Chapter 3
Agencies

This chapter presents responses to agency comments on the Draft EIS.

3.1 Federal Agencies

The federal agencies listed in Table 3-1 submitted comments on the Draft EIS. These comments and responses to those comments are presented after the table. Master responses were developed to address commonly raised comments and are presented in Chapter 2, *Comment Themes and Master Responses*.

The responses refer to the Draft EIS unless information has been revised, in which case the Final EIS is specified.

Table 3-1. Comment Letters Submitted by Federal Agencies

Number	Agency (Name)
FA-1	Bureau of Indian Affairs, David Redhorse
FA-2	United States Department of Agriculture, Forest Service Columbia River Gorge National Scenic Area, Lynn Burditt
FA-3	United States Department of Commerce, National Oceanic and Atmospheric Administration, Olympic Coast National Marine Sanctuary, Carol Bernthal
FA-4	United States Department of Interior, Fish and Wildlife Service, Washington Fish and Wildlife Office, Eric V. Rickerson
FA-5	United States Department of Interior, National Park Service, Pacific West Region, Palmer Jenkins

FA1, Bureau of Indian Affairs, David Redhorse

Comment FA1-1

Proposed increase in vessel traffic substantially impacts Indian treaty fishing rights. Tribes with treaty rights are adverse to any actions that affects treaty rights. No solution is offered (except to stop fishing activities).

Response FA1-1

Draft EIS Chapter 3, Section 3.12, *Tribal Resources*, describes potential impacts on tribal resources and proposes mitigation measures to address these impacts. Implementation of these measures could reduce but would not completely eliminate the potential for impacts on tribal resources.

FA2, U.S. Department of Agriculture, Forest Service Columbia River Gorge National Scenic Area, Lynn Burditt

Comment FA2-1

United States Department of Agriculture
Forest Service
Columbia River Gorge National Scenic Area

902 Wasco Avenue Suite 200
Hood River, OR 97031
541-308-1700
FAX: 541-386-1916

File Code: 1950
Date: November 30, 2015

Westway and Imperium Terminal Services Expansion Projects EISs
c/o ICF International
710 Second Ave., Suite 550
Seattle, WA 98104

To Whom It May Concern,

The USDA Forest Service, Columbia River Gorge National Scenic Area, appreciates the opportunity to provide comments on the Draft Environmental Impact Statement (DEIS) for the Westway and Imperium Terminal Expansion Projects.

In May of 2014 we provided comments during the scoping period for this environmental impact statement process. Our comments focused on the transport of crude oil by rail through the Columbia River Gorge National Scenic Area that would be associated with the Westway and Imperium Projects. We requested that the DEIS fully evaluate the potential for direct, indirect, and cumulative effects to the environment, fire risk, and public safety along this section of rail line. We also requested that you address the fact that the Westway and Imperium Projects are among several other proposed oil distribution projects currently undergoing environmental review, all of which would contribute cumulatively to a substantial increase in rail transport of hazardous crude oil through the Columbia River Gorge. The DEIS addresses some of these concerns, but the analysis is not sufficient to fully inform a decision maker about the project's potential impacts to the Columbia River Gorge.

The primary study area for the DEIS covers the area on and near the project site in Hoquiam, Washington; resources along the PS&P rail line from Centralia, Washington, to the project site; and resources in and around Grays Harbor. The DEIS concludes that “A large oil spill, fire, or explosion would likely cause unavoidable and significant adverse environmental impacts. The likelihood of a large spill or related fire or explosion is relatively low; however, the potential for significant consequences to the environment and human health if such an incident were to occur is high.” (DEIS at S-19).

Chapter 5 of the DEIS does include an impact analysis of the potential effects of rail transport of crude oil in the rail traffic extended study area. This extended study area covers the BNSF Railway

main line system in Washington State, including the Columbia River Gorge route, which traverses the Columbia River Gorge National Scenic Area (CRGNSA) along the north shore of the Columbia River. The impact analysis generally concludes the "potential impacts along the BNSF main line are likely similar to those that would occur along the PS&P rail line and the magnitude of impacts would be roughly proportional to the incremental increase in traffic under the proposed action." (DRIS at 5-2). On this basis, the impacts analysis for the extended rail study area explicitly excludes impacts to resources, and focuses on rail traffic only. The impacts analysis for the extended rail study area does not consider scenic, natural, cultural, or recreational resources, or any other conditions unique to the Columbia River Gorge. Examples of these resources and conditions include salmon species listed under the federal Endangered Species Act (bull trout, chinook, chum, coho, sockeye and steelhead), endemic plant species, the area's deep tribal and cultural history, and the high levels of public recreation concentrated along the Columbia River shoreline. Washington State Route 14, which runs adjacent to the BNSF rail line throughout most of the Gorge, is the primary access route to and from many Gorge communities, for both residents and emergency responders. While we greatly appreciate the fact that the DEIS includes the extended rail study area, the risks and impacts to Gorge-specific resources and conditions are not adequately addressed in the impacts analysis.

The DEIS states that increased rail traffic in the extended rail study area could result in increased emissions from more diesel trains; increased noise at grade crossings and along the route; increased vehicle delay at grade crossings, including disruption to emergency vehicle response times; and increased risk of a derailment, spill, or fire/explosion involving rail cars. The analysis compares project-related increases in rail traffic to 2035 projections in the Washington State Rail Plan, and concludes, "Rail traffic related to the proposed action would account for a small percentage of BNSF rail traffic in Washington State: approximately 2% of the expected 2035 capacity estimated by the Washington State Department of Transportation for the main line along the Interstate 5 corridor and approximately 3% along the Columbia River Gorge" (DEIS at S-26).

The Washington State Rail Plan indicates that rail volumes in 2035 are expected to be more than double those in 2010, and this forecast does not take into account the several other current proposals for new or expanded oil or coal distribution terminals. Assessing the project-related increase in rail traffic expressed as a percent of projected rail capacity in 2035 does not adequately reflect either the effects of the Westway and Imperium projects on current rail traffic, or how the proposed action would affect the current condition in terms of the increased risks to resources and public safety associated with rail transport of crude oil. Based on information in the DEIS that the Westway and Imperium projects would result in up to 458 unit train trips per year, of which one half would be loaded trains most likely travelling to the facility through the Columbia River Gorge rail route, there would be a quantitative increase over current conditions of approximately 229 loaded unit trains travelling this route, with an equivalent increase in risks to resources and public safety. The DEIS states that there are approximately 998 loaded unit oil trains currently moving through Washington State each year, and that most loaded trains use the Columbia River Gorge route. These numbers indicate a much larger impact on rail traffic and associated risks in the Gorge than the DEIS suggests.

In summary, while the Westway and Imperium DEIS does include an analysis of the effects of increased rail traffic in an extended area beyond the immediate project area, the analysis presented in the DEIS does not adequately represent or fully address the project's potential impacts to the Columbia River Gorge. We request you ensure the FEIS appropriately considers these effects and the likely cumulative potential associated with the various projects that would be impacting this travelway.

Sincerely,

Lynn Burditt
Area Manager

Response FA2-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts, described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

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FA3, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Olympic Coast National Marine Sanctuary, Carol Bernthal

Comment FA3-1

UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
OFFICE OF NATIONAL MARINE SANCTUARIES
Olympic Coast National Marine Sanctuary
115 East Railroad Avenue, Suite 301
Port Angeles, WA 98362-2925

November 30, 2015

Westway and Imperium Terminal Services Expansion Projects EISs c/o ICF International
710 Second Ave., Suite 550
Seattle, WA 98104

Re: Comments on Westway and Imperium facilities DEISs

This letter provides comments on the draft environment impact statements (DEISs) for the proposed Westway and the Imperium Bulk Expansion Projects in Grays Harbor. We appreciate the seriousness with which the Washington Department of Ecology and the City of Hoquiam are addressing these controversial projects. The shifting trade patterns related to the shipment of crude oil in the United States and Canada and its implications for public and environmental safety is a concern for all of us.

Olympic Coast National Marine Sanctuary (OCNMS or sanctuary) was designated in 1994 as one of our nations marine protected areas, spanning 3,189 square miles of marine waters off the western Olympic Peninsula. The sanctuary is home to many species of marine mammals and seabirds, diverse populations of kelp and intertidal algae, productive commercial and recreational fisheries and thriving invertebrate communities. Along this coast are hundreds of islands where many of the largest seabird breeding colonies in the region thrive under the federal protection provided by the Washington Islands National Wildlife Refuges. The mainland shore adjacent to the sanctuary is owned by Native Americans (the Makah, Ozette, Quileute, Hoh, and Quinault Reservations) or Olympic National Park. South of the Quinault Reservation, the shoreline is designated as the Washington State Seashore Conservation Area. The Grays Harbor estuary hosts concentrations of wildlife and is a seasonally important feeding or foraging area for wildlife. The estuary is a critical nursery and foraging area for juvenile salmonids and Dungeness crab. Commercial aquaculture and wild capture fisheries are a large part of regional economy. The various natural and cultural resource conservation designations along this coast substantiate the ecological importance of this special place. In addition, the economies of outer coast communities are strongly reliant on the abundance of natural resources to support commercial fisheries.

Although the Westway and Imperium projects are not within the sanctuary, products spilled in Grays Harbor could flush from the estuary and be carried into sanctuary waters and onto adjacent shorelines. In addition, each of these projects anticipates a significant increase in petroleum product transport through Grays Harbor and along the outer Washington coast, which increases the risk for petroleum spills in open ocean areas. Our primary concern with the proposed projects, as it relates to our mandate to protect sanctuary resources, is the increased risk of petroleum product spills into estuary and marine waters, and the private and public capacity to respond effectively in the event of a spill with potential to affect the sanctuary.

Response FA3-1

As noted in the comment and discussed in Draft EIS Chapter 4, Section 4.6, *Environmental Health Risks—Vessel Transport*, and Appendix N, *Oil Spill Modeling*, there is the potential for spilled oil to travel outside the harbor and move up or down the coast depending on conditions present at the time of the spill. Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from offsite rail and vessel transport in the extended study area, from the likely source of crude oil to the like destinations. The Olympic Coast National Marine Sanctuary is within the extended study area identified in Section 5.1, *What is the extended study area for rail and vessel transport?*

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts, described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

Comment FA3-2

In our May 27, 2014 letter on the scoping for this project we provided recommendations and requested a strong focus on “Oil spill prevention, preparedness, response” and “Vessel Traffic”. While our review of the DEISs focused primarily on these topics, we have also commented on the cost-benefit analysis. Based on this review, we have two specific recommendations for improving your analysis that we would like to see in both Final Environmental Impact Statements.

SOCIOECONOMIC IMPACTS

Chapter 7, “Economics, Social Policy, and Cost-Benefit Analysis”, focuses primarily on resources under the purview of the City of Hoquiam that could be affected by the proposed action alone. By limiting the analysis in this way we believe the DEIS underestimates costs associated from the project from impacts and risks that are documented in Chapter 3, “Affected Environment, Impacts, and Mitigation” and Chapter 4, “Environmental Health and Safety”. There are costs associated with these risks that are not accounted for in your analysis. These costs represent a negative externality, which if not accounted for could result in Washington Stale and the City of Hoquiam having to make difficult permitting decisions without a true picture of the cost and benefits. We recommend that the FEIS include the costs associated with the impacts from Chapter 3 and the risks from Chapter 4, to provide a more accurate and complete assessment of the costs and benefits.

Response FA3-2

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of

associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment FA3-3

RISK OF OIL SPILLS

We appreciate the challenges associated with evaluating the increased risk of an oil spills that come with an increase in oil transport traffic. While the scenario in Chapter 4, "Environmental Health and Safety", that evaluates the potential release of 15.1 million gallons (360,000 barrels) of crude oil and vessel fuel from a vessel at the entrance to Grays Harbor would have the largest impact, all of the scenarios would have the potential of harming sanctuary resources. This fact is not clear from your modelled scenarios. Your analysis stops after 48 hours and before you would start seeing significant shoreline impacts. By stopping the model after 48 hours, potential impacts are underrepresented.

The winds used in the scenarios are based on winds from Hoquiam/Bowerman Airport (8-10 mph). These averages appear to be significantly lower than winds typical for the coast of Washington. More accurate estimates could be determined by reviewing data from NOAA National Data Buoy Center Stations WPTW1-9441102-Westport, and Station 46041-Cape Elizabeth. In addition, when evaluating risk it would be more useful to consider worst case scenarios. When it comes to wind speed and sea conditions it is more likely that an incident would occur during a period of degraded versus average conditions.

One only needs to look to the real life incident of the 1988 Nestucca oil spill to understand how an oil spill at the entrance to Grays Harbor could impact the Washington Coast. That real-life spill, which you note in Attachment A-Appendix N released 90,972 gallons (2,166 barrels) of diesel oil (0.6% the volume of your scenario), impacted an estimated 95 miles of shoreline. We recommend that in the FEIS you broaden your Oil Spill Modelling to include a more realistic range of wind speeds and to extend out the modeling for a longer period of time showing where the spilled oil would land on the coast.

We appreciate the opportunity to provide comments on these proposed projects.

Sincerely,

Carol Bernthal
Sanctuary Superindendent

Response FA3-3

Draft EIS Appendix N, *Oil Spill Modeling*, explains the methods, inputs, and assumptions used in the oil spill modeling. As noted in Appendix N, the modeled scenarios were based in part on regulatory requirements defining worst-case releases and were modeled over 24- and 48-hour increments to match Washington State planning standards for oil spill response trajectory analysis and equipment (WAC 173-182-405). To improve the ability to respond to an oil spill in Grays Harbor, Final EIS Chapter 4, Final EIS Chapter 4 reflects additional mitigation measures proposed to address gaps in emergency preparedness planning and response capabilities. These measures include the provision

of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions.

Refer to the Master Response for Oil Spill Modeling Methods for more information regarding the purpose, approach, assumptions, scenarios, and inputs for oil spill modeling, including the limitations and applicability of the modeling results.

FA4, U.S. Department of Interior, Fish and Wildlife Service, Washington Fish and Wildlife Office, Eric V. Rickerson

Comment FA4-1

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Washington Fish and Wildlife Office
510 Desmond Dr. SE, Suite 102
Lacey, Washington 98503

In Reply Refer To: 01EWFW00-2014-CPA-0020

Westway and Imperium Projects EISs
c/o ICF International
Attn: D. Butorac; B. Shay
710 Second Avenue, Suite 550
Seattle, Washington 98104Dear Ms. Butorac and Mr. Shay:

On August 31, 2015, the Washington State Department of Ecology (Ecology) and City of Hoquiam, Washington (City) announced the release of two Draft Environmental Impact Statements (EISs) addressing redevelopment proposals at the Port of Grays Harbor (Port) in Grays Harbor County, Washington. The Westway Terminal Company LLC (Westway) and Imperium Terminal Services (Imperium) projects each propose to expand their existing bulk liquid storage and distribution facilities located at Terminal 1 on the Port. Westway currently receives and distributes methanol, and Imperium currently receives and distributes biodiesel, petroleum diesel, vegetable oil, and methanol. Both Applicants, Westway and Imperium, propose to construct and operate new bulk liquid storage tanks, new and modified rail spurs, rail-unloading equipment, pumps, pipelines, and tank vessel-loading equipment, with the specific intent of receiving, storing, and transloading unrefined crude oil. Ecology and the City, acting as the Washington State Environmental Policy Act (SEPA) co-leads, have requested any comments for the Draft EISs, discipline reports, and technical appendices by October 29, 2015.

The U.S. Fish and Wildlife Service (Service) has responsibility for managing or co-managing a variety of federal trust resources, including sensitive species which are listed under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)(ESA), their habitats and designated critical habitat, federal wildlife refuges, and other fish and wildlife trust resources. Within the study area, including the lower Chehalis River valley and Grays Harbor, these trust resources include the following: 1) Coastal/Puget Sound bull trout (Salvelinus confluentus, threatened), 2) marbled murrulet

(Brachyramphus marmoratu, threatened), 3) western snowy plover (Charadrius alexandrines nivosus, threatened), 4) streaked horn lark (Eremophila alperstris strigata, threatened); 5) designated critical habitat for the bull trout, western snowy plover, and streaked horned lark; 6) the Grays Harbor National Wildlife Refuge (NWR), located at Bowerman Basin directly adjacent to the Port and Grays Harbor navigation channel; 7) shorebird, waterfowl, and migratory bird populations; and, 8) jointly managed Tribal, commercial, and recreational fisheries (fin fish and shellfish). In these portions of Washington State, the Service's roles and responsibilities are administered by the Washington Fish and Wildlife Office (WFWO) located in Lacey, Washington, and the Grays Harbor NWR, headquartered at the Nisqually NWR Complex in Thurston County, Washington.

