

Stand.earth et. al.

Please find attached coalition comments joined by Friends of the San Juans, Friends of the Earth, Stand.earth, The Lands Council, Washington Physicians for Social Responsibility, the Washington State Chapter of the Sierra Club, Washington Environmental Council, and RE Sources for Sustainable Communities.

Thank you for your time and attention.

Alex Ramel, Alex@stand.earth

We are copying the following by email:

Maia Bellon, Director of the Department of Ecology

Lauren McCloy, Governor's Senior Policy Advisor, Energy

Sen. Reuven Carlyle

Sen. Christine Rolfes

Sen. Liz Lovelett

Rep. Joe Fitzgibbon

Rep. Debra Lekanoff

Rep. Sharon Shewmake

Stephanie Solien, Co-Chair, Southern Resident Killer Whale Task Force

Les Purce, Co-Chair, Southern Resident Killer Whale Task Force

October 5, 2019

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RE: Rulemaking to update Chapter 173-182 WAC, Oil Spill Contingency Plan

Mr. Jensen and Ms. Larson,

As environmental and conservation organizations working to protect the health and safety of our communities from the safety risks of oil transportation, the undersigned 8 organizations urge you to strengthen spill response requirements to address the unique risks potentially non-floating oils pose to waters in Washington State and the Salish Sea. Of particular concern are the non-floating Canadian Tar Sands crude oils, also known as diluted bitumen or dilbit, which should be regulated commensurate with their unique risks and spill response challenges. Through the passage of 2018 Strengthening Oil Transportation Safety Act the legislature directed Ecology to use this year's update to develop new rules and protections that address these risks.

We are concerned that the Department of Ecology's proposed rule does not meet its legislative directive to address the existing risks of non-floating oils by failing to establish more stringent requirements for plan holders transporting diluted bitumen and by using outdated models that overestimate response capacity. As written, this draft rule is insufficient to protect Washington's waters and communities.

The shortcomings of the current draft rule include:

- The draft rule is right to require a faster timeframe for the initial assessment of a spill; however, it still fails to require on site assessment and faster response times for diluted bitumen, despite acknowledging the heightened risks it poses.
- The timeframes required in the draft rule provide no assurance that the current response times and capability (the amount and type of response resources) will be sufficient to respond to a worst-case spill.
- The scope of the rulemaking is overly limited and planning requirements in the rule continue to rely on outdated modeling that overestimates our response capabilities.

To address these shortcomings, we urge Ecology to:

and well-coordinated response to contain and recover potentially non-floating oils *before* they submerge and sink. These updates should focus on high risk and high consequence regions such as the San Juan Islands.

- Further distinguish between all potentially non-floating oils and diluted bitumen, which is likely to sink quickly and therefore demands more stringent equipment and response time requirements to protect our communities, underwater habitats, and shorelines. Due to the depths of many of the region's waterways, recovering meaningful volumes of oil after it has sunk would be all but impossible.
- Require that the one-hour initial assessment requirement be done on site.
- Commit to an aggressive timeline to update the modeling tool used to evaluate plan holders' oil spill response capacity by replacing assumptions that have been long-recognized to result in overestimates of recover rates of spilled oil.
- Enhance planning standards for wildlife response in the event of a spill, including adequate personnel and equipment and immediate deterrence actions that keep wildlife from entering a spill. The Plan must require that the monitoring and deterrence operations apply to all killer whales, which will provide greater certainty that Southern Resident orcas will be deterred from entering an oil spill.

Communities across Washington are at risk from the existing transport of tar sands crude oil and we are unprepared to respond. Currently tar sands are transported by rail through Eastern Washington and along the Columbia River to terminals, including to Port Westward which has recently approved shipments of tar sands by rail to be received, stored, and shipped out of a facility permitted as a bio-refinery. In Tacoma, the Par Pacific (formerly US Oil) refinery receives weekly shipments of dilbit by barge across Puget Sound from the existing Trans Mountain pipeline terminal in Burnaby, BC. And in Skagit and Whatcom Counties, the Puget Sound Pipeline supplies Washington's four northern refineries with dilbit. Furthermore, the proposed expansion of the Canadian Trans Mountain Pipeline would exacerbate these existing risks, and has heightened public concern about the limitations of responding to a tar sands oil spill, especially once it sinks.

