

RESPONSE TO COMMENTS

Lower Columbia River Geographic Response Plan

Comments Received through June 8, 2015

We appreciate the time and effort all contributors provided in developing and submitting their comments on the draft version of the Lower Columbia River Geographic Response Plan. Comments received were categorized and may have been condensed to make them fit the format of this document. Complete copies of the original comments as submitted to Ecology can be found at the end of this document.

For each comment, the contributor is acknowledged by the number preceding their name in the list below. Comments were contributed by the following individuals:

- (1) Jean M. Avery
- (2) Shayne Cothorn, Washington Department of Natural Resources
- (3) Larry Douglass, Skamania County Public Works
- (4) Susan Eugenis, Consolidated Diking Improvement District No. 2 of Cowlitz County
- (5) Arthur (R.D.) Grunbaum, Friends of Grays Harbor
- (6) Emily Herbert
- (7) Brian MacDonald, Washington Department of Fish and Wildlife

General Comments

Comment: I am a resident of Washington State, and I would like to comment on the Lower Columbia River Geographic Response Plan. I am also an avid hiker who treasures this area's natural beauty and recreational assets. I started to read the Response Plan, but immediately felt sick to my stomach. No matter how thorough any response planning is, such planning cannot prevent oil spills from happening. I find it short-sighted to skip over the obvious-- that oil spills will happen -- and to shift the focus to fine-tuning a response plan. In my view, ANY oil spill is one to many; rather, I believe we need a zero-tolerance policy toward oil spills. The plan that needs to be developed, in my view, is one that guarantees there will be no spills. If that is not possible, then any oil-related proposal should be rejected. (1)

Response: We agree that any oil spill is one too many and that oil spill prevention is much preferred over spill response. Unfortunately, there is no effective solution that fully prevents spills from occurring. This truth is why it's important for us to prepare for oil spills in advance. The Lower Columbia River Geographic Response Plan is shared between Washington State and Oregon. We are hopeful that the updated plan will help the response community be better prepared to protect sensitive natural, cultural, and economic resources when spills do occur. Comments from the public about the plans we are working to update/develop are valuable because we believe that the people that live and work in the communities covered by the plans will always know more about those areas than we do, especially as it relates to the location of sensitive resources important to them. The plans we develop may seem related to recent facility proposals in the area, but they are not. Geographic Response Plans are focused on the protection of sensitive resources after a spill occurs, regardless of the spill source (be it road/highway, rail, pipeline, vessel, or something else).

Comment: What measures exist and/or will be implemented to assess, repair, and maintain rail to a condition suitable to CBR transport- especially in areas where derailment would impact state waters? (2)

Response: The determination of measures to assess, repair, and maintain rail systems in Washington State falls outside the scope of this plan update.

Comment: What type of risk assessment work will be conducted to analyze geologic hazards to rail lines- especially sections close enough that a derailment would significantly impact state waters? (2)

Response: The work to assess and analyze geologic hazards along rail lines in Washington State falls outside the scope of this plan update.

Comment: What resources are available to immediately respond to a crude by rail release to State Waters? Does this include immediate access to MSRC resources? (2)

Response: The type, amount, and location of response equipment in or near the Lower Columbia River can be found on the Western Response Resource List (WRRL) at www.wrri.us. Response times for equipment would vary depending on the spill location and the current "home base" or staging location for response equipment. A listing of Primary Response Contractors is available at <http://www.ecy.wa.gov/programs/spills/preparedness/prc/Prc.htm>; MSRC is on the list but we can't say if their resources would be available for spill response since it depends on a contractual relationship between the spiller/responsible party and MSRC.

Comment: The potential of an oil spill is not adequately addressed by identifying the rail corridor on the area maps or section maps provided. (5)

Response: All rail corridors, highways/roadways, vessel movements, and oil pipelines in the geographic area represent oil spill risks. For the purposes of this plan, it's not practical to designate every mile of track, highway, and pipeline or every river mile and stream crossing as a Potential Oil Spill Origin Point (PSOP). Where one or more spill risks cross or run near each other, the chance of a spill occurring at or near that location is increased. This parity increases the likely hood that such a location would be designated as a PSOP. Where multiple risks are separated by some distance but remain in the same general area, the specific location of a PSOP may be normalize; made a point central to all significant risks in that area. Potential Oil Spill Origin Points (PSOPs) are important because each one directly relates to a unique priority table in Section 4.3.2 that lists the order response strategies should be deployed based on the nearness of a spill source to a PSOP. Within the context of this plan we feel the number and location of PSOPs are adequate.

Comment: Strategies rely on average wind speeds. There doesn't appear to be any contingencies or response strategies for storm events which occur consistently throughout the region. (5)

Response: We agree that strong storms with high winds and flooding can occur in the area. How this might limit the implementation of GRP response strategies isn't known because much would depend on the extent of damage and flooding, road/highway closures, the oil spill location, type and amount of oil product spilled, and a myriad of other factors. In such a case, efforts to implement GRP response strategies would be a lower priority than the safety of the public, responder safety, and control and containment of a spill at or near the source. As capacity allows, attempts would be made to deploy the response strategies provided in this plan as written, but as stated in Section 4.1.1, response managers and responders must remain flexible and modify the strategies as needed to meet the challenges experienced during an actual response. It's highly likely that strategy locations that can't be safely accessed wouldn't have strategies deployed. This wouldn't preclude an Incident Commander or Unified Command from developing adhoc response strategies to help compensate for a GRP strategy that wasn't implemented. In all of this it's important to recognize that other plans, beyond this Geographic Response Plan, are used to help guide response actions, including facility, pipeline, and vessel contingency plans, rail plans, the Northwest Area Contingency Plan, and ICS-201 followed by an Incident Action Plan (a plan specific to the incident itself).