The Service is also committed to implementing the goals, objectives, and policy principles outlined in our Native American Policy (U.S. Department of the Interior 1994) and Secretarial Order 3206 (U.S. Department of the Interior and U.S. Department of Commerce, 1997). The Service shares in the federal government's responsibility for accomplishing greater recognition and protection of treaty-protected resources and rights.

The Service's WFWO and Grays Harbor NWR have previously provided SEPA scoping comments to Ecology and the City addressing redevelopment proposals at the Port. On May 23, 2014, detailed scoping comments were offered for the Westway and Imperium proposals (FWS Ref. No. 01EWFW00-2014-CPA-0020). On October 30, 2014, detailed scoping comments were offered for a third, similar proposal pending at Terminal 3 on the Port (U.S. Development Group LLC/Grays Harbor Rail Terminal LLC; FWS Ref. No. 01EWFW00-2015-CPA-0001).

The current Westway proposal includes the following (Ecology, City of Hoquiam 2015a, p. S-3):

- Maximum on-site crude oil storage - 42 million gallons (or 1 million barrels).
- Maximum annual throughput - approximately 752 million gallons (or 18 million barrels).
- At maximum throughput, an average of approximately 1.25 crude-by-rail (CBR) unit trains per day (a maximum of approximately 458 unit trains per year).
- At maximum throughput, an average of approximately 1 tank vessel trip every other day (a maximum of approximately 238 tank vessel trips per year).
- The Imperium proposal includes the following (Ecology, City of Hoquiam 2015b, p. S-3):
- Maximum on-site storage - approximately 30 million gallons (or 720,000 barrels).
- Maximum annual throughput - approximately 1.26 billion gallons (or 30 million barrels).
- At maximum throughput, an average of approximately 2.0 CBR unit trains per day (a maximum of approximately 730 unit trains per year).
- At maximum throughput, an average of approximately 1 tank vessel trip per day (a maximum of approximately 400 tank vessel trips per year).

Thank you for the opportunity to review and offer comments for the Draft EISs, and for holding the related recent public meetings and hearings in Elma and Aberdeen, Washington. This letter transmits the Service's comments and concerns regarding the current Westway and Imperium proposals, the Draft EISs, and the unavoidable and significant adverse impacts which have been acknowledged by the SEPA co-leads.

The Service continues to have significant concerns regarding the foreseeable impacts of those actions. The Service believes that the current Westway and Imperium proposals would have

significant adverse impacts to both fish and wildlife and tribal trust resources. Content included in the Draft EISs, discipline reports, and technical appendices strongly suggests that these proposals would have unavoidable and significant adverse impacts, as defined under SEPA, to Tribal Resources, Environmental Health and Safety, Air, and Water. These resources and impacts are discussed in greater detail below.

Response FA4-1

The commenter's specific concerns are addressed individually in the responses below.

Comment FA4-2

Tribal Resources: The SEPA co-leads have acknowledged unavoidable and significant adverse impacts to tribal resources, including exclusion from and/or reduced access to tribal fishing areas. The Draft EISs assess and describe cumulative impacts, including cumulative impacts to vessel traffic and tribal resources. "At maximum throughput, operation of the cumulative projects would add 758 vessel trips . . . along the navigation channel . . . for a total of 1,180 vessel trips, or an average of three per day. This increased traffic, and increased occupancy of the Terminal 1 dock, could disrupt tribal fishing in the navigation channel . . . and adjacent to Terminal 1" (Ecology, City of Hoquiam 2015a, 2015b, p. S-28). To address vessel traffic interactions with tribal fishing access and cumulative impacts to tribal fishing access, the SEPA co-leads and Applicants propose to implement coordination protocols and procedures in the form of docking schedules, announced arrivals and departures, and additional unspecified measures.

The Quinault Indian Nation (QIN) recently wrote and requested that the Service assist in reviewing redevelopment proposals at the Port. The QIN has indicated to us that ". . . impacts to treaty rights cannot be fully mitigated" (QIN 2015). The Service agrees that the QIN's conclusions and significant concerns are warranted.

Response FA4-2

Draft EIS Chapter 3, Section 3.12, *Tribal Resources*, concludes the following with respect to potential for impacts on tribal fishing in Grays Harbor: " . . . vessels related to the proposed action would travel through usual and accustomed fishing areas in Grays Harbor. Under current and future conditions, increased vessel traffic could restrict access to tribal fishing areas in the navigation channel and adjacent to Terminal 1. This conflict is most likely to occur for fishing related to harvest of salmon, steelhead, and sturgeon. Because other factors besides vessel operations affect fishing opportunities, such as the number of fishers, fish distribution, timing, and duration of fish windows, the extent to which vessel operations related to the proposed action would affect tribal fishing is difficult to quantify. No mitigation measures would completely eliminate the possibility of impacts on fishing resources resulting from vessel operations related to the proposed action."

Comment FA4-3

Environmental Health and Safety: The Draft EISs assess and describe a number of spill scenarios, including "small", "medium", and "large" spills that might potentially occur on-site and along the transport corridors. Summarizing their conclusions for on-site spill potential, the SEPA co-leads have indicated that small spills during rail and vessel loading/unloading are likely; the potential for medium-sized spills, involving 10,000 to 50,000 gallons, is considered an intermediate risk; and,

large spills are considered unlikely. Small and medium-sized spills involving vessel loading are likely to reach water, and to have moderately-severe or severe impacts. Large on-site spills are likely to reach water and would have severe impacts.

Regarding rail transport spill potential, the co-leads have indicated that small and medium-sized spills are likely (less than 30,000 gallons), and the potential that these spills would reach water is considered an intermediate risk; large spills, involving 90,000 to 900,000 gallons, are described as unlikely, but are likely to reach water and would have severe impacts. Regarding vessel transport spill potential, the co-leads have indicated that large spills are unlikely, but are certain to reach water and would have severe impacts.

The Draft EISs provide a reasonable, generic characterization of spill potential, both on-site and along the transport corridors. The Service agrees with the findings of the SEPA co-leads, that some spill scenarios, resulting impacts, and damages are likely to occur over the functional lives of the proposed facilities (e.g., 20 to 50 years, or more). The Service agrees that large or very large spills are less likely, but resulting impacts and damages would be severe.

We conclude that the current Westway and Imperium proposals are likely to result in spills. Resulting adverse impacts to fish and wildlife and tribal trust resources are reasonably certain to occur. Some of these spills and adverse impacts could result in "take" under the ESA [Sections 3(19) and 9(a)(1)] and/or adversely affect designated critical habitat.

Response FA4-3

Draft EIS Chapter 4, *Environmental Health and Safety*, acknowledges the potential for a spill of crude oil to occur related to the proposed action. As noted in Section 4.7, *Impacts on Resources*, depending on the extent and location of the spill, there is the potential for significant adverse environmental impacts. In the event of "take," as defined in Section 9 of the Endangered Species Act, the responsible party would be required to comply with the applicable regulations pursuant to the act. As part of the incident command system, federal and state agencies would be involved in the response and cleanup actions.

Comment FA4-4

Air and Water: Available information strongly suggests that these proposals have unavoidable and significant adverse impacts to air and water. The Westway and Imperium proposals would increase toxic air pollutant emissions from both stationary and mobile sources, including diesel particulate matter. These emissions and particulates deposit on surfaces and are typically washed into surface runoff and receiving waters.

Response FA4-4

No information was provide to support this comment. Draft EIS Chapter 3, Section 3.2, *Air*, and 3.3, *Water*, describe potential impacts on air and water resources, respectively. Based on the analysis in Section 3.3, construction and routine operation of the proposed action would have not significant and unavoidable adverse impacts on water. Final EIS Section 3.2 reflects revised emissions estimates based on information provided by PS&P in its comments on the Draft EIS regarding rail operations Based on the revised analysis, construction and routine operation of the proposed action would have no significant and unavoidable adverse impacts on air.

Comment FA4-5

Greenhouse gas emissions contribute to observed trends toward increasing global average sea temperatures and ocean acidification. These trends are a threat to marine food webs, sensitive marine and coastal resources, and Tribal, commercial, and recreational fisheries.

According to the SEPA co-leads, "cumulative greenhouse gas emissions for operations and transportation [i.e., exclusive of refining and combustion] would be approximately 103,753 metric tons per year", and ". . . greenhouse gas emissions from the cumulative projects [would] contribute to climate change at the global level" (Ecology, City of Hoquiam 2015a, 2015b, p. S-27). "Using [the U.S. Environmental Protection Agency's] average heat content of crude oil . . . and a more conservative emissions factor . . . .the maximum amount of CO2 emissions from end use of products shipped through the proposed facility in a given year is 7,796,882 metric tons of CO2 per year" (Ecology, City of Hoquiam 2015a, p. 3.2-20), and ". . . is 13,067,400 metric tons of CO2 per year" (Ecology, City of Hoquiam 2015b, p. 3.2-21).

Response FA4-5

Comment acknowledged.

Comment FA4-6

We conclude that the current Westway and Imperium proposals are likely to have unavoidable and significant adverse impacts to air, water, and sediment quality. The proposals would emit, directly, indirectly, and cumulatively, large quantities of greenhouse gases and toxic air pollutants. These emissions would threaten the quality and function of fish and wildlife habitats along the lower Chehalis River valley, in Grays Harbor, and beyond. Foreseeable adverse impacts to environmental health and safety, air, and water are likely to result in damage to both fish and wildlife and tribal trust resources.

Response FA4-6

Refer to Response to Comments FA4-3 and FA4-4. Final EIS Chapter 6, *Cumulative Impacts*, also reflects revised emissions from the cumulative projects based on rail operation information from PS&P.

Comment FA4-7

The Service is aware that communities and a concerned public throughout the study area voiced concerns regarding transport safety, security, spill readiness, spill response, and inherent vulnerability along the transportation corridors to and from the Port (Public Meetings and Hearings, Elma and Aberdeen, Washington; October 1 and 8, 2015). We share many of these concerns, and would emphasize the following:

Terminal 1 is located on artificial fills and constructed in-water and over-water structures. There is moderate to severe earthquake potential at the site, and indications that ground movement and/or liquefaction would cause moderate to severe damage to structures, including storage tanks and pipelines. In the event of an offshore earthquake, the site could also be inundated by tsunami waves. Comments - The Service believes that the size of the proposed containment walls is not sufficient to effectively counter the risk of storage tank and pipeline failure at this vulnerable location. The

Service doubts that there is any effective and feasible mitigation that would adequately address vulnerability to earthquakes and tsunami waves.

Response FA4-7

No information was provided to support this comment. As addressed in Draft EIS Chapter 3, Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, all proposed facilities would be required to meet all applicable building standards. Geotechnical engineering and structural design would be required to account for potential geologic hazards, including earthquakes and earthquake-related events such as tsunami and liquefaction. The Master Response for Seismic Risk and Design Requirements describes these requirements, the permitting processes they are tied to, and the applicant mitigation identified to further reduce these potential impacts. The measures include standards to design the proposed facilities to withstand potential tsunami and debris forces without allowing spillage of crude oil to the environment, based on a site-specific tsunami impact modeling and analysis conducted for the proposed action.

Comment FA4-8

- According to the SEPA co-leads and Applicants, no modifications are needed or proposed for the PS&P rail network that would carry CBR unit trains between Centralia and Hoquiam, a distance of approximately 60 miles. The Draft EISs do acknowledge the potential for earthquakes, landslides, liquefaction, and subsidence. Comments - Recent instances of PS&P rail derailments indicate that the existing rail network is vulnerable. Proposals bringing CBR to the Port, including but not limited to the current Westway and Imperium proposals, would present an inherently higher cumulative risk over time of significant hazardous material releases to the terrestrial and aquatic environments. These risks would be particularly significant wherever the rail network traverses over or through wetlands and waters associated with the lower Chehalis, Satsop, Wynochee, Wishkah, and Hoquiam Rivers, including the lower Chehalis River tidal surge plain. The current proposals are reasonably certain to result in adverse impacts and damage to sensitive freshwater, brackish, and/or marine ecosystems. These ecosystems are uniquely diverse, productive, and biologically valuable. Some of these adverse impacts could result in "take" under the ESA [Sections 3(19) and 9(a)(1)] and/or adversely affect designated critical habitat.

Response FA4-8

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant. In the event of "take," as defined in Section 9 of the Endangered Species Act, the responsible party would be required to comply with the applicable

regulations pursuant to the act. As part of the incident command system, federal and state agencies would be involved.

Comment FA4-9

The Grays Harbor navigation channel runs the length of the Grays Harbor NWR at close proximity, lies directly south of Damon Point and the Oyhut Wildlife Recreation Area, and traverses more than 12 linear miles of subtidal estuarine and marine habitat. Comments - The Service continues to have significant concerns regarding proximity of the current Westway and Imperium proposals to the Grays Harbor NWR. The refuge provides habitats for a wide variety of terrestrial and aquatic species, including species listed under the ESA, and supports large numbers of shorebirds and waterfowl. The whole of Grays Harbor is designated as a site of "hemispheric significance" in the Pacific flyway (USFWS 2014), and supports both migratory and resident shorebirds, waterfowl, passerines, and birds of prey. Vast averages of biologically productive and important sand and mud flat, saltmarsh, shallow shoals, sand islands, and spits surround the Port and Grays Harbor navigation channel. The Service believes, and would argue that these are Aquatic Resources of National Importance, per the resource-based threshold factors implementing Section 404(q) of the Clean Water Act (EPA 2011).

Response FA4-9

Draft EIS Chapter 3, Sections 3.4, *Plants*, 3.5, *Animals*, and 3.10, *Recreation*, acknowledge the importance of Grays Harbor Wildlife National Wildlife Refuge for wildlife, ecosystem function and values, and recreational importance. Draft EIS, Chapter 2, *Proposed Action and Alternatives,* notes there is no in-water work requiring evaluation of the proposal pursuant to Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1989, or Section 103 of the Marine Protection, Research and Sanctuaries Act.

Comment FA4-10

The Service also believes that the current proposals would have unavoidable impacts to the visual character of the surroundings, and the refuge user experience.

Response FA4-10

No information is provided to support this statement. Based on the analysis presented in Draft EIS Chapter 3, Section 3. 9, *Aesthetics, Light, and Glare*, construction and routine operation of the proposed action would have no significant impacts on aesthetics, light, or glare.

Comment FA4-11

To address increased on-site and transport spill, fire, or explosion potential, the SEPA co-leads and Applicants propose a number of measures. These measures include structural and procedural spill controls; contingency planning; required personnel training and certification; bonding and financial responsibility requirements tied to emergency response and cleanup; rail car requirements and specifications; manifests classifying and characterizing crude oil properties; tug escorts for tank vessels; coordinated preparation of a formal vessel management system and related procedures; training and certification for tank vessel operators and first responders; and, incident communications. Comments - The SEPA co-leads and Applicants have demonstrated a serious

commitment to ensuring that the proposed bulk liquid storage and distribution facilities operate according to high performance standards. However, the Service believes that the proposed measures are unlikely to succeed in preventing all significant adverse impacts. Over the functional lives of the proposed facilities (e.g., 20 to 50 years, or more), the Service believes that these operations will result in significant spills and adverse impacts. These spills are likely to damage both fish and wildlife and tribal trust resources.

Response FA4-11

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including fish and wildlife and tribal resources.

Comment FA4-12

The SEPA co-leads have acknowledged potential impacts on plants, animals, and their habitats, including those that would result from increased vessel traffic (e.g., wake stranding of salmonids; erosion of sediments, shorelines, and low-lying intertidal vegetation). The Draft EIS acknowledges that vessels pose a risk of introducing nonnative and invasive species, and that ballast water exchange practices and requirements do not fully mitigate those risks.

Response FA4-12

Draft EIS Chapter 3, Section 3.3, *Water*, Section 3.4, *Plants*, and Section 3.5, *Animals*, describe potential ballast water impacts and the regulatory requirements to reduce these impacts. Section 3.4.7.1, *Applicant Mitigation*, and Section 3.5.7.1, *Applicant Mitigation*, propose mitigation measures to further reduce potential impacts.

Comment FA4-13

The SEPA co-leads and Applicants have offered to, ". . . voluntarily cease vessel-loading operations. . . 2 weeks each year . . . to reduce the potential for impacts on natural resources during the Grays Harbor Shorebird Festival" (Ecology, City of Hoquiam 2015a, 2015b, p. S-10). Comments - The Service continues to have significant concerns regarding the impacts of the current proposals, including foreseeable direct and indirect impacts and damages to fish and wildlife and tribal trust resources. The Service doubts that a two-week pause on vessel-loading would meaningfully or significantly mitigate potential impacts and damages. Any measure intended to significantly mitigate, avoid, or minimize impacts in this way would more likely need to extend over a period of several weeks and/or months (e.g., around the peaks of spring and fall avian migration; around the peak of juvenile salmonid outmigration).