Spills of these oils in other states, such as on the Kalamazoo River in Michigan, have had catastrophic results leading to years-long response efforts and limited recovery of sunken oils. To provide adequate protections, Washington's rule should require more rapid response for companies transporting these oils to respond to spills before they submerge and sink.

We appreciate Ecology's oil spill prevention, preparedness, and response work to protect Washington's communities, natural resources, and economy and from the risk of oil spills and urge Ecology to exercise its full regulatory authority to develop a robust rule establishing more stringent preparation and response requirements for the movement of diluted bitumen and other oils that have a high likelihood of sinking.

Full Technical Comments on Draft Rule

Acknowledge Non-floating oil impacts.

Of particular concern to our organizations are the non-floating Canadian Tar Sands crude oils, also known as diluted bitumen or dilbit, which should be regulated commensurate with their unique risks and spill response challenges. This update to the Oil Spill Contingency Plan is critical given the current and increasing transport of Canadian Tar Sands crude oils through Washington State's waters in both the Salish Sea and the Columbia River, and the corresponding increase in the risk of Canadian Tar Sands crude oil spills.

There is consensus that the most effective response strategy for non-floating oil spills is a rapid and aggressive deployment of equipment and personnel in order to contain and collect the spill of non-floating oil before it begins to submerge and sink. Ecology agrees. Ecology's own [Preliminary Regulatory Analyses](#) for this rulemaking states (on page 40):

Additional coordination and preparedness for dealing with spills of potentially non-floating oils reduce the likelihood that oils will weather and sink before they are addressed. Improved preparedness for potentially sinking oils could have helped reduce damages and ultimate cleanup costs from the Enbridge Kalamazoo spill that cost \$1.2 billion to clean up.

Note that "clean up" is an inaccurate term regarding the response to this 2010 non-floating oil spill. As of June 2013, the EPA determined that 162,000-168,000 gallons of submerged Canadian Tar Sands crude oil would remain in the river bottom given that any further dredging would cause significant adverse impacts to the river.^[2] According to a July 12, 2019 magazine article, "The riverbed will never be fully cleansed of bitumen."^[3] Unless Ecology can fully document that a response to a worst-case non-floating oil spill will result in a literal "clean up" of the spill, without any long-lasting and/or residual impacts, please replace "clean up" with "response" throughout the rule documents.

The following requested changes to the draft update of the State's Oil Spill Contingency Plan are necessary to enhance the State's preparedness for spills of non-floating oils, as directed by the Legislature in E2SSB 6269.

Provide additional and more detailed information in the Preliminary Regulatory Analyses.

In this rule, Ecology should fully address all the potential costs of a worst-case non-floating oil spill and specifically address both the federal liability limits and Washington State's financial responsibility limits.

During the Question and Answer portion of the September 17, 2019 hearing in Everett on the Oil Spill Contingency Plan update rulemaking, a member of the public asked about the obligation of the responsible party regarding payment for the costs of a spill. Please provide a thorough and clear answer to this question in the Regulatory Analyses, Likely Benefits of the Proposed Rule Amendments (or whatever Regulatory Analyses section is

appropriate), and specifically address both the federal liability limits and Washington State's financial responsibility limits.

In response to the question on September 17, 2019, Ecology's spokesperson answered that the responsible party has to pay all costs associated with a spill. WA State law ([RCW 90.56.360](#) and [RCW 90.56.370](#)), unlike federal law, includes unlimited liability for oil spill response costs and damages. However, the demonstration of financial responsibility is subject to specified limits.[4] Ecology's answer, while technically correct, did not address the state's financial responsibility limits.

According to the 2011 report, *Improving Oil Spill Prevention and Response in Washington State: Lessons Learned from the BP Deepwater Horizon Oil Spill*:[5]

Under Washington State law, unlike the federal government, liability for oil spill costs and damages is unlimited. Demonstration of financial responsibility, however, is subject to specified limits. Washington state law grants the Department of Ecology authority to administer state financial responsibility requirements by rule, if necessary. While regulations for vessels have been established, financial responsibility regulations for facilities have not been set.