Comment: The proposed GRP considers only small isolated spills and doesn't plan or strategize for a spill from a unit train. (5)

Response: Potential spills from trains along rail routes were considered in the development of this plan, but it's important to recognize that Geographic Response Plans (GRPs) focus solely on the implementation of response strategies (primarily boom in the water strategies) to collect oil off of the water before sensitive resources are impacted or to deflect and exclude oil away from those resources (natural, cultural, and economic). The ICS-201 form followed later by the Incident Action Plan (plans specific to the incident itself) would include objectives and actions related to source control and containment, and other response activities beyond anything provided in this GRP.

Comment: The report as presented apparently recommends and believes that the GRP plan can solve and mitigate the potential loss of livelihood *for many* who depend on healthy marine resource jobs. (5)

Response: This plan is focused solely on sensitive resource protection after an oil spill to water occurs, regardless of the spill source. It's not intended to represent everything that could, should, or would be done to protect public safety and the environment. The ICS-201 form followed later by the Incident Action Plan (plans specific to the incident itself) would include objectives and actions related to source control and containment, and other response activities beyond anything provided in this Geographic Response Plan.

Comment: The only way to plan for an oil spill is a plan to keep it in the ground. We know from science that 80% of already identified fossil fuel sources must be kept in the ground to prevent catastrophic warming. We have little time left to stop harvesting fossil fuels. That is the correct solution. (6)

Response: Thank you for sharing your concerns and taking the time to read the plan. Your comment is noted and appreciated.

Spill Response Contact Sheet

Comment: The Skamania County Sheriff is not listed as a local agency contact. There are waterways in Skamania County listed in your document so I feel it is important to have us listed as a Local Agency for contact information. Please add "Skamania County Sheriff (509) 427-9490" to the Spill Response Contact Sheet. (3)

Response: Based on your comment, contact information for the Skamania County Sheriff's Office has been added to the plan.

Comment: On Page ii under Washington State “Dept of Fish and Wildlife” add "Oil Spill Team (360) 534-8233*." (7)

Response: Based on your comment, the contact information for the Washington State Department of Fish and Wildlife has been updated.

Comment: On page ii under Washington State "Dept of Fish and Wildlife" edit "Emergency HPA Assistance" to read "Non-spill related Emergency HPA Assistance." Also add “Spill-related Emergency HPA Assistance (360) 534-8233*” to the Spill Response Contact Sheet under Washington State "Dept of Fish and Wildlife." (7)

Response: Since the WDFW Oil Spill Team is always consulted about spills where an emergency HPA might be required, contact information for HPA assistance won’t be included on the Spill Response Contact Sheet in the plan.

Chapter 2 – Site Description

Comment: This GRP does an adequate job of presenting current risk posed by crude by rail unit trains and pipelines, however, more exact volumes should be presented as they are received and updated along with future GRP updates. Risks posed by mechanically or geologically caused derailment as well as threat of terrorism should be addressed. We must do all we can to identify and mitigate the risks to rail and pipelines carrying oil and other hazardous substances. (2)

Response: The risk assessment in Chapter 2 is an overview of oil spill risks in the area rather than a list of all causal factors that might lead to a spill, such as a train derailment, terrorism event, or earthquake. Rail and pipeline spill risks are properly mentioned given the purpose of the plan. GRPs are a part of the larger Northwest Area Contingency Plan which also contains information on oil spill risks, as do plans from industry and Local Emergency Planning Committees.

Comment: The Lower Columbia River GRP cannot be considered complete and adequate until a CBR risk analysis is completed considering oil handling proposals currently under review and; a maintenance, monitoring and response plan is developed comparable to the risk posed and presented to the public for review and comment. (2)

Response: A Crude by Rail (CBR) risk analysis and the development of a maintenance, monitoring and response plan for CBR falls outside the scope of the GRP update and development process.

Chapter 4 – Response Strategies and Priorities

Comment: There are over 100 river, stream and tributary crossings (most of which are fish-bearing) *in this GRP area*. Yet there are only 193-listed response strategy locations in the subject area, many of which are not poised along the rail corridor. (5)

Response: The response strategies in the Lower Columbia River Geographic Response Plan don't represent everything that could, should, or would be done to protect sensitive resources during an oil spill. Other plans exist that would help guide response actions, including control and containment of an oil spill at or near the source. Other plans include the Northwest Area Contingency Plan (NWACP), the ICS-201 form followed by the development of an Incident Action Plan (IAP), any U.S. Department of Transportation/Federal Rail Administration required oil spill response plans for rail, and Washington State approved contingency plans for any regulated facilities, pipelines, or vessels involved in an oil spill incident.

Ecology believes the response strategies provided in Chapter 4 of the Lower Columbia River Geographic Response Plan are “doable” and should have a chance of being successfully implemented after a spill occurs. Not all rivers, creeks, streams, wetlands, or flood plains can be fully or even partially protected from a spill, but we attempt to rectify this through the update of this existing plan.