Response FA4-13

Although ceasing vessel-loading operations for 2 weeks during the Grays Harbor Shorebird Festival would reduce risks related oil spills that could affect migratory birds in the area during that period, the Final EIS reflects revisions to clarify that the applicant's primary intent in committing to this voluntary measure is to recognize the importance of the annual Grays Harbor Shorebird Festival to the community and those attending the festival and to eliminate the chance of a spill from vessel-loading operations during this time. The measure has been moved to Final EIS Chapter 3, Section 3.10, *Recreation*, to reflect this clarification.

Mitigation measures to reduce and minimize impacts on natural resources that could result from an oil spill during operations at the project site are proposed in Draft EIS Chapter 4, Section 4.4.3, *What mitigation measures would reduce impacts related to terminal operations at the project site?*

Comment FA4-14

According to the SEPA co-leads, "cost-benefit impacts were analyzed in accordance with the Hoquiam Municipal Code . . . No additional cost benefit analysis was conducted . . . The proposed action[s] would result in some economic and financial benefits to the City of Hoquiam, as well as some costs" (Ecology, City of Hoquiam 2015a, 2015b, p. S-32). The cost-benefit analyses included in the Draft EISs fail to acknowledge or consider significant impacts, damages, and costs. These omissions are a concern to the Service.

Grays Harbor and its major tributaries support large and important fisheries, both fin fish and shellfish. These fisheries are important (socially, economically, and culturally) to the citizens of Grays Harbor, the State of Washington, and to the QIN and Confederated Tribes of the Chehalis Reservation. These fisheries support traditional industries that are vital to the economy of the region and the State, including fishing, crabbing, tourism, shellfish culturing, boat building, and marine support services.

The Service believes that failure to account for externalities, including social and environmental impacts and damages, results in findings that are skewed and incomplete. Decision-makers, and the general public, should not be presented with a distorted image of true costs and benefits. There is a strong emerging State and regional consensus that CBR proposals pose unacceptable risks, and that associated costs and damages may exceed the economic benefits that accrue to local communities and the State. The SEPA co-leads should broaden their consideration of social and environmental factors where possible, and should monetize and provide to the public a thorough and comprehensive accounting of all the foreseeable impacts, costs, and damages that are likely to result from the current proposals.

Response FA4-14

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment FA4-15

In Summary, the Service believes that the current Westway and Imperium proposals would have unavoidable and significant adverse impacts, and would damage both fish and wildlife and tribal trust resources. Therefore, the Service cannot and does not offer its support for the current Westway and Imperium proposals.

Thank you for the opportunity to review and offer comments for the Draft EISs. If these comments are unclear, if the SEPA co-leads have related questions, or would like to further discuss these proposals and/or the SEPA process, please contact Ryan McReynolds (WFWO, Consultation and Conservation Planning Division; Email: ryan_mcreynolds@fws.gov).

Sincerely,

Martha L. Fensen for
Eric V. Rickerson, State Supervisor
Washington Fish and Wildlife Office

cc:
City of Hoquiam, WA (B. Shay)
Ecology, Lacey, WA (D. Butorac)
Ecology, Lacey, WA (S. Toteff)
Port of Grays Harbor, Aberdeen, WA (M. Horton)
FWS, Nisqually NWRC, WA (G. Nakai)
Quinault Indian Nation, Taholah, WA (D. Bingaman)
NMFS, Lacey, WA (J. Fisher)
WDFW, Montesano, WA (A. Spoon)
WDFW, Montesano, WA (S. Kalinowski)

Sources Cited

Quinault Indian Nation (QIN). 2015 (October 2, 2015). Letter to Eric Rickerson, Manager, Washington Fish and Wildlife Office, Re: Crude-by-rail storage and transport facilities in Grays Harbor. 2pp.

Washington State Department of Ecology and the City of Hoquiam, Washington (Ecology, City of Hoquiam. 2015a. Westway Expansion Project, Draft Environmental Impact Statement, Volumes I-III. August 2015.

Washington State Department of Ecology and the City of Hoquiam, Washington (Ecology, City of Hoquiam. 2015b. Imperium Terminal Services Expansion Project, Draft Environmental Impact Statement, Volumes I-III. August 2015.

U.S. Department of the Interior. 1994 (June 28, 1994). The Native American Policy of the U.S. Fish and Wildlife Service. 9pp.

U.S. Department of the Interior and U.S. Department of Commerce. 1997 (June 5, 1997). Secretarial Order 3206. 14pp.

U.S. Environmental Protection Agency (EPA). 2011. Clean Water Act Section 404(q) Dispute Resolution Process. 2pp. (Accessed May 5, 2014). Available On-Line @ http://water.epa.gov/type/wetlands/outreach/upload/404q.pdf.

U.S. Fish and Wildlife Service (USFWS). 2014. Grays Harbor National Wildlife Refuge and Black River Unit of Nisqually National Wildlife Refuge, Draft Comprehensive Conservation Plan and Environmental Assessment, Chapter 1 (Introduction). 33pp.

Response FA4-15

Comment acknowledged.

FA5, U.S. Department of Interior, National Park Service, Pacific West Region, Palmer Jenkins

Comment FA5-1

United States Department of the Interior
NATIONAL PARK SERVICE
Pacific West Region
909 151 Avenue, Suite 500
Seattle, WA 98104

IN REPLY REFER TO:
l.A.2. (PWRO-NR)

November 5, 2015

Westway and Imperium Terminal Services Expansion Projects EISs c/o ICF International 710 Second Street, Suite 550 Seattle, WA 98104

To Co-Lead Agency Representatives:

The National Park Service (NPS) appreciates the opportunity to provide comments on the Draft Environmental Impact Statements (DEIS) for the Westway and Imperium Terminal Services Expansion Projects proposed in Grays Harbor, Washington. The facilities are proposing to expand operations to accommodate receipt of crude oil by train and subsequent shipment by marine vessels to refineries on the West Coast and, potentially, abroad. Given the concerns identified in our May 19, 2014, letter that provided scoping comments, our review of the DEISs focused on potential impacts on areas managed or administered by the NPS. These areas include Glacier National Park in Montana; sections of the Lewis and Clark National Historic Trail, Oregon National Historic Trail, and Ice Age Floods National Geologic trail along the Columbia River in Oregon and Washington; Fort Vancouver National Historic Site in Vancouver, Washington; Lewis and Clark National Historical Park near Astoria, Oregon; Olympic National Park in northwest Washington; San Juan Island National Historical Park on San Juan Island, Washington; and Ebey's Landing National Historical Reserve on Whidbey Island, Washington.

Based on the information provided for the DEISs, marine vessels traveling south from Grays Harbor should be 25-50 nautical miles from shore, so it is highly unlikely the projects could impact Lewis and Clark National Historical Park. However, there is still a potential for train or marine vessel traffic, or oil spills, to affect the other areas described in our scoping letter. Therefore, we were disappointed that while the DEISs include comprehensive analyses of impacts at the terminal site and the rail line from Centralia to Grays Harbor (i.e., the study area), there is minimal discussion of potential impacts associated with trains traveling from the central United States to Centralia and with marine shipping outside of Grays Harbor (i.e., the extended study area). Given that the purpose of completing an EIS under Washington's State Environmental Policy Act is to inform local and state agencies, decision-makers, and the public about potential project impacts, we recommend the final EISs provide a more robust analysis of impacts in the extended study area. The final EISs should also include a map showing areas managed or administered by the NPS, as well as other areas of natural, cultural, historical significance, that could be affected by the projects.

Response FA5-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts, described in Section 4.7, *Impacts on Resources*, would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

The maps requested for areas of natural, cultural, and historical significance are included in geographic response plans (GRPs) developed for specific areas as part of the Northwest Area Contingency Plan. The plan intent and use is discussed in Draft EIS Chapter 4.2, *Applicable Regulations.* These maps are located at www.rrt10nwac.com/GRP/Default.aspx.

Comment FA5-2

Section 6.5.1.2 discusses greenhouse gas (GHG) emissions associated with the projects. According to the DEISs, the Westway, Imperium, and Grays Harbor Rail Terminal projects cumulatively would result in a 0.11 percent increase over 2011 levels in statewide rail, marine vessel, and industrial source GHG emissions, including a 7.8 percent increase in rail emissions. Appendix 2 of

Washington's 2010 Climate Change Comprehensive Plan states "maintaining emissions at current levels means we are not on track to meet the state's statutory GHG reduction limit for 2020, and must continue to look for additional opportunities to increase energy efficiency, promote renewable energy, and otherwise reduce our GHG emissions." Requiring the Westway, Imperium, and Grays Harbor Rail Terminal projects to offset all project GHG emissions would support the goals of the state's 2010 Plan.

Response FA5-2

Refer to Chapter 3, Section 3.2.71, *Applicant Mitigation*, for proposed mitigation measures for air quality and greenhouse gas impacts.

Comment FA5-3

Sections 6.5.7 (Westway) and 6.5.8 (Imperium) discuss potential cumulative impacts from rail and marine vessel transport in the extended study area. The DEISs imply Westway and Imperium have no responsibility for impacts, including accidents or oil spills, that occur beyond the terminal site or the Centralia to Grays Harbor rail line. In fact, because the increased rail and marine traffic would be a direct result of the Westway and Imperium projects, the companies should play a major role in ensuring that all stakeholders are invited to participate in accident and spill response preparedness and planning. The NPS is concerned about potential consequences for visitor and employee safety, and adverse effects on natural, cultural, and historic resources, in parks and affiliated areas. This is of particular interest at Glacier National Park and Fort Vancouver National Historic Site because the rail line runs through both parks. We recommend the DEISs include a strategy for engaging stakeholders in response planning.

Please contact Tonnie Cumming at 360-816-6201 or Tonnie_Cummings@nps.gov for further information or if you have any questions regarding our comments.

Sincerely,

Palmer Jenkins
Deputy Regional Director, Pacific West Region

FNP:tcummings:101615: 360-816-6201:westway and imperium deis letter 10 16 2015.docx.

Response FA5-3

Draft EIS Chapter 4, Section 4.2.1, *What framework prevents incidents from happening?* describes the formalized planning framework in place to address risks related to oil spills, fires, or explosions from the terminal operations, rail transport, or vessel transport. The responsible party may vary during the transport of crude oil. This section describes the requirements for planning and preventive equipment and design. Section 4.2.2, *What framework prepares for an incident?* describes federal and state regulations to prepare for an incident, the integration of plans, and drill and exercise requirements. The Department of Interior is part of the Regional Response Team 10 responsible for developing the Northwest Area Contingency Plan.

3.2 State Agencies

The state agencies listed in Table 3-2 submitted comments on the Draft EIS. These comments and responses to those comments are presented after the table. Master responses were developed to address commonly raised comments and are presented in Chapter 2, *Comment Themes and Master Responses*.

The responses refer to the Draft EIS unless information has been revised, in which case the Final EIS is specified.

Table 3-1. Comment Letters Submitted by State Agencies

Number	Agency
SA-1	Washington State Department of Archaeology and Historic Preservation, Lance Wollwage
SA-2	Washington State Department of Health, Maryanne Guichard
SA-3	Washington Department of Fish and Wildlife, Michele Culver
SA-4	Washington State Department of Natural Resources, Megan Duffy
SA-5	Washington State Department of Transportation, Megan White
SA-6	Washington State Parks and Recreation Commission, Randy Kline
SA-7	Washington Utilities and Transportation Commission, Steve King

SA1, Washington State Department of Archaeology and Historic Preservation, Lance Wollwage

Comment SA1-1

DAHP
Protect the Past, Shape the Future
Allyson Brooks Ph.D., Director
State Historic Preservation Officer

September 3, 2015

Mr. Brian Shay
City Administrator
City of Hoquiam
609 8th Street
Hoquiam, WA 98550

Ms. Diane Butorac
Regional Planner
Southwest Regional Office
Department of Ecology

In future correspondence please refer to:

Log: 031913-07-ECY

Property: WESTWAY TERMINAL TANK FARM EXPANSION PROJECT

Re: Adverse Impact

Dear Mr. Shay and Ms. Butorac:

We have reviewed the draft Environmental Impact Statement (DEIS) prepared the City of Hoquiam and Washington State Department of Ecology for the Westway / Imperium rail terminal project(s). As detailed in the Cultural Resources Technical report attached to the DEIS, the project will impact intertidal sediments across a large part of the project area. We disagree with your consultant's assertion that these deposits have a low probability to hold significant archaeological materials.

Intertidal deposits in the project area are known to hold widespread and dense concentrations of significant archaeological artifacts and features. Moreover, WSDOT's recent trenching of graving dock sites in Grays Harbor established that intact intertidal archaeological sites exist in the area at "heavily disturbed" locations beneath deep industrial fills.

Also, WSDOT's experience in Seattle at the rescue pit for "Bertha" the Tunnel Boring Machine (TBM) demonstrates the limits of coring as an archaeological sampling tool. At the TBM site archaeologists examined a great many cores yet failed to discern a massive intertidal archaeological site, which was later uncovered during mechanical excavation of the pit. In short, cores are useful for identifying major deposits and gross stratigraphy, but do not provide a sample that reliably captures archaeological data. In this case, your cores have identified intertidal deposits with a high likelihood of holding archaeological materials, but do not speak to the actual presence of any such remains.

Knowing now that intertidal deposits exist and will be impacted by the Westway / Imperium project, the DAHP would normally request additional testing—e.g., trenching—to sample specifically for archaeological materials. However, we do recognize that reaching such sites is very difficult and may disrupt construction plans and activities. In cases like this where there is a likelihood that significant archaeological resources exist but cannot be accessed for survey, testing and recovery, the Department of Archaeology and Historic Preservation assumes the loss of such resources and requires mitigation. We look forward to the development of a Memorandum of Understanding that incorporates your proposed archaeological monitoring of excavations that reach intertidal deposits, and addresses the mitigation of cultural resources for the project.

Response SA1-1

The Draft EIS acknowledges that the shores of Grays Harbor were important habitation and resource gathering areas, with habitations and fishing facilities being the most likely to leave a robust archaeological trace. Draft EIS Appendix J, *Cultural Resources Technical Report*, reports that the potential for encountering archaeological sites is based on the depth of proposed action-related ground-disturbing activities that would result in the excavation of sediments relative to the depth of anthropogenic fill. As indicated in Appendix J, although buried intertidal sediments are present at the project site, only one of the proposed action-related ground-disturbing activities would extend below the depth of anthropogenic fill—the driving of piles—and this activity would not result in the excavation of sediments and has associated access-related limitations. The conclusion was based on subsurface information obtained at the REG (formerly Imperium Terminal Services) site via both geoarchaeological cores and mechanically excavated trenches and at the project site via geoarchaeological cores. In recognition of the limitations associated with exclusively using

geoarchaeological cores at the project site, Draft EIS Chapter 3, Section 3.11.7.1, *Applicant Mitigation*, identifies a measure for monitoring of ground-disturbing activities that extend to depths greater than 15 feet below the current ground surface by a qualified professional archaeologist. This depth was selected because it is the point at which the interface between anthropogenic fill and intertidal sediments becomes ambiguous. However, except for pile driving, which would not result in the excavation of sediments and therefore monitoring would be of little benefit, ground-disturbing activities for the proposed action are not anticipated to extend to this depth. Based on this information, Appendix J, *Cultural Resources Technical Report*, states that the proposed action has limited potential for encountering as-yet undocumented archaeological sites.

SA2, Washington State Department of Health, Maryanne Guichard

Comment SA2-1

STATE OF WASHINGTON
DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL PUBLIC HEALTH
PO Box 47280
Olympia, Washington 98504-7820
(370) 236-3000 TTY Relay Service: (800) 833-6388

November 23, 2015

The City of Hoquiam
The Washington State Department of Ecology
Westway and Imperium Expansion Projects EISs
c/o ICF International
710 Second Avenue, Suite 550
Seattle, Washington 98104

Re: Comments on the Westway and Imperium Draft Environmental Impact Statements (EISs)

Thank you for the opportunity to comment on the draft Environmental Impact Statements (EISs) for the Westway and Imperium projects. As the state health department, we are interested in the impacts these projects will have on the health and well-being of people in Washington State. We recognize Grays Harbor County has one of the highest unemployment rates in the state and that the economic impacts of the projects could be beneficial in the case of increased employment at the facilities or detrimental in the case of a spill that impacted fishing and shellfish harvesting. We also recognize that the noise, traffic, air pollution, and the risks of spills or explosions would negatively impact health. We support the mitigation measures in the draft EIS that will reduce negative impacts on public health including anti-idling policies at the facilities, coordinating with communities to reduce the impacts of noise, and improving safety at rail crossings. Despite these mitigations, we have some recommendations on how to more fully address issues that impact health in the EIS:

- Air quality monitors should be sited so that it measures the highest potential exposure level, and data should be reported more frequently than annually in order to adequately respond to high exposure events.