There is also a gap in verifying that vessel and facility operators meet state financial responsibility levels. Ecology relies upon the federal government (USCG) and the State of California's Office of Spill Prevention and Response (OSPR), whose financial responsibility levels are similar to this state's, to verify compliance and issue certificates.

Please provide specific answers to the following questions:

1. Has Ecology established financial responsibility regulations for facilities, and if so, what are they?
2. Has Ecology addressed the gap in verifying that vessel and facility operators meet state financial responsibility levels, and if so, how does Ecology verify that vessel and facility operators meet state financial responsibility levels?

To address the costs that exceed federal liability limits, the federal Oil Spill Liability Trust Fund can allocate up to \$1 billion per oil spill and can only be opened at the discretion of the Coast Guard[6]. Please provide detailed information on Washington State's oil spill response tax and oil spill administration tax, as well as funds available for oil spill restoration. Please provide details on the state funds that are available for oil spill response and oil spill restoration.

Given federal liability limits, Washington State's financial responsibility limits, and additional available federal and state, please include details on whether identified and available funds are sufficient to cover the financial costs of full costs of a worst-case spill of non-floating oil in Washington State.

Page 40 of the Preliminary Regulatory Analyses discusses the \$1.2 billion cost of the 2010 Enbridge Kalamazoo River non-floating oil spill. According to the United States Environmental Protection Agency, this was a spill of 843,000 gallons (or 20,071 barrels) of

diluted bitumen.[7] According to the Trans Mountain Pipeline Expansion Project application, the oil spill risk from the tankers transporting diluted bitumen through Washington State waters in the Salish Sea have a mean-case spill volume of 52,000 barrels and a credible worst-case spill volume of 104,000 barrels. (Note that this project application's definition of worst-case spill is not the same as WA State's definition.) If the cost of the 2010 Kalamazoo River spill (\$59,786.47 per barrel) is applied to these spill sizes, the 52,000 barrel spill would cost \$3,108,896,440 and the credible worst-case spill volume of 104,000 barrels would cost \$6,217,792,880.

Please specifically address the differences in property values along the Kalamazoo River as compared with Washington State property values along the shores of the Salish Sea, the outer coast, and rivers. Please also address the difference in spill response costs in the deep marine waters of the Salish Sea and the Columbia River as compared with the response costs in the Kalamazoo River. Finally, please address the wildlife response and NRDA costs for a spill in the Salish Sea and Columbia River as compared with the 2010 Enbridge non-floating oil spill wildlife response and NRDA costs in the Kalamazoo River.

Page 43 of the Preliminary Regulatory Analyses has information about Enbridge's purchase of 148 houses, 2 mobile homes, and 5 vacant parcels following the 2010 Kalamazoo River non-floating oil spill, stating: "While a large company may be able to buy out impacted property owners, a smaller company or single vessel may not be able to do so." This should be updated to address both federal liability limits and Washington State's financial responsibility limits, and also information on the financial value of shoreline properties in Washington State, as compared with riverside properties along the Kalamazoo River.

Executive Summary (page x)

It appears that "Avoided ERTV drill costs" was intended to be included in the bullet list of avoided costs, directly beneath "Property values." Instead it is the first sentence in the paragraph following the bullet list. Please correct the typo.

Section 4.3.2 Value of immediate spill cleanup (page 36)

In the bullet list of Washington Waters, please add the omitted waterways surrounding the San Juan Islands:

- Haro Strait
- Boundary Pass
- Lower Georgia Strait
- Rosario Strait and adjacent waterways

Define "non-floating oil."

Non-floating oil is omitted in WAC 173-182-030 Definitions. While we appreciate that the Dept. of Ecology recognizes that many forms of crude oil have a propensity to sink under some circumstances, we insist that there is a difference in kind, not just degree, for the sinking risk of tar sands dilbit. Tar sands crude oil is both more certain to sink and more

likely to sink quickly than other oils classified as type 4. The response strategy should be different and it should therefore be classified as different.