In the evaluation of potential response strategy locations there are several factors that limit us from developing response strategies in more areas, including: heavy vegetation, high river/creek banks, poor anchoring points, poor site access, private property access issues, stream hydrodynamics, surface and underwater obstructions, worker safety issues, and the potential to do more harm to sensitive resources than good. Ecology welcomes any information you might have on additional sites of interest, so they can be evaluated for their potential as a response strategy location during future updates to this plan. Please send any information about potential response strategy locations to GRPs@ecy.wa.gov.

Comment: There is no indication where and if response assets have already been in place. (5)

Response: Information on the location, amount, type, and kind of response equipment available in the Pacific Northwest can be found on the Western Response Resource List (WRRL) at <http://www.wrrl.us>. If warranted, depending on the size and extent of the spill, additional response personnel and equipment would be cascaded into the area as needed. This "ramping" or “cascade” approach is consistent with Section 1000 of the Northwest Area Contingency Plan (NWACP) where it says "the response to a spill incident should be promptly 'ramped-up' to provide adequate equipment and trained

personnel to effectively respond to the highest quantity of product that will most likely be released."

Comment: The GRP, as designed, is for "floating" oil and does not address submerged or sinking oils. (5)

Response: Correct. As mentioned in Section 4.1.1, the response strategies provided in the plan are designed for use with persistent heavy oils that float on water and may not be suitable for other petroleum products or hazardous substances.

Comment: The GRP does not compensate for booming inadequacies in fast-moving and/or tidally influenced waters. (5)

Response: The information in the tides and currents section of Chapter 2 (Section 2.5) was considered in the development of the GRP response strategies provided in this plan. Conditions on local streams are not static. As provided in Section 4.1.1 we trust the professional judgment of response contractors to modifying strategies as needed to meet the challenges experienced during an actual response.

Comment: There is a different strategy and adequacy necessary for response resources, depending on whether it is a persistent or non-persistent oil. The fate and effects of these spills into the waterway are different. (5)

Response: As stated in Section 4.1.1 of the plan, these GRP response strategies are designed for use with persistent heavy oils that float on water and may not be suitable for other petroleum products or hazardous substances.

Comment: On page 4-127, include the contact for the Knappton boat launch (BL-LCR-17.7R) as WDFW Region 6, 48 Devonshire Road, Montesano, WA 98563, Telephone (360) 249-4628. (7)

Response: After the draft plan was published, a number of boat launches and staging areas in Oregon were added. The Knappton boat launch is no longer the closest launch to a number of strategies and, because of this reason, was removed from the plan.

Comment: In the Chapter 4 (4-114) and Appendix 48 (48-3) the document indicates that the District will be notified of an oil spill and take action to protect resources including shutting down the pumps at the Burris Creek Pump Station. The Supervisors are concerned that if the document is adopted as written they will be required to turn off

the pumps regardless of the stream flow levels. Under certain conditions this would cause flooding in the District. The District is requesting that a statement is added to the sections that states, "This District will only shut down the Burris Creek Pump Station if turning off the pumps will not cause flooding of the surrounding area." (4)

Response: The wording of notification strategy BURRC-0.05-N has been changed to reflect that the decision to shut down pumps (or not shut them down) will be made by CCID#2, based on the potential risk of flooding.

Chapter 6 – Resources at Risk

Comment: On page 6-1, insert following text immediately below section title: "Most biological communities are susceptible to the effects of oil spills. Plant communities on land, eelgrass and marsh grasses in estuaries, and kelp beds in the ocean; microscopic plants and animals; and larger animals, such as fish, amphibians and reptiles, birds, mammals, and a wide variety of invertebrates, are all at potentially at risk from smothering, acute toxicity, and/or the chronic long-term effects that may result from being exposed to spilled oil." (7)

Response: Based on your comment, the wording in Section 6.2 has been updated.

Comment: There have been recent changes to the T&E lists. On page 6-2, under "Birds" add "Tufted Puffin [SE]" (7)

Response: Based on your comment, Section 6.2 has been updated.

Comment: There have been recent changes to the T&E lists. On page 6-3, under "Mammals:" remove "Stellar Sea Lion [Fco/ST]" (7)

Response: Based on your comment, Section 6.2 has been updated.

Comment: On page 6-3, under "Fish:/"Pacific Lamprey [FCo]" move "River Lamprey [Fco]" to a separate line. (7)

Response: Based on your comment, Section 6.2 has been updated.

Comment: On page 6-4, under “Invertebrates” edit “Fender's blue butterfly" to read "Fender's blue butterfly [FE]." (7)

Response: Based on your comment, Section 6.2 has been updated.

Comment: On page 6-4, under the bullet labeled "Sloughs and back water channels ..." edit the sentence to read " ...and provide feeding and resting areas for a variety of birds, including waterfowl and herons." (7)

Response: Based on your comment, Section 6.2.1a has been updated.

Comment: In the 4th bullet on page 6-5, split this paragraph to create another bullet beginning with the 2nd sentence. (7)

Response: Based on your comment, Section 6.2.1b has been updated.

