

RESPONSE TO COMMENTS

Grays Harbor Geographic Response Plan Update

Received through October 15, 2013

We appreciate the time and effort all contributors provided in developing and submitting their comments on the existing and draft versions of the Grays Harbor Geographic Response Plan. Comments received were categorized and may have been condensed to make them fit the format of this document. For each comment, the contributor is acknowledged by the number preceding their name on the list below.

A number of substantial comments were provided by the Quinault Indian Nation (Quinault) in a letter from Dave Bingaman dated October 18, 2013. Our response to the Quinault is not included in this document, but will be made directly to them through formal consultations and meetings.

Comments were contributed by the following individuals:

- (1) Roger Ainsworth, Imperium Renewables Grays Harbor
- (2) Margaret Barrette, Pacific Coast Shellfish Growers Association
- (3) Dave Bingaman, Quinault Indian Nation
- (4) Andy Carlson, Washington Department of Fish and Wildlife
- (5) Brady Engvall, Brady's Oysters
- (6) R.D. Grunbaum, Friends of Grays Harbor
- (7) Ken Johnson, Weyerhaeuser
- (8) Jim Jorgensen, Quinault Indian Nation
- (9) Arnie Martin, Grays Harbor Audubon Society
- (10) Steven Spencer, Shoalwater Bay Tribe
- (11) Craig Zora
- (12) Glynnis Nakai, USFWS Nisqually National Wildlife Refuge

For your convenience, the electronic version of this document has been interlinked. Simply click on the name of a person that provided comments from the list above, and you'll be taken to a copy of the email or letter they submitted. Click on a comment within their document, and you'll be taken to the page that contains our response to that particular comment. Using Adobe Reader, you can always return to your last viewed page by simultaneously pressing the ALT button with the Left Arrow button on your keyboard.

General Comments about the Draft Plan:

Comment: The Response Plan is inadequate for dealing with anything but a small spill in one location, a scenario that is unlikely given that potentially 97.4 million gallons of crude oil will be stored on the estuary at any given time. How will the plan work if the oil spreads to several locations at high tide, outgoing tides, or during flood events? (6)

Response: The Grays Harbor Geographic Response Plan (GRP) isn't intended to represent the universe of everything that should, could, or would be done to protect sensitive resources during an oil spill. It's not designed or intended to guide all response actions and activities from the beginning of a spill event to its conclusion. Beyond GRPs, facility and vessel plans and the Northwest Area Contingency Plan (NWACP) play a significant role in guiding response related actions and activities. After a Unified Command is formed a plan specific to the spill itself will be used to guide the response; this plan is called the Incident Action Plan (IAP).

A primary purpose of the GRP is to put strategies in place during the early hours of a spill so impact to known sensitive natural, cultural, and economic resources at risk can be minimized. This is typically done by diverting and collecting oil off of the water before those resources are impacted or by deflecting and excluding it away from sensitive resources. This is not meant to say that all sensitive resources can be protected because physical and environmental factors limit us; such factors include inadequate site access, poor anchoring points, shallow water/mud flats, surface and underwater obstructions, worker safety, adverse weather, strong tides/currents, and the potential to do more harm to sensitive resources than good. Minus the availability of real-time or trajectory information during the early hours of a response, the order in which GRP response strategies are to be deployed is established in the priority tables of Section 4.3.2 of Chapter 4. Each table directly corresponds to a Potential Oil Spill Origin Point. If a spill were to occur, the nearest spill origin point would be selected and efforts would be made to deploy response strategies in the order listed in the associated table unless a different order was deemed necessary by the Incident Commander or Unified Command.

Comment: The Plan is inadequate for dealing with any spill along the rail route within Grays Harbor if it enters rivers, creeks, streams, wetlands, or the flood plain. How will these vital areas be protected from destruction by a spill? (6)

Response: As noted in our response to the previous comment, the Grays Harbor Geographic Response Plan does not represent everything that could, should, or would be done to protect sensitive resources during an oil spill. Other plans exist that would help guide response actions and activities. We believe the response strategies provided

in Chapter 4 of the updated GRP are “doable” and should have a chance of being successfully implemented after a spill event. Not all rivers, creeks, streams, wetlands, or flood plains can be fully or even partially protected from a spill, but the updated plan attempts to rectify this by increasing the number of response strategies available (fifty-five); significantly more than the thirty-one strategies published in the previous plan dated March 2003.

Comment: Flow through Grays Harbor on maximum ebb can reach velocities of 3.5 knots. A spill of crude oil at a loading dock in Grays Harbor could put commercial and recreational shellfish at risk of being oiled before responders ever reached the area. Are there any plans to have response teams on 24/7/365 standby in the local area so if a spill ever occurs they can respond immediately without delay (similar to how EMS, police, & fire departments respond to an emergency)? (5)

Response: It’s not known to us if "around-the-clock" responders would ever be staged and available in Grays Harbor. Response to an oil spill incident in the area would most likely be initiated by personnel from a local facility, commercial vessel, or response contractor. Additional personnel and equipment from outside the area would be mobilized if the size and scope of the spill warranted such action. This "ramping" or “cascade” approach is consistent with Section 1000 of the Northwest Area Contingency Plan (NWACP) where it says "the response to a spill incident should be promptly 'ramped-up' to provide adequate equipment and trained personnel to effectively respond to the highest quantity of product that will most likely be released."

Comments: We anticipate that if and when any future proposals (such as crude-by-rail shipping terminals and related facilities) are approved, the Grays Harbor GRP will be amended to address any additional risks from those proposals and ensure that all resources are properly protected. (2)

What plan is there for updating this current draft plan if risks from spills are being expanded extensively? Is there funding available to revise the GRP if a need is demonstrated? An example would be Crude By Rail as being proposed. Currently the proposals would put 2.3 billion gallons of crude through the GH estuary a year. Risk would be expanded because of all the transfer points in this type of operation. Also the railroad would bring crude oil along the Chehalis River from Centralia and across many streams and rivers feeding the estuary. What part of the GRP would address these risks to the environment and shellfish growers? (5)

I see this plan only covers the WRIA 22 sub-basin. What about WRIA 23? (8)

Response: The Grays Harbor GRP covers a large portion of the WRIA 22 sub-basin but ends just upstream of Cosmopolis on the Chehalis River. GRPs for the remainder of

WRIA-22 and the WRIA-23 sub-basin (Upper Chehalis River) have not been developed. Ecology works with other members of Regional Response Team 10 - Northwest Area Committee (RRT/NWAC) and stakeholders to maintain Geographic Response Plans (GRPs) throughout the State of Washington. Currently, the Grays Harbor GRP is one of nineteen such published plans. The order in which GRPs are updated, and the GRPs for new areas created, is ultimately decided by the RRT/NWAC. If conditions in Grays Harbor change substantially, the RRT/NWAC would likely weigh that risk against ongoing work to update and develop GRPs in other areas of the state before making a decision to redirect resources towards another update to the Grays Harbor GRP. The creation of a plan for the remainder of the Chehalis River would fall under the development of a GRP for a new area (e.g. Chehalis River GRP - Southeastern WRIA 22 & Northern WRIA 23).

Comment: How would the spill response be funded if an incident impacting Grays Harbor were to occur? Who's responsible for paying response related costs? (5)

Response: The response would be funded by the party responsible for the oil spill. Under the Federal Water Pollution Control Act (FWPCA) as amended by the Oil Pollution Act of 1990 (OPA90), the responsible party has the primary responsibility for cleanup. Each responsible party for a vessel or a facility from which oil is discharged, or which poses a substantial threat of a discharge, into or upon the navigable waters, adjoining shorelines or the Exclusive Economic Zone of the United States, is liable for removal costs and damages. If the responsible party is not known or unable/unwilling to pay for the response, federal and state funds would be made available to pay such costs. In this circumstance, the responsible party (if identified) would ultimately be billed for all costs, penalties, and damages related to the spill.

Comment: What recourse do commercial shellfish growers have for reparations if our resources are impacted and our ability to make a living are hurt by an oil spill? (5)

Response: Once designated by the USCG, the party responsible (RP) for the spill must advertise for claims. Loss of profits and earning capacity would be a claim that might be submitted by you to the responsible party for compensation. As with any claim, full documentation that proves your injury or loss is important. For instance, a claim for loss of profits or earning capacity might show your take of shellfish (by species) year-by-year for the three years immediately preceding the spill. You might then compare that to your reduced take (by species) for the year after the injury and beyond. The documented reduction in take could be something that helps prove your loss of profits. Proof that shows your shellfish farm or the surrounding area was actually impacted by oil during a spill might also be needed. Specific details about claim types and documentation can be provided by the RP after they advertise for claims. Additional

information on claims can be found on the National Pollution Funds Center (NPFC) web site at <http://www.uscg.mil/npfc/Claims/default.asp>.

Comment: Is there an executive summary available for the studies for Grays Harbor completed by Applied Science Associates in 2006? Would the results from the studies be different if Bakken crude was modeled? (11)

Response: Ecology doesn't have an executive summary for the studies completed by Applied Science Associates in 2006 or any information on how the results from these studies might differ if Bakken crude oil were modeled.

Comment: Will the Grays Harbor GRP be evaluated using different scenarios with the GNOME program? We only have tide and wind data (for Grays Harbor) for a few days in April. Is it possible to add data for winter months when weather conditions will be more extreme? (11)

Response: We are grateful to NOAA for providing us the GNOME model for Grays Harbor. The model helps us better understand the possible route, or trajectory, an oil spill might follow in Grays Harbor based on different input variables including the date and time of a spill, location, product type and quantity, and certain environmental conditions. The model was given to us solely with the data set provided, and there's no indication that NOAA intends to expedite an update to the model with more substantial information on winds, tides, and weather conditions for the month of April or the winter months.

Comments: The plan lacks a section that helps with the definition of terms. For example waterway needs a definition and perhaps should be defined as "...any river, stream, tributary, creek, ditch, canal, storm drain or sewer that is part of, connected to or has the ability to discharge into the Chehalis River Basin Watershed and its associated wetlands." (6)

Response Community and Unified Command should be defined so that there is a clear understanding of responsibility and the exchange and transition of responsibility. Each basic concept of the plan should be adequately defined to minimize confusion during an unexpected event. (6)

Response: The Grays Harbor Geographic Response Plan (GRP) is considered part of the Northwest Area Contingency Plan (NWACP), just revised and distributed separately. Section 1910 (Glossary) of the NWACP and other sections of the area plan that have definitions independent of the glossary should be used when seeking the meaning of terms used in the GRP. The NWACP currently lacks a definition for the term "waterway"

and "response community." We have recommended that the Northwest Area Committee (NWAC) define these terms in the 2013-2014 update of the area plan. "Unified Command" is defined and described in detail in Section 2000 of the NWACP. The NWACP is on-line at <http://www.rrt10nwac.com/NWACP/Default.aspx>.

Comment: A chart of responsibility would be helpful which outlines if/then scenarios of likely spill situations. (6)

Response: Spill scenarios have been purposely left out of the Grays Harbor Geographic Response Plan (GRP) since the order in which response strategies should be deployed is already established in the priority tables of Section 4.3.2 in Chapter 4. Each table in that section directly corresponds to a Potential Oil Spill Origin Point. If a spill were to occur, the nearest spill origin point would be selected and response strategies would be deployed in the order listed in the associated table unless a different order was deemed necessary by the Incident Commander or Unified Command. Diagrams and information about the structure of a response, including roles and staffing, can be found in the Northwest Area Contingency Plan (NWACP).

Comment: The hyperlinks in all of the sector maps to the GRP's are great! It makes it very easy to navigate around the document. I don't know if it's possible to put a "Back" button on the individual strategy map that takes you back to the Sector Map but that would be helpful. The current format requires you scroll back manually or use the bookmark page (which is fine) to get back to the Sector Map (for ex figure 4.2). The view format (i.e., 75%) always changes back to a small print default (58%) when you use the bookmarks. Is it possible to lock the scale? I don't know if that would be a user setting or a document (4)

Response: For ease of use the electronic version of the GRP has been bookmarked and interlinked. Using Adobe Reader, you can quickly return to your last viewed page by pressing the ALT key and Left Arrow. Zoom settings within the electronic GRP document are set to "Full Page View" with Bookmarks displayed. You can set a standard zoom level within your version of Adobe Reader to default the viewing to whatever zoom level you desire.

