

Alex, Along with my comments at the Aug. 30 OTSC meeting, please consider my following thoughts, questions, and suggestions for the Scope of Work.

- Text that looks like it should be linked to a webpage (is blue and underlined) are not actually linked, in version viewable/downloadable here -
<https://fortress.wa.gov/ecy/ezshare/sppr/prevention/Tug%20Escort%20Analysis%20-%20Scope%20of%20Work.pdf>
- Scope of Work (SOW) or at least the summary report would benefit from additional sections on:
 - o Definitions
 - Zones, as per defined by the BPC for ESHB 1578 Section 3(5)(d)(i)
 - Covered vessel, as per:
<https://app.leg.wa.gov/rcw/default.aspx?cite=88.46.010> (5)
 - Tank vessel
 - Risk – is this the combination of likelihood and consequence?
 - At least reference those used in the model, as in: Encounter, Accident, Outflow,
 - Reference the Interpretative Statement from the BPC,
<https://pilotage.wa.gov/oil-transportation-safety.html>
 - <https://nebula.wsimg.com/2e0c94a21d0285c4ed21a3d5eb31280a?AccessKeyId=F86D0A1E7A0091C2061F&disposition=0&alloworigin=1>
 - As per Section 3(8)
 - o Methodology
 - ESHB 1578 Section 3(5)(a) states: “Develop **scenarios** and subsets of oil tankers, articulated tug barges, and towed waterborne vessels or barges that could preclude requirements from being imposed under the rule making for a given zone or vessel;”
 - Estimated number of scenarios – perhaps present a matrix that isolates pairwise comparison by zones, by escorted vessel types, etc; provide explanation for how/why scenarios were selected
 - o Available inputs – model and data, as per Section 3(3)(e)
 - o Model and Data limitations; Assumptions
 - o What’s out of scope, ex. as per Section 3(4)?
- Will the analysis be able to address the additional impacts from additional tug escorts related to:
 - o underwater radiated noise, as per Section 3(6)(b)
 - o bunker demand and transfer
 - o air emissions
 - o cost, as per Section 3(2)(e)?

The following pages were from a pdf to .docx conversion on which I added some edits and comments for your review.

Thank you,

Commissioner Kirtley

Board of Pilotage Commissioners, Vice-Chair; Oil Transportation Safety Committee (OTSC)

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Analysis of Tug Escorts – Scope of Work

Background: ESHB 1578¹ requires an analysis of tug escorts

[ESHB 1578](#) Section 3(5) states: “To inform rule making, the board of pilotage commissioners must conduct an analysis of tug escorts using the model developed by the department of ecology under section 4 of this act.”

ESHB 1578 Section 3(1)(d)(iii) states: “By September 1, 2023, the department of ecology must submit a summary of the results of the analysis required under subsection (5) of this section to the legislature consistent with RCW 43.01.036.”

ESHB 1578 considerations for tug escort analysis:

- Vessel type and geographic zone – Section 3(1)
 - Includes tank vessels between 5,000 and 40,000 DWT
 - Includes ATBs and tank barges
 - Excludes tank barges engaged in bunkering
 - Excludes vessels in ballast
 - Includes waters east of a line from Discovery Island Light to New Dungeness Light
- ~~operational and functionality requirements for tug escorts, such as aggregate shaft power and operational (tethering) and functionality requirements~~ – Section 3(3)(c)
- Vessel safety measures implemented after July 1, 2019 – Section 3(5)(b)
 - avoiding or minimizing – Section 3(6)(b):
 - additional underwater noise from vessels in the Salish Sea, focusing vessel traffic into established shipping lanes.
 - vessel traffic impacts to established treaty fishing areas, and respecting and preserving the treaty-protected interests and fishing rights of potentially affected federally recognized Indian tribes.

BPC and Ecology roles and responsibilities

Board of Pilotage Commissioners (BPC) and Ecology signed an [Interagency Agreement](#) (IAA)² for work related to ESHB 1578. For the analysis of tug escorts, the IAA includes the following responsibilities:

- BPC Staff will develop scope of work for the tug escort analysis.
- Ecology will provide technical assistance to BPC by producing a draft of the scope of work.
- Board of Pilotage Commissioners will vote to approve the scope of work
- Ecology will perform tug escort analysis and related outreach activities based on the scope with input from BPC.
- Ecology will write and submit a summary of the tug escort analysis to the legislature by September 1, 2023.

¹ ESHB 1578. Sess. Of 2019 (WA 2019), [1578-S.SL.pdf \(wa.gov\)](#).

² Board of Pilotage Commissioners and Washington Department of Ecology. IAA No. C2000090, Washington: BPC, 2019. [IAA, Interagency Agreement \(wsimg.com\)](#).

Commented [EK1]: <https://app.leg.wa.gov/bills/summary?BillNumber=1578&Year=2019&Initiative=false>

<http://lawfilesexternal.wa.gov/biennium/2019-20/Pdf/Bills/House%20Passed%20Legislature/1578-S.PL.pdf#page=1>
(p. 6 Line 21)

Commented [EK2]: full text:

(b) Consider the benefits of vessel safety measures that are newly in effect on or after July 1, 2019, and prior to the adoption of rules under this section; and

Commented [EK3]: Additional consideration, as per Section 3(6)(b)

Analysis Objective

The objective of the analysis is to evaluate the potential reduction 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/Discovery Island Light.

Research questions

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

Qualitative analysis may be used to answer and provide context for research questions which cannot be adequately assessed quantitatively.

Outreach

Ecology will consult with tribes and stakeholders and lead outreach activities throughout the project to include a mixture of webinars, informational briefings, technical discussions, and informal discussions.

Deliverable

A summary report of the results of the tug escort analysis submitted to the legislature by Ecology before September 1, 2023.

Commented [EK4]: The analysis intent, I do not believe is limited to risk reduction. For example, the consideration of benefits in Section 3(5)(b). Purpose: "To inform rule making, the board of pilotage commissioners must conduct an analysis of tug escorts using the model developed by the department of ecology under section 4 of this act."

Commented [EK5]: Where possible, relate this to zones as defined in Section 3(1)(d)(i)

Commented [EK6]: Can the model do this? Or will this question be answered more anecdotally or qualitatively, rather than quantitatively from the model? If so, perhaps re-organize Qs under sentence "Qualitative analysis..."