- Impacts of noise on schools should be minimized. Education is a key determinant of health and can be adversely impacted by the noise generated by trains.
- Health impacts of spills, derailments, and explosions should be more adequately addressed in the EIS. For example, death is not considered as a potential impact of a derailment or explosion.

Response SA2-1

Refer to responses to specific comments below related to air quality monitoring and reporting (SA2-2), minimization of noise impacts on schools (SA2-3), and analysis of health impacts of spills, derailments, fires, or explosions (SA2-4).

Comment SA2-2

Air Quality

We agree that diesel particulate matter (DPM) emissions should be monitored. Diesel exhaust is a human carcinogen and is projected to be emitted during construction and routine operation at the project sites. Siting of DPM monitors was not discussed in the draft EIS. We recommend that DPM monitors be sited in locations that would capture the highest possible concentrations (accounting for meteorological conditions detailed in the draft EIS, Appendix D) and reflect maximum exposures to community members, especially sensitive individuals. In addition, annual reporting of DPM emissions does not allow for a quick response to high exposure events. We recommend a shorter time frame for reporting and reviewing of DPM emissions (e.g., monthly) in order to more quickly respond to high DPM events and adjust operations to better protect the surrounding community.

Response SA2-2

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present analyses of cancer risk from emissions of diesel particulate matter related to the proposed action and cumulative projects, respectively. Final EIS Section 3.2 and Section 6.5.1.2 have been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P.

These changes result in lower diesel particulate matter emission rates and result in a lower cancer risk. The incremental increase in cancer risk from air quality impacts would be less than 10 in 1 million for any offsite receptor. This level of increased risk is not considered significant. Because this risk is lower, the need for air quality monitoring near the project site is no longer warranted; therefore, this proposed mitigation measure has been removed from Final EIS Section 3.2.7.1, *Applicant Mitigation*. Refer to the Master Response for Mitigation Framework.

Comment SA2-3

School Noise

Education is a key social determinant of health. A review article [Footnote 1: Shield, B., and Dockrell, J. (2003). The Effects of Noise on Children at School: A Review, Building Acoustics, 10(2), 97-116] on the effects of noise on children at school concluded that noise negatively impacts children's performance at school, particularly reading scores. Aberdeen, Elma, and especially Hoquiam already have below average reading scores compared to the rest of the state [Footnote 2: Office of Superintendent of Public Instruction, Washington State. Washington State Report Card]. Grays

Harbor County's high school graduation rate is 76 percent, slightly below the state average [Footnote 2: Office of Superintendent of Public Instruction, Washington State. Graduation and Dropout Statistics Annual Report, April 2015. Appendix B] of 77 percent and even further below the national average of 81 percent. The World Health Organization and the American National Standards Institute (ANSI) recommend a background average noise maximum of 35 dBA for an hour.

In Grays Harbor County alone, the cities of Hoquiam, Aberdeen, Cosmopolis, Montesano, Satsop, and Elma have schools within 1,500 feet of a railroad that would be impacted by this proposal. Using GIS and publically available data [Footnote 4: Office of Superintendent of Public Instruction Data Gateway, accessed November 2015], we found that schools across Washington that were within 1,500 feet of a railroad had 6 percent more students who did not meet standards on English Language Arts. Noise could also have unintended policy impacts on schools. To site a school in Washington State, ambient noise must have an hourly average at or below 55 dBA and not exceed a hourly maximum of 75 dBA, WAC 246-366-030. In addition to the health and performance issues noted above, we are concerned that there is a potential for the rail traffic to increase noise levels sufficiently that certain schools may not meet the noise requirements if they wanted to remodel. This would have a significant impact on the community and could disrupt a child's education. We suggest you assess the impacts of noise on education and school siting along the train route.

Response SA2-3

Draft EIS Chapter 3, Section 3.7, *Noise and Vibration*, presents an analysis of noise impacts, including noise from trains related to the proposed action. The analysis uses the Federal Railroad Administration adopted noise assessment methods developed by the Federal Transit Administration. Per these methods, noise exposure values are reported as hourly equivalent sound level (L_{eq}) for Category 1 and 3 land uses, including schools, and day-night average sound level (L_{dn}) for residential land uses (Category 2). Daytime loudest-hour noise levels (in terms of L_{eq}) were not analyzed because the loudest hour at grade crossings and wayside locations, generally characterized by a single train passby, would be unchanged from existing conditions.

The focus of the noise analysis is on L_{dn} for locations where people sleep. Noise-sensitive land uses are identified within approximately 500 feet of the PS&P rail line for wayside noise and within 1,000 feet of grade crossings for train horn noise. No schools in the study area are within these distances.

Because freight rail traffic does not run on a schedule, the analysis assumes rail events related to the proposed action would be evenly distributed over a 24-hour day. No moderate or severe impacts on sensitive receptors were identified for train wayside noise. The analysis identifies moderate and severe noise impacts at residential receptors adjacent to grade crossings from the increase in horn noise events related to the proposed action over a 24-hour day. No moderate or severe impacts are predicted at schools.

Refer to the Master Response for Geographic Scope of the EIS for an explanation of why Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail and vessel transport in the extended study area qualitatively.

Comment SA2-4

Public Health Risks of Explosions, Spills, and Derailments

We do not believe that the health risks from potential fires, derailments, or explosion are adequately addressed. For example, in the spill scenarios, the risk to the environment is displayed on a scale from low to severe, but the risks to human health are not estimated. At the bottom of table S-3, you list potential impacts to human health from spills and explosions. The list fails to mention:

- Death
- Injury
- Mental Health
- Contaminants in Fish

Although they are rare, deaths and injuries from explosions, spills, and derailments of freight trains in the United States and North America have occurred in recent years and pose a low probability but high impact risk. There is also no mention of mental health, which would likely be the most prevalent public health impact following an explosion, spill, or derailment. Neria et a., 2008 [Footnote 5: Neria Y, Nandi A, and Galea S. Post-Traumatic Stress Disorder following disasters: A systematic review. Psychological medicine. April 2008; 38 (4):467-480] assesses post-traumatic stress disorder (PTSD) following technological disasters. In 65 studies of 40 technological disasters, they found that the prevalence of PTSD was between 15-75 percent in the first month after the disaster. This rate often dropped off sharply in the year following the event; however, in some instances rates stayed high for as long as a decade.

There is a wide range of chemicals of concern for human health that could be released by a spill and exist or accumulate in fish and shellfish in Grays Harbor. Despite efforts to control the consumption of contaminated fish after a spill, it is likely that some individuals would continue to fish, harvest, and consume fish and shellfish from Grays Harbor and increase their exposure to toxic substances. Although it would be difficult to forecast health impacts without knowing what was spilled, how much, or where, there is potential for harm to human health.

Response SA2-4

The approach to the risk analysis involves assessing the chance of various release scenarios related to terminal (onsite) operations and rail and vessel transport to and from the project site, rather than predicting when and where a spill would be most likely to occur. Draft EIS Chapter 4, Section 4.7, *Impacts on Resources*, describes the general types of impacts on resources. The Final EIS section has been revised to more fully describe human health impacts that could occur as a result of an oil spill, fire, or explosion, including consumption of contaminated material. For more information on the risk analysis approach, refer to the Master Response for Environmental Health and Safety Analysis.

Comment SA2-5

We recommend that the impacts to schools along the Puget Sound and Pacific Railroad and other impacted railroad lines in Washington be assessed and attempts made to mitigate those impacts through noise reduction strategies.

Response SA2-5

Refer to Response to Comment SA2-3.

Comment SA2-6

We further recommend that air quality monitors be sited to measure maximum potential exposure levels and that monitoring data be reported more frequently than annually.

Response SA2-6

Refer to Response to Comment SA2-2.

Comment SA2-7

In regards to public health impacts of derailments, spills, and explosions, we recommend that the scope of the health impacts be reassessed along with potential mitigation measures.

If you have questions about these comments or need technical assistance from the state health department during the Environmental Impact scoping process, please contact Rad Cunningham at (370) 236-3359 or by email at Rad.Cunningham@doh.wa.gov.

Sincerely,

Maryanne Guichard
Assistant Secretary

Response SA2-7

Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, has been revised to describe potential human health impacts that could occur as the result of an oil spill, fire, or explosion. The framework for preventing and responding to an oil spill, fire or explosion is discussed in Section 4.2, *Applicable Regulations*; additional mitigation measures to reduce the potential for impacts are proposed in Sections 4.4.3, 4.5.3, and 4.6.3. These measures, which are aimed at minimizing the frequency and extent of a potential spill, could reduce the potential for adverse impacts on human health. However, no mitigation measures would completely eliminate the possibility of a spill, fire, or explosion, nor would they completely eliminate the adverse consequences of a spill, fire, or explosion. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

SA3, Washington Department of Fish and Wildlife, Michele Culver

Comment SA3-1

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November 20, 2015

Imperium and Westway DEIS c/o ICF International
710 Second Avenue, Suite 550
Seattle, Washington 98104

RE: Imperium and Westway Draft Environmental Impact Statement Comments

The Washington Department of Fish and Wildlife (WDFW) is mandated to preserve, protect, and perpetuate the fish and wildlife resources and their habitats on behalf of the state's citizens, and is responsible for maintaining the economic well-being of the fishing industry and promoting outdoor recreation. In light of our responsibilities, we submit the following comments on the scope of the environmental reviews for the Imperium and Westway proposals.

While WDFW is concerned about the broader ecosystem effects associated with all of the areas identified for discussion in the Environmental Impact Statement (EIS), we are focusing these comments on the potential threats to fish, wildlife, their habitats, and in some cases, the commercial and recreational fisheries and coastal communities dependent upon the health of those resources, resulting from these proposals.

WDFW understands that these are separate proposals, which will have separate EIS documents; however, as the proposals have common elements, such as the addition of bulk liquid storage tanks for crude oil (and, in the Imperium Renewables proposal, for other hazardous materials), expansion of rail facilities, and new pipelines, our comments are relevant to both proposals. The project area of potential effect should be analyzed at three scales: the project site, the project vicinity, and the broader project shipping prism. In addition, impacts to natural resources from the increase in rail transportation associated with the delivery of crude oil to the distribution terminal also must be addressed. The proposed projects will significantly increase the amount of oil transiting Grays Harbor and the surrounding areas by trains (1,188 new train movements per year), pipelines, vessels/barges (428 new vessel/barge movements per year).

Response SA3-1

Draft EIS Chapter 3, Section 3.0.4, *What areas and activities were analyzed?* provides a description of the areas and activities analyzed in Chapter 3, *Affected Environment, Impacts, and Mitigation*, which includes consideration of the project site and surrounding vicinity and rail and vessel transportation corridors. The impacts on natural resources associated with the risk of crude oil spills, fires, and explosions are addressed in Chapter 4, Section 4.7, *Impacts on Resources*. Final EIS Section 4.7 more fully describes some of the potential impacts.

Comment SA3-2

While WDFW recognizes that there are existing storage tanks, pipelines, and rail facilities bordering the Harbor now that pose potential threats to marine life, we are concerned about the greater risks associated with the dramatic expansion of this infrastructure, the increase in the amount of product

being handled, and the additional rail activity that will occur in the area bordering the estuary and throughout the western Washington region.

Response SA3-2

Draft EIS Chapter 4, *Environmental Health and Safety*, presents an analysis of potential impacts from increased risk of accidents (e.g., storage tank failure, train derailments, vessel collisions) and related consequences (e.g., release of crude oil) under the proposed action. Chapter 4 focuses on determining the likelihood and possible release volumes associated with a representative set of potential release scenarios related to the proposed action to provide decision-makers and planners with an understanding of the types of risks of concerns and to help identify targeted mitigation measures. Refer to Master Response for Environmental Health and Safety Analysis. For additional information about the analysis of impacts in the extended study area, refer to the Master Response for the Geographic Scope of the EIS.

Comment SA3-3

Scope of Impacts

The study area has been limited to the mouth of Grays Harbor. Given that outgoing oil laden vessel traffic will move north and south along Washington coastline, an obvious risk is still present beyond the mouth of the harbor and should be addressed by these DEISs. Northwest Area Contingency Plan (NWACP) Geographic Response Plans (GRP) including; Outer Washington coastline, Straits of Juan de Fuca, San Juan Islands, Admiralty Inlet, North Central, Central, and North Puget Sound can be utilized for additional information on these areas.

Response SA3-3

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from vessel transport—less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*. Final EIS Chapter 5 reflects additional information characterizing potential risks related to vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Comment SA3-4

Although the analysis of potential risk of oil spills is estimated to increase by an order of magnitude the total risk is still characterized as low. The confidence limits around this point estimates are not reported, but presumably will range above and below the reported value. Experience has shown that the complete recovery of the environment from major oil spills takes on the order of decades. For example 26 years after the Exxon Valdez oil spill several impacted resources have not completely recovered to pre-spill levels.

Response SA3-4

Many uncertainties contribute to both the actual risks and the analysis of those risks, particularly, as noted in the comment, related to quantitative risk assessments. However, as discussed in Master

Response for Environmental Health and Safety Analysis, the Draft EIS relies on a semi-quantitative scenario-based approach and does not include a quantitative or probabilistic risk assessment. Therefore, the risk assessment methods do not consider confidence intervals to account for the inherent uncertainties in predicting risk. Rather, the Draft EIS provides context for understanding how best to interpret and apply the results of the study. More specifically, Draft EIS Chapter 4, *Environmental Health and Safety*, and Appendix M, *Risk Assessment Technical Report*, explain that the results of the risk assessment are more meaningful when compared to each other, as opposed to considering them as predicting absolute frequencies of potential impacts. Section 4.7, *Impacts on Resources*, describes the general types of impacts on resources that would be expected as a result of an oil spill; the section has been revised to acknowledge the potential for more lasting impacts as the result of a spill.

Comment SA3-5

Although the DEISs are developed separately for the Westway and Imperium projects, the cumulative increase of the projects should be considered.

Response SA3-5

Draft EIS Chapter 6, *Cumulative Impacts*, addresses the potential impacts of the proposed action when considered in combination with all other past, present, and reasonably foreseeable future projects. The REG (formerly Imperium Terminal Services) Expansion Project and Grays Harbor Rail Terminal Project are considered reasonably foreseeable projects and are analyzed in Chapter 6.

Comment SA3-6

The DEISs may give an overly optimistic view of how well spill containment and cleanup measures can protect the potentially impacted environments. The GRPs developed in the NWACP are very helpful for protecting certain sensitive areas or serving as collection points for spilled product. The development of the GRPs is a huge advance in preparing for spills and will allow for faster and more organized response. None-the-less current spill response technology has limitations for current speed and other factors that make complete protection of the vast majority of sensitive resource from impact by a large oil spill unlikely.

Response SA3-6

Draft EIS Chapter 4, *Environmental Health and Safety*, Sections 4.4, 4.5, and 4.6, describe the geographic response plans applicable to the study area. As further noted in these sections, no measures can completely eliminate the possibility of a spill, fire, or explosion or completely eliminate the adverse consequences of a spill, fire, or explosion. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment SA3-7

Most of the GRPs involve protective booming near the entrance to small inlets, creeks or rivers where particularly sensitive resources occur. Much of the open water and extensive intertidal mud flat areas cannot be simply boomed off. To illustrate the risks consider a large release from a ship

collision near the mouth of the harbor. A spill of this type could not be entirely contained around the ship due to the high current velocities in the area. Depending on conditions, a spill in this area would either be drawn out the mouth of the bay and then move north or south along the coast, or be driven farther into the bay where large areas of sensitive resources cannot be fully protected by booms or other available spill response technology.

Response SA3-7

Draft EIS Appendix N, *Oil Spill Modeling*, illustrates the potential movement of oil within Grays Harbor for a subset of the scenarios addressed in the risk assessment. As noted in the comment and shown by the modeling, depending on the specific conditions of the incident, it is possible for oil to reach the shoreline or to move farther up or down the coast. The purpose of this information is to inform decision-makers and planners about the types of risks of concern and to help identify targeted mitigation measures. The geographic response plans and Northwest Area Contingency Plan identify strategies other than booming (e.g., use of culvert blocks and underflow dams) to combat the spread of spilled oil in Grays Harbor. Final EIS Chapter 4, Section 4.6.3, *What mitigation measures would reduce impacts related to vessel transport?* proposes additional measures that would address potential impacts related to vessel transport. However, as noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment SA3-8

Alternative spill response technologies that are used for the treatment of oil in open water such as dispersants and in situ burning would also be problematic for oil spill operations within Grays Harbor. The use of dispersants would not be advised because of the shallow nature of the bay providing only limited volume to reduce the toxic concentrations of dispersed oil. Similarly in situ burning could be limited by the proximity of human populations that could be subjected to the reduced air quality from the smoke produced by these operations. Consequently, large tracts of sensitive intertidal habitats such as, eelgrass beds, mud flats, and marshes would likely be contaminated despite the full activation of all GRPs and other spill response measures. The limits of spill response technology are acknowledged in the DEISs which state that “no mitigation measures would completely eliminate the adverse consequence of an incident.”