Spill Response Contact Sheet (Draft Plan):

Comment: The Spill Response Contact Sheet. Station Grays Harbor (Westport) is listed under Sector Columbia River. We believe it would be easier to find if it were placed as a subset of "13th Coast Guard District" (Washington State). It would seem that Westway Terminals as a bulk liquid terminal should be listed in addition to the already listed Imperium. (6)

Response: USCG Station Grays Harbor is a subordinate unit to USCG Sector Columbia River, and therefore listed below the Sector on the contact sheet. Westway Terminals doesn't currently fall under Washington State oil spill contingency plan rules (WAC 173-182) because they don't transfer oil over the water at their dock in Grays Harbor. Because of this reason, they are not currently listed on the sheet.

Comment: Incorrect contact information for WDFW is shown on the contact sheet. The correct phone number for the WDFW Region 6 office (which covers Grays Harbor) is 360-249-4628. The Oil Spill Team and Emergency HPA numbers are correct. (4)

Response: The telephone number for WDFW Region 6 has been updated.

Chapter 1 – Introduction (Draft Plan):

Comment: Page 1-2 of the states that the plan has been developed for the "greater Grays Harbor area." This area does not adequately cover the concern of an oil spill which is delivered by rail. The CBR response should include at the minimum a plan that leads from the entry of rail in Centralia along the route that follows the Chehalis River basin and its flood plain. (6)

Response: This part of Chapter 1 has been rewritten to better describe the area covered by the plan.

Chapter 2 – Site Description (Draft Plan):

Comment: There is the yearly potential for over 2 billion gallons of crude oil as it is brought in by rail, transferred to storage tanks, pumped to vessels and transported along the Washington, Oregon and California coast. Why is there no mention of crude oil storage/transport under Risk Assessment in Chapter 2 or under Facilities, or Other Oil Spill Risks? (6)

Response: As of this update, crude oil terminals for Grays Harbor are proposed but none actually exist. There is no mention of crude oil storage/transport under the Risk Assessment in Chapter 2 because crude oil is not currently being brought into Grays Harbor by rail.

Comment: There is no description or acknowledgement in the description of physical features that the area is subject to fairly frequent earthquakes. Certain commercial areas, especially shorelines in the Grays Harbor estuary are built on fill and subject to

liquefaction. Major tsunamis have been recorded in the Grays Harbor area but there is no mention of this in the draft plan. There is no mention that Grays Harbor is a hemispherical important shorebird migration area that is critical to the survival of many of those that visit (i.e. Grays Harbor hosts 50% of the Western Red Knot population). (6)

Response: Information on winter storms, earthquakes, liquefaction, and tsunamis has been added to the Risk Assessment in Section 2.6 of Chapter 2. Information denoting the importance of Grays Harbor as a site of hemispheric importance by the Western Hemisphere Shorebird Reserve Network is also included in Section 6.2.1c (Wildlife) and Section 6.2.2 (Specific Geographic Areas of Concern) of Chapter 6. The prevalence of Red Knot population in the area is noted in Section 6.2.1c.

Comment: Section 2.3 (Hydrology) in Chapter 2 provides no comment about the channel being tricky for navigation and often require pilot boats or experienced vessel operators. (6)

Response: A note about challenging navigation for vessels entering or leaving port and a comment reminding commercial vessels to follow pilotage rules are included in Section 2.6 of Chapter 2 (Risk Assessment).

Comment: Section 2.3.2 states “Within the 2,600 square miles that make up the Chehalis Basin” and Section 2.3 (Hydrology) says the “Grays Harbor is a large estuary fed by a 2,550 square mile drainage basin.” The 2,600 figure is most frequently used and should be maintained throughout the document. (6)

Response: Section 2.3.2 of Chapter 2 has been updated to reflect the basin as 2,600 square miles.

Chapter 4 – Response Strategies & Priorities (Draft Plan):

Comments: Studies show booming is not effective in waters that have waves or with speeds over 1 knot. Grays Harbor Estuary water speed is higher than 1 knot and the bar crossing is usually more than 3 knots. How will booms stop the oil? (6)

A single line of boom is not reliable. Why is there no plan in these strategies to have rows of booms? (6)

Response: Your understanding of strait line boom across a waterbody is correct; oil will entrain under a boom starting at a flow of 0.7 knots. But boom can be effective in waters with flow velocities up to 10 knots if deployed at a proper angle to the current. Table 4.1 in Chapter 4 was developed by the U.S. Coast Guard and provides maximum

boom angles based on water speed/velocity.

We can't always achieve the ideal boom angle during strategy design because limiting factors sometimes exist and must be considered; limitations such as inadequate site access, poor anchoring points, shallow water/mud flats, surface and underwater obstructions, worker safety, and the potential to do more harm to sensitive resources than good. We understand that any oil impacting a sensitive resource can be devastating, and the cost and harm of doing nothing in certain areas contrasted with doing something that's only partially effective is obvious; provided the strategy we intend to implement is "doable" and work to deploy such a strategy wouldn't further harm the resource. Even a strategy that's partially effective might reduce oil impacts and speed the response, ultimately benefiting the recovery of the resource injured by the spill. It's important to understand that the GRP does not represent the universe of everything that should, could, or would be done to protect sensitive resources during a response. Other plans, including the Incident Action Plan (IAP) produced and approved by the Unified Command (once formed) will dictate additional actions (beyond the GRPs) that must be taken. In some instances, this might include adding additional secondary booms to response strategies that are already in place.

During the last rule update we added a new "4 hour boom requirement" to the Grays Harbor Planning Standard WAC 173-182-450. The four hour standard calls out best achievable technology equipment. The capability statement in the rule calls for "at least an additional 200 feet of boom and temporary storage of at least 196 barrels with the ability to collect, contain, and separate collected oil from water... The additional boom should be capable of encountering oil at advancing speeds of at least 2 knots in waves." This boom will be appropriate for collecting oil off the water in the Grays Harbor operating environment minimizing shoreline impacts. One example of equipment that meets this capability is the Current Buster Boom <http://www.nofi.no/nofi-current-busterareg-technology.139608.en.html>. The new 4 hour planning standard takes effect in Grays Harbor January 14th, 2017.

Comments: Do the GRP response strategies in the existing and updated plan provide protection from crude oil that sinks after the light ends burn off? How would the response to sinking oil be handled? (5)

Bakken Crude components will have different trajectories. In fact some oil spill components will sink to the bottom. How will these components be contained or removed from the bottom sediments? (11)

Response: The identification of spill response tactics for oils that sink in water falls outside the scope of the Grays Harbor Geographic Response Plan. As mentioned in Section 4.1.1 of Chapter 4, response strategies in the plan are designed for use with persistent heavy oils that float on water and may not be suitable for other petroleum

products or hazardous substances. Best practices for a spill involving submerged and sinking oils can be found in Section 3420.2 of the Northwest Area Contingency Plan.

Comment: The GRP plan calls for a total of 31,750 ft. of boom material. Depending on the type, location and water conditions during the spill this may need to be different types. Where would this be stored? Who would provide the money to provide the necessary materials? (6)

Response: If all 55 response strategies in the plan were deployed the amount of boom you indicate would be required. Information on the location of response equipment in the Pacific Northwest Region can be found on the Western Response Resource List (WRRL) at www.wrri.us. Classifications on the type of boom recommended are provided on the 2-Pagers listed in Appendix 4A (under "Recommended Equipment"). Equipment would cascade into the area. The Responsible Party (RP) for the vessel, facility, or rail line would be responsible for the costs associated with cleanup. If the RP was slow to take action, or denied responsibility, the response would likely be funded by the Oil Spill Liability Trust Fund (managed by the Coast Guard) or by State Funds.

Comment: Will each of the strategies be responded to individually or simultaneously? (6)

Response: Much would depend on the size of the incident and the scope of the response effort. In the hours following a significant spill event, more and more response personnel and equipment would arrive into the Grays Harbor area. This increased capacity would likely allow additional equipment and personnel to be allocated to GRP response strategy deployments unless they were needed to help control and contain the spill at or near its source. It's important to understand that source control and containment are a higher priority than the deployment of GRP strategies during a spill response.

Comment: Maps in Chapter 4 aren't titled. Consider adding a title to the maps. The legend implies what the map is for but when I first looked at the figures it took me awhile to figure out how they were different and what data was being shown. (4)

Response: Titles have been added to the area maps in Chapter 4.

Comment: Weyerhaeuser is agreeable to emergency response access by the State of Washington, its agencies and/or contractors, for the purpose of oil spill mitigation, on or adjacent to company ownership referred to as the Bay City Log Yard. In the draft GRP, Ecology has identified the possibility of oil boom placement at locations GH-16 and at

the “South Aberdeen – Chehalis River (Weyerhaeuser Dock).” This access is authorized under the following limited conditions and understanding: "That any such access does not provide any grant of right-of-way or easement onto the property by the State and does not create an encumbrance on the property. Such authorization shall not be recorded against the property in public records. Weyerhaeuser, or any successor or assigns, reserves the right to terminate or modify such authorization in the future with at least 12 months notice if the property is sold to a third party or immediately in the event the property is put back into productive use by Weyerhaeuser." (7)

Response: Weyerhaeuser’s assistance in granting access to the Bay City Log Yard is very much appreciated. As it relates to the implementation of GRP response strategies during an oil spill emergency, Ecology and its partners do not seek a legal right-of-way or easement onto Weyerhaeuser property at the Bay City Log Yard in South Aberdeen. Per WAC 173-340-800 (Emergency Entry), notice by Ecology’s authorized employees, agents, or contractors is not required for entry onto property to investigate, mitigate, or abate an emergency posed by the release or threatened release of a hazardous substance (including oil). After a spill event, reasonable efforts will be made to inform you about any response actions occurring at or near your property in South Aberdeen.

Comments: Most of the strategies in the GRP appear to be designed to address spills that occur above or near the shoreline, rather than in the open waters of Grays Harbor. Further, many of the specific response strategies in Chapter 4 for areas with significant shellfish resources (e.g. Sectors GH-3, GH-4, and GH-5) do not list shellfish as resources at risk or specifically describe how shellfish resources will be protected. (2)

More GRP response strategies in the existing plan are located in upstream wetlands rather than open estuary where shellfish resources are located. Will more strategies for open estuary shellfish areas be developed and published in the updated plan? If not, why? (5)

There is no plan to protect oyster beds in South Bay or North Bay. All booming strategies exclude commercial and private shellfish beds. How will the oyster and shellfish industries be protected from a spill and its consequences? (6)

Response: As mentioned, most GRP response strategies are located along the shore. We believe these strategies can be effectively deployed after a spill occurs and might reduce oil’s impact to some (not all) of the sensitive resources in a particular area. Since sensitive shellfish resources are generally located away from shore (out in bays and estuaries) they are not typically listed as “Resources at Risk” for response strategies along the shore. Oil spill response options are limited in broad and shallow bays and estuaries, especially those in areas with strong currents. Since these areas flood and drain twice a day with the tide and are primarily mud flat at low tide, the placement and anchoring of boom can be difficult or impossible to set and maintain. These areas may

also have eel grass beds or other sensitive habitat that could be damaged by the anchoring or placement of boom, doing more long-term harm to the environment than good. Since dispersants and in-situ burning aren't likely to be used in Grays Harbor, enhanced on-water skimming (mechanical recovery) is one of the few remaining response options available. On-water mechanical recovery provides responders the opportunity to recover oil on the water before sensitive muddy shallow areas are impacted. Enhanced skimming is purposely left out of the Grays Harbor GRP because the placement of assets associated with this activity is best determined after a spill occurs when the actual or projected movement of oil on the water is known (spill specific). Enhanced skimming assets are too valuable to limit by strictly defining their pre-placement in the GRP.

Comment: There is an error in contact for O'Leary Creek 4A-106 - phone number is incorrect. The number should be (360) 648-2476; email address should be Ldotorg@olearycreek.com. (6)

Response: The contact information for response strategy OLRC-0.0 has been updated.

Comment: Chapter 4 (Pg. 4-3, pdf page 25), Edits to the second bullet on the page are needed. Replace the text "Generally, anything more than the hand-cutting of vegetation on or near the bank of a stream would require an Emergency HPA permit from Washington Department of Fish and Wildlife; call WDFW Oil Spill Team at 360-534-8233 (24-hour pager)." with "To obtain an Emergency Hydraulic Project Approval contact the WDFW Oil Spill Team at 360-534-8233 (24-hour pager)." (4)

Response: Information in Chapter 4 concerning Emergency HPA permits has been updated.

