

RESPONSE TO COMMENTS

Middle Columbia River Geographic Response Plans (Bonneville, The Dalles, John Day, and McNary Pools)

Comments Received through May 15, 2015

We appreciate the time and effort all contributors provided in developing and submitting their comments on the draft version of the Middle Columbia River Geographic Response Plan (MCR-GRP). Although the MCR-GRP has subsequently been divided by pool into four separate plans, all comments received appear in the following pages. Comments have been 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) Joel Hogue, Elemental Services & Consulting, Inc.
- (2) Shayne Cothorn, Washington Department of Natural Resources
- (3) Brian MacDonald, Washington Department of Fish and Wildlife
- (4) Jess Wardwell, White Salmon Fire Department
- (5) Andrea Klass, Port of The Dalles
- (6) Brady Kent, Yakama Nation
- (7) Keith Hatch, Bureau of Indian Affairs
- (8) Stephanie Kranz, Tidewater Environmental Services
- (9) Lynn Burditt, U.S. Forest Service, Columbia River Gorge National Scenic Area
- (10) Ashton Bree Wesner, Berkeley University

General Comments:

Comment: Nothing in the MCR-GRP addresses verification of OSRO/Contractors/First Responder readiness through audits. These Audits have shown that both large and small companies, OSRO Classified and not are severely lacking in equipment, education, training and readiness. Nothing in the MCR-GRP addresses education or training of responders (public and private). (1)

Response: Verification of OSRO/Contractors/First Responder readiness through audits is a separate process that falls outside the scope of this plan. For Washington State, information on the verification of Primary Response Contractor (PRC) equipment and training can be found on Ecology's web site at <http://www.ecy.wa.gov/programs/spills/preparedness/prc/Prc.htm>. Information on the type/kind, home base, and ownership of response equipment throughout the state can be found on the Western Response Resource List (WRRL), available on line at <http://www.wrri.us>. Information about required contractor training, based on the roles staff would fill during a response can be found in Section E of the PRC application; available at <https://fortress.wa.gov/ecy/publications/documents/ecy070216.pdf>.

Comment: How will MCR-GRP be implemented in the event of an actual spill? The RP (Responsible Party) will typically implement their Response Plan - having an "agency" produced GRP causes confusion and competing priorities unless the RP and their OSRO/Contractor/First Responders are brought into the planning and buy into it. (1)

Response: GRPs are part of the RP's plan. There is no confusion or competing priorities during a spill. Responders train year round on the GRPs and they are a fundamental component of the response system in Washington.

More detail: Geographic Response Plans (GRPs) are part of the hierarchy of plans that guide responses to oil spills in the Pacific Northwest. They are contained in the Northwest Area Contingency Plan (NWACP).. Company specific contingency plans commit to and are consistent with both the NWACP and the GRPs. Geographic Response Plans in the Pacific Northwest are not solely owned, maintained, or developed by any one agency; all members of the Northwest Area Committee are included in the process. Local and tribal governments, industry, environmental groups, response contractors, and others are also invited to participate in the process. GRP specific information is included in every state approved contingency plan. Confusion about GRPs is reduced/eliminated through drills. A list of all companies holding Washington State approved contingency plans is available at <http://www.ecy.wa.gov/programs/spills/preparedness/cplan/cpmanagers.htm>.

Comment: This MCR-GRP is currently 1,169 pages. We acknowledge this includes many blank pages, comment pages and other pages that may not be included in the final produced Plan. Our experience has demonstrated that a Plan, regardless of the area it

covers that is over roughly 100 pages is too large to be effective and ultimately will not be implemented. Responders will simply be overwhelmed with the sheer size of the document and the data contained within and will revert to what they have been comfortable with. It is suggested the Plan Pools be broken down to smaller response areas and/or minimize countermeasure sites within each location. (1)

Response: Based on your comment, the MCR-GRP has been broken down into four separate and complete plans; one for each pool area.

Comment: In the 10+ years between the 2004 GRP and the 2015 GRP Update very little has changed in the Plan despite numerous "lessons learned," new and improved tactics and equipment and other technological advances. Given the quantity and type of oils being transported across North America, the lack of effective education and training and the lack of accountability of responders, this MCRGRP lacks actual "planning" which we think must occur as we move forward in the 21st Century. (1)

Response: Significant changes to the MCR-GRP have been made in the updated plans when compared to the existing plan from 2004. These changes include detailed 2-page information sheets in the appendices of Chapter 4; review and consideration of sensitive cultural resources (including submerged cultural resources) on both the Washington and Oregon sides of the river; alignment of certain response strategies with those previously created by BNSF for their Fallbridge rail line which runs adjacent to the Middle Columbia River; an increased number of on-shore or near-shore collection strategies that, if implemented, could remove oil from the water before downstream sensitive resources are impacted. Much support, including the on-site evaluation of new and existing strategy locations, was provided by response contractors. The GRPs as well as the larger NWACP reflect the changing oil movement, oil type and risks of the area.

Comment: There is no listing of river crossings for personnel and/or equipment in the MCRGRP. During an incident it is often the case that contractors and others from outside the area are working on the project and are not familiar with local roads and river crossings. We have found it extremely beneficial to include river crossings in our TRP's. (1)

Response: Your concerns regarding a list of river crossings are noted and may be considered in future updates to the plan.

Comment: The MCR-GRP descriptors and booming locations don't match the descriptors and booming locations in the Online ArcGIS Map Viewer. (1)

Response: We identified an issue with some of the strategy positions in the two pagers. This is being corrected. The GRPs will be republished. The Online ArcGIS Map Viewer and the published GRPs will reflect this change.

Comment: The Middle Columbia River GRP cannot be considered complete and adequate until a maintenance, monitoring and response plan is developed comparable to the risk posed and presented to the public for review and comment. (2)

Response: The development of a maintenance, monitoring and response plan falls outside the scope of the GRP update and development process.

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: As a first responder, it would be helpful to know who has the materials, what is the ETA of each piece of equipment to these areas. I also am aware that Bingen City Fire has a boom trailer to protect the Port of Bingen...but I did not see them mentioned in the plan. (4)

Response: Government and contractor owned equipment in the area is listed on the Western Response Resource List (WRRL), available on-line at <http://www.wrri.us>. In addition to any equipment in or near White Salmon, response personnel and equipment would be cascaded into the area as needed, depending on the size and scope of the spill incident.

Comment: Also, nothing seems to be noted regarding fire mitigation of an oil spill in the middle Columbia region. Should a fire occur on a derailed unit train, it would take immense amounts of class B foam. Are first response organizations authorized to deploy such tactics along this water way? If not, what alternatives do we have? (4)

Response: After an incident occurs the response would initially fall under an Incident Command (IC) structure, led by an incident commander from local fire, police, or emergency management. As a significant incident grows and develops, a Unified Command (UC) response structure would form, replacing the IC. The UC would consist of a Federal On-Scene Coordinator (FOSC), a State On-Scene Coordinator (SOSC), Local and Tribal On-Scene Coordinators (LOSC/TOSC), and the Responsible Party's Representative (RP). Decisions on whether to extinguish a fire (and how) or let it burn are incident specific and fall outside the scope of this plan. Ultimately, such a decision would be up to the IC or UC, as appropriate.

Comment: Who is responsible for notifying the river users (windsurfers, fishers, etc.) in the event of a spill, so we may remove them from the oil flow? (4)

Response: Oil spill notifications to waterway users would occur through various means depending on the location, size and scope of the incident. For instance, after a spill into a waterway like the Middle Columbia River occurs, Ecology or staff within an Incident Command (IC) or Unified Command (UC) structure would notify other state agencies; including Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Washington State Department of Health, Washington State Parks and Recreation Commission, and the Department of Archaeology and Historic Preservation. In the same manner, tribal nations and county or municipal agencies would also be notified. In turn, these tribes and state or local agencies would notify users of the resources under their control and make a determination on the need (or lack of need) to close certain recreational and commercial areas to the public. Ecology

or IC/UC staff would also be spreading information about the spill to the public through social media, local news, and press releases.

Comment: Our discussion has led me to believe the GRP is mainly designed to help those address the issues on a macro level. As a first responder, we are seeking guidance on how we fit into this plan, and how to best start mitigation efforts on a micro level, should a trail derailment occur. The general public is seeking answers from their emergency response organizations, unfortunately we have not been able to address their concerns. We need to be made aware of existing plans that would affect our fire department. We need to teach our staff how to implement plans that coordinate with the GRP and other plans that are in existence. We need training on equipment to assist in the initial mitigation efforts. (4)

Response: Personnel from a local fire department would likely be the first-responders on-scene. Beyond the need to keep the public safe and away from harm, efforts to control and contain the incident would be a higher priority than the deployment of GRP response strategies. It would be prudent for everyone involved to know and understand the purpose of Geographic Response Plans but, again, the need to implement those strategies would fall below the need to control and contain the spill at or near its source. As an incident progresses, over time, more and more equipment and personnel would be cascaded into the area to support the response, including the deployment of GRP response strategies. Contractors would be hired by the Responsible Party (RP), Ecology, U.S. Environmental Protection Agency or the U.S. Coast Guard, as needed.

