

May 25, 2018

Rob Dengel

Statewide Resources Section Manager

Spill Prevention, Preparedness &Response Program

Washington Department of Ecology

Re: Draft Ecology 2018 Vessel Traffic Safety Report

Dear Mr. Dengle:

Friends of the Earth appreciates the opportunity to participate in the development of the Department of Ecology’s Vessel Traffic Safety Report called for by the 2018 Washington Legislature in Section 206 of Engrossed Substitute Senate Bill 6269 (ESSB 6269). Thank you for the phone conversation and webinar that have served to inform the submission of the following scoping comments and references.

While we understand Ecology’s preference to receive single letters from different constituencies, the reality is there are a range of priorities even within coalitions. Regardless, Ecology still has a responsibility to provide adequate notice directly to all constituents that have interest in the subject. Unfortunately, this was not done prior to initiating this study. Given the short timeframe afforded for these comments, Friends of the Earth was not able to consult with other stakeholders.

The Puget Sound Region continues to draw people from around the world seeking a healthy environment. Maintaining this delicate balance in the maritime environment is a challenge due to ongoing changes in trade and the environment, requiring vigilance.

There have been significant changes in the volumes and types of crude oil and the means by which all oil is transported through our region due to increases in pipeline, rail, tanker terminal and refinery capacity and the rapid rise of the use of Articulated Tug Barges (ATBs) over the past decade. Significant increases in domestic oil production and lifting the ban on the export of domestically produced crude oil have also greatly expanded the potential risks posed by tank vessel traffic.

We all should be proud of how our region’s maritime safety regime has improved over the years. It is a result of the long-term commitment to steady improvement in this dynamic environment which must continue. There have also been reductions in protections like the elimination of the double tug escort requirements in Washington waters despite its retention in Prince William Sound, Alaska. While Washington’s waters have been spared a catastrophic oil spill, there have been many near misses which could have resulted in catastrophes.

The Neah Bay Emergency Response Towing Vessel (ERTV) has afforded assistance to, and saved, 66 commercial vessels since its establishment in 1999. It has been called out several times in the last few months. It is the far greater frequency of such underreported incidents, not oil spills, that truly belie our risk and this concern. We must not wait for an oil spill to take proactive measures and this study must focus on the most pressing questions.

The Canadian Government is in the process of making significant enhancements to its maritime safety regime in anticipation of the seven-fold increase in dilbit-carrying tanker traffic associated with the proposed tripling of the Kinder Morgan pipeline. As a result, 30 crude oil tankers would transit through the core habitat of the increasingly endangered Southern Resident Killer Whales, putting them at risk of extinction from a catastrophic oil spill. These same waters are also widely recognized as the most navigationally challenging for Canadian traffic.

Historically, little attention has focused on the movement of oil between ports within the Salish Sea. However, the far greater frequency and growing proportion of oil tug-tows and ATBs transiting through these waters have long warranted the attention this study provides. While the US Coast Guard has finally begun enforcing its long-awaited Subchapter M inspection rule, there have been a recent series of incidents and oil spills involving tug-tows and ATBS in the region requiring immediate attention.

The significance State legislators and the Governor have placed on addressing potential improvements in oil transportation is evidenced by the directive to Ecology to produce this study in partnership with the Pilotage Commission and the Puget Sound Partnership. Particular attention to ATBs and tug-tows is also incorporated into a variety of other policy directives.

While this new study requires the collection of diverse background information from reliable sources, ultimately there needs to be a focus on using these data to 1) evaluate the variations in operations and regulations pertaining to different tank vessels, 2) the potential benefits of expanding the range of sizes and types of tank vessels, required to have tug escorts, as well as 3) the relative benefit of establishing additional emergency response systems, like is established in Neah Bay, to other parts of the Salish Sea.

As documented below, Ecology has overlapping obligations to address these issues. In order to accurately interpret potential recommendation for expanded use of tug escorts and ERTVs there needs to be a common understanding of the fundamental differences between the various ways oil is transported over Northwest marine waters.

Thus, to meet the multiple mandates for such information we recommend producing a table for incorporation in the Vessel Traffic Safety Report and other studies, summarizing the differences between the operating and regulatory environments of the various modes of oil transport operating in the Salish Sea.

This would afford a common level of understanding between governments, industry, as well as the public and regulators to help assure recommendations and potential legislation are pertinent.  At minimum such a table needs to summarize and analyze the following:

* capacity (bbl, dwt),
* number of transits,
* mean volume oil/transit,
* total volume of oil/year,
* location of transits,
* types of oil,
* speed, and
* the origin and destination between several sizes of ATBs, oil-laden tug and tows, and tankers.

