIS. Tribal workshops began early and occurred often enough that our staff were informed and able to review documents and ideas with sufficient time. BPC and ECY staff made themselves available for staff-level meetings with Makah in addition to their tribal workshop series throughout this

[4] Makah Ocean Policy, (2017).
[5] Makah Tribal Council (2023), *R*e: *Makah Tribal Council comments on the Traffic Separation Scheme Feasibility Study for Southern British Columbia (electronically submitted). Comment letter to Transport Canada.*

process, adding needed flexibility for Makah participation. Additionally, we appreciated that the EIS documented the impact of vessel traffic, including tug transits, on treaty fishing even if outside the Makah U&A. The Makah Tribe is a participant in the ad hoc Tribal Fisheries Lost Gear Subcommittee of the Puget Sound Harbor Safety Committee that aims to explore these impacts and potential solutions.

Thank you for the opportunity to provide comments on the proposed rule language for the tug escort rulemaking. The MTC supports the proposed rule language and appreciates the early, continuous, and flexible tribal engagement provided throughout the rulemaking from BPC and ECY. We look forward to further partnership to raise the protection standard for Makah treaty resources against the threat of oil pollution. Please contact Chris Martinez, Makah Tribal Council Chief of Staff (cos@makah.com or 360-645-2080), with any questions or for any additional information.

Sincerely,

Timothy J. Greene, Sr.
Chairman
Makah Tribal Council

CC
Sarah Thompson, Department of Ecology Rulemaking Lead
Haley Kennard, Department of Ecology EIS Lead
Tyson Oreiro, Department of Ecology Tribal Liaison

RE: Amendments to the Pilotage Rules Chap 363-116-WAC (Support Escort/Rescue Tug-Alt.C)

From: Mike Doherty (doherty_mike@yahoo.com)

To: doherty_mike@yahoo.com

Date: Thursday, July 31, 2025 at 10:00 AM PDT

Date: July 31, 2025

To: The Washington State Board of Pilotage Commissioners

RE: Amendments to the Pilotage Rules, Chap.363-116-WAC -- Support Escort/Rescue Tug (Alternative C)

For many residents of the North Olympic Peninsula, oil spill risks are taken seriously. In December 1985, the Tank Vessel Arco Anchorage, carrying 814,000 barrels of Alaskan North Slope crude oil, entered Port Angeles harbor, ran aground and tore open two cargo holds, spilling 5690 barrels, or 239,000 gallons, into the Port Angeles harbor. Oil drifted as far west as Neah Bay, and east to Dungeness Spit. The 24/7 cleanup lasted over four months.

In December, 1988, a spill occurred from the 300 foot tank barge, Nestucca, loaded with nearly 300,000 gallons of bunker oil from Cherry Point, when a tow line broke. An "insurance wire" that should have been available to deploy in such circumstances was not available. In maneuvers to reconnect the tow, the barge was ruptured by the tug's rudder (a six foot by 18" gash). The "fingerprint" of the oil was found from the Oregon Coast to Vancouver Island. 230,000 gallons spilled. A federal judge found that the "responsible party" had caused the spill.

In 1991, the fish processing vessel Tenya Maru, loaded with 450,000 gallons of fuel oil, rammed a Chinese freighter, 22 miles northwest of Cape Flattery, in Canadian waters. The vessel sank to the ocean floor near the mouth of the Strait of Juan de Fuca. Nearly 75% of the diesel oil and bunker fuel remains unaccounted for. The ship remains 500 feet under water.

I appreciate the several improvements made in recent decades to the oil transshipment system, but much more must be done. However, I agree with other parties that low probability events can have the potential for very high consequences, at least partially because of the record. The record of spilled oil in Washington's waters in the 1980's and 1990's justifies our concern. Communities, local governments and tribal governments have regularly supported efforts to strengthen Washington State oil spill prevention, preparedness, response, monitoring and damage assessment capabilities. U. S. and Canadian tribal governments have express legal rights related to treaties and certain governmental forums. I encourage tribal consultations throughout this process.

I also appreciate the actions of the State Legislature, the Governor, the Department of Ecology Spills Program, the Board of Pilotage Commissioners, and numerous organizations and citizens urging additional safeguards.

The Northern Salish Sea and the Strait of Juan ed Fuca are experiencing increasing congestion in shipping lanes. The expansion of the transshipment of tar sands oil and products will raise additional risks. I support the expansion of tug escort regulations required of offshore oil tankers, to smaller oil tankers and articulated tug barges (ATBs) as well as tow barges between 5,000-40-000 dwt (other than those engaged in bunkering operations).

Thank you for the detailed rule-making process and for the opportunity to comment.

Sincerely,

Mike Doherty, Member
Clallam County Marine Resources Committee
Olympic Coast National Marine Sanctuary. Advisory Committee
Former Member, Washington SeaGrant Advisory Committee

c: Governor Ferguson

State Senator Mike Chapman,

State Representative Steve Tharinger

State Representative Adam Bernbaum

Clallam County Board of Commissioners

Clallam County Marine Resources Committee

Swinomish Indian Tribal Community (Wendy Otto)

Attached file contains the Comment Letter from Swinomish Indian Tribal Community Chairman, Steve Edwards

Main Office: 360.466.3163
Facsimile: 360.466.5309

Swinomish Indian Tribal Community

A Federally Recognized Indian Tribe Organized Pursuant to 25 U.S.C. § 5123
* 11404 Moorage Way * La Conner, Washington 98257 *

July 31, 2025

Board of Pilotage Commissioners
2901 3rd Avenue, Suite 500
Seattle, WA 9812

RE: Tug Escort Rulemaking Chapter 363-116 (Pilotage Rules)