GRPs are part of the Northwest Area Contingency Plan (NWACP), just maintained and updated separately. The NWACP is available on-line at <http://www.rrt10nwac.com/NWACP/Default.aspx>. Depending on the source of a spill, there may or may not be a state approved contingency plan in use by the Responsible Party; a listing of such plans can be found at: <http://www.ecy.wa.gov/programs/spills/preparedness/cplan/cpmanagers.htm>. Rail companies operating in Washington State are not currently required to hold state approved contingency plans. As the response to an incident develops, an ICS-201 form would be used as the initial, incident specific plan for the response. After a Unified Command is formed an Incident Action Plan (IAP) would be developed and used, replacing the initial ICS-201 form. Local fire departments in areas near BNSF's rail system might check with Justin Piper of BNSF for training specific to rail incidents; his email is Justin.Piper@BNSF.com.

Comment: Should a train derailment occur, what equipment would be most beneficially located in the pool areas of the Columbia River? Through the SERTC training we've received it's apparent that oil booms, large quantities of foam, and fittings and hoses would be necessary to address initial complications caused by a derailment. How do we acquire such resources? Are there contacts that can help us select appropriate equipment as well as secure funding? Our discussion led me to believe GRPs are mainly designed to help those address the issues on a macro level. As a first responder, we are seeking guidance on how we fit into this plan, and how to best start mitigation efforts on a micro level, should a train derailment occur. The general public is seeking answers from their emergency response organizations, unfortunately we have not been able to address their concerns. (4)

Response: Government and contractor owned equipment in the area is listed on the Western Response Resource List (WRRL), available on-line at <http://www.wrri.us>. In addition to any equipment staged in or near White Salmon, response personnel and equipment would be brought into the area. Contractors hired by the Responsible Party, Ecology, U.S. Environmental Protection Agency, or the U.S. Coast Guard would provide support to the Incident Commander or Unified Command with spill control and containment, and the concurrent implementation of GRP response strategies. This would not preclude a local fire department from deploying GRP strategies if they have the resources to do so – only that it is highly likely all fire department resources would be working to control and contain the incident (a higher priority than deploying GRP response strategies). Equipment trailers were cached across the state several years ago with training provided by Ecology. Ecology recently received funding from the legislature to continue this program. Information on Ecology's response trailer cache program is available online at http://www.ecy.wa.gov/programs/spills/response/equipment_caches.htm or contact Dave Byers, Ecology's Response Section Manager, at dbye461@ecy.wa.gov. For information about the type of equipment Ecology and contractors use in spill response for your area, contact Jeff Lewis, the Response Supervisor for our Central Regional Office in Yakima, at 509-454-7829 or jlew461@ecy.wa.gov.

Comment: Had we not been seeking these plans out, we likely would not have been made aware of their existence. Since we are the first line of defense in protecting life safety and keeping the incident as small as possible, what opportunities exist to train

our firefighters about the plans that we best incorporate with? Are there pre-plans or other guiding documents that we can utilize in developing our own standard operating procedures or response guides for these types of emergencies? (4)

Response: The Northwest Area Contingency Plan (NWACP) is Washington State’s Master Plan for oil spill and hazardous substance release response; available online at <http://www.rrt10nwac.com/NWACP/Default.aspx>. GRPs are part of the Northwest Area Contingency Plan (NWACP), just maintained and updated separately. Depending on the source of a spill, there may or may not be a state approved contingency plan in use by the Responsible Party; a listing of such plans can be found at: <http://www.ecy.wa.gov/programs/spills/preparedness/cplan/cpmanagers.htm>. Rail companies operating in Washington State are not currently required to hold state approved contingency plans. Rail plans required by the federal government may be available through the Federal Rail Administration or through direct contact with railway companies in your area.

Comment: Each department I speak with has their own unique geographic challenges to face should a derailment or other similar oil related disaster occur in their jurisdiction. This makes finding and collaborating with other jurisdictions very difficult as their plans may not be appropriate for our geography. Can you help provide guidance of where we can find help to develop a plan, or learn more about existing plans that would benefit our specific area? (4)

Response: How a local plan is developed is beyond the scope of this Geographic Response Plan update. Since the Northwest Area Contingency Plan (NWACP) is Washington State’s Master Plan for oil spill and hazardous substance releases, anything that coordinates with the NWACP is likely to be helpful – especially as a response transitions from an Incident Commander to a multi-agency Unified Command. Coordination, advice, or additional information from your county’s Department of Emergency Management or the Local Emergency Planning Committee (LEPC) would likely be useful in the development of a local plan, as well as the following on-line resources:

- [Northwest Area Contingency Plan](#)
- [Washington State Geographic Response Plans](#)
- [Washington State Contingency Plan Holders](#)
- [Western Response Resource List](#) (WRRL)
- [Equipment Caches in Washington](#)

- [Ecology Response Contractors](#)
- [Local Emergency Planning Committees within Washington State](#)

Comment: Please check the spelling in the Bonneville Pool section and also on the reference maps..."The Dalles", not Dales or Dalles; River, not Rvier. (5)...

Response: Based on your comment, typographical errors related to the spelling of "The Dalles" have been corrected

Comment: The whole river is a cultural site. Contact Yakama Nation on all spills no matter the location or size. (6)

Response: The following statement can be found in Section 6.3 of all four of the Middle Columbia River Geographic Response Plans: "The Tribal Historic Preservation Offices (THPOs) of the Cowlitz, Nez Perce, Umatilla, Warm Springs, Yakama Nation, and the Confederated Tribes of the Colville Reservation, may also be able to provide information on cultural resources at risk in the area and should be contacted, along with WDAHP and the OR SHPO, through the normal trustee notification processes when significant oil spills, or smaller spills above reportable thresholds, occur on the Columbia River.

Comment: I was hoping to make it to the workshop with Department of Ecology staff at Columbia River Gorge Community College but was unable to attend today. Will the meeting minutes or any recordings of the meeting be made available afterward? I would appreciate access to any notes, since I was unable to attend! (10)

Response: The PowerPoint presentations from the Middle Columbia River Emergency Planning Workshop held on April 17th, 2015 in The Dalles, OR, are available online at <http://www.epaosc.org/midcolumbiaemergencyplanning>.

Comment: There is a mass casualty incident plan for Hood River, Wasco, Sherman, Gilliam, Klickitat, and Skamania Counties on-line. Perhaps this plan could be linked somewhere within the middle Columbia GRP? (4)

Response: Our understanding of the [mass casualty incident plan](#) you mention is that it focuses on ensuring victims of a mass casualty are transported as quickly as possible to hospitals that are prepared to provide definitive care. It uses the National Interagency Incident Management System (NIMS ICS), the same system used by Geographic Response Plans and the Northwest Area Contingency Plan. GRPs focus on the protection of sensitive resources after an oil spill occurs; not patient transport after a mass casualty. For this reason, the mass casualty incident plan for Hood River, Wasco, Sherman, Gilliam, Klickitat, and Skamania Counties won't be linked in the GRPs for the Middle Columbia River.

Spill Response Contact Sheet:

Comment: Under "Washington State"/"Department of Fish and Wildlife" the first phone number in the list is the contact number for the Region 5 office. Replace "Region 6" with "Region 5". (3)

Response: Based on your comment, WDFW phone number has been updated to read "Region 6" on the Contact Sheet.

Comment: Spill Response Contact Sheet: Tidewater Terminal Company phone number is incorrect. It should be (509)-547-7701. (8)

Response: Based on your comment the Tidewater Terminal Company phone number has been updated on the Contact Sheet.

Comment: "Tidewater Environmental" is not an OSRO or PRC. The phone number and web link are for Tidewater Environmental Services, Inc. (dba West Coast Marine Cleaning). Tidewater Barge Lines/ Tidewater Terminal Company is a PRC. (8)

Response: Based on your comment, the contact information referencing "Tidewater Environmental" has been changed to read "West Coast Marine Cleaning."

Comment: As a trustee agency with responsibilities for managing public lands and resources within the Middle Columbia River GRP area, we request that the U.S. Forest

Service, Columbia River Gorge National Scenic Area (541) 308-1700, be included in the list of "other federal agencies" on the Spill Response Contact Sheet at the front of the GRP document. (9)

Response: Based on your comment, the U.S. Forest Service, Columbia River Gorge National Scenic Area phone number has been included on the Contact Sheet.

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 when GRP is updated. Risks posed by derailment, mechanically or geologically caused, as well as threat of terrorism should also be addressed. We must identify and mitigate where possible the risks adjacent 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.