Comment: On page 6-16, consider adding a new section (6.5.4?) titled "Pre-cleaning of shorelines." In the new section, insert the following text: “Pre-cleaning” refers to the removal of loose material (typically organic) from a shoreline before it is affected by an oil spill. Before starting any beach pre-cleaning, the Operations Section should provide the Environmental Unit Leader (Planning Section) with a list of shorelines (with location descriptions) being considered for pre-cleaning. The Environmental Unit will consult with the Wildlife Branch and the Natural Resource Damage Assessment (NRDA) group to determine whether the proposed pre-cleaning will conflict with other resource protection or NRDA goals or activities. Environmental Unit staff will report back to the Operations Section with an evaluation of the proposed beach pre-cleaning." (7)

Response: Information about the pre-cleaning of shorelines, pre-oiling debris removal, or pre-spill debris collection is an advanced tactic that would be considered by the Environmental Unit after a Unified Command is formed. A decision about the appropriateness of pre-cleaning shorelines falls outside the scope of this plan and, therefore, is not included.

Comment: On page 6-16, I wasn't able to confirm the basis for the first two sentences relative to “take” associated with marine mammals. I recommend deleting the first and second sentences of this paragraph. Additionally, with regard to the 3rd sentence, I recommend striking the words "...and recommend..." because, as written, it could be inferred that hazing operations will be conducted by default - which may not be the case. (7)

Response: Based on your comment, Section 6.5.2 has been updated.

Comment: On page 6-16, 3rd sentence, insert "...of oiled wildlife..." after the word "observations." (7)

Response: Based on your comment, Section 6.5.3 has been updated.

From: [Jean Avery](#)
To: [ECY RE Geographic Response Plans](#)
Subject: Comment on LCR-GRP
Date: Monday, June 01, 2015 1:44:16 PM

I am a resident of Washington State, and I would like to comment on the Lower Columbia River Geographic Response Plan. I am also an avid hiker who treasures this area's natural beauty and recreational assets.

I started to read the Response Plan, but immediately felt sick to my stomach. No matter how thorough any response planning is, such planning cannot prevent oil spills from happening. I find it short-sighted to skip over the obvious-- that oil spills will happen -- and to shift the focus to fine-tuning a response plan. In my view, ANY oil spill is one to many; rather, I believe we need a zero-tolerance policy toward oil spills.

The plan that needs to be developed, in my view, is one that guarantees there will be no spills. If that is not possible, then any oil-related proposal should be rejected.

Sincerely,
Jean M. Avery
Vancouver, WA



June 4, 2015

Washington Department of Ecology
Spill Prevention, Preparedness, and Response (GRPs)
P.O. Box 47600
Olympia, WA 98504-7600

Subject: Lower Columbia River Geographic Response Plan

To Whom It May Concern:

Please accept these comments from the Washington State Department of Natural Resources (DNR) regarding the Lower Columbia River Geographic Response Plan (GRP).

DNR is the manager of over 3 million acres of state trust lands comprised of forest, range, commercial, and agricultural lands, and 2.6 million acres of state-owned aquatic lands (SOAL). State ownership of the lower waters of the Columbia River are shared between Washington and Oregon with the Line of Navigability serving as the border. The state owned aquatic lands on the Washington side of river are managed by the Department of Natural Resources for the citizens of the state.

Oil spills represent the single greatest risk of catastrophic impact to resources on SOAL. DNR would like to commend the Department of Ecology for updating the GRP for this valued waterbody and appreciate the opportunity to comment.

Prevention is the most productive effort to ensure oil spills do not harm aquatic resources, citizens and the economy of Washington that depends on these resources. We have a legislative mandate to seek methods to achieve a zero spills status in this state; although we have one of the most comprehensive spills programs in the nation, we have yet to attain this goal.

There is an unpredictable nature to spills and we must do all we can to ensure maximum recovery when all preventative measures have failed. GRPs are an excellent strategy to ensure an immediate productive response until a proper oil spill trajectory can be constructed and response strategy developed. Time is of the essence when trying to ensure maximum recovery can be achieved. With this said, we must acknowledge that on average maximum recovery is 20% or less for most major oil spills. It is DNR's hope that effective preparedness measures such as GRPs will improve recovery numbers for spills in Washington State.

GRPs cannot be considered complete until all hazards are properly identified. Where these hazards have not been mitigated for, GRPs must be developed to respond effectively and

efficiently. In a riverine system, this means time is of the essence and adequate equipment and personnel must be staged accordingly. As risks increase so should the level of preparedness.

This GRP does an adequate job of presenting current risk posed by crude by rail unit trains and pipelines, however, more exact volumes should be presented as they are received and updated along with future GRP updates. Risks posed by mechanically or geologically caused derailment as well as threat of terrorism should be addressed. We must do all we can to identify and mitigate the risks to rail and pipelines carrying oil and other hazardous substances.

There currently exists a large gap in contingency planning by the State. Oil handling facilities are held to a high planning standard, yet rail lines and pipelines moving crude oil are not yet held to these same standards.

Legislative mandates to conduct rulemaking regarding CBR transport contingency planning are currently being finalized (see SHB-1449). It is DNR's hope that this rulemaking results in proper oversight of CBR hazard mitigation. Until these planning efforts are complete, and necessary mitigation efforts taken, DNR must express strong concern regarding current state of preparedness and gap in GRP planning. We encourage the Department of Ecology to move forward as quickly as possible to fill this gap by completing all necessary rulemaking and planning efforts.