Dear Board of Pilotage Commissioners,

The Swinomish Indian Tribal Community ("Swinomish" or "Tribe") is pleased to submit these comments on the Draft Environmental Impact Study (DEIS) concerning proposed amendments to existing Pilotage Rules. The Swinomish Tribe is a federally recognized Indian tribe and political successor in interest to certain tribes and bands that signed the 1855 Treaty of Point Elliott, which among other things reserved fishing, hunting and gathering rights and established the Swinomish Reservation on Fidalgo Island in Skagit County, Washington. The Swinomish Reservation sits at the mouth of the Skagit River, the largest river system draining to Puget Sound and the only river in the Lower 48 states that still has all species of wild Pacific salmon spawning in its waters. Since time immemorial, the Swinomish Tribe and its predecessors have occupied and utilized vast areas of land and water in Puget Sound up to the Canadian border to support the Swinomish way of life.

Fish and fish habitat are crucial to the cultural, spiritual, subsistence and commercial activities of the Swinomish Tribe, and the Tribe exercises Treaty-protected fishing rights in its usual and accustomed fishing areas ("U&A"), which include an extensive portion of the Salish Sea and the entirety of the Skagit River and its tributaries. See *United States v. Washington*, 459 F. Supp. 1020, 1049 (W.D. Wash. 1975). For generations, Tribal fishers have fished Puget Sound and the Salish Sea for a variety of fish and shellfish species, including but not limited to Chinook, coho, and chum salmon, steelhead trout, halibut, and Dungeness crab. Over the last 75 years, oil transportation, storage, and refinement has dramatically increased on Puget Sound. The Tribe has been directly impacted by that increase.

Today, more than 27% of the Tribe's U&A is now occupied by traffic lanes for vessels and anchorages. The Swinomish Tribe is regularly forced to forgo fishing in areas in which it has a Treaty-protected right to fish because the safety of its fishers and fishing gear is routinely threatened by or lost to vessel traffic. Danger to fishers, lost gear, and missed fishing opportunities are now a way of life for the Tribe, and one that impairs the rights secured to the Tribe by the Treaty. Additionally, the existence of four oil refineries within the Tribe's U&A, and the increase in oil shipped to and from Canada, means the threat of an oil spill is a constant for Tribal fisheries, Tribal fishers, and Tribal lands. Ensuring that the quality of the marine waters in Puget Sound remain free of oil spills and hazardous contamination is of the utmost importance to the Swinomish Tribe.

The Swinomish Reservation is within the area studied for this DEIS and all the area studied is within Swinomish U&A. Swinomish has a strong incentive to both limit additional vessel traffic in this already overburdened area and to limit the potential for a catastrophic oil spill in the study area which would fundamentally alter the Swinomish way of life and further impair its Treaty rights.

Swinomish supports the adoption of Option C, with the expanded Tug Escort Zone and addition of Functional and Operational Requirements, as a reasonable additional safeguard against an unlikely but devastating oil spill. Overall vessel traffic would essentially be unchanged from the existing baseline due to the extension of existing tug escorts rather than adding new escorts. We are also pleased that commutes from Anacortes to Cherry Point would be reduced. The minimal increase in vessel activity is offset by the reduced possibility of a catastrophic oil spill due to a drift grounding in Swinomish U&A.

We understand the challenges in addressing mitigation measures specifically for Tribal resources and appreciate the inclusion of supporting the Puget Sound Harbor Safety Committee's Tribal Fisheries Lost Gear Subcommittee. Support and participation from the Board of Pilotage Commissioners in that subcommittee will be a positive development in assisting Tribes to recover from the significant impacts of oil shipments and other vessel traffic.

One specific statement in the DEIS is patently incorrect and must be corrected in the final EIS. In the Tribal Resources Discipline Report, the table on page 23 of the report, pdf page 25, lists the Samish Indian Nation as established through the Treaty of Point Elliott, 1855. While the Samish Indian Nation gained Federal Recognition in 1996 and has long claimed to be a party to the Treaty of Point Elliott, since 1979 at the urging of the United States, the Federal courts have held repeatedly and consistently that *the Samish Indian Nation is not a successor to any tribe that participated in the Treaty of Point Elliott*, including the aboriginal Samish tribe and the Nuwhaha or Stick Samish tribes. *See, e.g., United States v. Washington*, 476 F. Supp. 1101, 1104 (W. D. Wash. 1979), *aff'd* 641 F.2d 1369 (9th Cir. 1981); *Samish Indian Nation v. United States*, 58 Fed. Cl. 114, 120 (2003); *United States v. Washington*, 593 F.3d 790, 799-800 (9th Cir.) (*en*

banc). Stated another way, the Samish Indian Nation is not a Treaty Tribe, does not have Treaty rights, and does not own or manage Treaty resources and should not be included in any table or text referencing such rights or resources.

We are pleased to see that protection of the waters, wildlife, and peoples of Washington from catastrophic oil spills is the highest priority for the Board of Pilotage Commissioners. While the adoption of Option C is an important new safeguard, Swinomish believes expanding the tug escort requirement to include Haro Straight, and coordination with Canada on similar rules, is an appropriate future effort. Thank you for this opportunity to comment on the rule making within Swinomish U&A and directly adjacent to the Swinomish Reservation.