Chapter 4 – Response Strategies and Priorities:

Comment: There is no mention of Wind Vector, Current Vector and the subsequent Oil Vector which will greatly impact boom deployment. (1)

Response: The understanding of current, wind, and oil vectors are basic to oil spill response and, therefore, not included in this document. Spill trajectories in the pool areas of the Middle Columbia River would be incident specific, greatly dependent on dam spillway activity, seasonal withdrawals, and the speed and direction of the wind.

Comment: There is no mention of river velocity, width or depth - all important factors in booming and oil recovery. (1)

Response: The movement of water throughout the pool areas of the Middle Columbia River is variable, governed by dams that are controlled by the U.S. Army Corps of Engineers (USACE). They determine when and how much water will pass through the spillways at any given time. Flows may be non-existent to slow moving (< 1mph). River widths and depths also change from one location to the next, but are adequately documented in NOAA charts for the area. We trust that our primary response contractors are fully trained and capable of modifying GRP response strategies, as needed, to meet the environmental conditions present on the day of an oil spill.

Comment: Section 4.1 (chapter Introduction) makes numerous assumptions that require verification if the MCR-GRP is to be valid. "Has initial control and containment been sufficiently achieved?" "Initial control and containment" rarely occurs due to a lack of tactical response knowledge and skill; also, "who" determines what is "sufficiently achieved?" Effective containment and control involves deployment of boom in an area and at such an angle as to contain oil without entrainment. This involves other issues such as reading rivers, anchoring, line strength, oil recovery and others. (1)

Response: Section 4.1.1 is labeled "on-site considerations" and means "these are some of the things that an Incident Commander (IC) or Unified Command (UC) should think about before dedicating resources to deploy/implement GRP response strategies." Efforts to control a spill and contain the oil at or near the source are higher priorities than the deployment of GRP response strategies, especially during the early hours of a spill when there may not be enough response resources to do both. Without this focus, oil's impact on sensitive resources in the area could be far reaching. The determination of initial control and containment being "sufficiently achieved" would be made by the IC or UC, as appropriate, and is spill/incident specific. Geographic Response Plans purposely concentrate on the protection of sensitive resources, not the efforts or actions needed to control and contain a spill at or near its source.

Comment: "How far downstream or out into the river environment is the spilled oil likely to travel before response personnel will be ready and able to deploy GRP response strategies?" This should be addressed with the MCR-GRP. Not knowing the potential travel time and distance of oil within a specific environment invites a "free for all" mentality instead of an "emergency response" mentality. Another major issue with most "spill plans" is to allow for an open-ended response instead of measuring the time and distance of oil and comparing this with potential response times of OSROs/Contractors

based on realistic expectations. Many responders advertise unrealistic response times that are simply used for sales and marketing and are rarely, if ever questioned or verified. A GRP or TRP should always have an end point of impact based on oil time and travel and realistic responder mobilization and recovery initiation. (1)

Response: The movement of water throughout the pool areas of the Middle Columbia River is variable, governed by dams that are controlled by the U.S. Army Corps of Engineers (USACE). They determine when and how much water will pass through the spillways. Flows may be non-existent to slow moving (< 1mph). Seasonal depletions of water from the pools can reduce flow rates even further. When the spillways are closed, the movement of oil within each pool becomes a function of the wind vector more than anything else. When the spillways are open, the current vector becomes a significant factor but remains a function of spillway throughput. Expected spill trajectories would be incident specific, greatly dependent on dam spillway activity, seasonal withdrawals, and the speed and direction of the wind.

Comment: Oil containment boom must be free of twists, gaps and debris in order to remain effective." This is one of many basic education and training issues and should be eliminated from the MCR-GRP. (1)

Response: We agree that the inclusion of this statement is basic and should be removed from the GRP during a future plan update.

Comment: The "Water Speed and Boom Deflection Angle" description from USCG is one of many ways of determining current velocity. Our experience has shown that responders will typically not measure current velocity as described which is why we've developed other measuring means. (1)

Response: In Washington State, we believe that responders will measure current velocities using methods and practices established through training and drills.

Comment: There are a number of mathematical errors in "Table 4b-1: Water Speed Drift Measurement Table." Although not necessarily significant for field response, this "cut and paste" of an inaccurate table without verification occurs quite often. We think it is better that responders understand the mathematics of boom deployment and not rely

on a brief, summarized table that covers a small fraction of potential water speed velocities. Additionally, the "Boom required for 100-foot Profile to Current" column is misleading for two reasons. 1) The quantity is for EACH 100-foot profile, not simply a single 100-foot profile; this has proven to be confusing for many responders; and 2) The "Anchors needed if Placed every 50 feet (number)" column is also misleading because based on our OSRO/Contractor Audits, the vast majority of available boom is 100 foot sections, not 50 feet. We have seen responders attempt to anchor 100 foot boom at 50 foot intervals that results in boom failure because they wrap anchor line around the boom every 50 feet. (1)

Response: The Water Speed Drift Measurement Table (4b-1) is from the U.S. Coast Guard Research and Development Center's field guide for oil spill response in fast currents published in 2001 (Table F-1). It provides an estimate of the length of boom required for deflecting oil at a specified angle for a 100ft profile (perpendicular width) to the current. We agree that most boom comes in 100ft lengths. There are ways to properly secure anchoring systems to boom at intervals less than 100ft, but wrapping anchor line around the boom is not recommended and should be considered inappropriate. All equipment listed in GRP strategies is suggested. We expect oil spill responders to adjust boom lengths and anchor points appropriate to the operating environment and the conditions of the day.

Comment: Regarding "Table 4b-2: Historical River Streamflow Ranges," we think this table should be replaced with one or more of the following: 1) internet website address of real-time streamflow stations, 2) names and download information for smartphone applications for real-time streamflow stations; or 3) internet website for Google Earth add-on for real-time streamflow stations. (1)

Response: Historic streamflow volumes (monthly mean) were derived from USGS gage station data. They are included in the plan so responders can get an idea of the volume (cfs) of flow that might be present, generally, during different months of the year. In the final plan, hyperlinks to the USGS website for each gage station listed are provided within the table header.

Comment: "4.2 Area Overview Maps" provide no meaningful information and only adds to the overall size of the MCR-GRP. (1)

Response: Area overview maps provide a graphical representation of the entire planning area and the layout of sector maps within that boundary.

Comment: The tables from page 330 to 333 are confusing. "Strategy Numbers" are listed in these tables, yet "Response Strategy Matrices" are listed as "Strategy Names." Further, our experience with TRP's, Owner/Operators and OSRO/Contractors/First Responders has shown that using easily recognizable names and not "codes" for specific sites within a location greatly improves understanding of the Plan, speeds response times and overall puts everyone on the "same page" regarding countermeasure deployment, SCAT, etc. The "Response Strategy List (Appendix 4bA, from page 355 to 450) are identified by Location - this identification method is very confusing and lacks continuity. (1)

Response: In the context of this plan, strategy numbers and strategy names (short names) are the same. Each response strategy, notification strategy, staging area, and boat launch location has a short name and a long name assigned. The short name provides information that the long name doesn't, including the strategy type, river/creek mile, and location on the river. Because of its brevity, the short name is helpful for listing and tracking purposes too, especially when sites are co-located or near each other. During drills and actual spill incidents, short names are used by our primary response contractors with little or no difficulty. Long names provide the "commonly known" or "easily recognized" name of a particular site or group of sites, and are provided in the header of the detailed 2-page information sheets in the appendices of Chapter 4.

Comment: "Table 4.5.1 Response Strategy Matrices" shows that if fully implemented, 22,620 feet (-4.28 miles) of boom is required and since a boat is required for each site, 35 boats would be required - for this single Pool. It should also be noted there is no distinction between "hard" boom and sorbent boom in these tables, but both are listed in the "Response Strategy List" (i.e. page 401 lists sorbent boom). (1)

Response: The tables/matrices in Section 4.5 provide a "quick list" of all strategies, staging areas, and boat launch locations in the plan. The format of the matrices requires

that information be abbreviated, including boom. During a significant spill it's highly likely that teams of boats and personnel would be assigned to deploy GRP response strategies throughout the area. After a team finishes deploying one strategy they would move to a different location and deploy the next (based on the priorities set in Section 4.3.2 of Chapter 4). The suggested equipment is tailored to the GRP site. It does not preclude one boat from deploying multiple strategies provided there is sufficient boom and anchors to do so. This means fewer boats and personnel are needed to implement GRP response strategies than shown by simply adding all of the numbers in the plan together.

Comment: When it comes to planning and response, a strategy is a plan designed to achieve an overall goal (general overview) whereas a tactic is an action performed to achieve a specific task (detail specific). There are enough "plans" that don't address the core issues of an effective response - namely tactics. A search of the MCR-GRP showed 552 instances of the word "strategy" and one (1) instance of the word "tactic" or "tactical." Success is all in the details. (1)

Response: The response and notification strategies provided in Appendices 4A and 4B of the MCR-GRPs prescribe the actions that should be taken to complete a task or objective and, therefore, are considered "tactical" regardless of the terminology used. Historically, the term "tactical response strategies" was used to describe such site specific actions but over time this has been shortened to "response strategies" with the word "tactical" inferred.