Response SA3-8

Draft EIS Chapter 4, Section 4.2.2.2, *Northwest Area Contingency Plan*, describes the planning framework in place for Washington State and discusses the factors considered when planning and implementing a response effort. The Regional Response Team is responsible for the Northwest Area Contingency Plan development that includes the consideration of dispersants or *in situ* burning.

Comment SA3-9

Based on the DEISs, the risk of a spill may be underestimated. On Page 4.6-4 of the Westway and Imperium DEISs it states “Because of the increased number of vessel trips to and from the project site, the proposed action would result in the potential for more frequent spills of bulk liquids relative to the no-action alternative, although the orders of magnitude are very similar.

Response SA3-9

Final EIS Chapter 4, Section 4.6.2.1, *Oil Spills*, has been revised to delete the statement that the orders of magnitude are similar.

Comment SA3-10

The likelihood of very large releases would remain low." "Low" is a subjective term. The more pertinent factor is that there is an order of magnitude (ten times) of increase in risk, and for some other spill scenarios, the risks is increased by almost 40 times.

By presenting the results of the risk analysis for the terminal for the rail transport and vessel transport of petroleum products separately the total risk is obscured. As oil will generally arrive by rail, be stored and handled at the terminal and transported away with vessel. The risk of a rail incident, terminal incident and vessel incident all make a contribution to the total risk of a spill from development of these projects. The total risks, including associated increased vessel and rail traffic, should be addressed by the EISs.

Response SA3-10

Final EIS Chapter 4, *Environmental Health and Safety,* has been revised to combine risks associated with the proposed terminal (onsite) operations and rail and vessel transport. Because the mechanisms for an incident associated with terminal operations and rail and vessel transport are physically separated, associated with different responsible parties, and have different response and mitigation strategies, risks across these operations are not combined in the Draft EIS. Although there would be an increase in risks when considering the combination of risks associated with terminal, rail, and vessel operations, the circumstances contributing to each risk scenario are unique and directly relate to the potential consequences of the incident.

Comment SA3-11

The estimated risk of the various spill scenarios considered in the DEISs may be overly conservative. Considering that the Nestucca Spill of 231,000 gallons (5,500 barrels) of heavy fuel oil resulting from a collision occurred less than 30 years ago, it seems terribly optimistic that that the risk of a vessel collision resulting in a spill of up to 105,000 gallons (2,500 barrels) is only 1/2,100 years.

One possible source of conservatism of the estimates is the use of Table 14 (Appendix M); failure Rates from Glosten and Associates 2014 [*footnote 1: Glosten Associates. 2014. Gateway Pacific Terminal (GPT), Vessel Traffic and Risk Assessment Study, November 4*.]. These values use Cherry Point area data. Oil tankers transiting to or from Cherry Point have the benefit of navigational advisories from the Cooperative Vessel Traffic System and the use of escort tugs for much of the journey.

Presumably this lowers the risk of a spill for these vessels. The vessels entering or departing Grays Harbor do not currently have these safety measures available and it is unclear if they would be required for vessels serving the Imperium Renewables or Westway facilities. The current method may then underestimate the risk of oil spills from vessel operation.

Response SA3-11

As noted in Draft EIS Appendix N, *Oil Spill Modeling,* the release scenarios include spill volumes up to the amount specified, meaning that the chances of any release scenario occurring includes the possibility of a smaller-sized spill from the specified event. Incidents occurring during vessel transit are skewed to the larger, less likely spill sizes because the magnitude of the incident must be sufficiently great so that the forces involved penetrate the hull of the vessel. In those cases, the releases sizes are more likely to be relatively larger and less likely given the loss of integrity of at least one compartment. Final EIS Chapter 4, Section 4.4.2.1, *Oil Spills,* has been revised to note that the risk of a small to medium oil spill (up to 2,100 gallons [50 barrels]) would be more likely to occur during vessel loading and could happen approximately 4.7 times between 2017 and 2037. Final EIS Chapter 4, Section 4.6.2.1, *Oil Spills,* has been revised to show the chance of any spill during vessel transport is 25% over the same period. Refer the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

Comment SA3-12

Additionally, the risk analysis does not include the risk of contributing disasters such as severe storm, earthquakes and/or tsunamis. For example, recent reports (Schulz, 2015) [*footnote 2: Schulz, K. July 20, 2014. The Really Big One; An earthquake will destroy a sizable portion of the coastal Northwest. The question is when. The New Yorker*.] indicate that the Cascadia Subduction zone is overdue for a major (9.0 Richter scale) earthquake with an estimated one-third chance of it occurring in the next 50 years. Obviously the earthquake could do damage to the facility and rail lines, but the ensuing tsunami could severely damage a ship moored to the facility, the facility itself, train tracks, and rail cars in the vicinity. Any, or all, of which could cause a large oil spill.

Response SA3-12

As noted in Draft EIS Appendix M, *Risk Assessment Technical Report,* Section 3.2, *Approach and Data*, the risk assessment evaluates the likelihood that different spill scenarios could occur regardless of the cause. The selected sources consider applicable causes of failure, including construction defects, natural hazards, human error, and material failures. The likelihood of a tsunami occurring within the study area is addressed more specifically in Draft EIS Chapter 3, Section 3.1, *Earth*.

Considering that the intent of the risk assessment is to inform decision-makers and planners, as opposed to final technical designs, these sources and the approach to the risk assessment are considered appropriate for the Draft EIS. Refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment SA3-13

An additional matter concerning these risk estimates is a possible mistake on page 4.4-5 of the Imperium Renewables DEISs. It is reported that the risk of a medium pipeline or storage tank spill scenario drops from 1/714 years for the no action alternative to 1/ 1,100 with the project in place.

Similarly, a large spill from storage tank failure scenario is reported as decreasing from 1/14,000 years for the no action alternative to 1/22,000 with implementation of the project.

Response SA3-13

The comment is specific to the Imperium Terminal Services Expansion Project Draft EIS. Comments on that proposal would be addressed in in response to comments as part of the Final EIS for that project. With respect to Westway, the risks of the proposed action are slightly greater than those under the no-action as shown in Chapter 4, Section 4.4.4, *Would the proposed action result in unavoidable and significant adverse environmental impacts related to terminal operations at the project site?* The increase in risk between the no-action alternative and the proposed action is not greater because the increase in risk was calculated for the incremental increase in storage tanks. The risk associated with the no-action alternative is for four existing tanks and the risk associated with the proposed action would be for the five additional tanks only.

Comment SA3-14

For the Westway DEIS, it is unclear why the risk of a small rail transport spill decreases from 1/85 years with the no action alternative to 1/100 after the project is implemented.

Response SA3-14

Under the no-action alternative, the risks were assessed for Westway's receipt of methanol on manifest freight trains. As noted in Chapter 2, *Proposed Action and Alternatives*, Westway currently receives methanol by train. This process typically results in one to two trips onto and off the project site each day, to deliver and remove an average of 10 rail cars. Under the proposed action, the risks were assessed related to the movement of crude oil unit trains. Although the number of rail cars carrying crude oil per train (120) are greater than the number of rail cars carrying methanol per train (10), the number of trains under the no-action alternative (an average of 3 trips per day) is greater than the number of trains associated with the proposed action (an average of 1.25 trips per day). Considering all the factors evaluated in the risk assessment, the likelihood of a small to moderate release associated with existing conditions is slightly greater than the incremental increase in risk associated with the proposed action. For these reasons, the largest release scenario is not applicable to the existing conditions.

Comment SA3-15

Put another way, even if we acknowledge that catastrophic spills happen very rarely, as stated in the proposal, it should be expected that some oil will certainly be released into the environment as a result of these projects. If we accept the calculations (Appendix M, Fig 2) we can see that a release of 2100 gallons could be expected to occur at the Westway/Imperium loading dock - to water, and thus outside of containment; approximately every 2.6 years. Although this would be considered a minor incident according to the DEIS, it should be noted this volume of oil to water has the potential to cause significant negative effects within Grays Harbor. In addition, this same table suggests that an additional release of ~10,000 gallons would be expected to occur each ~43 years - a volume of oil that could certainly cause significant long-term impacts to the area. Cumulatively, then, this modeling exercise is suggesting that a volume of ~45,000 gallons of oil will be spilled to water by these facilities each ~43 years for a yearly average of ~1,000 gallons/year.

Response SA3-15

As noted in the response to Comment SA3-11, the release scenarios include spill volumes up to the amount specified, meaning that the chances of any release scenario occurring includes the possibility of a smaller-sized spill from the specified event. Nonetheless, Draft EIS Chapter 4, *Environmental Health and Safety,* acknowledges that the risks associated with the proposed action cannot be completely eliminated and that depending on the specific circumstances of the incident, there is a potential for significant environmental impacts.. As noted in Chapter 6, *Cumulative Impacts,* each facility operates independently. The chance of an incident involving the release of up to 10,000 gallons (238 barrels) during vessel loading would increase to once every 43 years under the cumulative scenario.

Comment SA3-16

The applicant's model indicates that a spill of ~30,000 gallons would be expected to occur along the PS&P rail line every ~10 years and it is likely that significant environmental impacts would occur from such a spill. Given the number of stream crossings and wetlands present along this line, it is also likely that a spill of this size would spread to the Chehalis River and potentially Grays Harbor.

Response SA3-16

As described in Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport*, the medium rail transport spill scenario (referred to in the Final EIS as the one rail car spill scenario) resulting in a spill of up to 30,000 gallons—could occur once in 36 years with current rail cars; with rail car improvements, this would extend to once in 43 years. Along the PS&P rail line in the study area, a spill could affect a sensitive area or habitat of concern. Table 4.5-1 lists sensitive habitat areas and identifies the approximate length of exposure and its relative portion of the total route along the PS&P rail line. This percentage can be applied to the estimated chances of a release to determine the possibility that a specific release might occur in a particular area. Resources, including waterways that could be affected, are described in Section 4.7, *Impacts on Resources*.

Comment SA3-17

The applicant's calculations (Table 15) indicates that they would expect a spill of ~105,000 gallons of crude oil to occur due to a vessel collision within Grays Harbor each ~45 years. It should be noted, however, that this volume appears to be based on oil spilled from the tanker not the other vessel involved and it seems likely that there could also be a fuel release from the second vessel as well. In addition, given that a release risk of 1:5 is presumed (i.e. crude is released only once in each five collisions) for the tank vessels (Table 13), and the size of these vessels, it would seem likely that petroleum releases from the second vessels in these collisions (likely to be single-hulled cargo or fishing vessels) would occur at a more frequent rate than indicated in the table for crude. WDFW staff is not expert in this type of spill risk analysis, but given the concerns expressed above it would be prudent to have an independent third party with expertise in these matters review the risk analysis presented in these DEISs.

Response SA3-17

The risk assessment presented in Draft EIS Appendix M, *Risk Assessment Technical Report,* was completed by a third-party contractor with direction from the co-lead agencies to provide

information to evaluate the proposed action consistent with the requirements of SEPA. The release scenarios evaluated in Appendix M and modeled in Appendix N, *Oil Spill Modeling,* were developed in coordination with the co-lead agencies and are consistent with applicable regulatory requirements. Refer to the Master Response for Environmental Health and Safety Analysis.

Comment SA3-18

Potential Impacts to the Marine Environments

WDFW has serious concerns about the potential impacts to marine life, which could occur during the transport of crude oil or other hazardous products via rail, shipping vessel, or pipeline, or at the bulk liquid storage facility adjacent to Grays Harbor.

The Westway Expansion Project would involve the construction of five new storage tanks on the site to the south of Westway's existing bulk storage tanks. The new tanks would each have a total storage capacity of 200,000 barrels (8.4 million gallons) for a project total storage capacity of 1 million barrels (42 million gallons). The annual maximum throughput would be 17.8 million barrels (749.9 million gallons) per year. Up to nine storage tanks would be constructed on the site to the north/northwest of Imperium's existing bulk storage tanks. The new tanks would each have a capacity of 80,000 barrels (3.36 million gallons) for a project total storage capacity of up to 720,000 barrels (30.2 million gallons). The annual maximum throughput for the entire Imperium facility, including the expansion, would be 30 million barrels (l.26 billion gallons) per year.

The proposed increase in storage and associated systems for this project will significantly increase the risk of an accidental oil release. In addition, the increased volume of storage being proposed is likely to also increase the potential impact associated with any given release. Oil storage facilities can fail for a variety of reasons, including industrial accidents, unusual weather conditions such as severe storms and flooding, and other natural disasters such as earthquakes and tsunamis-all of which pose a high risk.

Grays Harbor is an area particularly sensitive to the adverse effects of oil spills. Salt marshes and sheltered tidal flats are found throughout the harbor and are vital to salmon, birds, and marine mammals. Grays Harbor is also an area vital to migrating shorebirds, supporting upwards of one million birds during their spring migration.

Response SA3-18

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including salt marshes and tidal flats and the associated species.

Comment SA3-19

If there were to be a spill, the volume of the product being considered for this project would likely lead to a catastrophic loss of habitat, and the potentially affected area could be much larger than just the Grays Harbor vicinity. Depending on the location and timing of the incident, the area affected by an oil spill could extend throughout the Grays Harbor estuary, its tributaries, and to offshore waters where the spill could reach a broad expanse the Washington coast and beyond. As an illustration of this, the Nestucca Barge incident (1998) released ~213,000 gallons of oil near the entrance of Grays Harbor. While the majority of the oil washed ashore near Ocean Shores, beaches as far away as Oregon and Vancouver Island, British Columbia were impacted. The habitats within Grays Harbor and the nearshore areas are particularly sensitive to oil spill impacts, notoriously difficult to clean of oil, and are likely to suffer years of degraded function following a spill event.

Such an incident would cause irreparable harm to the marine fish, shellfish, wildlife, and greater ecosystem for decades. The estuary is important nursery and foraging area for juvenile salmonids including stocks of coastal cutthroat trout; winter and summer steelhead; fall, spring, and summer Chinook; fall chum and coho salmon. Herring spawning areas occur in eelgrass beds at several locations within the estuary, and Grays Harbor is also nursery ground for sixgill and sevengill sharks.

Response SA3-19

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment SA3-20

The DEISs include estimates for the probability of occurrence of a wide range of different spill types and sizes. Some smaller spills could occur every five years and when the Imperium Renewables and Westway projects are both implemented small spills could be even more frequent. The cumulative effect of even smaller but presumably more frequent spills needs to be incorporated. Recent work by Incardona et al [Footnote 3: Incardona, J.P., Carls, M.G., Holland, L., Linbo, T.L., Baldwin, D.H., Myers, M.S., Peck, K.A., Tagal, M., Rice, S.D., and Scholz, N.L. 2015. Very low embryonic crude oil exposures cause lasting cardiac defects in herring and salmon. Scientific Reports, 5:13499.] indicates that very low levels of hydrocarbon pollution have impacts on the cardiac development of juvenile salmonids and herring which may have led to population level survival impacts on herring and pink salmon following the Exxon Valdez oil spill. Frequent small spills in Grays Harbor and the Chehalis River system could present a hazard to spawning hearing and salmonids utilizing the habitat.

Response SA3-20

Final EIS Chapter 4, *Environmental Health and Safety*; Chapter 6, *Cumulative Impacts*; and Appendix M, *Risk Assessment Technical Report*, have been revised to clarify that each release scenario includes a volume up to the specified amount. For example, as noted in Draft EIS Chapter 4, Section 4.4, *Environmental Health Risks—Terminal (Onsite)*, a small spill during vessel loading could occur once every 8 years under the proposed action. This scenario addresses the release of up to 2,100 gallons, which also includes the potential for smaller releases. Final EIS Chapter 6 has been revised to clarify that, under cumulative conditions, a release of up to 2,100 gallons could occur every 3 years, which also includes the potential for smaller releases. As noted, the potential for environmental impacts would depend on the specific circumstances of the event. Draft EIS Chapter 4, Section 4.7.1.2, *Plants*, addresses potential impacts of oil on plants, including sensitive areas and habitats. Section 4.7.1.3. *Animals*, identifies potential impacts on animals, including impacts from oil on the water surface, in the water column, and along shorelines and other sensitive habitats. Final EIS Section 4.7 reflects additional information about the potential impacts on resources, including plants, fish and shellfish.