In addition, difference need to be identified in the regulations and standards of care that include tug escorts, crew size, pilotage, AIS carriage, as well as variations in the operations within the water ways (e.g. lanes, one-way rule) between these tank vessels.

Related policy directives for these studies were included as part of the establishment of the Salish Sea Shared Waters Forum, Section 204 of ESSB 6269, that directs Ecology to evaluate the benefits associated with additional tug assistance to reduce the risk of an oil spill in collaboration with US and Canadian tribal governments, federal and provincial agencies as well as with industry and public stakeholders.

Support for expanded tug escort requirements on smaller tankers, barges and ATBs and evaluating the relative merits of additional emergency response tug requirements to reduce oil spill risk in the boundary waters of the Salish Sea were also the top recommendations of the 2016 Salish Sea Risk Mitigation Workshop in Bellingham, Washington.

Interestingly, while both sections 204 and 206 of ESSB 6269 call for Ecology to evaluate requiring tug escorts for some ATBs and oil barges and the establishment of an emergency response system for Haro Strait, Boundary Pass and Rosario Strait, the 2016 Salish Sea Oil Spill Risk Mitigation Workshop called for a multi-mission emergency response towing vessel for added protection of the same region.

Whether it be a multi-mission tug or separate vessels, it is critical that Ecology evaluate the multiple benefits associated with emergency towing in addition to firefighting, salvage and expedited oil spill response. Reducing the response time to non-floating oils, like dilbit, is the best way to increase its likelihood of recovery prior to sinking which is called for in section 202 of ESSB 6269.

More recently, Governor Inslee issued Executive Order 18-02 on 14 March 2018 creating the Southern Resident Killer Whale Recovery and Task Force which also calls for the identification of maritime safety measures that can improve the region’s ability to prevent, prepare and respond to oil spills.

Thank you again for your consideration of these comments. We are encouraged by the citations Ecology has already assembled to address the emphasis we are requesting. Please find additional references to be included in your research following the excerpts from the legislative and administrative obligations described above.

Sincerely,



Fred Felleman

NW Consultant

Friends of the Earth

Cc

Pilotage Commission

Puget Sound Partnership

Governor Inslee

**ENGROSSED SECOND SUBSTITUTE SENATE BILL 6269**

**Vessel Traffic Safety Report**

**C. NEW SECTION. Sec. 206.** (1)(a) The department of ecology, in consultation with the Puget Sound partnership and the pilotage commission, must complete a report of vessel traffic and vessel traffic safety within the Strait of Juan de Fuca, Puget Sound area that includes the San Juan archipelago, its connected waterways, Haro Strait, Boundary Pass, Rosario Strait, and the waters south of Admiralty Inlet. A draft report, including recommendations, must be completed and submitted, consistent with RCW 43.01.036, to the legislature by December 1, 2018. The final report must be completed and submitted to the legislature by June 30, 2019……

(i) **Tug escorts for oil tankers, articulated tug barges, and other towed waterborne vessels or barges**. If tug escorts are determined in this assessment to reduce oil spill risk, the department of ecology must recommend specific requirements and capabilities for tug escorts;

(ii) **An emergency response system in Haro Strait, Boundary Pass, and Rosario Strait, similar to the system implemented by the maritime industry pursuant to RCW 88.46.130**. If the department of ecology determines such a system will decrease oil spill risk, it must also recommend an action plan to implement it.

**Salish Sea Shared Waters Forum**

**NEW SECTION. Sec. 204.** A new section is added to chapter 88.46 RCW to read as follows: The department must establish the Salish Sea shared waters forum to address common issues in the cross-boundary waterways between Washington state and British Columbia such as: Enhancing efforts to reduce oil spill risk; addressing navigational safety; and promoting data sharing....

(3) The Salish Sea shared waters forum must meet at least once per year to consider the following: ……

(b) Opportunities to **reduce oil spill risk, including requiring tug escorts for oil tankers, articulated tug barges, and other waterborne vessels or barges**;

(c) Enhancing oil spill prevention, preparedness, and response capacity; and

(d) Whether an **emergency response system in Haro Strait, Boundary Pass, and Rosario Strait,** similar to the system implemented by the maritime industry pursuant to RCW 88.46.130, will decrease oil spill risk and how to fund such a shared system.