Comment: Regarding the "Response Strategy List" (pages 355 to 450), the GPS coordinate format such as decimal degrees or degrees, minutes, seconds, UTM, etc. should be listed as well as the coordinate datum. (1)

Response: We agree that additional GPS coordinate formats should be used in the detailed 2-page information sheets in the appendices of Chapter 4. In addition to the standard decimal degrees format, vessel waypoints are best provided using degrees with decimal minutes and navigational charts are typically provided in degrees, minutes, and seconds. All three formats will be included in future updates to the plans.

Comment: Driving directions should include directions from the north, south, east, and west so regardless from where a responder is coming from, they have directions from the four cardinal directions. (1)

Response: Driving directions on the detailed 2-page information sheets in the appendices of Chapter 4 are from a known location (e.g. highway mile post) to the strategy site. Directions that explain how to arrive at the site from every major point on the compass is not practical. It would greatly increase the size of the plan because 2--page information sheets would become 3-page sheets. With the increase use of smart phones and vehicle GPS, the value of listing driving directions for each site becomes less important over time and may be completely discontinued at some point in the future.

Comment: Photos are too small and blurry and don't show adequate detail to be useful. Most are satellite views which rarely conform to the actual site. Each site should be photographed as they currently exist to allow for more detail to be provided to the plan. Additionally, there is no scale or North Arrow shown on any aerial photograph and the aerial photographs and ESRI maps show completely different views of what is assumed to be the same area. (1)

Response: Our response contractors find the aerial images provided in the detailed 2-page information sheets very useful. Most satellite views actually conform to sites on the ground. We agree that improvements to image quality need to be made. We are working to improve image quality in future updates to the plans. Each diagram image has a compass rose (north up) and scale bar in the legend.

Comment: Many of the booming tactics listed will fail. For example, "The Dalles North Fish Ladder" shows a "chevron formation" in order to exclude oil from the fish ladder. As shown, this "chevron formation" will allow the oil to impact the boom at a 90 degree angle, which will likely cause entrainment and allow the oil to impact the fish ladder despite the countermeasure. The Dalles Lock sheet aerial photograph (page 357) appears to show boom deployment in the wrong direction for containment and recovery. In addition, this containment site makes no sense scientifically. This location is on the Washington State side of the river, past the dam and other structures. It is also against where the oil will likely flow since it is immediately upriver from a major bend where the water/oil will accelerate and be forced to the Oregon State side of the river due to fluid dynamics. Depending on the wind direction and speed, the oil will likely also

be further directed to the Oregon State side of the river due to Oil Drift caused by the wind. Lastly, this containment site is immediately adjacent to the dam overflow which will send the oil over the dam, not to containment. Looking at this location, there are several much better containment locations upriver that would allow the oil to not reach the dam in the first place and allow for better containment based on topography, resources at risk and available resources. (1)

Response: Response strategy D-191.7M (The Dalles North Fish Ladder) and D-191.9R (The Dalles Lock) were both designed with assistance from USACE; the dam's operator. Because of hard boom permanently in place ~200ft upstream from the fish ladder and towards the spillway, response strategy D-191.7M provides a secondary layer of protection for the fish ladder when the spillway is closed; a period of time when the wind vector is dominant. When the spillway is open, the current vector is dominant with oil expected to move towards the spillway (not towards the fish ladder). Response strategy D-191.9R (The Dalles Lock) appears to be properly configured for a collection strategy on the upstream side of the lock; especially considering spill risks immediately upstream on river right (BNSF rail line and a log yard). When the spillways are closed currents would be non-existent (except slightly if the lock chamber was being filled by the upper pool). Easterly or northeasterly winds could push oil on river right towards the lock. Because of this, strategy D-191.9R will remain in the plan.

Comment: Under the "Recommended Equipment" section, the anchor types are listed without any reference to their holding power or in the case of Danforth (or other appropriate type) ensuring a 10:1 scope in order to establish 100% anchor holding strength. Further, some anchors appear to be against concrete or other non-earthen structures; there is no mention on how to anchor to these structures. "Shoreside Anchoring Systems" should also be detailed so they include holding strength of the anchor itself; working load of the line, anchor angles, etc. (1)

Response: Under "recommended equipment" in the detailed 2-page information sheets of Appendix 4A, anchoring systems (including shoreside anchoring systems) are purposely vague, so primary response contractors can decide and use what they believe to be most appropriate based on environmental conditions. Without flexibility, confining contractors to one type of anchoring system or anchors of a particular weight might reduce their options to the point of failure.

Comment: Many resources (equipment, personnel, time, money, etc.) are wasted on side channel protection. Why boom the confluence of a river (i.e. Spanish Hollow Creek, etc.) when its flow will prevent oil from entering the Columbia River? A typical countermeasure would be a short deflection boom (depending on the river topography) ensuring oil does get potentially hung up in eddies, debris or other confluence structures. (1)

Response: We agree that flows into a river or lake from a tributary stream would normally preclude the need for protection. Unfortunately, conditions are not always static. Depending on the season, wind direction, and spillway activity, flows into pool areas from some tributary streams can be negligible, increasing the chance of oil impact at or near the mouth of those streams. The confluence of Spanish Hollow Creek with the Columbia River (The Dalles Pool) provides an example of this concern and, therefore, remains in the plan as a response strategy.

Comment: It appears that nearly all booming tactics are incorrect for the environment they are deployed. All deployment angles appear to be too great for site conditions. Each site should have velocity, depth and width individually measured and listed on each form. Boom angle, anchor line loads, anchor loads, oil encounter rates, etc. should all be listed on each form. The more answers you provide to questions before an incident the more successful the outcome will be. At containment points, the maximum boom deployed is 1,000 feet. For example, at "Rufus Landing Collection" (page 415) the river width is 2,845 feet for just a one knot current, the maximum boom angle is 44° (it is shown as 50°; effective for a 0.9 knot current.) With a boom angle of 44° and a river velocity of one knot the minimum boom/rope for this site is 4,096 feet; this assumes booming the river shoreline to shoreline, which would not be done rather, it would be boomed in a cascading deflection manner in order to deflect and contain oil across this entire width of the river. This holds true for all containment locations. With this technique, more than 4,096 feet of boom would be required for this single site. (1)

Response: As previously mentioned, flows in the pool areas may be non-existent to slow moving (< 1mph) depending on spillway activity and other factors. River widths and depths also change from one location to the next, but are adequately documented in NOAA charts for the area. As drawn, response strategy D-213.3L (Rufus Landing Collection) would likely be effective in currents less than 0.9 knots. For occasions where currents in the area reach or exceed that speed, we trust that our primary response contractors will modify/adjust the boom's angle as needed to keep the strategy

effective. Response strategy D-213.3L has a maximum deployment length of 1000ft (not bank to bank). Established GRP "boom use" criteria discourages boom lengths over 1000ft. Cascade booming could be effective, but the amount of time and number of response resources needed to implement such a strategy could be substantial and, because of time, come at the cost of protecting other sensitive resources in the area; resources that could be protected through the deployment of less complicated response strategies (on or near shore).

Comment: There is a total of 13 "skimmers" listed as needed for this Pool. No mention is given regarding the potential oil encounter rate, type of oil or potential quantity of oil. The following example demonstrates why detailed skimmer planning is so critical. The average "Protected Water" skimmer (based on our database of all available skimmers from all manufacturers) maximum recovery D31rate is 348 gpm. Using a 25% Efficiency Factor (or other percentage based on USCG) = 87 gpm (this could be more or less, based on site conditions). Computing the Oil Encounter Rate: Width of slick: 1,887 feet, Velocity: 3.3 fUse. (2 knots), Thickness of slick: 0.008" (0.2 mm) Transitional dark true color (just before metallic sheen) = Estimated Oil Encounter Rate: 1,843 gpm. iv. Based on the above example site conditions, the number of average "Protected Water" skimmers required for one site is: 1. 5.3 skimmers are required based on the maximum recovery rate of 348 gpm. 2. 21.18 skimmers are required based on a 25% Efficiency Factor with a recovery rate of 87 gpm. v. Plus vacuum trucks/tankers and storage - (Doesn't include recovered water). (1)

Response: For every collection strategy provided in the plan, there must be some means to recover and store the oil collected. The GRP collection strategies are part of a larger response framework. In addition to GRP collection strategies, on water recovery operations and containment would make up the response operations. All regulated plan holders operating in the Bonneville Pool area are subject to planning standards which detail the required boom, storage, and recovery assets necessary based on the worst case discharge planning volume. A list of equipment that may be cascaded into a response is available on the Western Response Resource List (WRRL), available online at <http://www.wrml.us>. Skimming devices listed on the WRRL would be selected and utilized based on the product type and operating environment. We appreciate your comment; this detailed analysis is done in the plan holder contingency plan review process.