Comment SA3-21

The nearshore Pacific Ocean waters are designated as critical habitat for species listed under the Endangered Species Act (ESA), such as the leatherback sea turtle, green sturgeon, and Eulachon, and as Essential Fish Habitat for West Coast salmon (including ESA listed stocks), groundfish, forage fish, and coastal pelagic sharks. The adjacent nearshore waters are important areas for thresher sharks and juvenile and adult rockfish, including species that are under rebuilding plans, such as canary and yelloweye rockfish; these species are long-lived and slow-growing with low productivity and their populations take decades to recover to healthy levels.

With regard to shellfish, the estuary is a major nursery area for juvenile Dungeness crab, which contributes significantly to the adult population along the outer coast. 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. Eastern soft-shell clams, horse clams, Manila clams and cockles are found at various locations throughout the estuary.

Response SA3-21

Draft EIS Chapter 3, Section 3.5.4.3, *Grays Harbor*, describes the aquatic species and habitats in Grays Harbor and Pacific nearshore areas listed in the first paragraph of the comment except thresher shark and critical habitat for the green sturgeon and leatherback sea turtle. Final EIS Section 3.5.4.3 reflects the inclusion of critical habitat for the green sturgeon and leatherback sea turtle. The EIS does not address thresher shark because it is not a special-status species and does not have essential fish habitat in the study area.

Section 3.5.4.3 also addresses juvenile Dungeness crab and its highly productive habitat, oysters and clams and their farming, and other invertebrates.

Comment SA3-22

Relative to wildlife, a wide variety of birds and marine mammals also frequent the Grays Harbor area, its tributaries, nearshore ecosystems, and offshore waters. Grays Harbor is an important

foraging and resting area for migratory shorebirds and waterfowl. Waterfowl concentrations occur from fall through spring, especially in North Bay. Grays Harbor is a shorebird site of global significance, supporting up to one million birds during the spring migration, as well as large numbers of fall-migrating and wintering shorebirds. Red Knots are shorebirds that overwinter in Mexico and breed in the Arctic; Willapa Bay and Grays Harbor constitute two of only three estuaries used by the Pacific Flyway subspecies between wintering and breeding grounds. The Oyhut/Damon Point area is one of only three nesting areas in Washington for the federally threatened Snowy plover. Bald eagles and great blue herons nest throughout the region and forage in the Bay, and Peregrine falcons breed in Grays Harbor and occur in all seasons.

Response SA3-22

The Draft EIS provides information on the importance of Grays Harbor for migrating birds. Chapter 3, Section 3.5, *Animals,* describes the terrestrial and aquatic bird environments in the Grays Harbor study area and mentions a number of birds that use habitats in the study area, including the red knot, bald eagle, peregrine falcon, snowy plover, and great blue heron. A list of all federal and state-listed birds in the study area is found in Appendix F, *Special-Status Species*, which was based on the most recent listings by the U.S. Fish and Wildlife Service under the federal Endangered Species Act and Washington Department of Fish and Wildlife under the Washington State Priority Habitats and Species Program. The Draft EIS acknowledges the importance of Grays Harbor for birds as a stopover and staging area during bird migration along the Pacific Flyway (Section 3.5) and discusses the Grays Harbor National Wildlife Refuge (multiple locations in Section 3.5) and Grays Harbor's status as a hemispheric reserve of international significance as designated by the Western Hemisphere Shorebird Reserve Network (Section 3.5). In addition, the Draft EIS mentions mudflats and sand islands, describes the five Washington State Department of Natural Resources Marine Protected Areas in Grays Harbor, and includes typical bird species that may use these protected areas (Section 3.5). The Draft EIS describes the Chehalis River Surge Plain Natural Area and includes a list of several bird species that use the preserve (Section 3.5). Further, the six Audubon Society-designated Important Bird Areas of Grays Harbor have been added to Final EIS Section 3.5 to note their significance in addition to the other important areas of Grays Harbor that are listed and described above and in the Draft EIS.

Comment SA3-23

The DEISs do not identify the high importance and sensitivity of the Grays Harbor area during the spring shorebird migration. It is significant and commendable that the applicant has proposed ceasing all vessel loadings for a two-week period around the Grays Harbor Shorebird Festival (Item 3.5, pg.S-39). This would help but it does not reduce all the risk.

First, this time period represents only a small portion of the time during which this vulnerable species is traveling through this area - and that it is not entirely predictable. The annual spring shorebird migration through Grays Harbor occurs throughout the months of April and May each year and their associated fall migration takes place during the months of July through October. Although the dates for the Shore Bird Festival are static, the actual peak in the movement of shorebirds through Grays Harbor is subject to natural variation that is not always predictable. In some years, the closure may not coincide with the peak in bird abundance.

Second, this proposed mitigation implies that shorebirds are the only birds at risk during migrations. In a manner similar to the shorebirds, very large waterfowl migrations also seasonally

move through this area - with spring migrations occurring in the months of March and April and the fall migration occurring between September and November. Significant overwintering waterfowl concentrations occur November and April.

Third, the applicant seems to be implying that these wildlife species are only at risk from the direct impact of a spill. The biological purpose of these species stopping within Grays Harbor during their migration is their desperate need to feed. Some of these migratory species have traveled extremely long distance and lost a high percentage of their body weight when they stop at Grays Harbor. They rely on the harbors abundant forage to build up their reserves of energy for the continuation of north or southward migration. This means that even a spill a couple of months before the migration peak could harm the birds if it negatively impacted the infauna of invertebrates that serve as the shorebirds food. Without the ability to obtain enough caloric energy to continue the migration, birds might die or be delayed in arrival on their nesting grounds with negative impacts on reproductive success. Oil spills that might occur outside of the proposed two week period is still likely to result in very high mortality rates to these migration species by way of negatively impacting the habitat and prey species upon which they depend.

Finally, the potential impact to migratory birds described in these DEISs has been apparently limited to only large spills related to vessel loading. It should be noted that due to the biological concentrations of these species, these risks could potentially apply to any of the described spill scenarios (small, medium, or large) in this document. We would recommend that additional measures to prevent spills during late winter and early spring that could have an impact on bird migrations through Grays Harbor be considered.

Response SA3-23

Draft EIS Chapter 3, Section 3.5, *Animals*, identifies the high importance and sensitivity of the Grays Harbor area during the spring bird migration. Additionally, Chapter 4, Section 4.7.1.3, *Animals*, acknowledges that the Grays Harbor estuary is located along the Pacific Flyway, a migratory flight corridor between Alaska and South America. It is one of four major staging areas for migrating shorebirds in North America, with shorebirds congregating in the mudflats to feed and rest during spring and fall migrations. Approximately 24 species of shorebirds use the Grays Harbor National Wildlife Refuge during migrations, which begin in late April and continue through mid-May.

Although ceasing vessel-loading operations for 2 weeks during the Grays Harbor Shorebird Festival would reduce risks related to oil spills that could affect migratory birds during this migratory season as well as other species in the area, the Final EIS reflects revisions to clarify that the applicant's primary intent in committing to this voluntary measure is to recognize the importance of the annual Grays Harbor Shorebird Festival to the community and those attending the festival and to eliminate the chance of a spill from vessel-loading operations during this time. The measure has been moved to Final EIS Chapter 3, Section 3.10, *Recreation*, to reflect this clarification. Potential impacts on resources in the event of a spill, fire, or explosion are addressed in Chapter 4, Section 4.7 *Impacts on Resources*. Final EIS Section 4.7 has been revised to indicate that the mechanisms for potential adverse impacts also include secondary impacts on shorebirds from loss of food sources. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

Comment SA3-24

The DEISs note that the increased vessel traffic would increase the chance of vessels striking marine mammals in the navigation channel but does not indicate what measures, if any, might be taken to mitigate this. It states that the greatest potential for vessel strikes would be in the shipping lanes, which are located outside of state waters because large mammals, such as whales, typically migrate and forage in deeper waters and are not likely to enter the harbor. However, some species of whales, such as gray whales migrate along the coast and past the mouth of Grays Harbor twice a year. Gray Whales feed relatively close to shore. The Harbor is home to thousands of harbor seals and California Sea Lions from mid-spring through early fall, and is one of the largest seal pupping areas in the state. Pupping occurs throughout the bay with concentrations around Sand Island and in North Bay. Impacts in the shipping lanes outside of state waters are still impacts with a direct nexus to these projects.

Response SA3-24

Final EIS Chapter 3, Section 3.5, *Animals*, reflects additional information on gray whales, humpback whales, and killer whales and clarifies whale use of Grays Harbor, including frequent use by the gray whale. Potential impacts of vessel collisions with all marine mammals, including whales, are analyzed in Draft EIS Chapter 3, Section 3.5, *Animals,* in all parts of the study area, including Grays Harbor. Even though the occurrence of many of the whale species listed in Section 3.5 would be rare in the study area, the impacts from vessel strikes apply to all such whale species. Whales and other marine mammals that are more common in Grays Harbor and nearshore coastal waters would be at a higher risk from vessel strikes. Final EIS Section 3.5.5.2, *Proposed Action*, *Operations*, has been revised to reflect the higher risk for these species. The National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service's 2014 Pacific Marine Mammal Stock Assessment indicates that the number of reported marine mammal collisions with vessels makes up a very small percentage of the populations of many marine mammals along the West Coast.[1] For example, the gray whale population is estimated to be around 20,125 whales and the reported number of vessel strikes over a 5-year period was 9.8 whales (or two whales per year). Based on this information, the annual number of gray whales that collide with a vessel along the Pacific Coast is approximately 0.009% of the gray whale population. Looking at the same numbers for the humpback whale, the annual number of humpback whale collisions with vessels along the Pacific Coast is approximately 0.059% of the entire population. This information suggests that the risk of vessel collisions on these whale populations from the incremental increase in vessel traffic is very low and any impact on populations would not be significant.

Comment SA3-25

Sea otters are not mentioned at all in the main body of either DEISs and are simply listed in Appendix F. Sea Otters are fairly rare in the immediate vicinity of Grays Harbor but there is a recovering population living on north of Point Grenville, with a significant proportion of this population is found around Destruction Island. It is possible that a large spill in the Grays Harbor area could be transported by wind and currents to the north coast area where sea otters would be impacted. Sea otters are particularly susceptible to oil injury due to their reliance on dense fur and

[1] Carretta, J. V. and 15 others. 2015. *U.S. Pacific Marine Mammal Stock Assessments: 2014.* National Oceanic and Atmospheric Administration Technical Memorandum NMFS. Doi:10.7289/V5/TM-SWFSC-549.

not blubber for thermal protection; once the pelt of sea otters is oiled, it loses most of its thermally protective qualities and the animal would likely succumb to hypothermia.

This potential threat to sea otters should be further evaluated in the DEISs perhaps by hypothetical trajectory modeling to see the risk of the various spill scenarios considered to the sea otter population. This is particularly true in light of the Region 10 Regional Response Team Wildlife Task Force's recent finding that there is a significant gap between the personnel and equipment identified in the Northwest Area Contingency Plan (NWACP) for oiled sea otter response and what actually is available on short notice.

Response SA3-25

Sea otters are listed in Draft EIS Appendix F, *Special-Status Species*, and impacts on all animals are covered in Draft EIS Chapter 3, Section 3.5, *Animals,* and Chapter 4, Section 4.7, *Impacts on Resources* (for oil spills).

Sea otters in the study area are rare. The Point Grenville and Destruction Island populations are not described in Section 3.5 because these areas are outside of the study area for the analysis of risks. Refer to the Master Response for Geographic Scope of the EIS for an explanation of how the extent of the study area was determined for different impacts associated with the proposed action.

Comment SA3-26

Southern Resident Orcas periodically utilize the offshore waters near Grays Harbor and the Columbia River entrance particularly in the winter and early spring where they prey on salmon and other fish. Orcas suffered high rates of mortality following the Exxon Valdez oil spill; the same would likely happen here if a similar size spill occurred while they are present. ESA listed Southern Resident Orcas rely heavily on Chinook salmon for prey, and an oil spill in Grays Harbor would eliminate a large portion of these preferred prey items from the area.

Response SA3-26

Final EIS Chapter 3, Section 3.5, *Animals*, reflects additional information on killer whale presence in the study area. Potential impacts on marine animals resulting from a spill in Grays Harbor are described in Draft EIS Chapter 4, Section 4.7.1.3, *Animals.*

Comment SA3-27

Potential Impacts to the Upland and Freshwater Environments

Each of the proposed projects will significantly increase the number of train transits through the area. These additional trains would transit tracks from Centralia to Aberdeen passing adjacent to, or crossing, numerous salmon bearing waters including the Chehalis, Black, Satsop, Wynoochee and Wishkah Rivers as well as numerous other fish bearing creeks and streams. There are 20 rail crossings of documented salmon spawning streams in Grays Harbor County alone. Loss of oil into these water could have a significant impact on resident and anadromous fish runs. Additionally, there are no effective oil spill containment and collection procedures identified for these waterways. The uncontrolled release of even one tank car could cause oil impacts for many miles downstream.

Response SA3-27

Because the analysis of environmental health and safety impacts does not predict the likelihood of a certain spill scenario affecting a particular sensitive resource, such as a specific river crossing, the required spill containment and collection procedures unique to any one resource are not evaluated. Draft Chapter 4, Section 4.7.1, *What would be the environmental impacts of a spill?*, addresses the types of impacts that could occur if oil spills, fires, or explosions affected water, plants, or animals. Section 4.7.1.1, *Water*, states that spills into adjacent surface waters or onto the ground could contaminate inland waters, associated wetlands, and underlying groundwater. The spilled material could expose aquatic and terrestrial plants and animals, aquatic habitats, shorelines, sediments, and humans to contamination. The type, duration, and extent of water resource impacts caused by releases of these potential contaminants depends on numerous factors.

Draft EIS Chapter 4, Section 4.2.2, *What framework prepares for an incident?* describes the formalized planning framework in place to address risks related to oil spills, fires, and explosions. Final EIS Section 4.2.2 has been revised to note that railroad operators would be required to develop spill contingency plans consistent with state requirements.

Comment SA3-28

About ten years ago, grain cars derailed on the Wynoochee Bridge, spilling grain onto pasture lands adjacent to the Wynoochee River. Had this been oil instead of grain, the river would have delivered this oil to the Chehalis and the surge plain immediately below it. This surge plain is protected by the Washington Department of Natural Resources (WDNR) as a natural area, and is one of the largest preserved natural surge plain habitats on the west coast. Spilled oil would be impossible to remove from this critical habitat. In 2014, there were three derailments over the course of less than three weeks-including one that involved more cars immediately adjacent to the Chehalis River in Aberdeen and another near the Wynoochee River. These recent incidents further reduce our confidence in the safety of this form of oil delivery to Grays Harbor.

Response SA3-28

As noted in Draft EIS Appendix M, *Risk Assessment Technical Report,* Section 4.2.2, *Accident Rates,* the determination of a chance of derailment or collision (i.e., accident rates) is based on data from the Federal Railroad Administration through October 2014. Train accident rates were collected from all operations on Class 2 track nationwide, both for mainline operations and for all track including main lines, industry tracks, yards, and sidings. The same data were collected specific to the PS&P rail line and summarized in Appendix M, Section 4.2.2, *Accident Rates*. As discussed in the Master Response for Risk Assessment Methods, the selected sources consider all causes of failure, including construction defects, natural hazards, human error, and material failures.

Comment SA3-29

Increased rail traffic also leads to potential increased train and wildlife interaction, including mortality from collisions. There are likely to be some hotspots for wildlife mortality along the rail and these are likely to correspond to adjacent habitats, migration/travel corridors, and/or human caused funneling of habitat. The loss of lactating females and adult nesting birds often results in secondary mortality to dependent offspring, which should be considered.

Response SA3-29

Final EIS Chapter 3, Section 3.5.5.2 *Proposed Action*, *Operations*, reflects additional information to address the habitat corridors along the existing rail corridor where there could be a higher risk of wildlife interaction with trains and mortality. The Final EIS recognizes the potential secondary impacts on dependent offspring. This additional information does not change the conclusions of the Draft EIS.

Comment SA3-30

The DEIS fails to fully account for the cumulative effects of additional rail traffic to wildlife (Chapter 3, page 22). Without considering the increased risk of accidental hazardous chemical release, the primary effects of increasing rail traffic include additional wildlife-train collision mortalities and, a greater barrier effect to the movement of species across the railgrade. The degree of barrier effect or probability of collision is species dependent. The negative effect will depend on total traffic volume, speed, and landscape effects. Since the proposed action is to increase rail traffic volume, the DEIS is wrong to conclude that increased rail traffic is not likely to affect species populations or fitness.