Sincerely,

Steve Edwards
Chairman

U.S. Coast Guard (Brendan Harris)

The Coast Guard continues to appreciate the cooperative relationship that it shares with the State of Washington Department of Ecology and the Board of Pilotage Commissioners. Through these productive relationships, we have worked together to protect the Puget Sound, its adjoining waterways, and its marine life from various threats, including oil pollution. Puget Sound is a crucial waterway to the citizens of Washington State, our sovereign tribal communities and to the Nation. The Coast Guard supports the State of Washington's forward-leaning stance regarding environmental safety and protection, including its desire to mitigate oil spill risks in Puget Sound. Through our respective authorities, we have protected the pristine nature of Puget Sound and established effective rules to mitigate oil spill risks in the Puget Sound and its adjoining waters throughout the State.

These comments are related to the findings in the Summary of Tug Escort Analysis Results that were released to the Coast Guard and the Public in September 2023. The primary concern is that the study model shows, under simulated circumstances, the overall reduction in oil spill incidents is negligible while significantly increasing vessel traffic. The increase in vessel traffic will result in increased vessel interactions and potentially cause a higher rate of marine casualties in the Puget Sound and adjacent waters. Due consideration should be given to the national and international existing tug escort requirements within the proposed area to ensure duplicative efforts are not being made for regulatory requirements.

Thank you for the opportunity to comment on this rulemaking. The Coast Guard looks forward to our continued relationship in jointly working to protect all the waters of the Puget Sound, the marine life, and the navigability for the various of vessels that work and recreate within these waters.

U.S. Department of Homeland Security
United States Coast Guard

Commander
United States Coast Guard
Northwest District

915 2nd Ave
Seattle, WA 98174
Staff Symbol: dp
Phone: (206) 220-7220

July 15, 2025

State of Washington Dept of Ecology
300 Desmond Dr. SE
Lacey, WA 98503

Board of Pilotage Commissioners
2901 Third Avenue, Suite 500
Seattle, WA 98121

Dear State of Washington Department of Ecology and Board of Pilotage Commissioners:

The U.S. Coast Guard greatly appreciates the cooperative relationship it shares with the State of Washington Department of Ecology and Board of Pilotage Commissioners. Through these productive relationships, we have worked together to protect Puget Sound and its marine life from various threats, to include oil pollution. Puget Sound is a critical body of water to both the citizens of Washington and the people who use it for navigation purposes. The U.S. Coast Guard supports the State of Washington's forward-leaning stance regarding environmental safety and protection, to include its desire to mitigate oil spill risks in Puget Sound. Through our respective regulatory authorities, we have protected the pristine nature of Puget Sound and established effective rules to mitigate oil spill risks in its waters.

This letter is to inform and hopefully open a productive dialogue to discuss RCW 88.16.190 and 88.16.260 and the findings in the Summary of Tug Escort Analysis Results released to the Coast Guard and the public in September 2023 [hereinafter, "Summary"]. The U.S. Coast Guard appreciates the work and research done to create the 196-page report and would like to discuss those findings. The primary concern is that the study model shows, under simulated circumstances, the overall reduction in oil spill incidents is negligible while significantly increasing vessel traffic in Puget Sound and adjacent waters.

The Coast Guard has regulatory authority over the navigable waterways of Puget Sound and adjacent waters under 33 CFR § 165.1303, to include the power to regulate tug escort requirements for tank vessels. We respect the State of Washington's desire to protect waterways from oil spills, but the Coast Guard does not find the Summary supports expanding current tug escort requirements in Puget Sound. Instead, it suggests more collisions and spills could result due to increased vessel traffic and risks to safety of navigation in congested waterways. If the State intends to proceed with expanding current tug escort requirements as proposed, the Coast Guard is prepared to submit public comments documenting our concerns while emphasizing our support to preserving the pristine Pacific Northwest waters.

The Coast Guard values its relationship with the State of Washington in executing our shared goals to protect Washington's waters from environmental damage. We look forward to continued cooperation on this matter. Should you have questions or wish to discuss this further, please feel free to me at (206) 747-8104 or Darwin.A.Jensen@uscg.mil.

Sincerely,

D. A. JENSEN
Captain, U.S. Coast Guard
Chief of Prevention, Coast Guard Northwest District

Antonio Machado
Senior Manager, Northwest Technical

August 1, 2025

Sent via upload to: Tug Escort Rulemaking (WAC 363-116) - Comment Period

Ms. Jaimie Bever
Executive Director
Washington State Board of Pilotage Commissioners
Seattle, WA 98121

Re: WSPA Comments on CR-102 Filing of Chapter 363-116 WAC

Dear Ms. Bever:

The Western States Petroleum Association (WSPA) appreciates the opportunity to comment on the CR-102 filing proposing amendments to WAC 363-116, Pilotage Rules (the "Tug Escort Rule"), undertaken by the Board of Pilotage Commissioners (BPC) in coordination with the Washington Department of Ecology (Ecology).

WSPA is a trade association representing companies that supply a diverse range of transportation energy sources across the western United States, including Washington. This includes the transportation and marketing of petroleum, petroleum products, natural gas, and other energy supplies. WSPA has actively participated in this rulemaking process through its membership in BPC's Oil Transportation Safety Committee (OTSC), as well as through stakeholder engagement workshops.

WSPA values the transparent efforts taken by the BPC and Ecology throughout this process. The agencies have demonstrated commendable diligence through multiple meetings, workshops, and the development of the draft Environmental Impact Statement (EIS) and have shown a consistent willingness to address questions and concerns. We appreciate these efforts as we work together toward the shared goal of implementing safe, reasonable, and effective measures to protect Southern Resident Killer Whales from the threat of oil spills.

In addition to the feedback provided in our previous comment letters dated March 7, 2024, and January 17, 2025, attached here for reference, WSPA respectfully submits the following additional comments.

Continued Engagement and Future Collaboration Opportunities

With the June 11, 2025 filing of the CR-102 formally proposing the new Tug Escort Rule under Chapter 363-116 WAC, WSPA requests continued opportunities for engagement in the rulemaking process.