Ensure preparedness for non-floating oil spill response through unannounced drills.

The National Academy of Sciences' report includes Recommendation 6:

USEPA, USCG, PHMSA, and state and local agencies should increase coordination and share lessons learned to improve the area contingency planning process and to strengthen preparedness for spills of diluted bitumen. These agencies should jointly conduct announced and unannounced exercises for spills of diluted bitumen.[8]

Update the table in WAC 173-182-710 Type and frequency of drills. Ecology initiated unannounced worst case, equipment deployment drills should be conducted at least once every three years with input from federal, state and local agencies on the design and evaluation. No prior notice should be given to responders --not even providing general information such as the week a drill may occur (as is currently the case)-- if Ecology is going to be able to realistically assess the spill response preparedness in the region.

Require additional, detailed, year-round-available personnel and equipment as well as accelerated timeframes to ensure that Oil Spill Contingency Plan holders are prepared to effectively implement wildlife response operations in a worst-case spill.

See below for the example of detailed response capacity requirements, including equipment and personnel, in WAC 173-182-522.

WAC 173-182-540 Planning standards for wildlife response

The draft update only requires two wildlife response personnel to arrive within 12 hours of a spill to conduct wildlife response operations, with an additional 7 personnel to arrive within 48 hours. The draft rule provides no correlation between these minimal personnel requirements and their ability to effectively deploy wildlife operations for all impacted species. An unspecified amount and type of deterrent equipment is also required to arrive on scene within 12 hours. It is essential that wildlife response actions are initiated as soon as possible. In particular, deterrence actions that keep wildlife from entering a spill are critical to have underway immediately following a spill. Additionally, the establishment and appropriate stocking of facilities needed for response to oiled wildlife needs to be initiated upon notice of a spill.

WAC 173-182-510 Requirements for response and protection strategies

It is not sufficient to merely require the identification of water column and benthic species at risk from sunken, submerged, or non-floating oil spills. The Contingency Plan update should require the wildlife response operations needed to specifically address the water column and benthic species that could be impacted by a non-floating oil spill in real time.

WAC 173-182-540 (2)(c)(ii)

Southern Resident Killer Whales were listed as Endangered under the federal Endangered Species Act, in part, because of concerns about potential oil spill impacts.^[9] A report from the National Marine Fisheries Service states, “Their small population size and social structure also puts them at risk for a catastrophic event, such as an oil spill, that could impact the entire population.”^[10] Southern Resident Killer Whales are also the only killer whales listed as Washington State Endangered Species.

The monitoring and deterrence operations to prevent Southern Resident Killer Whales from encountering spilled oil should be required for all killer whales in order to provide certainty that Southern Resident Killer Whales are deterred from entering an oil spill.

Whale scientists that specialize in Southern Resident Killer Whales and trained naturalists can identify individual whales and differentiate between the different killer whale species. However, unless the oil spill contingency plan is updated to require experts who can identify Southern Resident Killer Whales as an integral part of all whale monitoring and deterrence operations, there would be no assurance that if only some killer whales were deterred from encountering a spill, that those whales would be the Southern Resident Killer Whales.

WAC 173-182-540 (2)(c)(ii) states:

Based on the areas the plan holder operates or transits, equipment and personnel to conduct monitoring and deterrence operations to prevent southern resident killer whales from encountering spilled oil. The plan shall include contact information for a list of vessels, which may be whale watching vessels that have been vetted, trained, and equipped to support killer whale deterrent operations.

The plan should be updated to require vessels for deterrent operations to be available year-round (note that whale watching vessels are typically operated seasonally), and located in all the areas where whales are present which also varies seasonally.

Other whales listed as Washington State Endangered Species are Fin Whales, Sei Whales, Blue Whales, Humpback Whales, North Pacific Right Whales, and Sperm Whales.[11] The oil spill contingency plan should also require that these whales be monitored and deterred from encountering and being impacted by oil spills.