Comment: 48 boats would be needed to cover the estuary and hundreds of people according to the plan. Where would these boats come from and be stationed? How quickly would they be able to respond? (6)

Response: If all the response strategies in the plan requiring a workboat were deployed simultaneously then 48 boats would be needed; 36 standard boats, 9 airboats, and 3 hand-launch boats. 56 supervisors, 200 laborers/responders, and 48 boat operators would also be needed for a simultaneous deployment. After a spill, it is highly likely that teams of boats and personnel would be assigned to deploy 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). This means fewer boats and personnel would be needed to implement GRP response strategies than that shown by adding all of the numbers in the plan together.

Initial response resources (boats, boom, and personnel) would come from the Washington State approved contingency plan holder for the vessel or facility involved in the incident, or their Primary Response Contractor. Additional personnel and equipment from outside the area would be mobilized if the size and scope of the spill warranted such action. This "ramping" or "cascade" approach is consistent with Section 1000 of the Northwest Area Contingency Plan (NWACP) where it says "the response to a spill incident should be promptly 'ramped-up' to provide adequate equipment and trained personnel to effectively respond to the highest quantity of product that will most likely be released." Response resources arriving from outside the area may be allocated to the deployment of GRP response strategies if they're not needed for source control and containment of the spill at or near its source. It's important to understand that source control and containment are a higher priority than the deployment of GRP response strategies.

The type, amount, and location of response equipment in or near Grays Harbor can be found on the Western Response Resource List (WRRL) at www.wrrl.us. Response times for equipment would vary depending on their current "home base" or staging location. The staging of equipment in Grays Harbor after a spill event would be incident specific, much dependent on the spill location, product type, spill volume, and trajectory information. Eight staging areas meant to support the deployment of GRP response strategies are identified in Appendix 4C of the plan.

Chapter 6 – Resources at Risk (Draft Plan):

Comment: Why is there no mention of Grays Harbor National Wildlife Refuge until the last, 6-7? Why is there no mention of US Fish & Wildlife as owners of the Refuge and no plan to contact them? (6)

Response: Grays Harbor National Wildlife Refuge is appropriately placed as a Specific Geographic Area of Concern in Section 6.2.2. A link to the Grays Harbor National Wildlife Refuge is provided, allowing readers of the electronic version of the document to find more information about the Refuge on line. Filed notes and site contact information for GRP response strategy GH2 (Bowerman Basin) on page 4a-49 & 4a-50 have been updated to include the USFWS Grays Harbor National Wildlife Refuge.

Comment: PCSGA appreciates the hard work that has gone into updating the Grays Harbor GRP, and we believe that the updated plan provides significant improvements over the existing plan. In particular, we support the designation of shellfish beds as sensitive natural resources deserving of heightened protection, including the provisions in Section 6.2.1a (Habitat - Oyster Beds/Reefs) and Section 6.2.1b (Fish - Oyster Culture)

of the updated GRP. Protecting shellfish beds as sensitive natural and economic resources is critical to preserving the quality of the environment and human life in Grays Harbor, and we support these designations in the updated GRP. (2)

Response: Comment noted and appreciated.

Comment: All references to Chapter 9970 of the NWACP should be replaced with references to Chapter 9310 of the NWACP as the chapters were renumbered in 2012. You may want to recheck all NWACP references in the Grays Harbor document. I also noticed a reference to 9683.2 and 9683.3, both of which appear to no longer exist, even in other NWACP chapters? (4)

Response: References to NWACP Section 9970 have been changed to NWACP Section 9310. A reference to NWACP Section 9311 (Northwest Area Wildlife Deterrence Resources) has been include in Section 6.5.2 (Hazing). References to NWACP Sections 9683.2 and 9683.3 in Section 6.5.1 of the GRP have been changed to NWACP Sections 9301.3.2 and 9301.3.3. References in Chapter 5 and Appendix 5A have been updated to include the Shoreline Countermeasures Manual (NWACP Section 9420) and the Northwest Area Contingency Plan Permit Summary Table (NWACP Section 9401).

Chapter 7 – Logistics (Draft Plan):

Comment: Missing wildlife equipment owner information. Text for wildlife equipment owners needs to be added. (4)

Response: Wildlife equipment owner information has been added to Chapter 7.

Comments Received about the Existing Plan:

(GH-GRP dated March 2003)

Comment: I feel that all of the GRP's for the Grays Harbor area are practical and doable with the exception of GH-12 (Bowerman Basin). I believe that everyone involved is aware of this and understands that the impact of not having a response strategy would be devastating to the estuary and wildlife; I just don't know what other options exist. I know that the boom has been strung across the basin at GH-12 in the past, and would be curious to see any documentation of the drill. (1)

Mention was made during the workshop held in Aberdeen in August 2009 that it wouldn't be possible to boom the entrance to Bowerman Basin due to shallowness of the water and rough water (the rough water obviously depends on weather and tidal

state). Bowerman Basin is home to the Grays Harbor National Wildlife Refuge and extremely sensitive. Has the deployment of boom using airboats been considered for this shallow water area? Grays Harbor National Wildlife Refuge, Washington Department of Fish & Wildlife, and Washington Department of Agriculture all have airboats that might be used to deploy boom at this location. (9)

Response: The sensitivity of Bowerman Basin and the Grays Harbor National Wildlife Refuge is acknowledged. GH-12 in the existing plan is replaced by response strategy GH2 in the updated plan. Past attempts to deploy GH-12 using 4000ft of hard boom in a straight line across the entrance to the basin were unsuccessful. GH2 consists of multiple lines of sorbent and snare boom across the basin, implemented over several tidal cycles with contaminated sorbents and snare being replaced at the same time. Although GH2 is not expected to be completely effective in protecting the basin from spilled oil, it's believed that it would stop some quantity of product from entering once implemented. Airboats are recommended for the deployment of GH2, since they can operate in extremely shallow waters and transverse mudflats with little difficulty. Additional response actions such as enhanced on-water skimming (mechanical recovery) would likely be used during a spill to further reduce the chance of impact to Bowerman Basin, but descriptions of how such assets might be used would be spill specific and outside the scope of this plan update.

Comment: Page 4-10 of the draft plan - The "Site Access" given for the Strategy GH-16 is listed as "In south Aberdeen – use marina just west of mill." It is not clear which marina or mill is being referred to. If the reference is to the former "Weyerhaeuser Aberdeen Sawmill" site, located at 500 North Custer Street, note this property was sold to Grays Harbor Historic Seaport Authority. Site access would be controlled by the GHSA. If the reference is to the Pacific Veneer mill, located at 100 North Decatur Street, contact should Weyerhaeuser Bay City Log Yard gate at either East Schley Street or East Taylor Street, notification should be provided as indicated above. (7)

Response: GH-16 in the existing plan has been retired and is not referenced in the updated plan.

Comment: Page 4-10, The "Staging Area" listed for GH-17 is given as "Stage at Weyerhaeuser mill in Cosmopolis." Weyerhaeuser sold this mill to Cosmo Specialty Fibers several years ago. (7)

Response: GH-17 in the existing plan has been retired and is not referenced in the updated plan.

Comment: Will the updated plan include information about the sensitivity of Bottle Beach State Park and Mini Moon Island? Significant shorebird concentrations are present on the mudflats at both these locations, especially during spring & fall migrations. (9)

Response: Information on the sensitivity of Bottle Beach and Mini Moon Island has been included in Section 6.2.2 (Specific Geographic Areas of Concern) of Chapter 6.

Comment: Vessel traffic in Grays Harbor is likely to increase. New bulk liquid storage tanks and loading/unloading facilities just east of Imperium Renewables are planned or being developed. The SR520 Floating Bridge Pontoon Graving Dock facility is to be built just west of the Aberdeen Sewage Treatment Plant at the Weyerhaeuser Log Storage Area. With the likelihood of increased vessel traffic in Grays Harbor, we suggest that maximum speed regulations for ship traffic be lowered during the spring migration (3rd week of April through 2nd week of May) in the area of Mini-Moon Island, west of Bowerman Peninsula, adjacent to the North Ship Channel. Mini-Moon Island is within the boundary of the Grays Harbor National Wildlife Refuge (GHNWR), a recognized State Important Bird Area and part of the Grays Harbor estuary site of hemispheric importance as recognized by the Western Hemisphere Shorebird Reserve Network. (9)

Response: The establishment or adjustment of maximum speed regulations for ship traffic in Grays Harbor is beyond the scope of Geographic Response Plan update and development work. Your comment has been forwarded to the Harbor Safety Committee for Grays Harbor for their consideration.

Comment: Fisheries resources for Willapa Bay are described but not Grays Harbor. (10)

Response: Reference to fisheries in Willapa Bay has been removed from Chapter 6 of the updated plan. Willapa Bay is a separate Geographic Response Plan, fully independent of the Grays Harbor plan.

Comment: Wildlife/Shorebirds, Waterfowl, and Raptors: Streaked Horned Larks and Western Snowy Plover nesting habitat exists within Grays Harbor. Both birds are listed as Endangered by the State of Washington. The Western Snowy Plover is listed as threatened on the federal level (1993). The Streaked Horned Lark is a candidate for federal listing (2001). Due to their state and federal status, both species should be included in this section. (10)

Response: The Snowy Plover is listed as a “Federally Threatened” and “State Endangered” species in Section 6.2 of Chapter 6 in the updated plan. The Streaked

Horned Lark is listed as a “Federal Candidate” and “State Endangered” species in the same section of Chapter 6.

Comments Received from U.S. Fish & Wildlife Service:

Comment: The Spill Response Contact Sheet under the listing of “Other Federal Agencies” contains the wrong number for the U.S. Fish and Wildlife Service. (11)

Response: The telephone number has been updated. The number for USFWS Nisqually National Wildlife Refuge (360-753-9467) is now listed since they also manage the Grays Harbor National Wildlife Refuge.

Comment: Since Bowerman Basin is within the Grays Harbor National Wildlife Refuge, we recommend the long name in the heading of response strategy GH2 (pp. 4A-49 & 4A-50) be changed to include the refuge in parenthesis (e.g. Grays Harbor NWR). This will make it clear that the area is a Federally-managed. (11)

Response: “Grays Harbor National Wildlife Refuge” has been added to the long name for response strategy GH2 (pp. 4A-49 & 4A-50).

Comment: Sweetgrass is present along the shoreline of Bowerman Basin near the staging area for response strategy GH2 and associated anchoring point on the north side of the basin. Means should be taken during implementation of GH2 to reduce potential injury to this sensitive resource. Sweetgrass is an important cultural resource. (11)

Response: Instructions in the implementation section of the 2-pager for GH2 (pp. 4A-49 & 4A-50) have been changed to reflect the need to lay plywood sheets over the sweetgrass so that the resource is compressed but not trampled by workers. Plywood sheets should be used to form a narrow corridor between the staging area and water so potential long-term impacts to the resource are minimized.

Comment: USFWS contact numbers on the 2-pager for response strategy GH2 (pp. 4A-49 & 4A-50) need to be updated. (11)

Response: Response strategy GH2 now includes the following USFWS contact numbers: (360) 742-9153, (360) 789-6353, and (360) 753-9467.

Comment: The information in Appendix-6A (Table C2 -Public Recreation Areas) needs to be updated. It should be written as follows: (11)

U.S. Fish and Wildlife Service
Grays Harbor National Wildlife Refuge
WA-I09, Hoquiam, WA
46.9781, -123.9442
Contact: Glynnis Nakai, Doug Roster
Phone: 360-753-9467
http://www.fws.gov/pacific/grays_harbor/

Response: The information for the refuge in Table C2 of Appendix 6A has been updated as you indicated.

From: Roger Ainsworth [roger.ainsworth@imperiumrenewables.com]
Sent: Friday, September 04, 2009 11:10 AM
To: Chichester, Harry (ECY); Hass, Todd (ECY)
Subject: GRP

Thank you for the opportunity to attend the GRP meeting held in Aberdeen. I feel that all of the GRP's for the Grays Harbor area are practical and do-able with the exception of GH-12. I believe that everyone involved is aware of this and the impact of not having it would be devastating to the wildlife and estuary, I just don't know what an option to this issue would be. I know that the boom has been strung on GH-12 in the past and I would be curious to see any documentation of the drill.