Mitigation Measures and Stakeholder Discussions. In early 2025, the OTSC discussed its intention to convene at future undetermined dates to explore potential mitigation measures associated with the Tug Escort Rule, such as strategies to minimize impacts of tug operations on treaty fishing and underwater noise. WSPA looks forward to participating in these important discussions.

Scheduled Re-evaluation of the Tug Escort Rule. In accordance with RCW 88.46.260, a re-evaluation of the Tug Escort Rule is scheduled to occur by October 1, 2028, and no less frequently than every ten years thereafter. WSPA welcomes the opportunity to engage with both BPC and Ecology during this re-evaluation process, which should allow for the consideration of actual vessel traffic and incident data related to tug escorts under the rule.

Coordination with the Puget Sound Harbor Safety Committee (PSHSC). As emphasized in WSPA's prior comment letters, we encourage BPC and Ecology to collaborate with the Puget Sound Harbor Safety Committee in updating or developing new protocols and Standards of Care. These measures could help reduce the risk of drift groundings and oil spills from laden tank vessels, while also addressing the increased tug traffic required for compliance. We believe these efforts, along with considerations such as self-repair capabilities for tugs or tank vessels, emergency anchoring procedures, and rescue by a tug of opportunity, can provide a comprehensive safety net to enhance spill prevention without imposing undue operational burdens.

WSPA appreciates the opportunity to contribute to this important rulemaking effort and the associated Environmental Impact Statement process. If you have any questions regarding the comments presented in this letter, please do not hesitate to contact me via e-mail at amachado@wspa.org or by phone at (360) 594-1415.

Sincerely,

Attachments: Attachment A – WSPA Comment Letter March 7, 2024.
Attachment B – WSPA Comment Letter April 8, 2023.
Attachment C – WSPA Comment Letter January 17, 2025.

cc: Jessica Spiegel, WSPA

Antonio Machado
Senior Manager, Northwest Technical

March 7, 2024

Sent via email to: BeverJ@wsdot.wa.gov

Ms. Jaimie Bever
Executive Director
Washington State Board of Pilotage Commissioners
Seattle, WA 98121

Re: WSPA Comments on Proposed WAC 363-116 Tug Escort Rulemaking Process

Dear Ms. Bever:

The Western States Petroleum Association (WSPA) appreciates the opportunity to provide comments on the proposed rulemaking process to amend WAC 363-116, Pilotage Rules (hereinafter referred to as the "Tug Escort Rulemaking"), conducted by the Board of Pilotage Commissioners (BPC) in interagency coordination with the Washington Department of Ecology (Ecology). Additionally, WSPA offers comments on the Environmental Impact Statement (EIS), reiterating the points raised in our comment letter dated April 23, 2023, and providing further input for your consideration in the EIS scoping process.

WSPA is a trade association that represents companies which provide diverse sources of transportation energy throughout the west, including Washington. This includes the transporting and marketing of petroleum, petroleum products, natural gas, and other energy supplies.

WSPA has participated in this rulemaking process through its membership in BPC's Oil Transportation Safety Committee (OTSC), as well as in stakeholder engagement workshops. WSPA appreciates the efforts of the BPC and Ecology to ensure a transparent and engaging rulemaking process for stakeholders, which has included multiple meetings and workshops. The involved agencies have shown a willingness to be available to discuss concerns and questions as all parties, work towards the goal of developing safe, reasonable, and efficient measures to protect Southern Resident Killer Whales from the threat of oil spills.

Ecology Tug Escort Analysis Model Results

WSPA believes that recommendations for escort scenarios should be developed with consideration of potential impacts of tug escorts along with the potential benefits of tug escorts. It has been a challenge to provide feedback on some escort scenarios recently, as the focus of the OTSC and stakeholder workshops has been to understand the risk model developed by Ecology and reported in the September 2023 Summary of Tug Escort Analysis Results[1]. This summary provides the results of an analysis of expanding tug escorts to additional zones and tank vessel types on Puget Sound waters and estimates how tug escorts can prevent tank vessels from drifting aground after losing propulsion and limit oil spill risk from loss of steering events. Conclusions of the report (pages. 38-40) which are noteworthy at a high-level included:

[1] https://apps.ecology.wa.gov/publications/UIPages/documents/2308009.pdf.

> *"Drift groundings are rare events. Based on our review of historical incidents in the area modeled, we identified four drift groundings between 2002 and 2019 (an average of 0.2105 drift groundings per year). None of these resulted in an oil spill."*
>
> *"Tank vessels make up only a portion of drift grounding risk, and drift grounding risk makes up only a small part of overall maritime oil spill risk. Our analysis shows tug escort requirements provide a level of protection against drift groundings, but not a big reduction overall."*

It is WSPA's understanding that Ecology compared differences between scenarios using relative change percentages. According to Ecology model authors, relative change allowed for evaluation in the differences between scenarios when the magnitude of the changes was small. Further, model filtering has been employed which modifies parameters and variables used in the model. This model filtering appears to change relative risks for various escort scenarios, but it is difficult to determine the significance of these results as they do not appear to be based upon reality (such as actual incidents, standard mariner operating procedures and practices, or natural conditions of geographic zones).

Ecology model authors have stated in workshops that the model assumptions are not based upon actual incidents, owing to the lack of incidents of drift groundings with oil spills, which lends to the question of whether statistically significant or meaningful conclusions can be drawn on the benefits of escort scenarios from the model outputs. Again, without the context of considering both potential impacts of tug escorts as well as benefits, it is difficult to recommend various scenarios based on the model results alone, outside of including the originally proposed tug escort ideas (referred to as Reasonable Alternatives 1, 2, and 4 in the February 28, 2024, OTSC slide presentation, page 7).