We ask Ecology to consider and address the following questions in its rulemaking/planning efforts to mitigate risk and enhance GRP development:

1. What measures exist and/or will be implemented to assess, repair, and maintain rail to a condition suitable to CBR transport- especially in areas where derailment would impact state waters?
2. What resources are available to immediately respond to a crude by rail release to State Waters? Does this include immediate access to MSRC resources?
3. What type of risk assessment work will be conducted to analyze geologic hazards to rail lines- especially sections close enough that a derailment would significantly impact state waters?

DNR recommends the following risk assessment work to analyze geologic hazards along rail lines and pipelines that will carry crude oil and other hazardous substances:

- a) Identify both shallow and deep-seated landslide hazards using DNR's GIS Statewide Landslide database and then create a site-specific geologic map. In areas with no existing landslide inventory, create a shallow landslide database using historic aerial imagery and other spatial data in a GIS;
- b) Evaluate riverbank sloughing and subaqueous landslide hazards using bathymetry or similar

DEM data;

- c) Identify potentially unstable slopes using a lidar-based slope hazard assessment tool comparable to the Oregon Department of Geology and Mineral Industries protocol (Burns, W. J., and Madin, I. P., 2009, Landslide protocol for inventory mapping of landslide deposits from light detection and ranging (lidar) imagery: Oregon Department of Geology and Mineral Industries Special Paper 42, 30 p., geodatabase template) in a GIS. Acquire Lidar as needed;
- d) Identify slope hazards associated with slope modification or vegetation removal at construction areas- especially in areas where rail expansion and/or repair may be needed to handle increased CBR transport; and
- e) Evaluate earthquake hazards including earthquake-induced liquefaction and other earthquake-induced ground failures.

The above mentioned assessments are critical to completing an adequate GRP. Sufficient equipment and personnel must be staged along railways to ensure GRP implementation is immediate and effective should an incident occur, again acknowledging that prevention through proper maintenance and design is where dollars are best spent. The level of equipment and personnel along rail should increase comparable to increased risk posed by volumes moving along route.

The Lower Columbia River GRP cannot be considered complete and adequate until:

- 1) A CBR risk analysis is completed considering oil handling proposals currently under review and
- 2) A maintenance, monitoring and response plan is developed comparable to the risk posed and presented to the public for review and comment.

Should you have any questions regarding these comments, please do not hesitate to contact me at (360) 902-1064. If you have questions specific to geologic hazard risk assessment please contact, Tim Walsh, our State Chief Hazards Geologist at (360) 902-1432.

Sincerely,



Shayne Cothorn
Spill Response Coordinator
Department of Natural Resources

cc: Kristin Swenddal, Aquatics Division Manager
Dave Norman, Geology Division Manager
Matt Niles, Assistant Division Manager, Rivers District

From: [Larry Douglass](#)
To: [Chichester, Harry \(ECY\)](#)
Subject: Draft Oil Spill Response Plan for the Lower Columbia River is Now Available! Lower Columbia River GRP
Date: Tuesday, May 12, 2015 1:48:18 PM

Mr. Chichester,

Comments from our County:

The Skamania County Sheriff is not listed as a local agency contact.
There are waterways in Skamania County listed in your document so I feel it is important to have us listed as a Local Agency for contact information.

Skamania County Sheriff (509) 427-9490

Thank You

Larry Douglass
Skamania County
Public Works Director
PO Box 790
Stevenson, WA 98648
509-427-3911
360-624-8359
Office Hours: Monday - Thursday
7:30 - 5:30
[*douglass@co.skamania.wa.us*](mailto:douglass@co.skamania.wa.us)

<http://www.skamaniacounty.org/public-works/>

CONSOLIDATED DIKING IMPROVEMENT DISTRICT NO. 2

of Cowlitz County, Washington

Engineer's Office

1600 – 13th Avenue South
Kelso, WA 98626
(360) 577-3030
Washington Relay Service 711 or (888) 833-8633

Maintenance Building

526 North Dike Road
P.O. Box 461
Woodland, WA 98674
(360) 225-8935

June 8, 2015

Washington Department of Ecology
Spills Program – Preparedness / GRPs
GRPs@ecy.wa.gov

SUBJECT: Draft Oil Response Plan for the Lower Columbia River

Dear Sirs and Madams:

Thank you for the opportunity to review the Draft Oil Spill Response Plan for the Lower Columbia River. We have one comment that we would like considered.

In the Chapter 4 (4-114) and Appendix 4B (4B-3) the document indicates that the District will be notified of an oil spill and take action to protect resources including shutting down the pumps at the Burris Creek Pump Station. The Supervisors are concerned that if the document is adopted as written they will be required to turn off the pumps regardless of the stream flow levels. Under certain conditions this would cause flooding in the District. The District is requesting that a statement is added to the sections that states, "This District will only shut down the Burris Creek Pump Station if turning off the pumps will not cause flooding of the surrounding area."

If you have any questions or would like to discuss this item, please feel free to contact me at eugeniss@co.cowlitz.wa.us or (360) 577 – 3030 extension 6538.