Regards,

Roger



Roger Ainsworth

Facility Security & Environmental Officer
rogerainsworth@imperiumrenewables.com

360-308-6109 cell

360-632-3783 fax

102 S. Maple

Suite 103

Aberdeen, WA 98520

imperiumrenewables.com / seaf@abiodiesel.com

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October 15, 2013



Via email and First-Class Mail

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

RE: Grays Harbor Geographic Response Plan

To Whom It May Concern:

Thank you for the opportunity to comment on the updated Grays Harbor Geographic Response Plan (“GRP”). I am the executive director of the Pacific Coast Shellfish Growers Association (“PCSGA”) and am submitting these comments on behalf of PCSGA. PCSGA represents shellfish growers in Washington, Oregon, California and Alaska on a broad spectrum of issues, including environmental protection, shellfish safety, regulatory issues, and technology.

PCSGA and its members have an acute interest in oil spill response plans, as shellfish farms are very sensitive to, and can be severely impacted by, oil spills. Among other things, oil spills can cause shellfish farms to shut down for long periods of time, causing serious economic impacts to shellfish companies and the workers they employ. A recent example occurred in the spring of 2012, when the fire and sinking of the fishing vessel *Deep Sea* forced Penn Cove Shellfish to close shellfish harvest activities at their farm in Penn Cove, Whidbey Island for almost a month.

PCSGA appreciates the hard work that has gone into updating the Grays Harbor GRP, and we believe that the updated plan provides significant improvements over the existing plan. In particular, we support the designation of shellfish beds as sensitive natural resources deserving of heightened protection, including the following provisions of the updated GRP:

Section 6.2.1a – Habitats:

- **Oyster Beds/Reefs:** Oyster beds/reefs and surface deposits of shell fragments from oysters and soft-shell clams support high densities of crabs, epibenthic invertebrates and fishes.

Section 6.2.1b – Fish

- **Oyster Culture:** Portions of the estuary are under active commercial oyster culture. While much of tidelands and oysters are privately owned, commercial oyster beds provide much the same habitat benefits to native fish and shellfish as do natural beds.

Designating commercial shellfish beds as sensitive natural resources is consistent with the latest science and policy on shellfish aquaculture in Washington State. For example, in December of

2011 then-Governor Christine Gregoire announced the Washington Shellfish Initiative.¹ This initiative adopts several programs to support shellfish resources and commercial shellfish farming throughout the state. The initiative, which is designed to “protect and enhance a resource that is important for jobs, industry, citizens and tribes,” recognizes “the extraordinary value of shellfish resources on the coast,” and promotes shellfish aquaculture as a “critical clean water industry.” The initiative explains that shellfish resources “rely on excellent water quality” and “also can help filter and improve the quality of our marine waters thereby being part of the solution to restore and preserve the health of endangered waters.” Protecting shellfish beds as sensitive natural and economic resources is critical to preserving the quality of the environment and human life in Grays Harbor, and we support these designations in the updated GRP.

While PCSGA appreciates the added protection afforded to shellfish beds in the updated GRP, we are concerned that most of the strategies in the GRP appear to be designed to address spills that occur above or near the shoreline, rather than in the open waters of Grays Harbor. Further, many of the specific response strategies in Chapter 4 for areas with significant shellfish resources (e.g. Sectors GH-3, GH-4, and GH-5) do not list shellfish as resources at risk or specifically describe how shellfish resources will be protected. Finally, we anticipate that if and when any future proposals (such as crude-by-rail shipping terminals and related facilities) are approved, the Grays Harbor GRP will be amended to address any additional risks from those proposals and ensure that all resources are properly protected. PGSGA and its members would be eager to work with the Department of Ecology, the Coast Guard, and other responsible agencies during such updates, and we would also welcome your input as to how PCSGA can otherwise support oil spill planning and response efforts in Grays Harbor.

Thank you once again for your consideration of these comments, and please contact me if you have any questions.

Respectfully,



Margaret P. Barrette
Executive Director

¹ Available at: http://www.digitalarchives.wa.gov/GovernorGregoire/news/shellfish_white_paper_20111209.pdf



Quinault Indian Nation

POST OFFICE BOX 189 □ TAHOLAH, WASHINGTON 98587 □ TELEPHONE (360) 276 - 8211

October 18, 2013

Via Email

Harry Chichester, GRP Technical Lead
Washington Dep't of Ecology
PO Box 47600
Olympia, WA 98504-7600
HCHI461@ECY.WA.GOV

Re: Draft Grays Harbor Geographic Response Plan

Dear Mr. Chichester,

The following comments are submitted on behalf on the Quinault Indian Nation (QIN) on the Draft Grays Harbor Geographic Response Plan. The Quinault Indian Nation is a sovereign tribal government that has federally-guaranteed treaty rights and other interests in Grays Harbor, the Chehalis and Humptulips River and those drainages lying north of Grays Harbor. We appreciate the opportunity to comment as it coincides with other efforts the QIN is making to protect the Grays Harbor Region.¹ These comments are primarily technical in nature. The Quinault Indian Nation considers the existing draft to be very preliminary requiring further technical collaboration. As provided in the State and Tribal Centennial Accords, the QIN reserves the right to call for government to government consultation when this plan approaches a higher level of completion. (*Centennial Accord between the Federally Recognized Indian Tribes in Washington State and the State of Washington, Aug. 4, 1989*).²

¹The Quinault Indian Nation and others had filed an administrative appeal of an MDNS issued by the City of Hoquiam and the Department of Ecology for a Shoreline Permit Application for the transshipment and storage of crude oil into and out of Grays Harbor. Several issues brought forward in that appeal will be decided in the QIN's favor by the Shorelines Hearing Board (SHB NO. 13-012c), which has preliminarily stated the "MDNS is erroneous" and that the "SEPA analysis . . . does not appear sufficiently robust pertaining to seismic hazards, archeological and cultural resources, and oil spill hazards" requiring further analysis (letter issued by SHB on Oct. 8, 2013).

² The Centennial Accord states that "[a]mong other things, these procedures will require persons responsible for dealing with issues of mutual concern to respect the government-to-government relationship within which the issue must be addressed. Each agency will establish a documented plan of accountability and may establish more detailed implementation procedures in subsequent agreements between tribes and the particular agency."

Interests of the Quinault Indian Nation

The Quinault Indian Nation is a signatory to the Treaty of Olympia (1856) in which it reserved a right to take fish at its “usual and accustomed fishing grounds and stations” and the privilege of gathering, among other rights, in exchange for ceding lands it historically roamed freely. Treaty rights are not granted to tribes, but rather are “grants of rights from them—a reservation of those not granted.” *U.S. v. Winans*, 198 U.S. 371, 380-381 (1905). Treaty rights are akin to easements running with the lands or places they burden and include a right of access to those places. *Id.* at 381. As such, treaty rights are property rights within the meaning of the fifth amendment and cannot be “taken” without compensation. *Muckleshoot v. Hall*, 698 F. Supp. 1504, 1510 (W.D. Wash. 1988). A letter date April 17, 2013 sent by Kristen L. Boyles, *Attorney for the Quinault Indian Nation*, to Sally Toteff, Southwest Regional Director of the Washington Dept. of Ecology further explains the interests and concerns of the Quinault Nation regarding the transport of hazardous materials within the Grays Harbor Basin.

We appreciate your direct response when you were asked what plan exists for the drainage areas above the Grays Harbor Plan Area. Your response was: *“Thank you for your email and interest in Geographic Response Plans (GRPs). As you noted, there is no GRP for WRIA 23 (Upper Chehalis). This is not meant to say that WRIA 23 doesn’t warrant a plan – only that GRPs aren’t currently developed for that area. The eastern upstream boundary on the Chehalis River in the draft Grays Harbor GRP is congruent to that published in the current plan, ending just upstream of Cosmopolis.”* The lack of such a plan, thus a lack of coordination between planning for the upper and lower basins is a primary concern of the QIN. Therefore, the QIN technical recommendation is that this GH plan update must also address a level of planning, a timetable and framework for the final development of a Geographic Response Plan above Cosmopolis as well. Potential spill recovery efforts above Cosmopolis, throughout the upper basin and coordination with the GH GRP could be most directly affected by lack of such planning.

The Quinault Indian Nation has usual and accustomed fishing areas in Grays Harbor and the Chehalis and Hump Tulips Rivers and adjacent marine coastal areas, and tribal members’ right to access currently-used fishing sites could be significantly and negatively impacted from a numerous range of potential incidents or natural disasters during conduct of normal commerce within these basins and marine areas. An incident, natural disaster or accident could compromise the safe passage of highway vehicles, marine vessels and rail traffic or otherwise affect the safe storage and transfer of hazardous products into and out of Grays Harbor, leading to the deleterious release of such products into our waterways, the air or on land to compromise public safety, public health or the health of our natural resources. A spill of hazardous material into our waters could devastate the fish, shellfish, and eel grass populations they rely on for commercial and subsistence harvest and cultural activities. Tribal members live and work in the Grays Harbor area. The Quinault Nation strongly opposes the advancement or the routine conduct of projects that could potentially harm the public, or affect the marine and freshwater resources. The GH GRP should include a process for continuing assessments of potential impacts, risks, and mitigation planning for new projects involving transport and storage of hazardous materials. Those assessments must require full disclosure of potential developments, to include those provisions that should be required for resource protection as well as required spill response capabilities of all significant stakeholders involved in each project proposal. Without full

informed disclosure and documented proof of acceptable basin-wide provisions to demonstrate adequate protection from potential project impacts a new project should not receive approval.

Structure and Content of the Chapter on Objectives and the Chapter on Communications within the Proposed Plan (Chapters 1 & 2)

QIN technical staff recommends that the plan include sections on measurable objectives such as communication activation and response times, equipment mobilization and equipment staging response times, as well as objectives for spill response containment and spill recovery (ie. percentage of spill recovered and estimated dispersion and time before recovery). It is further recommended that the plan, instead of identifying a contact chapter, contain a communication chapter that includes a prioritized listing of the individuals or entities who need to be contacted and in what order, in order to automatically initiate other communications that may be better performed by other individuals within the communications tree before an incident commander can be assigned and brought up to speed. This chapter should also first identify through the phone communication tree the first responders who would be charged with assessing the volume and dispersion rates of a spill, while prioritizing a list of potential populations and resources most at risk (ie Coast Guard, WDFW and QIN fisheries enforcement, Local Enforcement jurisdictions and the potential entities responsible for the spill). This chapter should contain a section up front about how to effectively utilize and test the communications process and response times during unscheduled tests. The capability of the communications tree should be routinely tested.

A critical part of the communications tree is an alert system that provides a ‘heads up’ notification which warns of a potential for an incident or spill that by itself initiates the communications tree. This should include categories such as a) terrorist alert, b) tsunami alert, c) earthquake alert, d) severe storm & flood warning alert, an incident or accident involving hazardous materials-(spill possible) and f) spill confirmed. The contact sheet in the draft appears to be missing key contacts. This list should include enough staff for 24/7 coverage from Homeland Security, the Washington State FEMA coordinator, the local WSDOT and I5 Corridor Regional staff, the Puget Sound and Pacific Railroad staff as well as responsible staff of the other Railroad companies that utilize the Class 1 Railroad through Centralia and the PS&P railway tracks. The communication tree should contain contacts for both Bremerton and Bangor Naval Bases and the Port of Olympia. The naval bases would have spill recovery equipment and they have direct rail connection with the Puget Sound and Pacific Railway, while the Port of Olympia should have response equipment and close potential connection through the PS&P and the Class 1 railroad lines. The Puget Sound and Pacific Railroad should have its own spill response equipment staged and cached within the basin. The testing of their communication response times should also be set within this plan on a non-routine schedule (ie. at various odd hours).

Structure and Content of the Chapter on Logistics & Needs Assessment(Chapters 3 & 4)

The current plan has a section called Response Equipment Cache Locations that is buried in Chapter 7, bottom of page 7-9. This includes a large regional equipment database accessed through the website: <http://www.wrrl.us/>. QIN recommends that this section be elevated as Chapter 3 and combined with what is currently labeled sections 4.1, 4.2, 4.3.1, 4.3.2, including

the maps and priority tables through page 4-17. Where each map or table through page 4-17 occurs in Chapter 3 and has a corresponding set of matrices; there should be contained a direct reference to where the corresponding matrice or tables of the chapter 4 would be contained in the appendix (labeled Chapter 3 appendix). The Response Equipment Cache Locations data base (<http://www.wrrl.us/>), should incorporate the local equipment listed in the text and that inventory list should also include additional columns on equipment loading and mobilization time and response time to Aberdeen. All other parts of Chapter 7 on logistics should be confined to the appendix labeled logistic suppliers because they do not provide an initial actionable response capability. Prioritized success of responses require quick communications response, and the fastest equipment mobilizations times coupled with the identification of immediate priorities before an incident commander may be able take over and assess the situation for themselves.