Actual Incident Data

In several workshops, the OTSC and stakeholder meeting presentations have provided actual incident data as referenced in Ecology's Report of Vessel Traffic and Vessel Traffic Safety: Strait of Juan de Fuca and Puget Sound Area (issued January 2019; revised February 2021)[2]. WSPA believes this information provides some key insights on actual oil spill risk for vessel oil transportation. In the report, Ecology provided a summary of vessel incidents between 2008- 2017 in Washington and Oregon waters (pages 61 - 63), which can be summarized as:

- Tank Barges: 45 incidents occurred, with 26 out of 45 incidents resulting in oil spills. 23 of the 26 spills occurred while moored. Of the three spills occurring while underway, one oil spill occurred upstream of a lock on the Columbia River, where towing operations and waterway characteristics are significantly different than the Puget Sound (0 gallons reported spilled, sheen observed). The remaining two spill incidents involved leaks from piping (9 gallons spilled combined)

- The report concludes that "none of the 26 oil spill incidents in Ecology's data indicated an opportunity existed for a tug escorting a towed tank barge within the Puget Sound to intervene."

- Articulated Tank Barges (ATB): 20 incidents occurred, with four out of 20 incidents resulting in oil spills. All four spills occurred while the ATB was moored.

[2] https://apps.ecology.wa.gov/publications/documents/1908002.pdf

This data suggests that Ecology has appropriately continued to focus on more significant spill risk mitigation through prevention measures such as the recent rulemaking updates to Ch 173-180 WAC Facility Oil Handling Standards and Ch 173-184 WAC Vessel Oil Transfer Advance Notice and Containment Requirements (adopted June 2023).

Standards of Care

The above-mentioned Ecology Report of Vessel Traffic and Vessel Traffic Safety: Strait of Juan de Fuca and Puget Sound Area also recommended development of Standards of Care by the Puget Sound Harbor Safety Committee (PSHSC), such as a voluntary vessel speed reduction program and wheelhouse watch stander standard (page 216). WSPA suggests that BPC and Ecology consider partnering with the PSHSC to evaluate updates or develop new protocols and standards of care that may reduce risk of drift groundings or other incidents that could have the potential for oil spills from laden tank vessels. Similar as considering the ability of a tug or tank vessel to self-repair, deploy emergency anchoring, and potential rescue by a tug of opportunity, such efforts could be part of a web of protections that provide spill threat reduction benefits without the potential impacts of tug escorts.

Tug Escort Concerns

WSPA is encouraged to see Ecology's resumption of the SEPA EIS scoping and draft development process, as this information is critical to evaluating all aspects of the Tug Escort Rulemaking fully and carefully. As noted above, WSPA provided comments on the EIS scoping in our letter dated April 8, 2023 (see attached), and requests Ecology's review and consideration of these comments during scope development of the EIS. In addition to the EIS scoping comments contained in the above-referenced letter, WSPA requests BPC and Ecology further evaluate the potential impacts of increased tug escort activity that may tighten navigation channels and increase the risk of vessel collisions thereby threatening mariner safety and the environment.

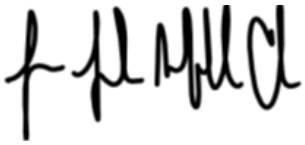
As discussed in the September 2023 Summary of Tug Escort Analysis Results, the model results provide estimates of how expanding tug escorts requirements increase escort tug movements, and found that increased underway time from escort scenarios (ranging from 134% to 263%) implies an increase in risk:

> *"For Scenario 3, we estimated a 263 percent increase in underway escort tug time, which corresponded to an increase of 0.49 allisions/collisions per year, 0.15 groundings per year, 0.04 sinking/capsize per year and 2.32 other incidents per year"* (page 32).

Ecology model authors have acknowledged in workshops that this increased underway time for additional escort tugs is not factored into the model results and relative risk reductions. Based on the model scenarios, it appears there could be *twice or three times as much tug underway time* (depending on the tug escort scenario). The additional tug escort activity represents a significant increase in vessel traffic in the Salish Sea. This surge in activity must be carefully evaluated to assess potential impacts, particularly on the environment. Factors such as underwater and ambient noise need to be considered, as they can have adverse effects on the surrounding ecosystem by the potential for constructive sound interference to occur, leading to an overall increase in sound levels with the increased tug escort activity.

WSPA appreciates the opportunity to provide comments on this important proposed rulemaking and the EIS process. If you have any questions regarding the comments presented in this letter, please do not hesitate to contact me via e-mail at amachado@wspa.org or by phone at (360) 594-1415.

Sincerely,



Cc: Jessica Spiegel, WSPA
Haley Kennard (Transmitted via: hken461@ECY.WA.GOV)
Sara Thompson (Transmitted via: stho461@ECY.WA.GOV)
Washington State Department of Ecology
Spill, Prevention, Preparedness and Response Program
PO Box 47600
Olympia, WA 98504-7600

Attachment: WSPA Comments on EIS Scoping for Proposed WAC 363-116. April 8, 2023

WSPA
Antonio Machado
Senior Manager, Northwest Technical

April 8, 2023

Sent via upload to: https://sppr.ecology.commentinput.com/?id=drNJk

Ms. Kim Morley
Washington State Department of Ecology
Spill Prevention, Preparedness, and Response Program
PO Box 47600
Olympia, WA 98504-7600

Re: WSPA Comments on EIS Scoping for Proposed WAC 363-116 (Pilotage Rules) Amendments

Dear Ms. Morley,

Western States Petroleum Association (WSPA) appreciates the opportunity to comment on the scoping of the Environmental Impact Statement (EIS) for the Board of Pilotage Commissioners (BPC), in consultation with the Department of Ecology (Ecology), rulemaking to amend WAC 363-116, Pilotage Rules (rulemaking hereinafter referred to as "Tug Escort Rule"). WSPA is a trade association that represents companies which provide diverse sources of transportation energy throughout the west, including Washington. This includes the transporting and marketing of petroleum, petroleum products, natural gas, and other energy supplies.

