



STATE OF WASHINGTON  
**BOARD OF PILOTAGE COMMISSIONERS**

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

**Agenda – Oil Transportation Safety Committee (OTSC)**

October 18, 2021, 10:00am – 12:00pm

Via MS Teams

**Attendees:**

Jaimie Bever (Chair/BPC), Alex Hess (Ecology Alternate/BPC), Brian Kirk (Ecology Alternate/BPC), JD Leahy (Ecology Alternate/BPC), Lori Crews (Ecology Guest), Eleanor Kirtley (Marine Environment/BPC), Blair Bouma (Pilot/PSP), Jeff Slesinger (Tug Industry/Delphi Maritime), Senator Joseph Williams (Tribal/Swinomish), Tom Ehrlichman (Tribal/Swinomish), Bettina Maki (Staff/BPC), Laird Hail (Advisor/USCG), Bob Poole (Oil Industry/WSPA), and Rein Attemann (Environment Alternate/WEC).

**Absent:**

Mark Homeyer (Tug Industry Alternate/Crowley), Fred Felleman (Environment/Friends of the Earth), Keith Kridler (Pilot Alternate/PSP)

**1. Welcome and Updates**

Jaimie Bever (Chair/BPC) started the meeting by reviewing the agenda and noted that the Enterprise Risk Management item will likely become a quarterly conversation at the committee level.

She announced that the OTSC's Tug Industry Representative, Charlie Costanzo from AWO, has accepted a position as Puget Sound Pilot's new Executive Director. Therefore, the OTSC will need a new representative. She introduced Jeff Slesinger, Delphi Maritime, as the proposed replacement. His appointment to the committee will be considered by the Board at the October 26, 2021, meeting.

**2. Approve August 30, 2021, Meeting Minutes**

Eleanor Kirtley (Marine Environment/BPC) provided two grammatical corrections to prior to the meeting. With those two revisions, the committee approved the minutes, which will be provided to the Board as a part of the October 26, 2021 meeting packets.

### 3. Ecology Presentations:

#### a. Synopsis of Changing Vessel Traffic Trends

Lori Crews (Ecology Alternate/BPC) provided an update regarding the synopsis via a slide deck presentation, which broke the data down by research questions and answers.

1) (Slide 5) How does the overall number of transits (by vessel type) change pre-and post-bill implementation?

- Transits by all three types of vessels effected by the new tug escort requirement (ATBs and barges greater than 5,000 DWT and tankers between 5,000 and 40,000 DWT) increased in Year 2 (post-tug escort implementation) of data collection for the synopsis compared to Year 1 (pre-tug escort implementation), for both Rosario Strait and Haro Strait.
- Most of these changes were not related to the tug escort requirement.
- Some were likely the result of business decisions by companies, the year-to-year variation in the market for crude oil and refined product, and the effects of the global pandemic.

Eleanor Kirtley (Marine Environment/BPC) commented that she was surprised by the second bullet regarding changes not being related to the tug escort requirement. She agreed it was important to provide context but wasn't expecting Ecology to have to come up with why the changes occurred. Lori agreed and offered that they could tell by looking at the data when vessels were laden but choosing a different route, which is part of their overall conclusions. Brian Kirk (Ecology Alternate/BPC) added that there were strong limits to what could be reported by the data but felt there were some areas where Ecology could provide some context and tried to do that where they could.

Tom Ehrlichman (Tribal/Swinomish) wondered, regarding the second bullet as well, what changes *were* related to the tug escort requirement. Lori responded that Ecology thinks that in 11 of 16 transits of barges through Haro Strait in Year 2 by barges greater than 5,000 DWT the tug escort requirements may have been a factor in deciding the route.

Tom also wondered if there was data collected regarding to Treaty Tribe fishing areas and if there were going to be any comments on that. Lori and Brian Kirk (Ecology Alternate/BPC) answered that they were not planning to address that in the synopsis as those considerations were not part of the scope of work, but instead a part of the tug escort rulemaking process, as directed by the legislation (ESHB 1578). Tom responded with a follow-up request. He stated that while he appreciated that the rulemaking contained that component, his understanding of the word "trend" would include a note regarding the increased number of transits occurring through usual and accustomed fishing areas for Treat Fishing Tribes. Lori suggested that it could be mentioned when discussing the crossing lines in the report. Brian concurred that Ecology could take a look at including some language, but that it would not be based on original work or data gathering. Lori requested comments from the Tribes specific to the crossing lines and how those effect Treaty fishing areas. Rein Attemann (Environment Alternate/WEC) echoed Tom's comment on more analysis on the impacts to Tribes.