Sincerely,



SUSAN EUGENIS, P.E.
Diking Engineer

From: [Arthur \(R.D.\) Grunbaum](#)
To: [Chichester, Harry \(ECY\)](#)
Subject: CHER GRP/Lower Columbia River
Date: Wednesday, May 13, 2015 2:52:47 PM
Attachments: [FOGH Comments Chehalis River GRP.pdf](#)

Attached please find comments in reference to the Chehalis River GRP. These would also apply to the Lower Columbia River Plan.

Thanks,
R.D.

Arthur (R.D.) Grunbaum
FOGH (Friends of Grays Harbor)
P.O. Box 1512, Westport, Washington 98595-1512
rd@olearycreek.com
rd@fogh.org
<http://www.fogh.org>
FOGHphone/fax (360) 648-2254
(360) 648-2476 direct
Cell Phone (206) 769-1123

FOGH is a broad-based 100% volunteer tax-exempt 501(c)(3) citizens group made up of crabbers, fishers, oyster growers and caring citizens. The mission of FOGH is to foster and promote the economic, biological, and social uniqueness of Washington's estuaries and ocean coastal environments. The goal of FOGH is to protect the natural environment, human health and safety in Grays Harbor and vicinity through science, advocacy, law, activism and empowerment. Your tax-deductible contribution can help FOGH maintain the quality of Central and Southwest Washington's coastal environment.



May 7, 2015

United States Environmental Protection Agency
Region 10
Office of Environmental Cleanup
1200 Sixth Avenue
Room ECL-116
Seattle, WA 98101

Washington State Department of Ecology
Spill Prevention, Preparedness, and Response (GRPs)
P.O. Box 47600
Olympia, WA 98504-7600

In Re: Chehalis River Geographic Response Plan (CHER GRP) 2015 Draft

Sent via email: GRP@ecy.wa.gov; epa-seattle@epa.gov

To Whom It May Concern:

Thank you for this opportunity to review and comment on the above referenced draft plan dated April, 2015. We hope our input will be of assistance in making decisions that will benefit the economy, environment, visitors and residents of this important watershed. We incorporate by reference comments submitted by the Washington Environmental Council, Climate Solutions, Friends of the Earth, Sierra Club, Forest Ethics, Washington Dungeness Crab Fisherman's Association, Grays Harbor Audubon, Grays Harbor/Willapa Oystergrowers Association, Arnie Martin, Brady Engvall and the Quinault Indian Nation.

FOGH is a broad-based 100% volunteer tax-exempt 501(c)(3) citizens group made up of crabbers, fishers, oyster growers and caring citizens. The mission of FOGH is to foster and promote the economic, biological, and social uniqueness of Washington's estuaries and ocean coastal environments. The goal of FOGH is to protect the natural environment, human health and safety in Grays Harbor and vicinity through science, advocacy, law, activism and empowerment.

We oppose locating any crude oil or other fossil fuel terminals in the State of Washington and especially its presence along our Washington estuaries, rivers and coast. Crude oil presents a threat to human health and safety from the time it is extracted to when it is burned. Washington State is a leader in clean energy and should not be approving the transport and storing of so dangerous a fossil fuel. In addition, the increase in rail traffic creates a multitude of serious problems for local communities and the environment along the rail routes.

We find the Chehalis River GRP woefully inadequate. It appears to be just another exercise in spinning an illusion that the procedures described could avert or mitigate a catastrophe along our rivers and streams, in our estuaries, and/or on our ocean coast and to the livelihoods of those who depend on healthy marine resources (31% Grays Harbor, 36% Pacific County).

It seems to be a fatal flaw that the potential of an oil spill is not adequately addressed by identifying the rail corridor on the area maps or section maps provided. This conceptually hides the impact potential of a spill. We are concerned that there are over 100 river, stream and tributary crossings (most of which are fish-bearing) on the route from just Centralia to Hoquiam. Yet there are only 65-listed Response Strategy Locations in the subject area, many of which are not poised along the rail corridor. For example CHER-1A does not indicate where the rail tracks are

located. With the potential for 1-1/2 mile long unit trains, the significance of strategically placed assets are essential to any response. In just the past 2 years there have been ten rail explosions, with no end in sight. The PSAP short-line, now owned by Genessee and Wyoming Rail, suffered three derailments in as many weeks as it made its way from Centralia to downtown Aberdeen.

Treaty and non-treaty tribes, such as the Quinault Nation, Hoh, Jamestown S’Klallam, Lower Elwha Klallam, Quileute and Makah tribes have lived and utilized the waters and lands of the Olympic Peninsula, Pacific Northwest ocean, the estuaries of the Columbia River, Willapa Bay and Grays Harbor, for tens of generations. They depend on the delicate balance that nature provides to sustain their culture and subsistence. The natural flow of waters during flood events depends upon healthy and natural storage of wetlands and riparian areas. Any interruption of natural processes of air, earth and water only exacerbates problems elsewhere - usually downstream or elsewhere into the ocean and estuaries. Additionally, since the late 1800’s, generations of non-native fishers, crabbers and shellfish gatherers have accessed the economic bounty of the coastal area provided in part by the drainage of the Chehalis River watershed. The introduction of crude oil into these areas can only further threaten to destroy these critical components of their combined cultures and heritage.

We are concerned that despite present hazardous materials being shipped via these rail corridors, there is no indication where and if response assets have already been in place.