WSPA's comments are based on the *"State Environmental Policy Act (SEPA) Determination of Significance and Request for Comments on Scope of Environmental Impact"*[1] and the BPC/Ecology (as co-lead agencies) presentation[2] during the EIS scoping meeting held on March 21, 2023 (March EIS Scoping Meeting). BPC/Ecology has indicated that the rulemaking will:

- Describe tug escort requirements for the following vessels operating in the waters east of the line extending from Discovery Island light south to New Dungeness light and all points in the Puget Sound area:
    - Oil tankers of between 5,000 and 40,000 deadweight tons.
    - Articulated tug barges (ATB) and towed waterborne vessels or barges greater than 5,000 deadweight tons that are designed to transport oil in bulk internal to the hull.
- Specify operational requirements for tug escorts, where they are required.
- Specify functionality requirements for tug escorts, where they are required.
- Consider the existing tug escort requirements applicable to Rosario Strait and connected waterways to the east, established in RCW 88.16.190(2)(a)(ii), including adjusting or suspending those requirements, as needed.
- Describe exemptions to tug escort requirements, including whether certain vessel types or geographic zones should be precluded from the escort requirements.
- Make other changes to clarify language and make any corrections needed.

[1] https://apps.ecology.wa.gov/separ/Main/SEPA/Record.aspx?SEPANumber=202300768.
[2] https://ecology.wa.gov/DOE/files/78/78928e77-ccc1-4765-b489-2fa167962f83.pdf.

During the March EIS Scoping meeting, BPC/Ecology requested feedback from stakeholders on not only the elements to be included in the EIS but also suggested alternatives to the proposed rule approach. Provided below is WSPA's feedback regarding both of these BPC/Ecology requests.

Elements of the EIS

In general, WSPA agrees with the EIS elements presented by BPC/Ecology during the March EIS Scoping Meeting. The following is additional input regarding the elements to be considered in the EIS.

Air Quality

WSPA appreciates that BPC/Ecology acknowledged during the March EIS Scoping Meeting that the additional emissions resulting from the proposed rule amendment (specifically, emissions due to an increase in the number of tug escorts in use) will be assessed in the EIS. WSPA believes that the evaluation of this incremental environmental impact is an important aspect of the EIS effort.

Environmental Health

It is WSPA's understanding that it is BPC/Ecology's intent to assess the underwater noise impacts resulting from the proposed rule amendment. The National Oceanic and Atmospheric Administration (NOAA) has highlighted the concern with effects of underwater noise to Southern Resident Killer Whale behavior.[3] WSPA encourages the assessment of the incremental increase underwater noise and its potential impact on marine mammals (particularly, the Southern Resident Killer Whale).

Another sub-element under Environmental Health identified by BPC/Ecology is *"*Releases or potential releases to the environment affecting public health*."* WSPA requests that this sub-element of the EIS includes a risk assessment analyzing increased risk for fuel spills and collisions due to the increase of escort tug volume. The consideration of the potential impact (risk of fuel spills and/or vessel collisions due to increased escort tug use) must be included along with the potential benefit (reduced risk of an oil spill) for this rulemaking through the risk assessment process.

-It is WSPA's understanding that an assessment similar to the Ecology-sponsored DNV-GL report entitled *"Columbia River Vessel Traffic Evaluation and Safety Assessment (CRVTSA)"*[4] is being completed for this rulemaking. Specifically, Ecology presented preliminary results from the *"Tugs Escort and ERTV Analyses"* during a webinar held on April 4, 2023. According to the Ecology presentation, the purpose of the analyses was to inform rulemaking and was to be completed by the summer 2023. WSPA supports this type of study for the area covered by the rulemaking as a necessary element of the rulemaking. Given the proposed timeline, WSPA encourages Ecology to allot sufficient time for the appropriate peer review by stakeholders.

Cumulative Impacts

One element not identified by BPC/Ecology in the Determination of Significance or during the March EIS Scoping Meeting was Cumulative Impacts. As noted in Ecology's *State Environmental Policy Act Handbook* [5], SEPA rules direct agencies to "[i]dentify and evaluate probable impacts,

[3] https://www.fisheries.noaa.gov/species/killer-whale#spotlight
[4] https://apps.ecology.wa.gov/publications/documents/1708019.pdf
[5] https://ecology.wa.gov/DOE/files/4c/4c9fec2b-5e6f-44b5-bf13-b253e72a4ea1.pdf

alternatives, and mitigation measures, emphasizing important environmental impacts and alternatives (including Cumulative…).*"* WSPA suggests that cumulative impacts be included as an element of the Tug Escort Rule EIS.

Suggested Alternatives

No-Action Alternative

Because SEPA requires the evaluation of the no-action alternative[6], WSPA assumes that BPC/Ecology will include a no-action element in the Tug Escort Rule EIS to provide a benchmark from which the other alternatives can be compared. The no-action alternative is of particular interest in situations where the potential impact of a proposed action (i.e., increased tug escort traffic) outweighs the potential benefit (i.e., reduced oil spill risk). WSPA requests that BPC/Ecology verify that the no-action alternative will be part of the EIS scope.