Comment: After reviewing the GRP for the mid-Columbia region 163.8R through 172.7R I notice the plan is to deploy boom in several locations, but none of these locations (with the exception of B-170.8) indicates who shall deploy the boom. (4)

Response: Contractors hired by the Responsible Party, Ecology, U.S. Environmental Protection Agency, or the U.S. Coast Guard would work to deploy GRP response strategies, along with efforts to control and contain the spill at or near its source.

Comment: Is the end result to allow the oil to flow westward until it reaches the Bonneville Dam? Will collection take place at the Bonneville dam? (4)

Response: Collection of oil will take place throughout the Bonneville Pool at locations identified in the plan and elsewhere. Approximately 30% of all booming strategies in the Middle Columbia River Geographic Response Plans are collection strategies. Spill specific response tactics and strategies would also be used later on in a response, if determined necessary by the Incident Commander or Unified Command.

Comment: There is an ability to launch a boat and go under the rail tracks at Blalock - I think this is the location. (7)

Response: Based on your comment, an additional collection strategy, J-234.1L, was created off Blalock Port Road at Arlington, OR in the John Day Pool.

Comment: D-192.5R: This GRP is stated as being on Tidewater property. Tidewater does not own this property or operate a facility at this location. Please remove all references to Tidewater for this strategy. (8)

Response: Based on your comment, all references to Tidewater have been removed from strategy D-192.5R.

Chapter 6 – Resources at Risk:

Comment: After the list of species contained within "Amphibian and Reptile" insert new group heading of "Plants", followed by "Northern wormwood [FC], Ute ladies'-tresses [FT], White bark pine [FC], White Bluffs bladderpod [FT]." (3)

Response: Based on your comment, information has been added to Section 6.2 of the plan.

Comment: Under bullet "Side channels and impounded areas..." Edit sentence to read "...and provide feeding and resting areas for a variety of birds, including waterfowl and herons." (3)

Response: Based on your comment, information has been added to the description of "Side channels and impounded areas..." in Section 6.2.1a of the plan.

Comment: Last bullet ("Resident fish") strike the text "...freshwater portions of...." from the sentence. (3)

Response: Based on your comment, the text "...freshwater portions of..." has been removed from the last bullet ("Resident fish") in Section 6.2.1b.

Comment: There are two entries (#4, #5) on these two pages for the McNary Wildlife Refuge/State Wildlife Recreation Area". Recommend deleting one and renumbering remaining entries, and editing the associated graphics. (3)

Response: Renumbering entries #4 and #5 in Section 6.2.2, and editing the associated graphics, will be considered in a future update to the plan.

Comment: Remove hyphen from in front of "Flight restriction zones." (3)

Response: Based on your comment, the hyphen was removed from in front of "Flight restriction zones" in Section 6.5.1.

Comments: Second sentence. Strike "... or marine mammal pupping areas" from the end of the sentence. (3)

Response: Based on your comment, the text "or marine mammal pupping areas" has been removed from the end of the second sentence in Section 6.5.1.

Comment: I 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 striking the words "...and recommend..." As written it could be inferred that hazing operations will be conducted by default - which may not be the case. (3)

Response: Based on your comment, changes have been made to Section 6.5.2 (Hazing).

Comment: 3rd sentence. Insert "of oiled wildlife" after the word "observations" (3)

Response: Based on your comments, the words "of oiled wildlife" were inserted following the word "observations" in Section 6.5.3.

Comment: 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 hand 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." (3)

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: Have Native American historical and culturally sensitive areas been addresses in this plan? If so, can those areas be identified so we can protect aggressively and disturb them as little as possible? (4)

Response: Yes, Native American and other culturally sensitive areas have been addressed in this plan. Ecology has a Secretary of Interior qualified archaeologist who has reviewed each of the strategies on the Columbia River and made any necessary changes to protect those resources. Information about the location of cultural resources is “sensitive” and therefore not identified in the plan.

Appendix A – Protection Techniques:

Comment: Regarding "Appendix A Protection Techniques" these appear to be the same as what was presented in 2004. Many of these techniques are not suitable for response or have been shown to be ineffective. Some examples include: (1)

- a. Beach Berms - it is rare, if not impossible to gain authorization from the RRT or others to damage the environment so invasively when other countermeasures are readily available or more effective. This is the classic, ""the operation was a success but the patient died"" (i.e. creating additional environmental impact to "protect"" the environment).
- b. Sorbent Barriers - As described, sorbent barriers have been shown to be ineffective due to oil entrainment, channel flow rates, maintenance issues, sorbent contact with oil and others.
- c. Containment booming is described as a ""U"" shape; this is incorrect. The only time a ""U"" configuration is used effectively is in open water skimming operations, not in rivers.
- d. Limitations of the various booming protection techniques are incorrect. Oil can be successfully contained, deflected, excluded or diverted in currents up to 5 knots with appropriate equipment, education and training.
- e. Boom should never be held in place by any vehicle, including a work boat.

f. Limitations listed for skimmers are generally inaccurate; they are specifically related to the actual size and type of skimmer as well as their operating environment.

g. Table A-2 "Summary of Protection Techniques for Nearshore Areas" lists under "Tactics" boom skirt size based on current speed. This is inaccurate. Skirt size is one variable when determining Boom Undercut and is not necessarily limited to 2 knots.

h. "Encircling" booming should only be used in non-current and non-wind conditions due to entrainment.

i. Due to the volume of air and/or water required to overcome the force of moving water as well as the logistics and cost involved in deployment and maintenance, air and water jets are rarely, if ever used. One exception is in ice environments to prevent ice formation.

j. Page 1153 shows a table of "Current Drag Force on One-Foot Boom Profile to Current." This table is one part of an equation with multiple parts in order to determine mooring line loads. Additional required information includes river width, boom angle, boom catenary angle and more. The table by itself is meaningless and would give a reader wrong and misleading information that could lead to worker injury or death or further oil impact. Also, the description above the table is misleading and incorrect.

k. Page 1154 states, "Attempting to moor a boom in a straight line across a current (90 degrees) is not recommended." In several other areas of the MCR-GRP this is exactly what is recommended either directly or through the use of booming tables.

l. On page 1155 the photos of underflow dams show how not to install underflow dams and the description above is misleading and incorrect.

m. On page 1156, there is a drawing of a "culvert block" which in practice would not be used because water/oil would seek relief from the blockage and further impact the area in and around the culvert as well as upstream.

n. Page 1156 shows what is described as a "Culvert Weir"; this is incorrect. What is actually shown is a Sluice Gate Dam. In order to properly and effectively employ this countermeasure, an accurate calculation must be used.

Response: Information in Appendix A (Protection Techniques) mirrors that provided in the U.S. Coast Guard Research and Development Center's field guide for oil spill response in fast currents published in 2001. We agree with many but not all of your comments and will consider the removal of the Appendix A from all Washington State GRPs in the future. Better examples and descriptions of response/protection techniques can be found in other documents outside of this plan, including the Guidelines for Oil Spill Response in Fast Currents published by the International Maritime Organization (IMO) in 2013.



Elemental Services & Consulting, Inc.

1418 Ithaca Drive
Columbus, Ohio 43228
740.815.9660
www.escoinfo.com

RECEIVED *New Ideas,*
Department of Ecology
Valuable Results
MAY 04 2015

USEPA – Region 10
Office of Environmental Cleanup
1200 Sixth Avenue
Room ECL-116
Seattle, WA 98101

Spills Program

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

April 27, 2015

Dear Sir/Madam:

This letter is in response to your public comment announcement regarding the draft Middle Columbia River GRP (*MCR-GRP*) Update. We have downloaded the draft Middle Columbia River GRP Update, studied it and our comments are below.

Before responding directly regarding your MCR-GRP we would like to direct you to the Resources page of our website located here www.escoinfo.com/page5.html. We have posted multiple articles that are relevant to our response but instead of including them here and in the interest of keeping our comments directly related to the MCR-GRP Plan itself, we encourage you to visit our website and review this additional information. Where appropriate, we have included sample copies of select pages of our Oil Spill Job Aids. It is hoped this will give a better understanding of our comments and reduce confusion.

Words on paper cannot express the spirit and intent of our comments regarding the MCR-GRP. We have traveled to this area and found it beautiful and exceptionally deserving of protection. Our aim is to provide comments that will assist in making a more effective actionable plan that will actually protect this area, or at least reduce the impact in the event of a spill or release.

OUR HISTORY WITH TACTICAL RESPONSE PLANS (TRP'S)

We have produced dozens of Tactical Response Plans (TRP's) and GeoTactical Response Plans™ across the United States for several clients including pipelines and refineries. Many of these TRP's were for large river environments like the Columbia River and have included the Ohio River, Mississippi River and many other smaller rivers and streams. Our TRP's are designed for First Responders (*both public and private*) since it is within the first few hours of a spill or release that the success of the project is often determined. Our TRP's include site visits, verification of tactics and much more – all directed toward First Responders.