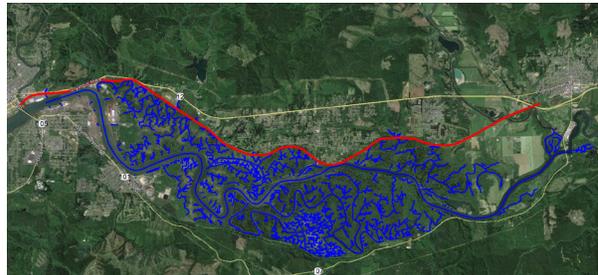
We are concerned that the strategies rely on average wind speeds based on readings from the Hoquiam Airport at Bowerman Field. There doesn’t appear to be any contingencies or response strategies for storm events which occur consistently throughout the region.

We are concerned that the proposed GRP considers only small isolated spills and doesn’t not plan or strategize for a spill from a unit train that may contain as much as 3 million gallons of crude and may have an associated fire or explosion.

We are concerned that the GRP, as designed, is for “floating” oil and does not address submerged or sinking oils. Nor does this plan for or compensate for booming inadequacies in fast-moving and/or tidally influenced waters.

We are concerned that there doesn’t appear to be a special strategic plan for the Chehalis Surge Plain and its associated wetlands. There is a different strategy and adequacy necessary for response resources, depending on whether it is a persistent or non-persistent oil. The fate and effects of these spills into the waterway are different.

The Chehalis Surge Plain hosts over 136 miles of tidally influenced shorelines. A spill anywhere along this part of the route would be particularly devastating to this important ecosystem. The rail route is depicted in red.



We are concerned that the report as presented apparently recommends and believes that the GRP plan can solve and mitigate the potential loss of livelihood of approximately 31% of the Grays Harbor workforce who depend on healthy marine resource jobs – a figure which excludes tribal contribution. These proposals are located in a tsunami and liquefaction zone with a 65% chance of a 6.0 or greater earthquake. Spills, accidents or catastrophic occurrences will happen within the life expectancy of these proposals. A Cascadia Subsidence would drop the landform and surrounding area by 2 meters or roughly 6-1/2 feet and would place approximately 113,000,000 gallons of stored crude oil at or below sea level.



A spill in one of our fast-moving waterways presents a great challenge when a water-in-oil emulsion (“mousse”) occurs as a result of high-energy mixing. The resulting mousse has properties that prevent dispersion into the water column and clean up becomes ineffective if not impossible.

Environmental fate, effects, and transport of released crude oil, dispersed oil, and dispersants on human health and the environment need to be carefully documented and studied. Spills, explosions, fires, and blowouts can have multiple environmental and public health impacts, which need to be quantified and analyzed for their economic impacts. Operational discharges of produced water, drill cuttings, and mud have chronic effects on benthic (bottom-dwelling) marine communities, mammals, birds, and humans. Humans can also be affected by occupational exposure to oil and other chemicals while participating in response and cleanup operations, or by environmental exposure such as ingesting oil-contaminated seafood. The GRP doesn’t appear to consider these issues nor offer strategies once they occur.

Marine mammals are affected by the oiling of their fur and skin, and through consumption of oil-contaminated foods (e.g., mussels, clams, oysters and other benthic organisms), or via inhalation of fumes that have liver, kidney, and central nervous system toxicity. The marine mammals most commonly affected in a riverine area include river otters. Otters are particularly vulnerable as they feed near the surface, have little blubber, and depend upon an intact fur coat to maintain their body temperature. Research is needed to better understand these impacts and how to mitigate the effects of an oil spill before it has affected the species at risk, including humans. Ecotoxicity research is needed in areas beyond human health effects, including research about effects on animals and other aspects of the environment.

The safe transportation of crude oil is complicated by the varied nature of the product itself. Bakken crude oil is inherently volatile with a flash point of under 74° F and vapor pressure similar to gasoline. An additional and serious danger is often the amount of dissolved natural gas and volatile organic compounds within the crude. This gas affects the vapor pressure of the crude. When contained in tank cars or other vessels, the vessel itself can become highly pressurized, almost like a soda can. The vapor pressure of a liquid, which varies with temperature, is a measure of how much vapor the liquid releases during evaporation. Materials with high vapor pressures tend to burn more violently because the liquid can change into vapor more readily, feeding a fire. The classification and packaging of crude oil does not currently account for vapor pressure. While the spike in Bakken crude oil has focused attention on the transportation of crude oil into Washington, there is also a concern over the possibility of transporting Canadian Tar Sands crude oil through the state. Canadian Tar Sands oil presents a different set of challenges to effective prevention and response. Tar Sand oil is less volatile than Bakken crude oil, but can become heavier than water and will sink to the bottom of any waterway particularly after volatile diluents have evaporated. If transported through Washington State, the Canadian tar sands crude oil would travel along, or on many of the state’s major waterways, including the salmon-critical Columbia River and Chehalis River. Leaving the city of Chehalis it would pass over 100 rivers, tributaries and streams on its way to Hoquiam. . Since Tar Sand oil sinks when introduced to water, different spill response equipment and protocols would be needed. The Bakken Crude also was been shown to sink and persist as we learned from the Lac Megantic disaster.