Chapter 4 should be constructed as a chapter that comprises an overall equipment inventory categorized as to equipment types and response times. Coupled to this current inventory an equipment needs inventory assessment should be included, based on information currently shown in the response plans strategies matrices beginning on current page 4-27 through page 4-58 and shown graphically in appendix pages 4A-2 through 4A-112. A worst case and moderate case scenario should be developed and assessed for overall equipment and response time capabilities that would summarize the needed equipment among all the areas and strategies that could occur requiring a timely response. This would cover those situations when approaching vendors for new equipment would not provide a timely response. The pager strategies do not need to be included here but could be outlined further in the Communications Chapter with reference to pages where a more generalized list could be contained. Pagers seem an outmoded form of communication given other communications options.

Another important task that should be added to this Chapter 4 would be to keep a designated staff person from the state agency to compile a current summary of the availability of surplus properties and equipment that would become available to the state or local entities that may provide key equipment, staging, oil recovery and recovery processing services to Grays Harbor, the adjacent coast and to the Upper Chehalis. Another routine objective of this staff person would be to investigate not just acquisition but also the availability of key resources that could be put on retainer and stage at critical locations on a routine basis. This needs to be a living document and process.

In 2014 the SR 520 bridge replacement casting basin site will become available for uses other than its current use. The disposition of this site will become the subject of an EIS process and WSDOT consultations with the Quinault Indian Nation, among others. Currently there exists no dedicated site on Grays Harbor committed to the staging of significant vessels, oil recovery barges or equipment that appears to meet the potential needs that this site would meet, being adjacent to the major commercial shipping piers in Grays Harbor. The launch channel could provide a moorage site for a dedicated tug, a skimmer vessel and a recovery barge loaded with the type of deployment and booming equipment that a large number of the strategies and locations seem to require. Furthermore, the site may be adaptable to other commercial and non-commercial activities occurring in tandem, and include the potential for treating oiled water in close proximity to several geographic areas.

Structure and Content of the Chapter on Emergency and Long-term Funding Sources and Needs Related to the Volumes of Hazardous Materials in Question for this GRP and the Upper Chehalis River (Chapters 5).

This chapter should contain a list of all entities which routinely transport or store hazardous liquids and dry goods in significant volumes (in excess of 500 gallons per trip load). It should also include those which share responsibility in the security of such products to prevent or limit their unintended release into the environment of Grays Harbor and its tributary basins and provide subsequent recovery from such incidents. The hazard materials should be broken out into Toxic Inhalation and Poison Hazard Materials (TIH/PIH) as well as Dangerous Goods and Hazardous Materials (Excluding TIH/PIH).

The shared responsible parties are those that would include regulatory, leasing, fee collection, and licensing authorities such as, the Port of Grays Harbor, WSDOT, the US Coast Guard, the US Army Corp of Engineers, the State Dept. of Licensing, the Railroad Transportation Administration, the Washington State Department of Lands (for leases of applicable DNR administered state land holdings where storage and commerce in such goods occur) etc.

Information should be solicited and compiled from the shipping and storage entities summarizing the levels of service fees collected for hazardous materials transport and storage in excess of those that would be received for the same amounts of routine materials and the separate rate structures provided for each of the respective collections. These fees should also include those collected for mishandling, mislabeling or misreporting by suppliers providing the materials to their shipping agencies. The reports should include an itemized summary of the destination of such funds that are collected in excess of those that would be collected for regular material handling.

The shared responsible parties would summarize the levels of fees they collect for shippers and material handling entities for hazardous materials that would be in excess of what they would collect for comparable sized amounts of non-hazardous materials. The destination of these funds should be reported.

A separate summary would be compiled for the levels of funds to be provided for the maintenance of Geographic Response Plans, response equipment acquisition and maintenance, staffing for such plans and the specific geographic areas to which those funds are designated in total and to Grays Harbor separately from all entities described previously. Each of these entities would provide information about the funds they would have available for emergency response, the conditions under which it could be provided and designate contacts with emergency release or purchase authorities that would be incorporated into the communications tree. The WSDOT, Port of Grays Harbor, WDOE, and US Coast Guard, with the aid of response maintenance funding, would be responsible for compiling and reconciling a database similar to that provided for the Equipment cache database (<http://www.wrrl.us/>) but just directed at funding .

In summary: The proposed organization of the plan provides five chapters that identify the mission, the actions and the resources upon which those actions would rely. The appendixes contain the supporting information for those chapters. The QIN's first recommendation is to re-organize some of the excellent groundwork that has been laid to identify response strategies in a

manner to makes them quickly accessible, allow for communications and direction that would be easily discerned by a novice reading this the first time or who through the communications setup can receive timely verbal or texted information from the initial communications responders. The second recommendation is to identify the measurable objectives from which to test responses under various conditions and scenarios. The third recommendation is to provide for the needs assessment, additional equipment and site locations where this plan may be implemented and to make it a living document that will update those needs routinely. The final recommendation is to identify the potential and existing sources of maintenance and emergency funds for response planning, equipment, siting of response services as those should be related to the level of materials handled and fees collected accordingly. Finally, QIN technical staff could not find information in the plan that would identify a responsible official, presumably within state government, who would have the authority to initiate an initial physical response, then, if necessary, appoint an incident commander. QIN technical staff recommends that such authority be expressly laid out within all GRP's.

The QIN looks forward to further collaborative work with WDOE on this project. Please feel free to contact us regarding your work on this project.

Regards



Dave Bingaman, Director
Quinault Division of Natural Resources
Email: dbingaman@quinault.org
360 276-8215, Ext. 374

Jim E. Jorgensen, Harvest Management Biologist
Department of Fisheries
Email: jjorgensen@quinault.org
Phone Ext. 552

Mark Mobbs, Department Manager
Department of Environmental Protection
Email: mmobbs@quinault.org
Phone Ext. 292

Quinault Indian Nation
Division of Natural Resources
P.O. Box 189
Taholah, WA
360 276-8215
Attachment:

Attachment to: QIN Technical comment letter subject: Draft Grays Harbor Geographic Response Plan

Selected excerpts from separate testimonies of James E. Jorgensen, Salmon and Steelhead Management Biologist and Ervin Joseph “Joe” Schumacker Jr., Marine Resources Scientist presented to the Shorelines Hearing Board regarding the description of the Basin and QIN fisheries within the basin in respect to Crude Oil by Rail and Marine Vessel traffic with their lists of references included:

James E. Jorgensen

I. GRAYS HARBOR GEOGRAPHY

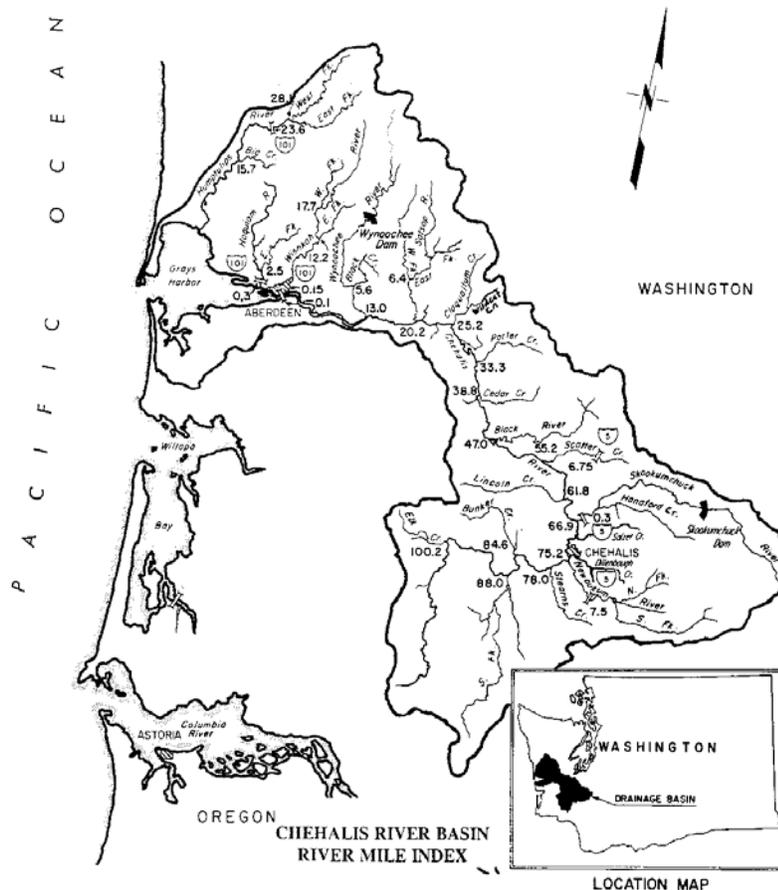
1. The geographic areas of concern for the salmonid populations cover the Upper and Lower Chehalis River Basin, primarily focusing on freshwater areas which lie downstream or within the vicinity of the railway routes over which crude rail shipments are being proposed and continuing downstream into the marine and adjacent waters of Grays Harbor and the outer Washington coast.

2. The map in Figure 1 (reproduced from 2008 Grays Harbor Management Plan Agreement between WDFW and Quinault) shows the entire drainage of the Chehalis Basin. The town of Chehalis lies where the Newaukum River meets the upper Chehalis River. The Newaukum drains uplands west and southwest of the town of Chehalis, while the uplands south and west of Chehalis drain into the Chehalis River before entering that town. Approximately four miles north of Chehalis, down the Chehalis River, lies the town of Centralia where the Skookumchuck River enters the Chehalis River. The Skookumchuck drains uplands north and northwest of Centralia, from the direction where the city of Olympia lies. Leaving the town of Centralia the Chehalis River flows northwest and west to the Grays Harbor. Adjacent tidal areas of Grays Harbor potentially affected include the tidal areas of the Hoquiam, Humptulips, Johns, and Elk Rivers, and numerous small tributaries emptying directly into Grays Harbor as well as

other low lying sloughs and wetlands that serve as refuge and forage habitat for numerous aquatic organisms within this extensive ecosystem.

3. From the direction of Olympia, the Class 1 railroad enters the Chehalis basin, crosses and runs near the Skookumchuck River downriver through Centralia, then a short distance up the Chehalis River to the town of Chehalis, and then up the Newaukum River crossing it on the way out of the basin going south. The Class 1 railroad switching yards in Centralia link to the Puget Sound and Pacific Railroad, that runs through the towns of Rochester, Oakville, Porter, Elma, Montesano, Aberdeen, Hoquiam to the Port of Grays Harbor. That route runs near or adjacent to the Chehalis mainstem for significant distances and it crosses numerous tributary waters of the Chehalis River as it runs northwest and west to Grays Harbor. From the town of Montesano most of the route hugs the north shore the river and its side-channels, then the estuary before crossing the Wishkah River and arriving at the Port.

Figure 1.



4. The Level 1 Watershed assessment provided for the Chehalis Basin Partnership gives the following description of this basin, excerpted in part (Michaud J., et al, 2000): “The basin is bound on the west by the Pacific Ocean, on the east by the Deschutes River Basin, on the north by the Olympic Mountains, and on the south by the Willapa Hills and Cowlitz River Basin. Elevations vary from sea level at Grays Harbor, to 5,054 foot Capitol Peak in the Olympic National Forest. The basin encompasses 2,520 square miles and drains 2,660 square miles. The Chehalis River system flows through three distinct ecoregions, Cascade (including the Olympic Mountains), Puget Lowland, and Coast Range before emptying into Grays Harbor near Aberdeen (Omernik, 1987). The geology and associated hydrogeologic conditions of the Chehalis Basin vary widely and reflect the complex geologic history of the area.”

5. Further geologic, soil, vegetative species, temperature and water, streamflow and precipitation information is provided in that report. “The lakes and streams within the Chehalis Basin provide vital habitat for numerous species of fish. Streams range in character from cold, swift-flowing, high elevation tributaries, to warmer, meandering, lowland valley rivers. There are 180 lakes, ponds, and reservoirs in the basin. Most of these are lowland waters supporting varied fish and wildlife species.”