MISCELLANEOUS COMMENTS

1. Since the MCR-GRP is so large we chose to review "Chapter 4b – The Dalles Pool" since we are somewhat familiar with this area due to previous travel to the area. There are many areas for improvement so we have not included all details, but our overall comments should provide ideas for overall improvement of the MCR-GRP.
2. Regarding our math, we have on retainer two PhD, Professional Engineers who verify our Job Aids calculations as well as provide other verification for the work we perform, and then verify each other's work.
3. We have performed over 50 OSRO / Contractor Audits using our detailed proprietary data form. Nothing in the MCR-GRP addresses verification of OSRO / Contractor / First Responder readiness through audits. These Audits have shown that both large and small companies, OSRO Classified and not are severely lacking in equipment, education, training and readiness.
4. Nothing in the MCR-GRP addresses education or training of responders (*public and private*).
5. How will MCR-GRP be implemented in the event of an actual spill? The RP will typically implement their Response Plan – having an "agency" produced GRP causes confusion and competing priorities unless the RP and their OSRO / Contractor / First Responders are brought into the planning and buy into it.
6. Once demonstrated, the use of online Flex Viewer or ArcGIS mapping is not favored by our clients for the following reasons:
 - a. It is based on having online access, it isn't suitable for smartphones or tablets – it works much better on laptops which first responders won't or shouldn't have during the initial response, data often conflicts or contains errors.
 - b. Owner/Operators prefer to manage their own data, Owners/Operators prefer to deal with tactical issues in order to minimize impact, time and costs.
 - c. We provide our clients Google Earth files with multiple layers that include TRP data, ISA data, real-time streamflow stations, river/water body outlines, response tactics, topographic map overlays, marine navigational chart overlays, surface water intakes, maritime assets, marinas, boat launches, county outlines, railroad crossings, bridge crossings, pipelines and others.
 - d. Google Earth is free, easy to use via mobile devices and can quickly and easily be modified and emailed to responders in the field for quick and accurate use.



-
- e. Various detailed layers can be created before or during a spill and shared across platforms in real-time. In the event there is no internet access, layers can be created and shared prior to a release (*during the planning stages*) to first responders, OSRO's, contractors, etc. and be available, even if the internet isn't.
 - f. We also provide electronic and paper versions of topographic, nautical navigation and other maps with each TRP – We recommend this for the MCR-GRP.

MCR-GRP SPECIFIC COMMENTS

1. This MCR-GRP is currently 1,169 pages. We acknowledge this includes many blank pages, comment pages and other pages that may not be included in the final produced Plan. Our experience has demonstrated that a Plan, regardless of the area it covers that is over roughly 100 pages is too large to be effective and ultimately will not be implemented. Responders will simply be overwhelmed with the sheer size of the document and the data contained within and will revert to what they have been comfortable with. It is suggested the Plan Pools be broken down to smaller response areas and/or minimize countermeasure sites within each location.
2. In the 10+ years between the 2004 GRP and the 2015 GRP Update very little has changed in the Plan despite numerous "lessons learned," new and improved tactics and equipment and other technological advances. Given the quantity and type of oils being transported across North America, the lack of effective education and training and the lack of accountability of responders, this MCR-GRP lacks actual "planning" which we think must occur as we move forward in the 21st Century.
3. When it comes to planning and response, a strategy is a plan designed to achieve an overall goal (*general overview*) whereas a tactic is an action performed to achieve a specific task (*detail specific*). There are enough "plans" that don't address the core issues of an effective response – namely tactics. A search of the MCR-GRP showed 552 instances of the word "strategy" and one (1) instance of the word "tactic" or "tactical." Success is all in the details.
4. "Section 4.1 Chapter Introduction" makes numerous assumptions that require verification if the MCR-GRP is to be valid. Some random examples include:
 - a. "Has initial control and containment been sufficiently achieved?"



-
- i. "Initial control and containment" rarely occurs due to a lack of tactical response knowledge and skill; also, "who" determines what is "sufficiently achieved?" Effective containment and control involves deployment of boom in an area and at such an angle as to contain oil without entrainment. This involves other issues such as reading rivers, anchoring, line strength, oil recovery and others.
 - b. *"How far downstream or out into the river environment is the spilled oil likely to travel before response personnel will be ready and able to deploy GRP response strategies?"*
 - i. This should be addressed with the MCR-GRP. Not knowing the potential travel time and distance of oil within a specific environment invites a "free for all" mentality instead of an "emergency response" mentality. Another major issue with most "spill plans" is to allow for an open-ended response instead of measuring the time and distance of oil and comparing this with potential response times of OSRO's / Contractors based on realistic expectations. Many responders advertise unrealistic response times that are simply used for sales and marketing and are rarely, if ever questioned or verified. A GRP or TRP should always have an end point of impact based on oil time and travel and realistic responder mobilization and recovery initiation.
 - c. *"Oil containment boom must be free of twists, gaps and debris in order to remain effective."*
 - i. This is one of many basic education and training issues and should be eliminated from the MCR-GRP.
 - d. *"Water Speed and Boom Deflection Angle"*
 - i. This description, from USCG is one of many ways of determining current velocity. Our experience has shown that responders will typically not measure current velocity as described which is why we've developed other measuring means.
 - e. *"Table 4b-1: Water Speed Drift Measurement Table"*
 - i. There are a number of mathematical errors in this table. Although not necessarily significant for field response, this "cut and paste" of an inaccurate table without verification occurs quite often. We think it is better that responders understand the mathematics of boom deployment and not rely on a brief, summarized table that covers a small fraction of potential water speed velocities. Additionally, the "Boom required for 100-foot Profile to Current" column is



misleading for two reasons. 1) The quantity is for **EACH** 100-foot profile, not simply **a single** 100-foot profile; this has proven to be confusing for many responders; and 2) The “*Anchors needed if Placed every 50 feet (number)*” column is also misleading because based on our OSRO / Contractor Audits, the vast majority of available boom is 100 feet sections, not 50 feet. We have seen responders attempt to anchor 100 foot boom at 50 foot intervals that results in boom failure because they wrap anchor line around the boom every 50 feet.

5. There is no listing of river crossings for personnel and/or equipment in the MCR-GRP. During an incident it is often the case that contractors and others from outside the area are working on the project and are not familiar with local roads and river crossings. We have found it extremely beneficial to include river crossings in our TRP's.
6. Regarding “Table 4b-2: Historical River Streamflow Ranges,” we think this table should be replaced with one or more of the following: 1) internet website address of real-time streamflow stations, 2) names and download information for smartphone applications for real-time streamflow stations; or 3) internet website for Google Earth add-on for real-time streamflow stations.
7. “4.2 Area Overview Maps” provide no meaningful information and only adds to the overall size of the MCR-GRP.
8. The tables from page 330 to 333 are confusing. “Strategy Numbers” are listed in these tables, yet “Response Strategy Matrices” are listed as “Strategy Names.” Further, our experience with TRP's, Owner / Operators and OSRO / Contractors / First Responders has shown that using easily recognizable names and not “codes” for specific sites within a location greatly improves understanding of the Plan, speeds response times and overall puts everyone on the “same page” regarding countermeasure deployment, SCAT, etc. The “Response Strategy List (*Appendix 4bA, from page 355 to 450*) are identified by Location – this identification method is very confusing and lacks continuity.
9. “Table 4.5.1 Response Strategy Matrices” shows that if fully implemented, 22,620 feet (~4.28 miles) of boom is required and since a boat is required for each site, 35 boats would be required – for this single Pool. It should also be



noted there is no distinction between "hard" boom and sorbent boom in these tables, but both are listed in the "Response Strategy List" (*i.e. page 401 lists sorbent boom*)

10. The following general comments are regarding the "Response Strategy List" (pages 355 to 450)

- a. The GPS coordinate format such as decimal degrees or degrees, minutes, seconds, UTM, etc. should be listed as well as the coordinate datum.
- b. Driving directions should include directions from the north, south, east and west so regardless from where a responder is coming from, they have directions from the four cardinal directions.
- c. Photos are too small and blurry and don't show adequate detail to be useful. Most are satellite views which rarely conform to the actual site. Each site should be photographed as they currently exist to allow for more detail to be provided to the plan. Additionally, there is no scale or North Arrow shown on any aerial photograph and the aerial photographs and ESRI maps show completely different views of what is assumed to be the same area.
- d. The MCR-GRP descriptors and booming locations don't match the descriptors and booming locations in the Online ArcGIS Map Viewer.
- e. There is no mention of Wind Vector, Current Vector and the subsequent Oil Vector which will greatly impact boom deployment.
- f. There is no mention of river velocity, width or depth – all important factors in booming and oil recovery.
- g. Many of the booming tactics listed will fail. For example, "The Dalles North Fish Ladder" shows a "chevron formation" in order to exclude oil from the fish ladder. As shown, this "chevron formation" will allow the oil to impact the boom at a 90° angle, which will likely cause entrainment and allow the oil to impact the fish ladder despite the countermeasure. The Dalles Lock sheet aerial photograph (page 357) appears to show boom deployment in the wrong direction for containment and recovery. In addition, this containment site makes no sense scientifically. This location is on the Washington State side of the river, past the dam and other structures. It is also against where the oil will likely flow since it is immediately upriver from a major bend where the water/oil will accelerate and be forced to the Oregon State side of the river due to fluid dynamics. Depending on the wind direction and speed, the oil will likely also be further directed to the Oregon State side of the river due to Oil Drift caused by the wind. Lastly,



this containment site is immediately adjacent to the dam overflow which will send the oil over the dam, not to containment. Looking at this location, there are several much better containment locations upriver that would allow the oil to not reach the dam in the first place and allow for better containment based on topography, resources at risk and available resources.