WAC 173-182-030 Definitions (70), WAC 173-182-540 Planning standards for wildlife response, and WAC 173-182-840 Content submittal and review of spill management team (SMT) and wildlife response service provider (WRSP) applications

The wildlife response operations included in the draft update are unclear as to what “capture” entails. Wildlife response operations need to include the pre-emptive capture, relocation and release of wildlife at risk of being oiled as well as the capture of oiled wildlife for stabilization and rehabilitation. Also, wildlife operations need to include the immediate removal of oiled carcasses. In all applicable sections of the draft rule, replace “wildlife impact assessment, reconnaissance, deterrence, capture, stabilization, and rehabilitation operations” with “wildlife impact assessment, reconnaissance, deterrence, pre-emptive capture and relocation of wildlife at risk of being oiled, capture of oiled wildlife, stabilization, and rehabilitation operations, and the immediate removal of oiled carcasses.”

Include accelerated timeframes and details on response “capability,” including both equipment and personnel, to ensure that Oil Spill Contingency Plan holders will implement an effective response to a worst-case spill of non-floating oil.

After summarizing the behavior of diluted bitumen in a spill, the National Academy of Sciences report’s recommendations state, “These challenges necessitate different response strategies, including immediate efforts to recover spilled diluted bitumen before significant weathering occurs and effective methods to identify, contain, and recover suspended and sunken oil.”[12]

The draft update includes methods to identify, contain, and recover suspended and sunken oil, but fails to accelerate the timeframes for the containment and recovery of non-floating oil before it begins to submerge and sink.

The table in WAC 173-182-324 [Planning standards for (~~Group 5 Oils~~) spills of oils that, depending on their chemical properties, environmental factors (weathering), and method of discharge, may submerge or sink] (2) includes additional but unquantified “capability” – the resources and equipment to detect, contain, and collect non-floating oils – that “could have arrived” by 12 and 24 hours. These timeframes do not reference any data and/or provide any assurance that containment and collection will occur before the non-floating oil begins to submerge and sink. There is also no mention of personnel requirements and no details on the amount and type of resources and equipment, including storage, to ensure that the “capability” would be sufficient to respond to a worst-case spill (as is required by [WAC 173-182-030](#) (48) that defines “planning standards,” and see also WAC 173-182-030 (70) that defines “worst case spill”).

Following lessons learned from the Kalamazoo River oil spill, additional requirements for respiratory protection as well as air quality monitoring need to be established to protect oil spill responders. There should also be requirements for notifying shoreline residents and businesses and providing public health and safety in the early hours of an oil spill.

In comparison, other sections of the existing Oil Spill Contingency Plan provide detailed requirements that offer some assurance that the equipment and personnel capacity are capable of effective response in the event of an oil spill. For example, [WAC 173-182-522](#)

(Covered vessel planning standards for shoreline cleanup) requires contingency plan holders to have:

- Contracted access to one hundred trained shoreline clean-up workers with appropriate safety and Hazwoper training and who will not be counted towards other planning standards;
- Contracted access to trained shoreline clean-up supervisors with a ratio of 1:10 supervisors to clean-up workers, with training that include safety, Hazwoper, and relevant ICS courses and who will not be counted towards other planning standards;
- Access to adequate equipment for passive recovery for three miles of shoreline on three tide lines; and
- Access to a shoreline clean-up mobile storage cache that can support eighty to one hundred shoreline clean-up workers with personal protective equipment, hand tools, and other logistical support for three to five days.

Require the one-hour planning standard requirement to be conducted at the spill location.

The table in WAC 173-182-324 includes a one-hour requirement to “Initiate an assessment and consultation regarding the potential for the spilled oil to submerge or sink.” At the September 17, 2019 hearing in Everett, Ecology’s representative stated that this assessment could be conducted remotely.

Also at the September 17, 2019 Everett hearing, Ecology’s representative said that she could not answer the multiple questions from members of the public regarding how long it takes before a non-floating oil spill begins to submerge and sink. Ecology’s representative stated that she could not answer that question because there are so many variables given the wide range of specific environmental conditions that could occur at the spill location and affect the behavior of the spilled non-floating oil, such as, amounts and/or types of sedimentation or turbidity in the receiving waters.