6. The Grays Harbor estuary at its northeastern end in Hoquiam contains the Bowerman Basin, an important area managed by the U.S. Fish and Wildlife Service as a major

component of habitat for migrating and wintering for waterfowl in the Pacific Flyway (Michaud J, et al, 2000). The estuary comprises approximately 99 square miles of surface area. The amount of the estuary's shallow bottom area that is flooded between high (MHW) and low (MLLW) tides ranges from 40 to 99 square miles with the intervening 59 miles of tidal flats playing an important role in the movement, mixing, and reaeration of the harbor waters during tide cycles (Beverage, J. P., & Swecker, M. N. (1969)).

7. The estuary and its dynamics and interactions with tributaries that drain into it were described in a study of the excursion distances of salinities, injected dyes, and potential pollutants within the basin when the water columns would move upstream then downstream during tide cycles at different freshwater flow regimes. The report characterizes the dispersions both in the horizontal and vertical planes of the water column as well as the flow velocities through high and ebb tides. It also describes the existing demands being placed on biologic communities through periods of low availability of oxygenated water as observed in the mid-1960's, being exacerbated by pulp and other lumber mill operations. The maximum mean velocities along the vertical within the water column for the upper estuary was characterized as varying from about 3 feet per second (fps) on floodtides to about 4.5 fps on ebbtides depending on the tidal stage, range of tides, fresh-water discharge, and location within the estuary (Beverage, J. P., & Swecker, M. N. (1969)).

8. The recovery of oil from a spill in time to prevent wide-spread dispersion, and prevent the wide-spread mixing of oil with suspended sediment as well as benthic sediment would be extremely limited during periods of high freshwater flows in the Chehalis River and within the tidally influenced areas during high velocity movements within the tidal cycle given the descriptions in this report. The described movements of water would also extend upstream

into the lower tributaries, the Wynoochee, Wishkah, Hoquiam, Johns, Elk and Humptulips River and smaller drainages and tidal influenced wetlands lying along the Estuary. The seasonal periods of freshet and storm events would coincide with an increased threat to the integrity of a railway corridor crossing or adjacent to a river. Those periods would coincide with more difficult maneuvering of marine traffic through the harbor and its mouth. Fall and winter storm seasons also coincide with the **major** entry of salmon and steelhead adults and the deposition of their spawned eggs into the spawning beds compared to the other seasonal periods of calmer weather patterns.

Figure 2 (from the Upper Estuary Study).

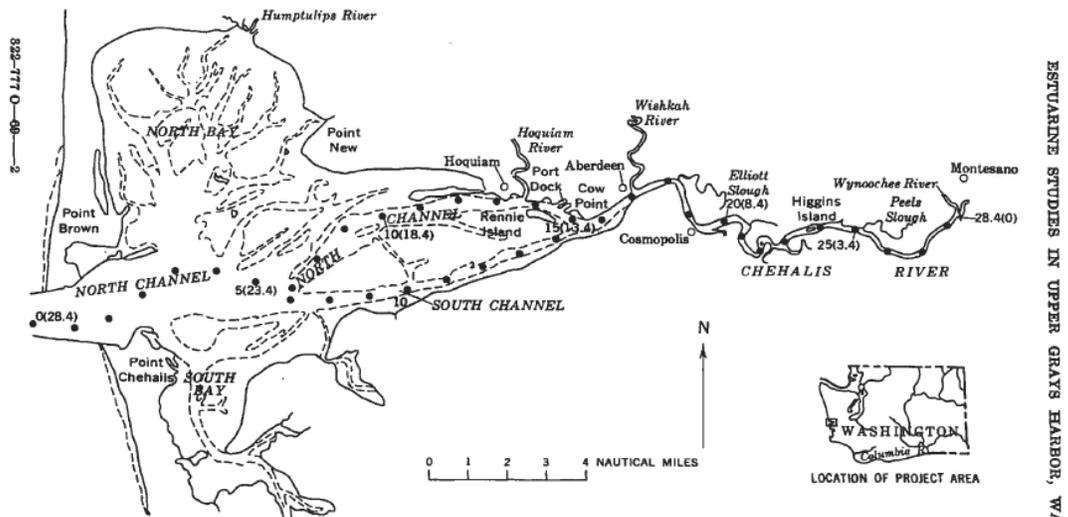


FIGURE 1.—Sketch map of Grays Harbor. Dots are spaced at 1-mile intervals, starting at mouth of harbor. Numbers outside parentheses indicate navigation-channel distances upstream from mouth. Numbers inside parentheses indicate distances downstream from State Highway 107 bridge south of Montesano. Shaded areas indicate tidal flats. Map modified after U.S. Coast and Geodetic Survey Chart 6195, 59th ed., March 21, 1966.

9. A major Class I railway corridor transverse the Middle Chehalis Basin running from Puget Sound to the Columbia River. This is the rail route that has been proposed to carry major amounts of crude oil through the upper basin to other transshipment points north and south of Grays Harbor. Westway, Imperium, and U.S. Development Group have proposed that the Puget Sound and Pacific Railroad, which branches off this Class I railroad in Centralia will be the route to carry crude oil down along the Chehalis River into Grays Harbor from where it will also be transhipped by marine vessels elsewhere.

II. BACKGROUND ON TRIBAL FISHERIES AND FISHERIES MANAGEMENT

10. The Quinault Indian Nation participates in the assessment of salmon and steelhead fishery impacts on those stocks of concern to the Quinault Nation with the state and other co-managers where the parties fish in common. For salmon and steelhead management of

Grays Harbor stocks, the Quinault and Washington State (Washington Department of Fish and Wildlife or WDFW) share in the management and assessment of those stocks within the Basin for harvest and conservation purposes. For fisheries targeting on those and other stocks from various regions and rivers of origin, which occur off the coast, the Quinault Indian Nation and Washington State (though WDFW) share co-management responsibility with the National Marine Fisheries Service and other Tribes. Chinook and coho salmon are also co-managed through the international Pacific Salmon Treaty, incorporating Alaskan and Canadian ocean fisheries and their stocks of concern. Our local stocks of chinook and coho salmon are subject to harvest in these northern fisheries and managed according to terminal spawning escapement objectives provided by WDFW and the Quinault jointly.

11. For salmon and steelhead, the primary local domestic ocean fisheries occur with the commercial treaty and non-treaty troll and the non-treaty recreational fisheries off the Washington and Oregon coasts. Also, coho and chinook fisheries affecting our local stocks extend up to Southeast Alaska, where local natural origin chinook are heavily harvested. Each marine ocean area fishery is limited each season by the availability of the weakest chinook and coho stocks (across regions and rivers of origin (freshwater basins) which contain stocks, such as Grays Harbor (GH) coho and chinook which come under the federal management regime controls) in order to meet the terminal spawning escapement objective. Most of the ocean catch directed at local chinook and coho stocks involves use of commercial troll hook and line gear as well as recreational hook and line gear. Fisheries within the estuary of Grays Harbor and its freshwater tributaries consist of the Treaty commercial, subsistence, and ceremonial (home use) fisheries, the non-Treaty commercial fishery (which utilize gill-net gear), and recreational fisheries (which utilize hook and line gear). These fisheries target Grays Harbor chinook, coho,

chum, and steelhead of both natural and hatchery origin conducted during separate seasons, the fall (targeting coho, fall chinook and chum), the winter (targeting winter steelhead) and spring/summer seasons (targeting Chehalis Spring/summer chinook and white sturgeon).

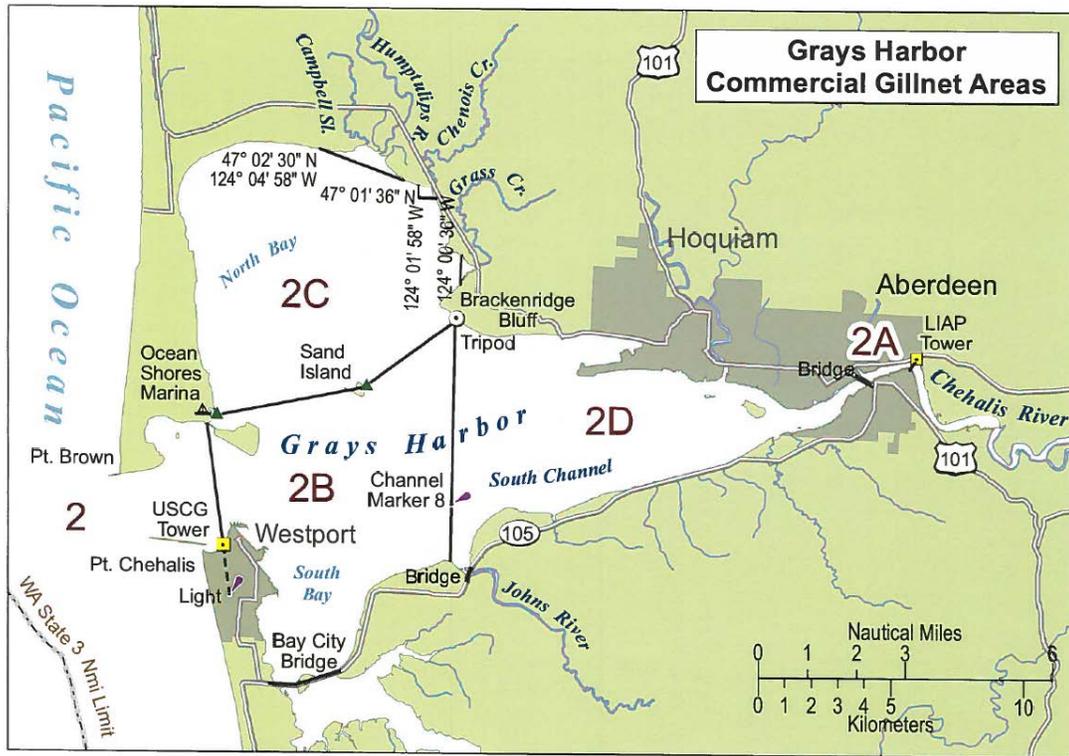


Figure 3 (WDFW: http://wdfw.wa.gov/fishing/commercial/salmon/2012_gh_map.pdf).

12. White sturgeon of non-local origin (many from the Columbia River) enter Grays Harbor in order to feed on the many varieties of forage fish and invertebrates that inhabit the estuary. Simenstad, C. A., & Eggers, D. M. (1981) documented locations and uses of the Harbor by various species. These sturgeon are available most seasons of the year. White Sturgeon make up the major targeted species of the Quinault Nation’s spring/summer fisheries in area 2C (adjacent to the Humptulips river) with white sturgeon and to a lesser extent spring/summer chinook of natural origin from the Upper Chehalis being targeted in Quinault fisheries within areas 2A and 2D extending upriver into the Lower Chehalis River.

13. Bull trout, eulachon, and green sturgeon that utilize the harbor are not targeted during fishing due to their threatened or endangered status. The largest Tribal and non-Indian Grays Harbor commercial fisheries occur in sub-areas 2D, 2A, 2A-1 and the Lower Chehalis River up to the mouth of the Wynoochee River targeting Chehalis origin coho, chinook, and chum during fall (September to November), and Chehalis winter steelhead from December to April. The Chehalis Tribe located near Oakville conducts a commercial gill-net fishery within the boundaries of the Chehalis Reservation, directed at coho, chinook (spring/summer and fall stocks), and winter steelhead from the upper Chehalis drainage. Recreational fisheries occur throughout the Chehalis River for those same stocks.

14. A considerably smaller set of Quinault and non-Indian commercial and recreational fisheries target Humptulips origin fish from much smaller populations of the same species in Grays Harbor Area 2C and the Humptulips River. Some white sturgeon catch occurs during fall and winter fishery seasons that target salmon stocks in Grays Harbor.

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Ervin Joseph "Joe" Schumacker Jr.

III. GRAYS HARBOR PLAYS A VITAL HABITAT ROLE FOR WASHINGTON'S FISH AND SHELLFISH SPECIES.

6. The Grays Harbor estuary is a critical component of Washington coastal ecosystems and an irreplaceable life-history component of culturally and economically important species including Dungeness crab, white sturgeon, ESA listed green sturgeon, and native salmonid species.

7. Dungeness crab are hatched as minute, free swimming larvae that must shed their shells (molt) in order to grow. When they are approximately the size of dime, the larvae must find a suitable area for settling to the bottom when they take on a normal crab body shape. These young juvenile crabs prefer shallow estuarine environments with protective areas and good detrital food availability. Key refuge for juvenile crab includes eelgrass, oyster shell, woody

debris, and piling areas, all found within Grays Harbor. Dungeness crab remain juveniles for the first two years of their lives and can molt as often as six times a year. During this time they are extremely vulnerable to both predation and environmental stressors. When molting, shellfish such as crab are effectively open to the environment with no protection until a new shell hardens around their body, a process that takes days to fully accomplish. During these events, shelter becomes even more critical and is best found in coastal estuary areas such as Grays Harbor or in nearshore sandy areas where they can bury themselves for cover.