**EXECUTIVE ORDER 18-02(14 March 2018)**

**SOUTHERN RESIDENT KILLER WHALE RECOVERY AND TASK FORCE**

**Whereas:** Key sources of contamination in storm water runoff remain to be addressed and the **potential for a catastrophic oil spill continues to threaten Southern Residents** and the entire ecosystem of Puget Sound. In addition, increased boat and ship traffic has caused greater underwater noise that interferes with Southern Resident critical feeding and communication;

The executive order outlines several short- and long-term actions related to unhealthy toxics, **oil spill prevention and vessel traffic,** including exploring ways to quiet ferries and freight traffic. The Port of Vancouver in British Columbia recently [found successes](https://www.columbiavalleypioneer.com/news/port-of-vancouver-program-examines-impact-of-marine-noise-on-local-whales/) in noise reduction by asking vessels to voluntarily slowdown in Haro Strait.

**From Governor Inslee’s Website: (https://medium.com/wagovernor/inslee-signs-executive-order-to-protect-orcas-chinook-salmon-8eb97d00b41d)**

**2016 SALISH SEA OIL SPILL RISK MITIGATION WORKSHOP** December 2016 Publication no. 17-08-005 <https://fortress.wa.gov/ecy/publications/documents/1708005.pdf>

The goal of the workshop was to develop and agree upon specific actionable recommendations and associated implementation strategies to address the 5 to 10 highest priority prevention-focused Risk Mitigation Measures (RMMs) for reducing and further preventing oil spills from vessel traffic in the Strait of Juan de Fuca and the Salish Sea.

RMM #1: **Escort tank vessels including oil barges and articulated tug barges in Puget Sound**

RMM #2: **Canada/U.S. Transboundary Marine Safety Forum**

RMM #3: **A multi-mission emergency response towing vessel (ERTV) for Haro Strait/Boundary Pass**

REFERENCES

POLICY INTENTIONS PAPER FOR ENGAGEMENT: PHASE TWO ENHANCEMENTS TO SPILL MANAGEMENT IN BRITISH COLUMBIA. Ministry of Environment & Climate Change Strategy February 28, 2018

Response times | Geographic response plans | Addressing loss of public use from spills including economic, cultural, and recreational impacts | Maximizing the marine application of environmental emergency regulatory powers.

PROCEDURES FOR THE CANADA/UNITED STATES COOPERATIVE VESSEL TRAFFIC SERVICES <http://www.uscg.mil/d13/cvts/proman.asp>

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WCMRC Geographic Areas of Response. <http://wcmrc.com/app/uploads/WCMRC-GAR-Map-Dec-2017.jpg> Note slow oil spill response time in BC waters.

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Coast Guard Maritime Commons 2/21/2018: Towing Industry Safety Statistics for 2016.

<http://mariners.coastguard.dodlive.mil/2018/02/21/2-21-2018-towing-industry-safety-statistics-for-2016>.

Note trends for medium and high severity towing vessel incidents (p. 5) were 120 and 70 respectively, not very significantly lower than in 1994.

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Felleman, F. (2016). Tar Sands/Dilbit Crude Oil Movements within the Salish Sea, 62 pp. <https://foe.org/resources/tar-sandsdilbit-crude-oil-movements-within-the-salish-sea>

Note movements of dilbit within Salish Sea by tug-tows as well as references.

Felleman, F (2017) Orcas and Oil Spills are a Catastrophic Mix. Seattle Times Op-Ed 12/25/2017

* provides context why ATBs need further attention.

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Greenwood, N. (2018). Ship Noise Mitigation Risk Assessment – GMSL Report 02/2018 Version 1.3. Greenwood Maritime Solutions. Victoria, BC. 50 pp. [www.greenwoodmaritime.com](http://www.greenwoodmaritime.com).

See p.11-14 (Baseline Risk Assessment – status quo Haro Strait.

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**Trans-Mountain Expansion Project Oil Spill Response Simulation Study, Arachne Reef and Westridge Marine Terminal**. November 2013. [EBA File: V13203022]

<http://transmountain.s3.amazonaws.com/application/V8C_TR_8C_12_TR_S13_TO_TR_8C_16_TERMPOL_RPTS.pdf>

See pages 8 –“The northern entrance to Haro Strait has the greatest level of navigation complexity for the entire passage, as well as significant numbers of vessels transiting the Strait. The location also has very high environmental value for the route, with the potential to affect several distinct areas and habitats, including but not limited to Boundary Bay, the Gulf Islands and San Juan Islands, the Salish Sea, and the Juan de Fuca Strait. “ See also pp. 24 -26 figs 2.1, 3.1, 4.18-4.19

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**Modeling the Fate and Behaviour of Marine Oil Spills for the Trans-Mountain Expansion Project Summary Report**. November 2013 [EBA File: V13203022]

<http://transmountain.s3.amazonaws.com/application/V8C_TR_8C_12_TR_S10_TO_S12_TERMPOL_RPTS.pdf>

See pages i-iii, 6, Figs 6.6-6.9

Table 4.1 “Northern Entrance to Haro Strait: Arachne Reef - Possible powered grounding is a low probability event due to pilots and tethered tug but this location is rated with greatest level of navigation complexity for the entire passage. Location also has high environmental values.”