Response SA3-30

Final EIS Chapter 3, Section 3.5.5.2, *Proposed Action*, *Operations,* addresses additional wildlife mortality from potential collisions with trains as a result of increased rail traffic under the proposed action. As described in this section, the Final EIS concludes that the addition of approximately one train trip per day from the proposed action to an existing and operating rail line, where wildlife species along the rail line are likely habituated to disturbances associated with train movements, would not measurably alter species population or fitness. Consequently, the proposed action is not expected to have significant impacts in combination with other past, present, and reasonably foreseeable and similar future actions.

Comment SA3-31

As example, trains produce noise, often at high frequency or intensity, although typically of short duration at any one location. Noise level and duration have been correlated with decreased avian density and may affect wildlife behavior (Waterman et al., 2002) [*footnote 4: Waterman, E., I. Tulp, R. Reijnen, K. Krijgsveld and C. Braak 2002. Disturbance of meadow birds by railway noise in the Netherlands. Geluid 1:2-3*]. Increased rail traffic should result in greater noise.

Response SA3-31

Draft EIS Chapter 3, Section 3.5.5.2, *Proposed Action, Operations, Rail, Noise*, describes potential impacts of noise from additional rail traffic under the proposed action on animals. Given that the context is an existing and operating rail line, that noise from passing trains and horns would be short-term, that the distance from the rail line that Federal Railroad Administration wildlife noise disturbance thresholds would be reached are estimated to be small (50 feet of the rail line for wayside noise and between 100 and 200 feet from grade crossings for horn noise), and that the species along the rail line are already habituated to noise levels associated with rail operations and are generally mobile, impacts would likely not be significant and would not affect species populations or fitness.

Comment SA3-32

The best mitigation option for preventing collisions and reducing barrier effects are wildlife crossing structures. The benefit of any such structures would depend on their size, location, and design. Simple structures for amphibians and small mammals may include the excavation of rock ballast between pairs of railway sleepers, providing a shallow depression below the tracks for animal use (Pelletier et al., 2006) [*footnote 5: Pelletier, S.K., L Carlson, D. Nein and R.D. Roy. 2006 Railroad crossing structures for spotted turtles: Massachusetts Bay Transportation Authority - Greenbush rail line wildlife crossing demonstration project. In C.L. Irwin, P. Garett and K.P. McDermott (eds). Proceedings of the 2005 International Conference on Ecology and Transportation, pp. 414-425. Center for Transportation and the Environment, North Carolina State University, Raleigh. NC.*].

Response SA3-32

Wildlife connectivity along the rail line is already compromised because the corridor is existing infrastructure with existing rail traffic. The rail line also travels adjacent to developed areas (e.g., agricultural lands and municipalities) and along and immediately adjacent to U.S. Highway 12 and Monte Elma Road for substantial distances in the study area, and in some areas between these two transportation corridors. These developed areas and other transportation corridors also contribute to the already compromised wildlife connectivity in the study area.

Given baseline conditions, increased rail traffic (approximately one unit train trip per day) under the proposed action would not cause a significant impact on wildlife connectivity and fragmentation.

Refer to the Master Response for Mitigation Framework for additional explanation about how mitigation is proposed in the Draft EIS.

Comment SA3-33

Potential Impacts to Recreational and Commercial

Grays Harbor and adjacent ocean waters are home to many healthy marine fish and shellfish stocks, which are harvested in Washington's recreational and commercial fisheries, and upon which our coastal communities depend, including Dungeness crab, Pacific halibut, Pacific whiting, salmon, lingcod, sablefish, nearshore flatfish and rockfish species, forage fish-including anchovy, sardines, and mackerel- and oysters and razor clams. The average ex-vessel revenue for Washington's coastal commercial fisheries for the past five years exceeds $109 million, and commercial oyster growing operations in the harbor contribute significantly to the State's economy as well. It is imperative that the potential impacts to recreational and commercial fisheries resulting from a catastrophic event, such as an oil spill, and secondary effects like those from airborne pollutants from train diesel engines, disruption to commercial and recreational fishing opportunities from increased vessel traffic, and the subsequent effects on the economies of the local communities and broader state be analyzed and considered in this decision-making process.

Response SA3-33

As noted previously, the approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors,

Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment SA3-34

Recommendations

The Department of Ecology and the City of Hoquiam must assess the proposed action's significant indirect and cumulative effects fish, wildlife, and their habitats and the subsequent effects on recreational and commercial fisheries and commercial aquaculture facilities. The very real and significant risks that increased transport, storage, and shipping operations resulting from the proposal would present to vulnerable coastal and marine life need to be addressed.

WDFW recognizes that there are existing facilities nearby that pose potential threats to marine life now, the risks of a spill event significantly increase with the construction of the proposed new facility. Recovery from the devastating impacts associated with a spill on fish and wildlife resources will take decades and the economies of our coastal communities will undoubtedly suffer long term impacts that will have negative consequences on the fabric of the communities.

Response SA3-34

Draft EIS Chapter 3, *Affected Environment, Impacts, and Mitigation*, describes direct and indirect impacts of construction and routine operation of the proposed action on fish, wildlife, and fishing in the study area. The risks of oil spills, fires, or explosions related to the proposed action are addressed in Draft EIS Chapter 4, *Environmental Health and Safety*. The risks in the extended study area are addressed in Chapter 5, *Extended Rail and Vessel Transport*. Risks in the study area and extended study area under cumulative conditions are described in Chapter 6, *Cumulative Impacts*. For information about the risk analysis approach, Refer to the Master Response for the Environmental Health and Safety Analysis. For information about the risk analysis in the extended study area, refer to the Master Response for the Geographic Scope of the EIS.

Comment SA3-35

In general, WDFW recommends:

- State and federal entities with regulatory authority consider the relative proximity to vulnerable and irreplaceable fish and wildlife resources and their habitats when considering project approval and the siting determinations.

Response SA3-35

Refer to responses to detailed comments on fish and wildlife resources above. The Draft EIS evaluates the proposed site under SEPA requirements. These requirements do not include making a siting determination.

Comment SA3-36

- Creation of new jobs must be balanced with placing existing jobs and businesses at risk, particularly those current jobs that rely on healthy marine ecosystems. A thorough analysis of the existing jobs and their reliance on a healthy and vibrant ecological environment must be completed to understand the risks and consequences of a spill.

Response SA3-36

Refer to Response to Comment SA3-33.

Comment SA3-37

- While outside the scope of these two particular proposals, we recommend against siting any bulk fluid storage and transloading/shipping operation at Terminal 3. A decision to site crude-by-rail facilities on land immediately adjacent to the U.S. Fish and Wildlife Service's Wildlife refuge poses an unacceptable risk to this critical habitat.

Response SA3-37

Comment acknowledged.

Comment SA3-38

More specifically, to address the concerns we have identified, WDFW strongly recommends:

1. A series of status determination studies for key fish and wildlife populations in Grays Harbor and nearshore Pacific Ocean waters to establish a baseline prior to the construction of the proposed facility. The key populations would include forage fish, such as anchovy, herring, and smelt; nearshore and juvenile rockfish; nearshore flatfish; seabirds and shorebirds.
2. As a mitigation measure, should this project move forward, we recommend adequate funding be provided to WDFW for ongoing annual monitoring studies for the populations listed in item #1.

Response SA3-38

Information about the species that are known to or have the potential to occur in the study area is presented in EIS Chapter 3, Section 3.5, *Animals,* and in Appendix F, *Special-Status Species.* Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, has been revised to include additional information about the potential impacts on sensitive species in the event of an oil spill, fire, or explosion. As noted in Draft EIS, the potential impacts on wildlife from construction and routine operations would be addressed through compliance with required best management practices and proposed mitigation measures. Potential impacts associated with an oil spill, fire, or explosion could be significant. The level of baseline information has been deemed sufficient for the purposes of supporting the conclusions presented in the Final EIS.

Additionally, Draft EIS Chapter 4, Section 4.4.3.1, *Applicant Mitigation,* proposes a mitigation measure that states that prior to beginning operations, the applicant will conduct a study to identify natural resources damages from an oil spill (among other things) and to determine the financial responsibility of such damages should an oil spill occur. Refer to the Master Response for Mitigation

Framework for an explanation of how the proposed mitigation measures were considered for inclusion in the Draft EIS.

Comment SA3-39

3. The Department of Ecology and the City of Hoquiam should host a series of inter¬agency discussions that include WDFW, the Quinault Indian Nation, and the Chehalis Tribe, to properly coordinate with these other entities with substantial interest before continuing to advance proposals that would bring additional bulk fluid storage and transloading/shipping operations to Grays Harbor. A focus should be placed on the areas of port safety, spill prevention measures, stand-by resources for spill containment, and contingency planning.

Response SA3-39

Comment acknowledged.

Comment SA3-40

4. Vessel Transportation Impact Analysis (VITA) be conducted relative to these specific proposals. This analysis should include evaluation of the items listed below, and should provide recommended solutions and mitigation measures to minimize any risks identified.
    a. The risk associated with the proposal's traffic (including the number and size of ships) increase relative to existing conditions, and the cumulative effects combined with existing conditions.
    b. The risk associated with traffic increase relative to existing navigation safety throughout the navigation channels associated with the Salish Sea (Strait of Juan de Fuca, Puget Sound, Georgia Basin, etc.), in Grays Harbor, and along the Washington coast.
    c. The risk associated with the combined Imperium and Westway Terminal traffic increase relative to potential increases of petroleum shipments from terminals with the Salish Sea (Strait of Juan de Fuca, Puget Sound, Georgia Basin, etc.)
    d. The capability of current tugs to control disabled vessel movements under the most adverse prevailing weather conditions in the area and respond to incidents in the harbor, outside the harbor entrance, and within a safe distance of the Washington shoreline, given that there is no ocean capable rescue tug stationed in Westport.
    e. The emergency tug availability from Neah Bay and Columbia River, include availability during severe weather or bar closures.
    f. How vessels will be managed offshore if the bars associated with Grays Harbor or the Columbia River are closed.
    g. The risks of incidents and measures to mitigate the risk for potential groundings, collision/allisions/loss of propulsion or oil spill while underway within the harbor and along the outer coast.

Response SA3-40

The *Vessel Traffic Impact Analysis for Imperium and Westway* was prepared by WorleyParsons (2014)[2] for the proposed action and REG (formerly Imperium Terminal Services) Expansion Project. The Draft EIS relies, in part, on this document as a source of information about vessel traffic in the study area, including characteristics of Grays Harbor and the navigation channel; vessel types, uses, and destinations; vessel traffic; and traffic management.

The Draft EIS presents an analysis of the potential direct, indirect, and cumulative impacts of the proposed action. The EIS includes an evaluation of the items identified by the commenter which are within the scope of study.

Draft EIS Chapter 4, Section 4.6, *Environmental Health Risks—Vessel Transport*, provides an assessment of risk related to vessel transport under the proposed action. Chapter 6, *Cumulative Impacts*, presents a discussion of risk related to the cumulative projects. See Master Response for Risk Assessment Methods for more information. Regarding impacts from increased vessel traffic generally and crude oil transport specifically in the Salish Sea and Washington Coast, refer to Master Responses for Geographic Scope of the EIS.

Final EIS Chapter 3, Section 3.17.4.2, *Large Commercial Vessels*, reflects revisions to clarify the capabilities of the tugs stationed at Grays Harbor. One is a Z-drive tug and has comparable capabilities—horsepower, maneuverability, and fire monitor—to the emergency response towing vessel stationed at Neah Bay. For information about how vessel movements are managed in Grays Harbor and, in the event of bar closure, near Grays Harbor, refer to Draft EIS Chapter 3, Section 3.17.4.4, *Vessel Traffic Management*. Also, Chapter 4, Section 4.6, *Environmental Health Risks—Vessel Transport*, presents an analysis of potential impacts from increased risk of vessel collisions, groundings, and allisions and related consequences (e.g., release of crude oil) under the proposed action. This section proposes mitigation measures to reduce the likelihood of a vessel incident.

Comment SA3-41

5. The EIS should include, at a minimum, the following analysis:
    a. Short- and long-term impacts of oil spills on the sensitive marine habitats and wildlife resources found within the project area, focusing on: State and Federally listed threatened and endangered species; resident and migratory birds and marine mammals; salt marshes, tidal flats, and other sensitive shallow water habitats; other WDFW listed Priority Habitat and Species (PHS); the marine fish and shellfish species important to recreational and/or commercial fisheries and commercial aquaculture activities. This should also include the analysis of the potential impacts of very low levels of hydrocarbon pollution from chronic small spills.
    b. An economic analysis of the current status of and potential impacts to recreational and commercial fisheries resulting from the direct or indirect effects of this project.
    c. Impacts to recreational and commercial fisheries resulting from additional shipping traffic during peak salmon runs, the possibility of shipping conflicts fishing gears, and the potential for displacement of fish away from normal fishing grounds due to increased shipping.

[2] WorleyParsons. 2014. *Vessel Traffic Impact Analysis for Imperium and Westway.* April 21.

d. The effects that increased barge and ocean going vessel traffic would have on fish, birds, and marine mammals. For example, gray whales are particularly susceptible to ship strikes, and the burrowing shrimp on which they feed are both susceptible to mortality form oil toxicity and would become vectors for delivery of sub-lethal doses of toxic compounds in oil to whales, green sturgeon, and other shrimp predators.

e. WDFW has documented bald eagles and great blue herons nest in the bay approximately one mile from the proposed site. Potential effects of construction noise should be addressed it is to occur during times that overlap with breeding season, and the impacts associated with the increased barge and vessel traffic will be passing by these nests within relative close proximity to the colonies should be analyzed.

f. The risks associated with potential train derailments, and resulting oil spills, to freshwater ecosystems along the rail corridors and the likely impacts to the associated aquatic organisms; evaluations should keep in mind the specific physical characteristics associated with individual products being transported along the rail lines.

g. The EIS include an analysis of the potential cumulative effects resulting from airborne pollutants from diesel engines form increased rail activity on the terrestrial and marine environment, including fish and wildlife.

Response SA3-41

The commenters topics are addressed below in the order provided.

a. Draft EIS Chapter 4, Section 4.7, *Impacts on Resources*, addresses the types of impacts that could occur if oil spills or fires affected water, plants, or animals, or aesthetic, recreational, cultural, or tribal resources. Section 4.7.1.2, *Plants*, addresses the potential impacts of oil on plants, including sensitive areas and habitats. Sensitive areas considered in the Draft EIS include the Grays Harbor Shoreline, Chehalis River Surge Plain Natural Area, and Grays Harbor National Wildlife Refuge/Bowerman Basin. Section 4.7.1.3. *Animals*, identifies potential impact on terrestrial and marine animals, including impacts from oil on the water surface, in the water column, and along shorelines, intertidal habitat, and other sensitive habitats. The potential impacts described would also apply to special-status species. Potential impacts on plants and animals resulting from increase in leaks and spills of petro-chemicals used in routine rail operations that could occur due to the increased frequency of rail traffic and associated maintenance, are described in Chapter 3, Section 3.4.5.2, *Proposed Action*, and Section 3.5.5.2, *Proposed Action*, respectively.

b. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

c. Draft EIS Chapter 3, Section 3.10, *Recreation,* Section 3.12, *Tribal Resources*, and Section 3.17, *Vessel Traffic*, address potential impacts on recreational, tribal, and nontribal commercial fishing, respectively, that could result from the construction and routine operation of the proposed action, including the potential impacts cited by the commenter.

d. Potential impacts on animals, including fish, birds, and marine mammals, resulting from routine vessel traffic related to the proposed action are described in Draft EIS Chapter 3, Section 3.5, *Animals*. Refer to Response to Comment SA3-24 for a description of updates in

the Final EIS with respect to the analysis of potential impacts on marine mammals from vessel traffic.

e. Potential impacts on animals resulting from noise associated with the construction and routine operation of the proposed action are described in Draft EIS Chapter 3, Section 3.5.5.2, *Proposed Action*.

f. The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Mod*eling, refer to the Master Response for Oil Spill Modeling Methods..

g. Refer to the Master Response for Cumulative Impact Analysis for an explanation of the resources considered for cumulative impacts in the Draft EIS.

Comment SA3-42

6. The project proponent(s) monitor train/wildlife collisions and create appropriate wildlife crossing structures to avoid collisions when and where hotspots for mortality are identified.

Response SA3-42

Refer to Response to Comment SA3-32 on wildlife connectivity and barrier effects along the rail line. Mitigation would not be warranted for this level of impact.

Comment SA3-43

7. Within the Special-Status Species section on page 3.5-6, include three federally listed special status species that are missing from this list: Coastal Cutthroat trout (Fco), River Lamprey (Fco), and Pacific Lamprey (Fco). Also, within the Forage Fish section on page 3.5-12, it should updated to include the Pacific Herring, which is also a special status species, being listed as both a Federal Species of Concern and as a State Candidate species.