- 2)** (Slide 6) What changing vessel traffic trends do we see for vessels that newly fall under an escort requirement?
- Ecology found that the new tug escort requirement does not appear to have effected route selection for ATBs or tankers less than 40,000 DWT.
  - Ecology identified 11 of 16 transits through Haro Strait in Year 2 by barges greater than 5,000 DWT where the tug escort requirements may have been a factor in deciding the route.
- 3)** (Slides 7 & 8) What changing vessel traffic trends do we see for deep draft and tug traffic that have no additional escort requirements?
- Tankers greater than 40,000 DWT had decreases between Year 1 and Year 2 in Rosario Strait, both in the number of transits and the number of tankers making transits.
  - The change in tankers and tanker transits in Haro Strait and Boundary pass was negligible from Year 1 to Year 2 for tankers greater than 40,000 DWT.
  - There was a decrease of transits by barges less than 5,000 DWT in Rosario Strait between Year 1 and Year 2.
  - There were no transits through Haro Strait by barges less than 5,000 DWT in Year 1 or Year 2.
  - Transits by barges engaged in bunkering within the study area decreased overall.
    - There was an increase in bunkering transits by barges greater than 5,000 DWT and a decrease in transits by barges less than 5,000 DWT.
    - The overall decrease in bunker transits may reflect vessels receiving fuel at a location outside of the study area, rather than a decrease in bunkering in the Puget Sound.
- 4)** (Slide 9) What changing vessel traffic trends do we see for tug escorts?
- Tug escort transits increased significantly following the implementation of the new requirement, especially for multi-purpose tugs, or tugs that performed escort duties as well as towed barges.
    - Transits by purpose-built escort tugs over crossing lines in the study area increased from 5,991 in Year 1 to 7,321 in Year 2. Transits increased over all crossing lines with the exception of the Saddlebag to Guemes Island line which decreased by 53 transits.
    - Transits by multi-purpose escort tugs over crossing lines in the study area increased from 79 in Year 1 to 1,745 in Year 2. Transits increased over all crossing lines.
    - Vessels can transit over multiple crossing lines in a single trip, so the total number of transits over crossing lines does not represent the number of trips.

Regarding the last bullet, Jason Hamilton (Public/BPC) wondered if there was a better indicator for the number of trips. Lori answered that the way it was set up was that they established the crossing lines then counted the number of times the tug crossed them. There was no way to tell what the tug was doing at the time. Therefore, there was no way to tell how many times a tug went on a tug escort trip.

Blair Bouma (Pilot/PSP) wondered about the significance of the “purpose built” vs “multi-purpose” designations. Lori responded that when they first started comparing year one to year 2 purpose-built tugs doing escort and shift assist services, they found, in year 2, there was another group of tugs that had never done ship assist in the area. They generally tow barges. When comparing the 2 years, they wanted to be clear about the comparisons. They looked at the categories separately, but also combined. Ecology felt they needed to compare apples to apples throughout both years. Lori confirmed that the definition is included in a terminology section of the synopsis. Jeff Slesinger (Tug Industry Candidate/Delphi Maritime) asked for additional clarification on the distinctions in the data. Lori responded that they looked at the ANT system data. She followed that up by looking at the AIS history data. To make their list of multipurpose tugs, they used AIS data to see what tugs were towing vs assisting.

Brian Kirk (Ecology Alternate/BPC) acknowledged the meticulous work by Lori resulting in the conclusions and added that he looked forward to presenting the findings to the Board. Jaimie Bever (Chair/BPC) concurred.

#### **b. Tug Escort Analysis Scope of Work**

Alex Hess (Ecology Alternate/BPC) provided an update regarding the tug escort analysis scope of work via a presentation and slide deck, as well as providing the revised scope language and comments that were submitted during the public comment period in September.

The original scope of work contained the following sections: Background, ESHB 1578 Considerations (Removed), BPC and Ecology Roles & Responsibilities, Analysis Objective, Research Questions, Outreach, and Deliverable. After reviewing the public comments, the following sections were added: Out of Scope, Definitions, Data Inputs, Study Area, and References.

#### **Analysis Objective**

Evaluate the potential change in oil spill risk from covered vessels resulting from the use of tug escorts by specified tank vessels in waters east of New Dungeness Light and Discovery Island Light.