Limited Area Alternative

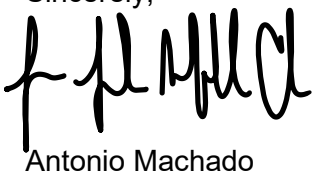
As described in the *"State Environmental Policy Act (SEPA) Determination of Significance and Request for Comments on Scope of Environmental Impact",* BPC/Ecology is proposing that the Tug Escort Rule amendment apply to waters east of the line extending from Discovery Island light south to New Dungeness light and all points in the Puget Sound area. It is further noted that the rule will describe exemptions to tug escort requirements, including whether certain vessel types or geographic zones should be precluded from the escort requirements. WSPA suggests that to help inform the exemption concept or to directly exclude areas from the rule amendment, BPC/Ecology consider a limited areas alternative which would focus on a reduced boundary for rule applicability.

ATB Exclusion Alternative

The previously-referenced CRVTSA found "[t]ug escorts for articulated tug barges (ATBs) would offer a relatively small reduction in risk in the study area, because ATBs have partially redundant steering and propulsion systems, and they have shallow drafts that allow them to safely navigate outside of the ship channel." With this finding in mind, WSPA suggests that BPC/Ecology consider an alternative that excludes ATBs. Similar to the no-action alternative, assessment of this alternative would address whether the potential impact of additional tug escorts for ATBs would outweigh the potentially marginal oil spill reduction risk.

WSPA appreciates the opportunity to provide comments on this important proposed rule amendment and the EIS process. If you have any questions regarding this submittal, please contact me at (360) 594-1415 or via email at amachado@wspa.org.

Sincerely,



Antonio Machado
Sr. Manager, Northwest Technical
WSPA

[6] *Id.*, p. 37.

Antonio Machado
Senior Manager, Northwest Technical

January 17, 2025

Sent via upload to: Tug Escort Rule Informal Comment Period

Ms. Jaimie Bever
Executive Director
Washington State Board of Pilotage Commissioners
Seattle, WA 98121

Re: WSPA Comments on Proposed WAC 363-116 Tug Escort Rulemaking Process

Dear Ms. Bever:

The Western States Petroleum Association (WSPA) appreciates the opportunity to provide comments on the proposed rulemaking process to amend WAC 363-116, Pilotage Rules (hereinafter referred to as the "Tug Escort Rulemaking"), conducted by the Board of Pilotage Commissioners (BPC) in interagency coordination with the Washington Department of Ecology (Ecology). WSPA is a trade association that represents companies which provide diverse sources of transportation energy throughout the west, including Washington. This includes the transportation and marketing of petroleum, petroleum products, natural gas, and other energy supplies.

WSPA has participated in this rulemaking process through its membership in BPC's Oil Transportation Safety Committee (OTSC), as well as in stakeholder engagement workshops. WSPA appreciates the efforts of the BPC and Ecology to ensure a transparent and engaging rulemaking process for stakeholders, which has included multiple meetings and workshops. The involved agencies have shown a willingness to be available to discuss concerns and questions as all parties work towards the goal of developing safe, reasonable, and efficient measures to protect Southern Resident Killer Whales from the threat of oil spills.

Along with the feedback provided in our comment March 7, 2024 comment letter, WSPA requests Ecology's consideration of the comments presented below.

EIS Technical Analysis

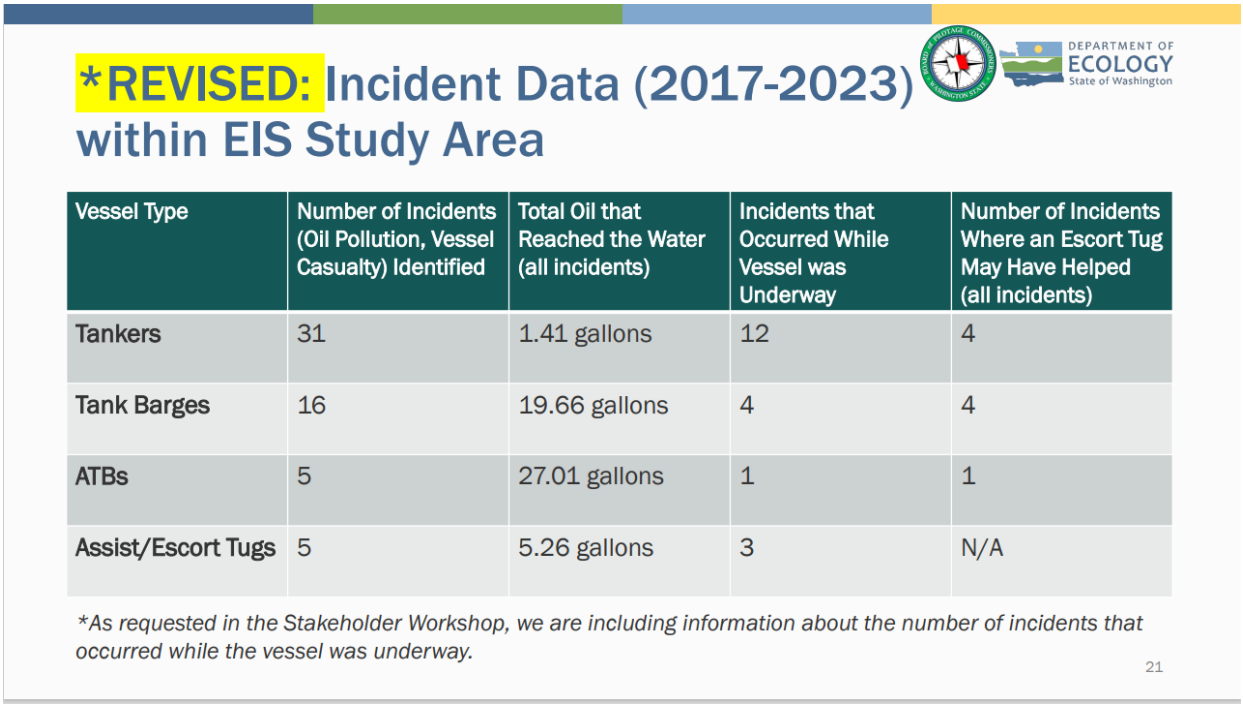
The November 2024 workshops and meetings focused on technical analyses of the Environmental Impact Statement (EIS) priority environmental elements, and preparing stakeholders for a February 2025 Workshop on reviewing proposed draft tug escort rule language. However, the November Workshop discussions did not include two key objectives of the technical analyses of priority environmental elements:

- Assessing areas of potential impacts; and
- Identifying mitigation measures.

These two objectives are important considerations of the EIS process. While they may have been outside the scope of the November workshops, both objectives warrant careful consideration for priority elements prior to meaningful discussion on rule language. It is premature to develop draft rule language until these critical steps are completed. WSPA requests that Ecology address these two objectives (and inform stakeholders) in advance of the February 2025 Workshop.

Incident Data

In the November 14, 2024 OTSC Workshop, Ecology provided additional information on the incident data presented initially at the Rulemaking Stakeholder Workshop of November 5, 2024. This revised information is shown below:



*REVISED: Incident Data (2017-2023) within EIS Study Area

DEPARTMENT OF ECOLOGY State of Washington

Vessel Type	Number of Incidents (Oil Pollution, Vessel Casualty) Identified	Total Oil that Reached the Water (all incidents)	Incidents that Occurred While Vessel was Underway	Number of Incidents Where an Escort Tug May Have Helped (all incidents)
Tankers	31	1.41 gallons	12	4
Tank Barges	16	19.66 gallons	4	4
ATBs	5	27.01 gallons	1	1
Assist/Escort Tugs	5	5.26 gallons	3	N/A

**As requested in the Stakeholder Workshop, we are including information about the number of incidents that occurred while the vessel was underway.*

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The revised incident data raises questions as to: (1) what constitutes an incident; (2) how many incidents occurred where oil was spilled when the vessel was underway; and (3) how many incidents were due to drift groundings (the mitigation of which is the intended focus of the tug escort rule). WSPA requests that Ecology provide the **actual incident data referenced** in this table for further stakeholder review. Such information would provide insights on spill risk for oil vessel transportation.

In earlier workshops, the OTSC and stakeholder presentations provided actual incident data as referenced in Ecology's Report of Vessel Traffic and Vessel Traffic Safety: Strait of Juan de Fuca and Puget Sound Area (issued January 2019; revised February 2021)[1]. As noted in the WSPA March 7, 2024 comment letter, this information provided some key insights on actual oil spill risk for vessel oil transportation. In the Report, Ecology provided a summary of vessel incidents between 2008 and 2017 in Washington and Oregon waters (pages 61 - 63), which can be summarized as:

- Tank Barges: 45 incidents occurred, with 26 out of 45 incidents resulting in oil spills. 23 of the 26 spills occurred while moored. Of the three spills occurring while underway, one oil spill occurred upstream of a lock on the Columbia River, where towing operations and waterway characteristics are significantly different than the Puget Sound (0 gallons reported spilled, sheen observed). The remaining two spill incidents involved leaks from piping (9 gallons spilled combined).

- The report concludes that *"none of the 26 oil spill incidents in Ecology's data indicated an opportunity existed for a tug escorting a towed tank barge within the Puget Sound to intervene."*

[1] https://apps.ecology.wa.gov/publications/documents/1908002.pdf

- Articulated Tank Barges (ATB): 20 incidents occurred, with four out of 20 incidents resulting in oil spills. All four spills occurred while the ATB was moored.

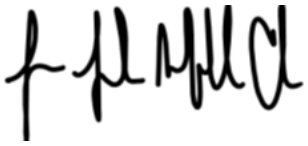
It is not clear whether Ecology's conclusion from the 2019 Report (updated in 2021) would be any different for this new incident data set (2017-2023). If not, the incident data highlights that Ecology has appropriately continued to focus on more significant spill risk mitigation through prevention measures such as the recent rulemaking updates to WAC 173-180 Facility Oil Handling Standards and WAC 173-184 Vessel Oil Transfer Advance Notice and Containment Requirements (adopted June 2023).

Standards of Care

The above-mentioned Report of Vessel Traffic and Vessel Traffic Safety: Strait of Juan de Fuca and Puget Sound Area also recommended development of "Standards of Care" by the Puget Sound Harbor Safety Committee (PSHSC), such as a voluntary vessel speed reduction program and wheelhouse watch stander standard (page 216). As noted in previous WSPA comment letters, we urge BPC and Ecology to consider partnering with the PSHSC to evaluate updates or develop new protocols and standards of care that may reduce risk of drift grounding or other incidents that could have the potential for oil spills from laden tank vessels. Similar to considering the ability of a tug or tank vessel to self-repair, deploy emergency anchoring, and potential rescue by a tug of opportunity, such efforts could be part of a web of protections that provide spill threat reduction benefits without the potential impacts of tug escorts.

WSPA appreciates the opportunity to provide comments on this important proposed rulemaking and the EIS process. If you have any questions regarding the comments presented in this letter, please do not hesitate to contact me via e-mail at amachado@wspa.org or by phone at (360) 594-1415.

Sincerely,



cc: Jessica Spiegel, WSPA