- h. Under the "Recommended Equipment" section, the anchor types are listed without any reference to their holding power or in the case of Danforth (*or other appropriate type*) ensuring a 10:1 scope in order to establish 100% anchor holding strength. Further, some anchors appear to be against concrete or other non-earthen structures; there is no mention on how to anchor to these structures. "Shoreside Anchoring Systems" should also be detailed so they include holding strength of the anchor itself; working load of the line, anchor angles, etc.
- i. Many resources (*equipment, personnel, time, money, etc.*) are wasted on side channel protection. Why boom the confluence of a river (*i.e. Spanish Hollow Creek, etc.*) when its flow will prevent oil from entering the Columbia River? A typical countermeasure would be a short deflection boom (*depending on the river topography*) ensuring oil does get potentially hung up in eddies, debris or other confluence structures.
- j. It appears that nearly all booming tactics are incorrect for the environment they are deployed.
 - i. All deployment angles appear to be too great for site conditions. Each site should have velocity, depth and width individually measured and listed on each form. Boom angle, anchor line loads, anchor loads, oil encounter rates, etc. should all be listed on each form. The more answers you provide to questions before an incident the more successful the outcome will be.
 - ii. At containment points, the maximum boom deployed is 1,000 feet. For example, at "Rufus Landing Collection" (page 415) the river width is 2,845 feet for just a one knot current, the maximum boom angle is 44° (*it is shown as 50°; effective for a 0.9 knot current.*) With a boom angle of 44° and a river velocity of one knot the minimum boom/rope for this site is 4,096 feet; this assumes booming the river shoreline to shoreline, which would not be done – rather, it would be boomed in a cascading deflection manner in order to deflect and contain oil across this entire width of the river.



This holds true for all containment locations. With this technique, more than 4,096 feet of boom would be required for this single site.

- k. There is a total of 13 “skimmers” listed as needed for this Pool. No mention is given regarding the potential oil encounter rate, type of oil or potential quantity of oil. The following **example** demonstrates why detailed skimmer planning is so critical
- i. The average “Protected Water” skimmer (*based on our database of all available skimmers from all manufacturers*) maximum recovery rate is 348 gpm.
 - ii. Using a 25% Efficiency Factor (*or other percentage based on USCG*) = 87 gpm (*this could be more or less, based on site conditions*).
 - iii. Computing the Oil Encounter Rate: Width of slick: 1,887 feet, Velocity: 3.3 ft/sec. (2 knots), Thickness of slick: 0.008” (0.2 mm) Transitional dark true color (*just before metallic sheen*) = Estimated Oil Encounter Rate: 1,843 gpm.
 - iv. Based on the above example site conditions, the number of **average** “Protected Water” skimmers required for **one site** is:
 1. 5.3 skimmers are required based on the maximum recovery rate of 348 gpm.
 2. 21.18 skimmers are required based on a 25% Efficiency Factor with a recovery rate of 87 gpm.
 - v. Plus vacuum trucks/tankers and storage – (*Doesn't include recovered water*).

11. Regarding “Appendix A Protection Techniques”, these appear to be the same as what was presented in 2004. Many of these techniques are not suitable for response or have been shown to be ineffective. Some examples include:

- a. Beach Berms – it is rare, if not impossible to gain authorization from the RRT or others to damage the environment so invasively when other countermeasures are readily available or more effective. This is the classic, “the operation was a success but the patient died” (*i.e. creating additional environmental impact to “protect” the environment*).
- b. Sorbent Barriers – As described, sorbent barriers have been shown to be ineffective due to oil entrainment, channel flow rates, maintenance issues, sorbent contact with oil and others.



-
- c. Containment booming is described as a “U” shape; this is incorrect. The only time a “U” configuration is used effectively is in open water skimming operations, not in rivers.
 - d. Limitations of the various booming protection techniques are incorrect. Oil can be successfully contained, deflected, excluded or diverted in currents up to 5 knots with appropriate equipment, education and training.
 - e. Boom should never be held in place by any vehicle, including a work boat.
 - f. Limitations listed for skimmers are generally inaccurate; they are specifically related to the actual size and type of skimmer as well as their operating environment.
 - g. “Table A-2 Summary of Protection Techniques for Nearshore Areas” lists under “Tactics” boom skirt size based on current speed. This is inaccurate. Skirt size is one variable when determining Boom Undercut and is not necessarily limited to 2 knots.
 - h. “Encircling” booming should only be used in non-current and non-wind conditions due to entrainment.
 - i. Due to the volume of air and/or water required to overcome the force of moving water as well as the logistics and cost involved in deployment and maintenance, air and water jets are rarely, if ever used. One exception is in ice environments to prevent ice formation.
 - j. Page 1153 shows a table of “Current Drag Force on One-Foot Boom Profile to Current.” This table is one part of an equation with multiple parts in order to determine mooring line loads. Additional required information includes river width, boom angle, boom catenary angle and more. The table by itself is meaningless and would give a reader wrong and misleading information that could lead to worker injury or death or further oil impact. Also, the description above the table is misleading and incorrect.
 - k. Page 1154 states, “Attempting to moor a boom in a straight line across a current (*90 degrees*) is not recommended.” In several other areas of the MCR-GRP this is exactly what is recommended either directly or through the use of booming tables.
 - l. On page 1155 the photos of underflow dams show how **not** to install underflow dams and the description above is misleading and incorrect.
 - m. On page 1156, there is a drawing of a “culvert block” which in practice would not be used because water/oil would seek relief from the blockage and further impact the area in and around the culvert as well as upstream.



Elemental Services & Consulting, Inc.

1418 Ithaca Drive
Columbus, Ohio 43228
740.815.9660
www.escoinfo.com

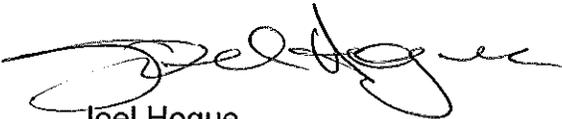
*New Ideas,
Valuable Results*

-
- n. Page 1156 shows what is described as a "Culvert Weir"; this is incorrect. What is actually shown is a Sluice Gate Dam. In order to properly and effectively employ this countermeasure, an accurate calculation must be used.

It is my sincere hope you accept these comments in the spirit they are presented and you find the information contained herein useful and effective. We have included some samples of our proprietary Job Aids for your review and use – many of these have been referenced within our comments and may be useful when reviewing our online articles.

Please do not hesitate to contact me directly at joelhogue@escoinfo.com or 740.815.9660 if you require additional information or if I can be of additional assistance.

Sincerely,
ELEMENTAL SERVICES & CONSULTING, INC.



Joel Hogue

Enclosures
Samples of ESCO Job Aids



May 15, 2015

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

Subject: Mid-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 Mid-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 the state of Washington and the state of Oregon with the Line of Navigability serving as the border between state ownership. The majority of the Mid-Columbia River GRP is contained within these shared waters until it reaches river mile 310 where it is wholly contained within the state of Washington as are the portions of the Snake and Yakima tributaries contained within this GRP. The river miles contained within the Mid-Columbia GRP declared navigable at the time of statehood are state owned aquatic lands; the 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.

Mid-Columbia River GRP Comments

May 15, 2015

Page 2 of 3

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 when GRP is updated. Risks posed by derailment, mechanically or geologically caused, as well as threat of terrorism should also be addressed. We must identify and mitigate where possible the risks adjacent 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 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;

Mid-Columbia River GRP Comments

May 15, 2015

Page 3 of 3

- 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 Mid-Columbia River GRP cannot be considered complete and adequate until 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

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

Chichester, Harry (ECY)

From: Macdonald, Brian F (DFW)
Sent: Friday, May 15, 2015 2:42 PM
To: ECY RE Geographic Response Plans
Subject: Middle Columbia River GRP review comments
Attachments: Middle Columbia Rv GRP Review WDFW 05152015.xlsx

To whom it may concern.