#### **Research Questions 1-3**

The following research questions will be assessed within analysis scenarios:

- How is oil spill risk distributed geographically? How does the use of tug escorts change the way that oil spill risk is distributed geographically?
- How is oil spill risk distributed across covered vessel types? How does the use of tug escorts change the way that oil spill risk is distributed across covered vessel types?
- How does the 2020 expansion of tug escorts in Rosario Strait and connected waters to the east change oil spill risk from covered vessels?

Eleanor Kirtley (Marine Environment/BPC) said that back when she worked at Glosten, they used a program called Tug Master to simulate scenarios, which could be helpful.

## Research Questions 4-6

- How does tethering affect oil spill risk?
- How do key design characteristics for escort tugs affect oil spill risk?
- Are there new safety measures adopted since July 1, 2019? If so, what are the benefits of these measures?

Blair Bouma (Pilot/PSP) wondered if the answer for these questions would come solely from the model or if there would be other sources. Alex answered that Ecology will use the model to answer as many of the questions as they can but will rely on outside resources as needed.

## Out of Scope

The following items are out of scope for this analysis.

- Consideration of underwater noise
- Consideration of air emissions
- Cost of tug escort requirements
- Analysis of the impacts of spilled oil (e.g., environmental, economic, cultural)
- Tug escorts for vessels specifically excluded in ESHB 1578

Tom Ehrlichman (Tribal/Swinomish) acknowledged the hard work from the Ecology team on both data collection and outreach concerning the oil spill risk analysis. However, he felt that Ecology's Tug Escort scope of analysis should characterize the Swinomish listed concerns as more than "cultural" issues. Swinomish would like Ecology to revise its scope to identify those issues that the Board of Pilotage Commissioners is required to address during rulemaking, according to ESHB 1578, including the consideration of federally recognized treaty fishing rights (as explained in Swinomish's scoping comment letter to Ecology dated September 21, 2021). The Ecology Tug Escort scope of work should make clear that the Ecology analysis for the Board will not address impacts to those treaty fishing rights. Secondly, Ecology has provided a good definition of "risk" in the Scope of Work that includes both probability and consequences to determine risk. However, Ecology's analysis of "consequences" is deficient because it only focuses on the volume of spills if they occur. The severity of the consequence of a certain volume of spilled oil in fact depends on the location of the spill and the seasonal elements, such as wind, tides, etc., in order to assess the impact of an oil spill on surrounding beach areas and the seafloor. If limited to predicting volumes of oil releases, the study should make clear that it is not assessing additional severity of consequences due to wind, tide, and seasonal conditions. The third issue he felt should be clearly articulated beyond the scope was spill releases from other kinds of vessels. He concluded by sending best wishes and hoped the comments were helpful.

Brian Kirk (Ecology Alternate/BPC) responded that what was being attempted with this model was to provide info about whether tug escorts for the three types of tank vessels was or was not a good. Questions: would that intervention reduce risk. If yes, what can they say about the magnitude of the change. To answer that question, they do not need to chase down what happens to the oil after it spills. The other consideration was that

throughout this process, they want to be careful in only saying what they can produce evidence for, as it is important to not mislead anyone. Tom responded that he agreed. However, the Tribe is asking that Ecology add a bullet that states that, and the Treaty rights, rather than using the word "cultural" as a catchall. JD Leahy (Ecology Alternate/BPC) acknowledged the time Swinomish puts into providing their input. He thought Tom brought up important points.

### **Data Inputs**

- Traffic Simulation–AIS data
- Vessel Characteristics –IHS Markit
- Incident Records –US Coast Guard Marine Information for Safety and Law Enforcement (MISLE), Transportation Safety Board of Canada Marine Safety Information System (MARSIS), IHS Markit, Ecology Spill Program Integrated Information System (SPIIS)
- Loss of propulsion resolution times –BPC marine occurrence records
- Oil Transfer Records –Ecology Advance Notice of Transfer (ANT) database

Eleanor Kirtley (Marine Environment/BPC) wondered if there were areas where Ecology was anticipating a lack of data. Alex answered that there was concern about lack of incidents. While it's great news, it may make calculating hazard probabilities difficult. He added that they would fill the gap by looking beyond the study area for data. Laird Hail (Advisor/USCG) cautioned that looking outside the area could result in taking away the impact of the active monitoring of the area and some of the new rules and regulations that were in place. He referenced the active VTS in the area (there are only 12 in the US). He questioned how Ecology would take into account the safety measures that are in place while considering another area. Alex didn't have a specific answer at that time. He did say that they were conscious that risk changes both in space and time and that there were challenges to doing direct comparisons. JD Leahy (Ecology Alternate/BPC) added that the reality was they would be producing an estimate no matter which area they chose. The model will have limitations. The goal is to have estimates that are informative enough to provide data on the utility of tug escorts for oil spill risk.