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**2016 VTRA 2015 KM - 348 Case and VTRA 2015 Base Case Comparison**

Presentation by Jason R.W. Merrick (Virginia Commonwealth University) and J. Rene van Dorp (George Washington University)August 9th – 10th,

<https://www2.seas.gwu.edu/~dorpjr/VTRA_2015/PRESENTATIONS/21%20-%20COMPARISON%20VTRA%202015%20Case%20KM%20348%20to%20VTRA%202015%20Base%20Case.pdf>

See slides 9-10: Three-Dimensional Waterway-Specific Comparison between the risk of potential oil loss from 2015 commercial vessel traffic in the Salish Sea with the addition of 348 oil tankers associated with the Kinder Morgan Trans Mountain Pipeline expansion.

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**VTRA 2015 FINAL REPORT UPDATING THE VTRA 2010 A POTENTIAL Oil Loss Comparison of Scenario Analyses by four Spill Size Categories**

By Jason R.W. Merrick (Virginia Commonwealth University) and J. Rene van Dorp (George Washington University)for the Washington State Department of Ecology 12/27/2016**:**

<https://www2.seas.gwu.edu/~dorpjr/VTRA_2015/REPORTS/VTRA%202015%20ECOLOGY%20FINAL%20REPORT%20-%2012_27_16.pdf>

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**2016 Salish Sea Oil Spill Risk Mitigation Workshop Summary Report from the Washington State Department of Ecology.**

Focus Sheet – <https://fortress.wa.gov/ecy/publications/documents/1708003.pdf>

Full Report - <https://fortress.wa.gov/ecy/publication/documents/1708005.pdf>

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**2014 Final Report Pilotage Risk Management Methodology (PRMM) on the Use of Escort Tugs In Haro St and Boundary Pass for Liquid Bulk Vessels, In Product, less than 40,000SDWT.**

<https://apps.neb-one.gc.ca/REGDOCS/File/Download/2786305>

See pages 5-8, 37-40

p.6 “The danger of a drift grounding occurring after a vessel comes to a complete stop only occurs at certain high risk points when it is maneuvering close to land and where the prevailing currents could push the vessel on shore. These would include Turn Point and East Pt. At all other times in the passage the vessel would likely, after coming to a hard stop, drift with the current parallel to the land giving time for a standby tug to provide assistance. As such it is recommended that a standby tug be available, close to tankers less than 40,000 SDWT as they round Turn Pt, and East Pt. Furthermore, it was determined that the use of a standby tug at key high risk points would likely provide the same overall benefit as an escort tug, when coupled with the 0.5 mile buffer zone.”

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**Spills of Diluted Bitumen from Pipelines: A Comparative Study of Environmental Fate, Effects, and Response**. National Academies of Sciences, Engineering and Medicine. 2016. Washington, DC: The National Academies Press. <https://doi.org/10.17226/21834> [Summary]

British Columbia Pilots (2017) Letter to Lynne Barre re Whale Protection Zone.

* Navigational challenges of Haro Strait, Boundary Pass and occurrence of overtaking.

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Fielden, S. (2017). Pacific Northwest Refineries: Cheap Crude and a Captive Market. Margins helped by Advantaged Crude and Less Competition. Morningstar Commodities Research. Chicago, 28 pp.

* Operations of refineries in Washington

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Marine News (February 2018) Crowley to build 100mb Alaska Class ATB. ([www.marinelink.com](http://www.marinelink.com))

-ATB construction continues strong.

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National Transportation Safety Board Marine Accident Brief, Grounding of Articulate Tug and Barge Nathan E. Stewart DBL/55. (Accident no. DCA17RM001

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Nike Schuler (2017). Jake Shearer Incident: Stricken Fuel Barge Safely Anchored in British Columbia. G-Captainhttp://gcaptain.com/jake-shearer-incident-stricken-fuel-barge-tow-off-british-columbia**.**