Rail condition coming from Centralia to Hoquiam is completely inadequate to handle oil trains and has been shown by the recent derailments of grain trains, may not be adequate to handle any heavy load commodity. A detailed study of the conditions of the bed, ties, rails, crossings and bridges must be undertaken and quantified. Financial responsibility must be determined before any crude oil is transported.

We hope that you will consider and respond directly to our concerns as you further develop this plan.

Sincerely,



Arthur (R.D.) Grunbaum
President



From: [Emily Herbert](#)
To: [ECY RE Geographic Response Plans](#)
Subject: Washington Oil Spill Plan
Date: Saturday, May 30, 2015 2:19:48 PM

The only way to plan for an oil spill is a plan to keep in in the ground. We know from science that 80% of already identified fossil fuel sources must be kept in the ground to prevent catastrophic warming. We have little time left to stop harvesting fossil fuels. That is the correct solution.

Best for All Creatures,
Emily Herbert
2120 NE Halsey #29
Portland, OR 97232
541-408-1516

From: [Macdonald, Brian F \(DFW\)](#)
To: [ECY RE Geographic Response Plans](#)
Cc: [Chichester, Harry \(ECY\)](#)
Subject: Review Comments - Lower Columbia River GRP
Date: Thursday, June 04, 2015 2:56:16 PM
Attachments: [Lower Columbia Rv GRP Review WDFW_06042015.xlsx](#)

To whom it may concern.

The WDFW Oil Spill Team has reviewed the draft Lower Columbia River GRP and our comments and suggestions may be found in the attached document.

Please contact me directly if you have any questions concerning any of these comments.

Thank you for your consideration.

Regards,

Brian MacDonald, Oil Spill Planning and Response Specialist
WA Dept. Fish & Wildlife, Habitat Program, Protection Division
Phone: (360) 902-8122, Email: brian.macdonald@dfw.wa.gov
Mail: 600 Capital Way N; Olympia, WA 98501, MailStop: 43143

Item	Section	Page	Issue	Recommendation
1	Contact Sheet	ii	Incomplete information	Under "Washington State"/"Dept of Fish and Wildlife" add "Oil Spill Team (360) 534-8233*".
2	Contact Sheet	ii	Incomplete information	Under "Washington State"/"Dept of Fish and Wildlife", edit "Emergency HPA Assistance" to read "Non-spill related Emergency HPA Assistance".
3	Contact Sheet	ii	Incomplete information	Under "Washington State"/"Dept of Fish and Wildlife" add "Spill-related Emergency HPA Assistance" (360) 534-8233*".
4	4.5.1	4-127	Incomplete information	Contact for the Knappton boat launch (BL-LCR-17.7R) is: "Region 6, 48 Devonshire Road, Montesano, Washington 98563 Telephone (360) 249-4628"
5	6.2	6-1	Incomplete information	Insert following text immediately below section title: "Most biological communities are susceptible to the effects of oil spills. Plant communities on land, eelgrass and marsh grasses in estuaries, and kelp beds in the ocean; microscopic plants and animals; and larger animals, such as fish, amphibians and reptiles, birds, mammals, and a wide variety of invertebrates, are all at potentially at risk from smothering, acute toxicity, and/or the chronic long-term effects that may result from being exposed to spilled oil."
6	6.2	6-2	Incomplete information	There have been recent changes to the T&E lists. Under "Birds" add "Tufted Puffin [SE]"
7	6.2	6-3	Incorrect information	There have been recent changes to the T&E lists. Under "Mammals:" remove "Stellar Sea Lion [Fco/ST]"
8	6.2	6-3	Formatting	Under "Fish:"/"Pacific Lamprey [FCo]" move "River Lamprey [Fco]" to a separate line.
9	6.2	6-4	Incomplete information	Under "Invertebrates:" / "Fender's blue butterfly" edit to read "Fender's blue butterfly [FE]"
10	6.2.1a	6-4	Editing	Under bullet "Sloughs and back water channels ...". Edit sentence to read " ...and provide feeding and resting areas for a variety of birds, including waterfowl and herons...."
11	6.2.1b	6-5	Formatting	4th bullet. Split this paragraph to create another bullet item, beginning with the 2nd sentence.

12	6.5.2	6-16	Possible incorrect information	Was not be able to confirm basis for the first two sentences relative to take associated with marine mammals. Recommend deleting the first and second sentences of this paragraph. In addition, with regard to the 3rd sentence, recommend stiking the words "...and recommend...". As written the it could be inferred that hazing operations will be conducted by default - which may not be the case.
13	6.5.3	6-16	Incomplete information	3rd sentence. Insert "...of oiled wildlife.." after the word "...observations....".
14	6-5	6-16	Incomplete information	Recommend adding new section (6.5.4?) titled "Pre-cleaning of shorelines". In the new section, insert the following text: "Pre-cleaning" refers to the removal of loose material (typically organic) from a shoreline before it is affected by an oil spill. Before starting any beach pre-cleaning, the Operations Section should provide the Environmental Unit Leader (Planning Section) with a list of shorelines (with location descriptions) being considered for pre-cleaning. The Environmental Unit will consult with the Wildlife Branch and the Natural Resource Damage Assessment (NRDA) group to determine whether the proposed pre-cleaning will conflict with other resource protection or NRDA goals or activities. Environmental Unit staff will report back to the Operations Section with an evaluation of the proposed beach pre-cleaning."