### **Outreach**

Joseph Williams (Tribal/Swinomish) inquired about the outreach process between the rulemaking body, the Board, and federally recognized treaty Tribes, adding that the tugs do the most damage to their fishing gear with no compensation, this last year in particular. Alex responded that a letter would be going out next month to Treaty Tribes outlining the process. The letter was currently being drafted. He added that outreach would include public forums, webinars, in-person meetings, phone calls, basically whatever the individual Tribe preferred. Brian Kirk (Ecology Alternate/BPC) responded that he agreed and looked forward to future conversations. He did clarify that for this particular analysis, they would be looking specifically at oil spill risk. Additional impacts would be considered during the rulemaking process, which will also include opportunities for consultation with Ecology and the BPC.

Eleanor Kirtley (Marine Environment/BPC) suggested that it would be helpful to provide any applicable information regarding future outreach on the scope document. More detail in the scope is better, in her opinion. Regarding the risk model webinars hosted by JD Leahy, she wondered if it would make sense to include information from those presentations in the scope. Alex responded that they would take a look at doing that.

### **Definitions**

Eleanor Kirtley (Marine Environment/BPC) wondered if “near miss” events would be considered, pointing out that the term was not listed in the definitions section. Alex answered that they were only looking at occurrences that resulted in oil spill. The model, however, would look at a range of hazards like collisions, power grounding, loss of propulsion. But not all those lead to oil spill. Jaimie Bever (Chair/BPC) added that BPC has provided both Near Miss MSOs and Incidents to Ecology for consideration in the model. Rein Attemann (Environment Alternate/WEC) requested further clarification regarding the term “near miss” as a hazard probability. Alex responded that Ecology was limited to incidents when talking about this category. JD Leahy (Ecology Alternate/BPC) added they were only looking at the probabilities for their list of hazards that could lead to an oil spill, like loss of propulsion. Jaimie wondered about a clear definition of “near miss” acknowledging that the BPC had its own definition for pilots. Blair Bouma (Pilot/PSP) added that the MSO information would be valuable for the rulemaking process as well. Brian Kirk (Ecology Alternate/BPC) wanted to make sure that Ecology was not pushing back on including all varieties of near-miss’, they just don’t have all the data necessary to include it. There was no database like there is for aviation near-miss’. JD added that there was a distinct challenge around using near miss data in terms of correlating reports with the potential for a hazard. Laird Hail (Advisor/USCG) concurred that there was a definitional problem with the term “near miss”. It means different things to different entities. Blair Bouma (Pilot/PSP) did mention that the USCG have a very specific definition in Form 2692, which is human injury, spill, or a specific dollar value, which could provide some structure. JD clarified that they are including loss of steering and loss of propulsion, even if they are not formally classified as near miss.

Eleanor Kirtley (Marine Environment/BPC) thanked Alex for his presentation and for capturing many of her comments in the revisions to the scope document. She asked Jaimie about the BPC’s upcoming rulemaking process recognizing the tug escort analysis is part of the consideration. She asked for a flowchart to show what all be considered as a part of rulemaking adding that it would be helpful to understand what was going to be considered when. Jaimie clarified that the model analysis is only a piece of the overall consideration for rulemaking. There were other ways to inform rulemaking outside of the tug escort risk model analysis. Jaimie also offered to put together a flowchart. Jeff Slesinger (Tug Industry Candidate/Delphi Maritime) concurred with making it clear that this analysis is not the focal point for solving all the other issues.

Alex concluded by recognizing the infinite level of complexity. The reason the out-of-scope items were selected as well as the narrow definition of risk, was not to discount important things that need to be thought about in the risk picture. But because they were trying to get

at, as clear as possible, what exactly was the impact of tug intervention on oil spill risk, not overall oil spill risk.

#### **4. Next Steps**

The next meeting will occur early next year. Jaimie Bever (Chair/BPC) will provide meeting links to the remaining BPC meetings in 2021. The BPC will take up the draft Tug Escort scope of work for review at its December 2021 meeting.