



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 Haida 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 reevaluated 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 Killer 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 Sound 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.