8. Grays Harbor and the lower Chehalis River are utilized by a number of marine fish species that enter and temporarily reside in the Harbor for refuge and feeding. Sturgeon have been fished commercially in Grays Harbor for decades and fished by the Quinault people for millennia. The white sturgeon (*Acipenser transmontanus*) feeds on dead fish, crustaceans and mollusks while in the Harbor. Endangered Green Sturgeon (*Acipenser medirostris*) use Grays Harbor extensively during the summer and fall feeding similar to white sturgeon but also depend heavily on amphipods, annelids and small clams and cockles.

9. Smaller “forage” fish such as northern anchovy (*Engraulis mordax*), Pacific herring (*Clupea pallasii*), surf smelt (*Hypomesus pretiosus*), longfin smelt (*Spirinchus thaleichthys*), and Pacific eulachon (*Thaleichthys pacificus*) have all been documented in Grays Harbor. All of these species were and remain important cultural foods for the Quinault people, including the now ESA listed eulachon which often filled critical food gaps between salmon runs. The Quinault language has names for many of these species including “komólnil” (surf smelt) and “páagwáls” (eulachon). In addition to the cultural food source and treaty right to these species, the Quinault Nation considers these species integral to the greater ecosystem that

supports higher predators including adult salmon, rockfish and other marine fish, marine mammals and seabirds.

10. The productivity of the Washington coast results in large schools of forage fish that feed returning salmon thus increasing survival of those salmon by increasing their fat content allowing them to survive their upstream migration to spawn. Natural and man-made impacts on these forage fish species reverberate through the ecosystem and can be manifested in, among other impacts, lower salmon survival.

11. The QIN has treaty rights throughout Grays Harbor and is actively planning to begin aquaculture operations in the near future. Quinault Department of Fisheries has been tasked with feasibility studies of intertidal growing areas in Grays Harbor for oyster, mussel and clam aquaculture operations. These animals and aquaculture operations are extremely vulnerable to natural and man-made toxins that may affect the safety of consuming these shellfish. All shellfish must be regularly tested for natural biotoxins and fecal bacteria and harvest is immediately curtailed should levels be above state and federal safety standards. The Washington Department of Health, Shellfish and Food Safety Program monitors and regulates the safe harvest of shellfish.

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Commenter(s):	Andy Carlson	
Organization/Affiliation:	Washington Department of Fish and Wildlife	
Email:	Andy.carlson@dfw.wa.gov	
Telephone:	360.902.8125	
Date:	10/15/13	
Line # and Page #, or Figure #.	Comment/Rationale	Proposed Change/Suggested Text
General	All references to Chapter 9970 of the NWACP should be replaced with references to Chapter 9310 of the NWACP as the chapters were renumbered in 2012.	Replace all references to “Chapter 9970 of the NWACP” with a reference to “Chapter 9310 of the NWACP”. NOTE: You may want to recheck all NWACP references in the Grays Harbor document. I also noticed a reference to 9683.2 and 9683.3, both of which appear to no longer exist, even in other NWACP chapters?
Introduction		
Spill Response Contact Sheet (.pdf page 3)	Incorrect contact information for WDFW	The correct phone number for the WDFW Region 6 office (which covers Grays Harbor) is 360-249-4628. The Oil Spill Team and Emergency HPA numbers are correct.
Ch. 4		
Pg. 4-3 (pdf page 25)	Edits to the second bullet on the page.	Replace the text “Generally, anything more than the hand-cutting of vegetation on or near the bank of a stream would require an Emergency HPA permit from Washington Department of Fish and Wildlife; call WDFW Oil Spill Team at 360-534-8233 (24-hour pager). ” with “To obtain an Emergency Hydraulic Project Approval contact the WDFW Oil Spill Team at 360-534-8233 (24-hour pager).”
	The hyperlinks in all of the sector maps to the GRP’s are great! It makes it very easy to navigate around the document.	I don’t know if it’s possible to put a “Back” button on the individual strategy map that takes you back to the Sector Map but that would be helpful. The current format requires you scroll back manually or use the bookmark page (which is fin) to get back to the Sector Map (for ex figure 4.2). The view format (i.e., 75%) always changes back to a small print default (58%) when you use the bookmarks. Is it possible to lock the scale? I don’t know if that would be a user setting or a document

		creation setting?																				
Pg. 4-9 to 4-13 (pdf pg 31-35)	Maps aren't titled	Consider adding a title to the maps. The legend implies what the map is for but when I first looked at the figures it took me awhile to figure out how they were different and what data was being shown.																				
Ch. 7																						
Pg. 7-12 (pdf pg. 282)	Missing wildlife equipment owner information	<p>Insert the text for wildlife equipment owners seen below. The table below is also found in the Spokane River and WRIA 7 GRPs. Here is the text to insert:</p> <table border="1"> <thead> <tr> <th colspan="4">Wildlife Equipment Owners</th> </tr> <tr> <th>City/Location</th> <th>Name</th> <th>Address</th> <th>Contact & Other information</th> </tr> </thead> <tbody> <tr> <td>Portland, OR</td> <td>Clean Rivers Cooperative</td> <td>Mobile Oiled Wildlife Mobile Rehabilitation Unit</td> <td>(503) 220-2040 www.cleanriverscooperative.com</td> </tr> <tr> <td>Seattle, WA (South Park)</td> <td>National Response Corporation Environmental Services (NRCES)</td> <td>Mobile Oiled Wildlife Mobile Rehabilitation Unit</td> <td>(800) 337-7455 http://www.nrces.com</td> </tr> <tr> <td>Everett, WA</td> <td>Marine Spill Response Corporation (MSRC)</td> <td>Mobile Oiled Wildlife Mobile Rehabilitation Unit</td> <td>(425) 252-1300 http://www.msrc.org</td> </tr> </tbody> </table>	Wildlife Equipment Owners				City/Location	Name	Address	Contact & Other information	Portland, OR	Clean Rivers Cooperative	Mobile Oiled Wildlife Mobile Rehabilitation Unit	(503) 220-2040 www.cleanriverscooperative.com	Seattle, WA (South Park)	National Response Corporation Environmental Services (NRCES)	Mobile Oiled Wildlife Mobile Rehabilitation Unit	(800) 337-7455 http://www.nrces.com	Everett, WA	Marine Spill Response Corporation (MSRC)	Mobile Oiled Wildlife Mobile Rehabilitation Unit	(425) 252-1300 http://www.msrc.org
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From: brady engvall [bradyengvall@gmail.com]
Sent: Friday, October 11, 2013 2:02 PM
To: Chichester, Harry (ECY)
Subject: Comments on GRP update.

To whom it may concern,

These are my official comments on the GPR update. The update will address small spills but what the Grays Harbor estuary faces with the advent of Crude By Rail proposals pales by comparison.

1. More GRP response strategies in the existing plan are located in upstream wetlands rather than open estuary where shellfish resources are located. Will more strategies for open estuary shellfish areas be developed and published in the updated plan? If not, why?
2. Flow through Grays Harbor on maximum ebb can reach velocities of 3.5 knots. A spill of crude oil at a loading dock in Grays Harbor could put commercial and recreational shellfish at risk of being oiled before responders ever reached the area. Are there any plans to have response teams on 24/7/365 standby in the local area so if a spill ever occurs they can respond immediately without delay (similar to how EMS, police, & fire departments respond to an emergency)?
3. How would the spill response be funded? Who would be responsible for paying?
4. What recourse do commercial shellfish growers have for reparations if our resources are impacted and our ability to make a living are hurt by an oil spill?
5. Do the GRP response strategies in the existing and updated plan provide protection from crude oil that sinks after the light ends burn off? How would the response to sinking oil be handled?
6. What plan is there for updating this current draft plan if risk from spills are being expanded extensively? Is there funding available to revise the GRP if a need is demonstrated? An example would be Crude By Rail as being proposed. Currently the proposals would put 2.3 billion gallons of crude through the GH estuary a year. Risk would be expanded because of all the transfer points in this type of operation. Also the railroad would bring crude oil along the Chehalis River from Centralia and across many streams and rivers feeding the estuary. What part of the GRP would address these risks to the environment and shellfish growers?

Thank you for the opportunity to comment on the GRP.

Brady Engvall (360)268 5518



October 6, 2013

United States Coast Guard
Sector Columbia River
Incident Management Division
2185 SE 12th Place
Warrenton, OR 97146

Washington State Department of Ecology
Spills Program (GRPs)
P.O. Box 47600
Olympia, WA 98504-7600

In Re: Grays Harbor Geographic Response Plan, Draft August 2013

Sent via email: GRPs@ecy.wa.gov

To Whom It May Concern:

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

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

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

It seems to be a fatal flaw that the potential of three crude oil tank farms was not considered as part of the planning process. There are two crude oil terminals proposed and in the permitting process (Imperium Renewables, LLC and Westway Terminals, Inc., both received MDNS determinations and Shoreline Substantial Development Permits) and an additional 800,000 to one million barrel terminal remains on the drawing boards. These terminals if allowed to build out, would place 97.4 million gallons (2.3 million barrels) of crude oil at any one time at the estuary's edge.

Please respond to the following comments and questions:

1. The plan lacks a section that helps with the definition of terms. For example waterway needs a definition and perhaps should be defined as "...any river, stream, tributary, creek, ditch, canal, storm drain or sewer that is part of, connected to or has the ability to discharge into the Chehalis River Basin Watershed and its associated wetlands."
2. Response Community and Unified Command likewise should be defined so that there is a clear understanding of responsibility and the exchange and transition of responsibility. Each basic concept of the plan should be adequately defined to minimize confusion during an unexpected event.

Post Office Box 1512 Westport, Washington 98595-1512 Phone/Fax (360) 648-2254
<http://fogh.org> rd@fogh.org 501(c)(3) tax-deductible

3. A chart of responsibility would be helpful which outlines if/then scenarios of likely spill situations.
4. The Spill Response Contact Sheet. "Station Grays Harbor (Westport)" is listed under "Sector Columbia River." We believe it would be easier to find if it were placed as a subset of "13th Coast Guard District" (Washington State). It would seem that Westway Terminals as a bulk liquid terminal should be listed in addition to the already listed Imperium.
5. There is an error in contact for O'Leary Creek 4A-106 - phone number is incorrect, it should be (360) 648-2476; email address is incorrect, it should be Ldotorg@olearycreek.com
6. Description of the plan as "...greater Grays Harbor area." This area does not adequately cover the concern of an oil spill which is delivered by rail. The CBR response should include at the minimum a plan that leads from the entry of rail in Centralia along the route that follows the Chehalis River basin and its flood plain. (page 1-2)
7. 2.2 Description of Physical Features: There is no description or acknowledgement that the area is subject to fairly frequent earthquakes. Certain commercial areas, especially shorelines in the Grays Harbor estuary are built on fill and subject to liquefaction. Major tsunamis have been recorded in the Grays Harbor area, however there is no mention of this. In describing the physical features, there is no mention that Grays Harbor is a hemispherically important shorebird migration area that is critical to the survival of many of those that visit. For example, Grays Harbor hosts 50% of the Western Red Knot population.
8. 2.3 Hydrology: There is no comment about the channel being tricky for navigation and often require pilot boats or experienced vessel operators.
9. 2.3.2 "Within the 2,600 square miles that make up the Chehalis Basin..." 2.3 Hydrology states this as 2550 square miles. "Grays Harbor is a large estuary fed by a 2,550 square mile drainage basin." The 2,600 figure is most frequently used.
10. There is the yearly potential for over 2 billion gallons of crude oil as it is brought in by rail, transferred to storage tanks, pumped to vessels and transported along the Washington, Oregon and California coast. Why is there no mention of crude oil storage/transport under Risk Assessment, p.2-6; under Facilities: p.2-6; under Other Oil Spill Risks, p.2-6?
11. Why is there no mention of Grays Harbor National Wildlife Refuge until the last, 6-7? Why is there no mention of US Fish & Wildlife as owners of the Refuge and no plan to contact them?
12. There is no plan to protect oyster beds in South Bay or North Bay. All booming strategies exclude commercial and private shellfish beds. How will the oyster and shellfish industries be protected from a spill and its consequences?
13. The Spill plan calls for a total of 31,750 ft. of boom material. Depending on the type, location and water conditions during the spill this may need to be different types. Where would this be stored? Who would provide the money to provide the necessary materials?
14. Will each of the strategies be responded to individually or simultaneously?
15. Studies show booming is not effective in waters that have waves or with speeds over 1 knot (1). Grays Harbor Estuary water speed is higher than 1 knot and the bar crossing is usually more than 3 knots. How will booms stop the oil?