The very reasons that Ecology staff gave for why they could not answer the question ‘how long before a non-floating oil spill will begin to submerge and sink?’ are the same reasons why the one-hour initiation of the assessment of a non-floating oil spill should be required to take place at the scene of the spill. With so many variables, a remote assessment will almost certainly lack crucial details.

Update the Oil Spill Contingency Plan to include detailed response capacity requirements, including equipment and personnel (as demonstrated in WAC 173-182-522) to ensure that Oil Spill Contingency Plan holders will be prepared to respond effectively to a non-floating oil spill with the response resources for both free-oil recovery operations and Geographic Response Plan deployment (shoreline protection) operations.

As shown below, the current draft update of the table in WAC 173-182-324 (2) fails to provide the necessary details.

<u>Time (hours)</u>	<u>Capability</u>
<u>1</u>	<u>Initiate an assessment and consultation regarding the potential for the spilled oil to submerge or sink.</u>
<u>6-12</u>	<u>Resources to detect and delineate the spilled oil such as side scan or multibeam sonar, divers, remotely operated vehicles, or other methods to locate the oil on the bottom or suspended in the water column could have arrived.</u> <u>Additionally, containment boom, sorbent boom, silt curtains, or other methods for containing the oil that may remain floating on the surface or to reduce spreading on the bottom could have arrived.</u>
<u>12-24</u>	<u>Resources and equipment, such as sampling equipment, necessary to assess the impact of the spilled oil on the environment oil could have arrived.</u> <u>Dredges, submersible pumps, or other equipment necessary to recover oil from the bottom and shoreline could have arrived.</u>

San Juan County is at unique risk and should receive heightened non-floating oil spill response capacity.

The 2015 *San Juan County Oil Spill Response Capacity Evaluation* includes important findings and recommendations that address deficiencies in the current Oil Spill Contingency Plan which should have been included in this update, or at the very least, thoroughly considered. The following findings state: [13]

1. The waters adjacent to the San Juan Islands present a very difficult environment to contain and recover a major marine oil spill. This is primarily due to the high currents and rip tides that occur throughout the area on a daily basis.

5. In order to maximize potential recovery capacity, it is imperative to initiate recovery operations as soon as possible. This could be enhanced by stationing equipment in San Juan County.

8. Free-oil recovery operations as modeled utilized almost all available workboat resources leaving few for other concurrent phases of the response, such as shoreline protection.

The San Juan Islands provide critical habitat for forage fish, salmon, and Southern Resident Killer Whales and are surrounded by major commercial shipping lanes that transit narrow channels and navigational challenges such as Turn Point, all of which are

in close proximity to shoreline residences and businesses. The current and increasing tanker traffic transporting non-floating oils includes the current and increasing risk of accidents and non-floating oil spills. Oil spill response operations would be especially challenging given the swift currents and depths of the waterways. The importance of early and aggressive containment and collection of non-floating oil spills, effective wildlife deterrence operations, and the response resources for both free-oil recovery operations and Geographic Response Plan deployment (shoreline protection) operations are especially significant in this biologically rich oasis of the State.

An additional rulemaking to update Chapter 173-182 WAC, Oil Spill Contingency Plan, is required before the next 5-year update to address long-standing concerns not included in the scope of the current rulemaking.

We acknowledge that the scope of the current rulemaking has limited Ecology's ability to fully address the challenges and risks presented by industry's decision to introduce more and more tar sands into Washington State. None-the-less, these risks need to be urgently addressed. We therefore request that Ecology include a firm commitment for a timeline and procedural steps to address the outstanding issues related to the risks of non-floating oils. We cannot wait another five, or even 2 years, to begin.

Estimated Daily Recovery Capacity (EDRC) is a poor metric for evaluating spill response capacity. We urge you to commit to an aggressive timeline to update this long-obsolete model.

The continued use of the EDRC inaccurately estimates response capacity and recovery rates.