The WDFW Oil Spill Team has reviewed the draft Middle 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	Incorrect information	Under "Washington State"/"Dept of Fish and Wildlife" the first phone number in the list is the contact number for the Region 5 office. Replace "Region 6" with "Region 5".
2	6.2	1130	Incomplete information	After the list of species contained within "Amphibian and Reptile" insert new group heading of "Plants", followed by "Northern wormwood [FC], Ute ladies'-tresses [FT], White bark pine [FC], White Bluffs bladderpod [FT]"
3	6.2.1a	1130	Editing	Under bullet "Side channels and impounded areas ...". Edit sentence to read " ...and provide feeding and resting areas for a variety of birds, including waterfowl and herons."
4	6.2.1b	1131	Editing	last bullet ("Resident fish"), strike the text "...freshwater portions of..." from the sentence.
5	6.2.2	1136-1137	Duplicate text	There are two entries (#4, #5) on these two pages for the McNary Wildlife Refuge/State Wildlife Recreation Area". Recommend deleting one and renumbering remaining entries, and editing the associated graphics.
6	6.5.1	1141	Editing	Remove hyphen from in front of "Flight restriction zones"
7	6.5.1	1141	Editing	Second sentence. Strike "... or marine mammal pupping areas" from the end of the sentence.
8	6.5.2	1142	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 striking 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.
9	6.5.3	1142	Incomplete information	3rd sentence. Insert "...of oiled wildlife..." after the word "...observations....".
10	6-5	1142	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 hand 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."

Chichester, Harry (ECY)

From: Jess Wardwell <jessw@ci.white-salmon.wa.us>
Sent: Monday, April 20, 2015 2:14 PM
To: ECY RE Geographic Response Plans
Subject: Middle Columbia River GRP Comment

To whom it may concern,

After reviewing the GRP for the mid-columbia region 163.8R through 172.7R I notice the plan is to deploy boom in several locations, but none of these locations (with the exception of B-170.8) indicates who shall deploy the boom.

As a first responder, it would be helpful to know who has the materials, what is the ETA of each piece of equipment to these areas. I also am aware that Bingen City Fire has a boom trailer to protect the Port of Bingen...but I did not see them mentioned in the plan.

Also, nothing seems to be noted regarding fire mitigation of an oil spill in the middle columbia region. Should a fire occur on a derailed unit train, it would take immense amounts of class B foam. Are first response organizations authorized to deploy such tactics along this water way? If not, what alternatives do we have?

Who is responsible for notifying the river users (windsurfers, fishers, etc) in the event of a spill, so we may remove them from the oil flow?

Is the end result to allow the oil to flow Westward until it reaches the Bonneville Dam? Will collection take place at the Bonneville dam?

Have Native American historical and culturally sensitive areas been addresses in this plan? If so, can those areas be identified so we can protect aggressively and disturb them as little as possible?

Lastly, there is a Mass Casualty Incident Plan for Hood River, Wasco, Sherman, Gilliam, Klickitat, and Skamania Counties on-line. Perhaps this plan could be linked somewhere within the middle columbia GRP?

Jess Wardwell | Captain
White Salmon Fire Department

From: Andrea Klaas [mailto:andrea@portofthedalles.com]
Sent: Thursday, September 18, 2014 2:18 PM
To: Butsick, Danielle (ECY)
Subject: Re: Middle and Lower Columbia River GRP Comment Period

Danielle:

Please check the spelling in the Bonneville Pool section and also on the reference maps..."The Dalles", not Dales or Dalles; River, not Rvier....

Andrea

41715

Geographic Response Plans

Sticker #
243

We need your help! Tell us about places you value near water that could be affected in the event of an oil spill.

Where is the site? (What body of water? Provide driving directions, GPS coordinates, or address)

LOWER & MID

.....
Describe what's at the site. What resources are at risk? (for example, seabird habitat or fishing dock)

WHOLE RING IS CULTURAL SITE

CONTACT YAKAMA NATION
ON ALL SPILLS
NOB MATTER LOCATION
OR SIZE

Contact Information (optional)

Name: BRADY

Email: BKENT@YAKAMA.COM

Would you like to receive email updates on GRPs? Yes No

To provide suggestions, email: grps@ecy.wa.gov

For more information about GRPs visit:

www.ecy.wa.gov/programs/spills/preparedness/GRP/index.html



4/17/15

Geographic Response Plans (GRP)

Sticker #
112

We need your help! Tell us about places you value near water that could be affected in the event of an oil spill.

Where is the site? (What body of water? Provide driving directions, GPS coordinates, or address)

Blalock? Blalock Port B

Describe what's at the site. What resources are at risk? (for example, seabird habitat or fishing dock)

There is an ability to launch a boat + go under the rail tracks at Blalock -

I think this is the location

Keith Hols
1317

Contact Information (optional)

Name: _____

Email: _____

Would you like to receive email updates on GRPs? Yes No

To provide suggestions, email: grps@ecy.wa.gov

For more information about GRPs visit:

www.ecy.wa.gov/programs/spills/preparedness/GRP/index.html



Vezeau, Susan (ECY)

From: Stephanie Kranz <stephanie.kranz@tidewater.com>
Sent: Thursday, April 30, 2015 4:09 PM
To: ECY RE Geographic Response Plans
Subject: Mid-Columbia GRP Comments

Spill Response Contact Sheet: Tidewater Terminal Company phone number incorrect, should be (509)-547-7701

Spill Response Contact Sheet: "Tidewater Environmental" is not an OSRO or PRC (the phone number and web link are for Tidewater Environmental Services, Inc. dba West Coast Marine Cleaning). Tidewater Barge Lines/ Tidewater Terminal Company is a PRC.

D-192.5R: This GRP is stated as being on Tidewater property. Tidewater does not own this property or operate a facility at this location. Please remove all references to Tidewater for this strategy.

Thank you,

Stephanie Kranz
Environmental Manager
T I D E W A T E R
(360) 759-0305



File Code: 1530
Date: May 15, 2015

Mr. Harry Chichester
Geographic Response Team Lead
Washington State Dept. of Ecology
Spill Prevention, Preparedness and Response (GRPs)
P.O. Box 47600
Olympia, WA 98504-7600

Dear Mr. Chichester,

Thank you for the opportunity to comment on the update of the Middle Columbia River Geographic Response Plan. The Columbia River Gorge National Scenic Area runs along the Columbia River in both Washington and Oregon, stretching for over 80 miles between the Sandy River and the Deschutes River and extending inland for up to six miles. The area covered by the Middle Columbia River Geographic Response Plan (GRP) encompasses approximately two-thirds Columbia River Gorge National Scenic Area, from Bonneville Dam to the upstream end of Miller Island. The western third of the Scenic Area, between Bonneville Dam and the mouth of the Sandy River, lies within the Lower Columbia River Geographic Response area.

The Columbia River Gorge National Scenic Area was created by Congress in 1986. The purposes of the Columbia River Gorge National Scenic Area Act are:

- (1) to establish a national scenic area to protect and provide for the enhancement of the scenic, cultural, recreational and natural resources of the Columbia River Gorge; and
- (2) to protect and support the economy of the Columbia River Gorge area by encouraging growth to occur within existing urban areas and by allowing future economic development in a manner that is consistent with paragraph (1).

The United States Department of Agriculture, Forest Service (U.S. Forest Service) was designed as the federal agency responsible for implementing the Scenic Area Act. This includes management obligations for both the federal and non-federal lands within the Scenic Area boundary. These responsibilities are carried out by the U.S. Forest Service, Columbia River Gorge National Scenic Area office in Hood River, Oregon. As a trustee agency with responsibilities for managing public lands and resources within the Middle Columbia River GRP area, we request that the U.S. Forest Service, Columbia River Gorge National Scenic Area (541) 3081700, be included in the list of "other federal agencies" on the Spill Response Contact Sheet at the front of the GRP document.



If we can provide any additional information or further clarify our land and resource management role within the Columbia River Gorge, please contact National Resources and Planning Staff Officer, Robin Shoal at (541) 308-1716.

Sincerely,



(for) LYNN BURDITT
Area Manager

Vezeau, Susan (ECY)

From: ASHTON BREE WESNER <ashton.wesner@berkeley.edu>
Sent: Friday, April 17, 2015 9:57 AM
To: ECY RE Geographic Response Plans
Subject: DEQ workshop minutes or recording?

Hello --

I was hoping to make it to the workshop with dept of Ecology staff at Columbia River Gorge Community College but was unable to attend today. Will the meeting minutes or any recordings of the meeting be made available afterward? I would appreciate access to any notes, since I was unable to attend!

Thanks for your help,

Best,
Ashton

--

Ashton B. Wesner
PhD Candidate
Environmental Science, Policy and Management
University of California, Berkeley
44A Giannini Hall
Berkeley, CA 94707
ashton.wesner@berkeley.edu