16. A single line of boom is not reliable (2.). Why is there no plan in these strategies to have rows of booms?

17. 48 boats would be needed to cover the estuary and hundreds of people according to the plan. Where would these boats come from and be stationed? How quickly would they be able to respond?

18. The Response Plan is inadequate for dealing with anything but a small spill in one location, a scenario that is unlikely given that potentially 97.4 million gallons of crude oil will be stored on the estuary at any given time. How will the plan work if the oil spreads to several locations at high tide? Outgoing tides? Flood events?

19. The Plan is inadequate for dealing with any spill along the rail route within Grays Harbor if it enters rivers, creeks, streams, wetlands, or the flood plain. How will these vital areas be protected from destruction by a spill?

We hope that you will address our concerns in the future draft of the GH GRP. The loss or impairment of the WRIA and the coasts of Washington, British Columbia and Oregon are a potential risk that is too great to be glossed over without a definitive plan and solid financial backing to make protection a reality.

Thank you for your consideration of this very important matter.

Sincerely,



Arthur (R.D.) Grunbaum
President

References in part used:

(1) J. Fang and K.V.Wong, "An Advanced VOF Algorithm for Oil Boom Design", Int. J. Model and Simulation, Vol. 26, No.1, Jan 2006, pp. 36-44.

Booms used in oil spills can be seen as they rest on the surface of the water, but can have between 18 to 48 inches of material that hangs beneath the surface. They're effective in calm water, but as wave height increases oil or other contaminants can easily wash over the top of the boom and render them useless.

(2) <http://www.csmonitor.com/USA/2010/0611/Containment-boom-effort-comes-up-short-in-BP-oil-spill>

In any oil spill, the use of a single conventional boom is not effective in protecting environmental resources even with the correct draft and aspect ratio. For speeds of over 1 knot (of the water and hence the oil), the boom will fail to stop the oil because of drainage under the boom. The approaching oil needs to be decelerated before it meets the boom. Drainage failure may be avoided by using a series of well-designed booms.

Cc: Knoll Lowney, Smith & Lowney knoll@igc.org





CH 1J32
PO Box 9777
Federal Way, WA 98477-9777
Telephone: (253) 924-3426
Fax: (253) 924-2013
E-Mail: ken.johnson@weyerhaeuser.com

October 14, 2013

Sent by electronic Mail to: GRPs@ecy.wa.gov

Mr. Harry Chichester
Spills Program
Washington Dept of Ecology

Subject: Grays Harbor Geographic Response Plan

Dear Mr. Chichester:

Weyerhaeuser NR Company comments on the draft Grays Harbor Geographic Response Plan (“GRP”) are provided.

General Comment

1. Weyerhaeuser is agreeable to emergency response access by the State of Washington, its agencies and/or contractors, for the purpose of oil spill mitigation, on or adjacent to company ownership referred to as the Bay City Log Yard. In the draft GRP, Ecology has identified the possibility of oil boom placement at locations GH-16 and at the “South Aberdeen – Chehalis River (Weyerhaeuser Dock)”.

This access is authorized under the following limited conditions and understanding:

1. That any such access does not provide any grant of right-of-way or easement onto the property by the State and does not create an encumbrance on the property. Such authorization shall not be recorded against the property in public records. Weyerhaeuser, or any successor or assigns, reserves the right to terminate or modify such authorization in the future with at least 12 months notice if the property is sold to a third party or immediately in the event the property is put back into productive use by Weyerhaeuser.

Specific Comments

1. Page 4-10 of the draft plan - The “Site Access” given for the Strategy GH-16 is listed as “In south Aberdeen – use marina just west of mill.” It is not clear which marina or mill is being referred to. If the reference is to the former “Weyerhaeuser Aberdeen Sawmill” site, located at 500 North Custer Street, note this property was sold to Grays Harbor Historic Seaport Authority. Site access would be controlled by the GHSA. If the reference is to the Pacific Veneer mill, located at 100 North Decatur Street, contact should be made with the company for any needed equipment staging and/or site access. If site access is intended through the

Mr. Harry Chichester
Grays Harbor Geographic Response Plan
October 14, 2013
Page 2

Weyerhaeuser Bay City Log Yard gate at either East Schley Street or East Taylor Street, notification should be provided as indicated above.

2. Page 4-10, The “Staging Area” listed for GH-17 is given as “Stage at Weyerhaeuser mill in Cosmopolis.” Weyerhaeuser sold this mill to Cosmo Specialty Fibers several years ago.

Thank you for the opportunity to comment on this GRP.

Sincerely,

Ken Johnson
Environmental Manager

/kj

From: Jorgensen, Jim [JJORGENSEN@quinault.org]
Sent: Friday, September 27, 2013 10:47 AM
To: Chichester, Harry (ECY)
Cc: Mobbs, Mark
Subject: GH GRP Plan

Harry—

I see this plan only covers the WRIA 22 sub-basin. What about WRIA 23?

If this is covered by another plan could you provide the reference or contact information and status for that also?

Jim Jorgensen



GRAYS HARBOR AUDUBON SOCIETY
PO BOX 470
MONTESANO, WA 98563

Gentlemen:

The following are comments regarding the 2009 updates to the Grays Harbor spill response plan:

Additional areas of wildlife sensitivity not mentioned in 2003 plan:

1. Bottle Beach State Park (shorebird concentrations on mudflats, especially during spring & fall migrations)
2. Mini-Moon Island – approx 1 mile off tip of Bowerman peninsula (shorebird concentrations on mudflats, especially during spring & fall migrations)

Mention was made during the August 25th Aberdeen Workshop that it would not be possible to boom the Bowerman Basin area (Grays Harbor National Wildlife Refuge) due to shallowness and rough water. The rough water obviously depends on weather and tidal state, but there is a possible solution available to the shallowness problem: There are airboats available in the area, including one stored at the GHNWR headquarters building on Airport Way, as well as others owned by Washington Fish and Wildlife and Washington State Department of Agriculture. These airboats could help in the deployment of booms in shallow water conditions.

Additional sites which will increase traffic in the harbor that are in development or in planning for development are:

1. New bulk liquid storage tanks and loading/unloading facilities just east of the Imperium Renewables Facility at the Hoquiam/Aberdeen boundary (Port of Grays Harbor Terminal 1).
2. The SR520 Floating Bridge Pontoon Graving Dock facility to be built just west of the Aberdeen Sewage Treatment Plant at the Weyerhaeuser Log Storage Area.

We suggest that maximum speed regulations for ship traffic be lowered during the spring migration (3rd week of April through 2nd week of May) in the area of Mini-Moon Island, which is adjacent to the North Ship Channel. This island is within the boundary of the Grays Harbor National Wildlife Refuge area, a recognized State Important Bird Area and part of the Grays Harbor estuary site of hemispheric importance as recognized by the Western Hemisphere Shorebird Reserve Network. For further information on shorebird concentrations, contact the refuge biologist, Marian Bailey, at 360-753-9467, email marian_bailey@fws.gov.

Respectfully,

Arnie Martin
Chapter President
631 Chenault Ave
Hoquiam, WA 98550-1822
Tel: 360-612-0437

From: Steven Spencer [sspencer@shoalwaterbay-nsn.gov]
Sent: Friday, September 20, 2013 9:59 AM
To: ECY RE Geographic Response Plans
Subject: Grays Harbor GRP

I have reviewed the Grays Harbor GRP and have two comments.

Section 6.1 Fisheries: Fisheries resources for Willapa Bay are described but not Grays Harbor.

Section 6.2 Wildlife/Shorebirds, Waterfowl, and Raptors: Streaked Horned Larks and Western Snowy Plover nesting habitat exists within Grays Harbor. Both birds are listed as Endangered by the State of Washington. The Western Snowy Plover is listed as threatened on the federal level (1993). The Streaked Horned Lark is a candidate for federal listing (2001). Due to their state and federal status, both species should be included in this section.

Sincerely,
Steven J. Spencer
Env. Operations Manager
Shoalwater Bay Tribe
Ph (360)267-6766 ex2421

From: Craig Zora [czora@comcast.net]
Sent: Sunday, October 13, 2013 12:26 PM
To: ECY RE Geographic Response Plans
Subject: Grays Harbor GRP comments
Attachments: 101213 ASA-Ph2-Vol28_GH-Bunk-NoResp-May06.pdf; 101213 ASA-Ph2-Vol29_GH-Bunk-AltResp-May06.pdf; 101213 ASA-Ph2-Vol27_GH-Bunk-Inputs-May06.pdf

October 13, 2013

Appreciate the opportunity to comment on the DRAFT Grays Harbor GRP. My concern is with how the plan will be evaluated under different conditions and just how effective will it really be in containing a major spill in this estuary. I'm not convinced a minor oil spill could be contained and decades of monitoring (and funding) would be required to determine if the response was successful. When we're talking about spill response, we must realize we are actually talking about the best case scenario, which is 25 percent recovery and ... we're leaving 75 to 90 percent of the oil that is spilled in the environment, and that is something we need to think about.

- Will the Grays Harbor GRP be evaluated using different scenarios with the [GNOME](#) program? We only have tide and wind data (for Grays Harbor) for a few days in April. Is it possible to add data for winter months when weather conditions will be more extreme?
- Bakken Crude components will have different trajectories. In fact some oil spill components will sink to the bottom. How will these components be contained or removed from the bottom sediments?
- I attached the (3) studies completed by Applied Science Associates, Inc. Is there an executive summary available and will the results be different if Bakken Crude is modeled?

If you have any questions please contact me at czora@comcast.net or 360-589-9854.



CRAIG ZORA 360-589-9854



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Nisqually National Wildlife Refuge

100 Brown Farm Road
Olympia, Washington 98516
Phone: (360) 753-9467
Fax: (360) 534-9302

22 November 2013

Harry Chichester
Washington Department of Ecology
P.O. Box 47600
Olympia, Washington 98504-7600

Subject: Draft Grays Harbor Geographic Response Plan (GH-GRP)

Dear Harry,

Thank you for providing an overview of your efforts to update the Grays Harbor Geographic Response Plan and especially for allowing us the opportunity to provide comments. Our comments are minor and primarily for updating contact information.

We have a few comments specific to the Bowerman Basin area, as follows:

Spill Response Contact Sheet (Page 3).

1. Under "Other Federal Agencies" there is a listing for U.S. Fish & Wildlife Service but the phone number is unfamiliar (360.561.8318) to us. Is this phone number for a contact in the Western Washington Field Office in Lacey?

GH 2 Hoquiam-Bowerman Basin (4A-49)

1. The Bowerman Basin is within the Grays Harbor National Wildlife Refuge; we recommend the refuge name be inserted into the title (parenthesis) to denote the area is a Federally-managed area. E.g., Hoquiam – Bowerman Basin (Grays Harbor NWR)
2. Access to the north side is from the Staging Area identified on sheet/page 4A-50. We wanted to let you know this shoreline in front of the staging area and anchor point is lined with sweetgrass, a plant that is an important cultural (Native American) resource. Naturally, access will be necessary in the event of an emergency; however, we would request minimal impact (trampling) while accessing the shoreline.
3. Field Notes: you revised the USFWS contact numbers; however, to ensure either Doug or I receive the notice at any time of day/night, I recommend the contact information include our mobile phone numbers: Glynnis at (360)742-9153 and Doug Roster at (360)789-6353 so there is 24/7 availability.

Appendix- 6A (Page 6A-5): Table C2 – Public Recreation Areas should be written as follows:

Name or General Location: U.S. Fish and Wildlife Service, Grays Harbor National Wildlife
Refuge

Location/Address: WA-109, Hoquiam, WA

Lat/Long: 46.9781, -123.9442

Contact: Glynnis Nakai, Doug Roster

Phone: 360-753-9467

http://www.fws.gov/pacific/grays_harbor

During our conversation on the phone, you provided an overview of options for deploying booms across the 4,000 ft span across the Basin. We understand the logistical challenge and look to you and your staff to implement the most effective method for protecting the Basin. I want to thank you for our conversation and the opportunity to comment.

Sincerely,



Glynnis L. Nakai
Refuge Manager