As demonstrated in Section 6.6, strike teams with equivalent maximum recovery potential can have vastly different EDRC ratings. Standards based on the delivery of EDRC, which relies primarily on the devalued capability of skimmers that are assumed to operate continuously, do not provide a true indication of response capability. Strike teams should be designed to optimize containment, collection, and storage capacity, then rated by their maximum recovery potential and operating environment. Planning standards could then be based on those ratings.

The Department of Interior's Bureau of Safety and Environmental Enforcement funded a project by Genwest Systems, Inc., the company that developed the ROC, to examine EDRC and recommend an alternative approach. The Estimated Response System Potential calculator was developed (Genwest Systems, Inc., 2012b) and updated most recently in February 2015 to include feedback received from a National Academies of Science review and public comments solicited through the Federal Register (79 FR 151).

Department of Ecology needs to update its methodologies to include the response options calculator (ROC) as Ecology recently used to evaluate oil spill response capabilities in Grays Harbor (cute). The reliance on EDRC to evaluate oil recovery rate once equipment arrives, used in the current rule update relies too heavily on the

calculation of devaluing the the pump capacity by 20% of a skimmer running 24 hours per day. In contrast, the Grays Harbor study, by utilizing the Response Options Calculator (ROC) includes far more variables that provide a far more realistic characterization of the spill response capacity in that region.

The executive summary of the Study Ecology funded in Grays Harbor succinctly distinguishes between the two approaches and the parameters considered:

The ROC is a simplified model of an oil spill response. It first models the spread and weathering of a hypothetical oil spill based on the oil type, winds, and water temperature. Then it applies a set of information about a recovery system (the combination of vessels, skimmer, boom, and primary storage used together to recover oil) to determine the maximum potential oil recovery of system when applied to that oil slick. The ROC incorporates the time a system arrives on scene, skimming capacity, type of skimmer, speed of advance, swath width captured by the boom, throughput and recovery efficiencies, decanting (when used), and primary storage volume. Calculations are then made to determine how long the system would need to stop skimming in order to transit to and offload at offload secondary storage, when full, before skimming can begin again. Each scenario in this analysis considers the simultaneous use of multiple recovery systems and presents a maximum potential recovery for the combined response forces from Washington and Oregon that may respond to a major spill in Grays Harbor.

The Grays Harbor study is illustrative of the type of improvements in analysis that need to be required as part of the current C-Plan update. The current spill risk in Washington requires urgent updates and Ecology should not wait until the next five-year update to improve its outdated methodology, and should instead update the plan as soon as relevant information becomes available.

The Preliminary Cost-Benefit Analysis Least-Burdensome Alternative Analysis (in the Preliminary Regulatory Analyses) concludes that the benefits of the proposed rule amendments are greater than the costs.

The Preliminary Cost-Benefit Analysis Least-Burdensome Alternative Analysis' use of qualitative impacts demonstrate a substantial buffer between the costs associated with the current draft rule and the benefits of the proposed rule amendment, thus justifying the increased costs associated with these requested changes to the draft rule.

Conclusion

To summarize, we request that Ecology:

- Remove references to “cleaning up” non-floating oil spills which will almost certainly persist indefinitely.
- Clarify the financial responsibility regulations for facilities and vessels.

- Fully assess the costs of a worst case spill of non-floating oils.
- Distinguish between all potentially non-floating oils and diluted bitumen, which is likely to sink quickly and therefore demands more stringent equipment and response time requirements to protect our communities, underwater habitats, and shorelines. The depths of the glacially carved straits that characterize much of the region transited by commercial vessels render recovery of meaningful volumes of uncontained sunken oil all but impossible.
- Ensure preparedness for non-floating oil spill response through unannounced drills.
- Improve planning standards for wildlife response including increased personnel, and planning for species in the water column that could be impacted by submerged oils.
- Require deterrence operations for all killer whales (not just SRKW) and all other whales that are listed as endangered.
- Immediately address our existing risks by including accelerated timeframes and details on the amounts and types of resources and equipment needed to respond to a worst-case spill of non-floating oil, especially in high risk and high consequence areas such as the San Juan Islands.
- Require that the one-hour incident assessment be conducted on-location and not just remotely.
- Improve response capacity in San Juan County which is uniquely at risk.
- Commit to using ROC, as was done for Grays Harbor, to update overall response capacity and requirements as calculated by EDRC which has been widely shown to overestimate response capacity. Further update this model as new information becomes available through, for example, ongoing federal modeling studies.

Thank you for the opportunity to provide these comments. If you have questions about these comments, please follow up via email with Alex Ramel (alex@stand.earth) and Anna Doty (anna@wecprotects.org).

Sincerely,

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Rep. Sharon Shewmake
Stephanie Solien, Co-Chair, Southern Resident Killer Whale Task Force
Les Purce, Co-Chair, Southern Resident Killer Whale Task Force

[1] NOAA Fisheries, Northwest Region. November, 2006. Designated Critical Habitat for Southern Resident Killer Whales.

https://www.westcoast.fisheries.noaa.gov/publications/protected_species/marine_mammals/killer_whales/SRKW-CH-Map.jpg. Accessed September 16, 2019.

[2] United States Environmental Protection Agency. June 2013. Oil Cleanup Continues On Kalamazoo River Enbridge Oil Spill, Marshall, Michigan.

<https://www.epa.gov/sites/production/files/2013-12/documents/enbridge-fs-20130624.pdf>. Accessed September 16, 2019.

[3] Joseph Riesterer. BELT magazine. July 12, 2019. The Enduring Legacy of the 2010 Kalamazoo River Oil Spill:

Nearly a decade after one of the largest inland oil spills in U.S. history, the landscape has changed. <https://beltmag.com/kalamazoo-river-line-6b-oil-spill/>. Accessed September 16, 2019.

[4] See

<https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Financial-responsibility-for-oil-spills>. Accessed September 24, 2019.

[5] Dept. of Ecology & Puget Sound Partnership. 2011. *Improving Oil Spill Prevention and Response in Washington State: Lessons Learned from the BP Deepwater Horizon Oil Spill*. Page 16. <https://test-fortress.wa.gov/ecy/publications/documents/1108002.pdf>. Accessed September 24, 2019.

[6] See

https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/About_NPFC/OSLTF/. Accessed September 24, 2019.

[7] United States Environmental Protection Agency. June 2013. *Oil Cleanup Continues On Kalamazoo River: Enbridge Oil Spill, Marshall, Michigan*.

<https://www.epa.gov/sites/production/files/2013-12/documents/enbridge-fs-20130624.pdf>. Accessed September 24, 2019.

[8] National Academies of Sciences, Engineering, and Medicine. 2016. *Spills of Diluted Bitumen from Pipelines: A Comparative Study of Environmental Fate, Effects, and Response*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/21834>. Page 119.

[9] Endangered and Threatened Wildlife and Plants: Endangered Status for Southern Resident Killer Whales, Federal Register Vol. 70, No. 222 (November 18, 2005) 69903 – 69912

[10] National Marine Fisheries Service. *Southern Resident Killer Whales (Orcinus orca) 5-Year Review: Summary and*

Evaluation. (National Marine Fisheries Service West Coast Region, Seattle, 2016)

https://www.westcoast.fisheries.noaa.gov/publications/status_reviews/marine_mammals/kw-review-2016.pdf. Accessed September 24, 2019.

[11] Washington Department of Fish and Wildlife. Revised June 2019. STATE LISTED SPECIES.

<https://wdfw.wa.gov/sites/default/files/2019-06/threatened%20and%20endangered%20species%20list.pdf>. Accessed September 24, 2019.

[12] National Academies of Sciences, Engineering, and Medicine. 2016. *Spills of Diluted Bitumen from Pipelines: A Comparative Study of Environmental Fate, Effects, and Response*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/21834>. Page 113.

[13] Nuka Research & Planning Group, LLC. 2015. *San Juan County Oil Spill Response Capacity Evaluation*. [2015 San Juan County Oil Spill Response Capacity Evaluation](#). Accessed September 24, 2019. Pages 82-84.