Response SA3-43

The full list of special-status species in the study area is found in Draft EIS Appendix F, *Species-Status Species*, where coastal cutthroat trout, river lamprey, pacific lamprey, and Pacific herring are listed. Final EIS Chapter 3, Section 3.5.4, *What animals are in the study area?* has been revised to provide a reference to the appendix. Pacific herring is mentioned in text and Table 3.5-3 of Chapter 3, Section 3.5, *Animals*.

Comment SA3-44

8. The study area should be expanded to include the WA coastline along the routes expected to be traveled by the cumulative tanker traffic anticipated (see NWACP, GRP's; Outer WA coastline, Straits of Juan de Fuca, San Juan Islands, Admirality Inlet, North Central, Central, and North Puget Sound for additional information).

Thank you for the opportunity to review and offer comments on the Westway Expansion Project and the Imperium Renewables Proposal. We hope that Ecology and the City of Hoquiam are willing to engage WDFW and other entities potentially impacted by this proposal. As you know, Grays Harbor is the fourth largest estuary in the nation and it deserves our best effort to protect it for future generations and the natural resources that it supports.

If you have questions regarding our comments and/or recommendations, please feel free to contact me at (360) 249-1211 or Michele.Culver@dfw.wa.gov.

Sincerely,

Michele K. Culver
Regional Director

Cc: Jim Unsworth
Margen Carlson
Jeff Davis
Dave Kloempken
Amy Spoon

Response SA3-44

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

SA4, Washington State Department of Natural Resources, Megan Duffy

Comment SA4-1

Washington State Department of Natural Resources
Peter Goldmark - Commissioner of Public Lands
Caring for your natural resources . . . now and forever

November 24, 2015

Westway & Imperium Terminal Services Expansion Project EISs
c/o ICF International
710 Second Street, Suite 550
Seattle, WA 98104

Subject: Westway & Imperium Terminal Service Expansion Projects

To whom it may concern:

The Washington State Department of Natural Resources (DNR) appreciates the opportunity to comment on the Draft Environmental Impact Statements (EISs) for the proposed expansion of the Westway Terminal Company and Imperium Renewables bulk storage facilities at the Port of Grays Harbor. DNR is the proprietary manager of over 3 million acres of state trust lands comprised of forest, range, commercial, and agricultural lands, and 2.6 million acres of state-owned aquatic lands. The agency is committed to sustainable management of state resources, relying on sound science and a transparent environmental review process to make informed decisions that benefit the public interest.

The proposed expansion of Westway Terminal Company and Imperium Renewables bulk liquid storage facilities adjacent to Terminal 1 at the Port of Grays Harbor would support receipt, storage, and shipment of petroleum products, including Bakken crude oil. Proposed on-site construction activities include (1) installing above ground storage tanks to support cumulative storage capacity of approximately 100 million gallons; (2) improving rail infrastructure within the facilities; (3) installing marine vapor combustion units; (4) building a network of pipelines to transport bulk liquids to and from rail cars, storage tanks, and tank vessels. No in-water work is proposed for either facility. Off-site activities include rail transportation of crude oil to the facilities from Bakken formation in North Dakota and by vessel from the facilities to refineries in Puget Sound and California. Cumulatively, the expanded facilities could support a throughput of up to 47.9 million barrels of crude oil, generating up to 638 additional vessel trips within Grays Harbor and 1188 rail trips throughout Washington State.

Upland areas associated with the proposed construction activities are located on property owned by the Port of Grays Harbor. The footprint of the marine terminal is located on state-owned bedlands, but management authority has been delegated to the Port of Grays Harbor under a Port Management Agreement (PMA) per RCW 79.105.420. The Port maintains authority over operational management activities and infrastructure development within the PMA; however, the State retains underlying fee-simple ownership of all state-owned aquatic lands subject to the PMA. The Port must manage state-owned aquatic lands within the PMA in a manner that is consistent with the aquatic

land policies of RCW 79.105-79.140, and Washington Administrative Code 332-30. The State retains ownership and management authority over state-owned aquatic lands adjacent to the PMA.

DNR's comments primarily focus on the potential impacts of oil spills, explosions, and fire associated with transport of crude oil by rail and marine vessels. A large scale spill and/or explosion would result in significant and unavoidable damages to state-owned resources and could undermine DNR's ability to sustainably manage public lands. The Draft EISs disclose that although the risk of a large-scale spill and/or explosion is low, mitigation measures cannot eliminate the risks of such an incident. DNR requests the FEISs comprehensively analyze all (1) reasonable and technically feasible design and operational measures to maximize spill prevention; (2) personnel and equipment response capabilities in the event of a worse-case spill scenario; and (3) potential damages to natural resources. This information is critical to understanding the true scope of the risks to Washington state residents and environmental resources presented by the proposed expansion of storage and handling of crude oil within Grays Harbor and associated oil transport throughout the region.

Although DNR does not retain management authority within the proposed footprint of the expanded terminals, the agency respectfully submits the following comments as the manager of (l) adjacent state-owned aquatic lands within Grays Harbor and (2) state-owned uplands and aquatic lands that are located within and adjacent to the transportation corridors identified to support movement of bulk liquids throughout Washington. This letter provides comments and recommendations that build upon those previously submitted by DNR during the EIS scoping process [May 26, 2014].

Should you have any questions regarding this letter, please do not hesitate to contact Megan Duffy at (360) 902-1034.

Sincerely,

Megan Duffy
Deputy Supervisor for Aquatics & Geology

Attachment (1)

Response SA4-1

Draft EIS Chapter 4, Section 4.2.1, *What framework prevents incidents from happening?* describes the formalized planning framework in place to address risks related to oil spills, fires, or explosions from the terminal operations, rail transport, or vessel transport. The responsible party may vary during the transport of crude oil. This section describes the requirements for planning and preventive equipment and design. Section 4.2.2, *What framework prepares for an incident?* describes federal and state regulations to prepare for an incident, the integration of plans, and drill and exercise requirements.

Final EIS Section 4.2.2 has been revised to indicate that railroad operators would now be required to develop spill contingency plans consistent with state requirements and a mitigation measure is proposed for a contingency plan to be submitted to Ecology until the new state rule is in effect. Final EIS Section 4.2.3, *What framework provides responses to an incident?* has also been updated to better reflect existing response capabilities and resources in the study area, including information identifying existing gaps from the Marine and Rail Oil Transport Study (Ecology 2015). Final EIS

Section 4.7, *Impacts on Resources,* has been updated to better reflect how the proposed action could affect emergency service responses.

Final EIS Chapter 4 reflects additional mitigation measures proposed to address gaps in emergency preparedness planning and response capabilities. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions.

Chapter 4 also identifies other proposed measures to ensure that broader prevention, preparedness, and response planning involves the appropriate stakeholders and that updates to any plans applicable to reducing risks related to the proposed action contain appropriate applicant information and participation. To the extent possible, as outlined in the Master Response for Mitigation Framework, measures that address the need for more coordinated and focused planning clarify the role of the applicant as appropriate.

Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7 describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation. For more information about the analysis of potential impacts in the extended study area, refer to the Master Response for the Geographic Scope of the EIS for additional information.

Comment SA4-2

Attachment
Westway & Imperium Terminal Services Expansion Project DRAFT EIS

The Department of Natural Resources (DNR) submits the following comments on the DRAFT Environmental Impact Statements for the Westway and Imperium marine export terminal expansion projects. Comments consider local, regional, and statewide impacts of the proposed facilities. All comments are intended to apply to both facilities unless otherwise specified.

Response SA4-2

Refer to the Master Response for the Geographic Scope of the EIS.

Comment SA4-3

On-site & Local Transport

Grays Harbor Shellfish Resources (Chapter 3.5.5 and Chapter 4.7.1.3)

The Draft EIS does not substantively consider the regional importance of or potential impacts to the aquaculture industry within Grays Harbor. Grays Harbor County supports approximately 2,288 acres of oyster and clam aquaculture. Collectively, this represents about 8 percent of shellfish aquaculture in Washington state and generated an economic impact of nearly $12 million in 2010 (Pacific Shellfish Institute 2013). DNR leases more than 440 acres of state-owned aquatic lands for oyster aquaculture that generates revenue for resource management and enhancement of and public access to aquatic lands. The Final EIS should clearly analyze the range of possible spill scenarios (e.g., size of release, potential response times, and weather conditions) that would involve

contamination and closure of both commercial and recreational shellfish areas. The analysis should evaluate spill response measures that would minimize exposure potential for valuable shellfish resources in the event of a release of crude oil. Estimates of potential clean-up costs, temporary and permanent resource damages, and ecosystem recovery times should be disclosed. The Final EIS should also identify under what scenarios a release of crude oil could theoretically reach Willipa Bay, the State's most productive shellfish growing area.

Response SA4-3

The analysis of risks presented in Draft EIS Chapter 4 is based on assessing the risks related to a set of spill scenarios as discussed the Master Response for Environmental Health and Safety Analysis. Appendix M, *Risk Assessment Technical Report,* and Appendix N, *Oil Spill Modeling*, do not predict precise oil spill sizes or locations where spills might occur. This approach provides decision-makers and planners with a range of potential outcomes related to the proposed action to help them understand potential risks and propose targeted mitigation measures. By extension, the Draft EIS does not predict the consequences that would affect individual resource areas or populations along rail and vessels transportation corridors with any one release scenario. Rather, Final EIS Section 4.7, *Impacts on Resources*, describes the general types of impacts that would be expected if an incident were to occur and reflects additional information about potential impacts on shellfish, including the potential for prolonged recovery. Refer to the Master Response for Oil Spill Modeling Methods for additional information about the approach to, input assumptions for, and limitations of the oil spill modeling.

Comment SA4-4

Tsunami Loads and Tsunami Risk (Chapter 3.1.7 & Appendix C)

The Draft EIS does not consider the full range of potential tsunamis debris that could harm the structural integrity of the proposed storage tanks or laden rail cars. Failure to account for larger sized tsunami debris items could result in inadequate design specifications and increase the risk of a catastrophic oil spill in Grays Harbor. The applicant proposes to assess the technical feasibility of constructing the proposed facilities to withstand a CSZ L1 tsunami event. The calculations of theoretical tsunami loads in the Tsunami Impact Modeling and Analysis are based on “lumber or wood log-oriented longitudinally as debris.” FEMA 646 lists a number of potential debris items to be used in this estimate. The Draft EIS selected the small debris item with no explanation of the suitability of that selection. The size, and therefore draft, of debris entering the site from outside of the project area depends in part on depth of inundation necessary to float debris over the upland berm. There is no explicit calculation of the size (draft) of debris that can float over the berm and therefore what would be the most appropriate object to consider. Although less of an issue for objects within the perimeter of the berm, it would also be appropriate to discuss what the maximum potential floating debris that is already within the project area. The Final EIS should modify the Tsunami Impact Modeling and Analysis to account for the full range of potential tsunamis debris. It should also specifically evaluate the technical and financial feasibility of meeting the identified design specifications.

The Draft EIS analyzes the risk associated with inundation of the storage tanks and rail loading and unloading facility during a tsunami event. However, the Draft EIS does not provide analysis of potential impacts to dock and vessel operations. The Final EIS should analyze the potential impacts associated with a large scale tsunami on tank vessel loading and offloading or transiting the harbor.

Should a tsunami warning be issued, what actions would be taken to avoid spills associated with oil transfers or laden tank vessels at the dock? What actions would be taken to avoid inundation or collisions of vessels docking at the facility due to a tsunami? Under what scenario could vessels leave the harbor or take other actions to reduce risks within the harbor?

Response SA4-4

Draft EIS Appendix C, *Tsunami Impact Modeling and Analysis,* calculates debris forces based on guidance from the Federal Emergency Management Agency,[3] which was developed for structures that would provide vertical refuge for evacuees above the level of tsunami inundation. Factors used in this document were derived from laboratory simulations of impenetrable vertical walls. Tsunami-borne debris may not accumulate around a circular tank the same way it would against a vertical structure. Stiffness between debris and vertical structures would differ from stiffness between debris and circular tanks, and impact and damming forces would likely differ for the proposed facility and evacuation facilities. Uncertainties also exist regarding the size and type of debris that would float over the berm surrounding the site. However, these uncertainties are accounted for in the tsunami analysis by applying a safety factor of 1.3, as described in Appendix C.

As described in Draft EIS Chapter 3, Section 3.1.7.1, *Applicant Mitigation*, the applicant will ensure that a tsunami evacuation and emergency management plan for the facility is prepared prior to beginning operations. The local communities have safety plans in place for tsunami evacuation. The applicant's facility safety plan will align and coordinate with the City of Hoquiam's evacuation plan for safety consistency.

Refer to the Master Response for Seismic Risk and Design Requirements for more information.

Comment SA4-5

Escort Tugs & Vessel Traffic Management (Chapter 3.17.5 & 4.6.3)

The Draft EIS states that "at least one escort tug must accompany a laden tanker or tank barge carrying oil between Hoquiam River and Grays Harbor entrance, and two tugs (one escort tug and one assist tug) must assist the vessel during mooring procedures." Although DNR supports the mandatory requirement for tug escorts for laden vessels to reduce risk of a vessel collision or allision within Grays Harbor, the Draft EIS states that a third tug escort may be used under certain weather conditions. The Final EIS should discuss under what weather conditions and operational scenarios a third escort is warranted. It should also discuss how this would impact escort tug capacity within Grays Harbor during these conditions.

Response SA4-5

Chapter 3, Section 3.17.5.2, *Proposed Action*, notes that state-licensed pilots may require a third tug to assist with docking or undocking maneuvers of large commercial vessel when environmental conditions warrant (such as high winds); the decision to use a third tug is made by the pilots. Final EIS Section 3.17.5.2 reflects additional information to further quantify tug needs in Grays Harbor over the planning period with the proposed action and to support the determination that tug capacity would be sufficient to assist and escort the projected commercial vessel traffic.

[3] Federal Emergency Management Agency. 2008. *Guidelines for Design of Structures for Vertical Evacuation from Tsunamis*. FEMA-P646. Washington, D.C.

Comment SA4-6

The Draft EIS states that an emergency response towing vessel is available at Neah Bay to assist with vessels off the coast and in Puget Sound. Although available to respond to incidents in or near Grays Harbor, the vessel has a 12 to 18 hour response time depending on weather conditions. DNR requests that the Final EIS analyze the various scenarios under which the emergency response vessel would be summoned to assist with tank vessels operating in or near Grays Harbor. What capabilities does the emergency towing vessel provide that cannot be performed by the Z-tugs currently stationed at the Port of Grays Harbor? Understanding the potential need for the Neah Bay emergency vessel is important to evaluating whether maintaining an emergency towing vessel at Grays Harbor is warranted to minimize the hazards involved with the proposed terminal expansion.

The Draft EIS states that Z-drive tugs are capable of leaving Grays Harbor to assist disabled or damaged vessels. The Final EIS should discuss under what scenarios Z-drive tugs are available to leave the harbor to assist with emergencies. It should also discuss the availability of Z-drive tugs to support offshore rescue operations assuming normal operational requirements within the harbor entrance. Understanding the regional capacity to respond to infrequent emergencies outside the harbor should not be overlooked in considering escort tug capacity within the harbor -especially given that the nearest emergency vessel is a minimum of twelve hours away.

Response SA4-6

Draft EIS Chapter 3, Section 3.17.4.2, *Large Commercial Vessels, Tug Services*, specifically states that the tugs working in Grays Harbor are able to assist a disabled or damaged vessel outside of the harbor, at sea. The decision about how to support a vessel in distress is, above all, a safety decision that must be made by the U.S. Coast Guard, the vessel master, and the state pilot if aboard the vessel.

Comment SA4-7

The Draft EIS identifies a series of potential mitigation measures to have the Grays Harbor Safety Committee work with the USCG to research the need for vessel traffic service; one-way channel transit along the inner harbor for laden vessels; designated anchorage areas; and requiring all tank vessels and barges to take a Grays Harbor pilot while transiting Grays Harbor. These mitigation measures "under consideration" represent important uncertainties in terms of vessel transit and safety that need to be addressed prior to initiating operations. DNR recommends the Final EIS include research and findings related to these measures and that the results be used to inform the formal vessel management system would be required to be active prior to initiating crude oil exports. At a minimum these measures should be moved from "Other measures to be considered" to "applicant mitigation."

Response SA4-7

Vessel transit and safety is regulated by the U.S. Coast Guard. The standards of care developed by the Grays Harbor Safety Committee provide best practices but do not replace regulatory requirements. The Draft EIS identifies three categories of mitigation that would help minimize potentially significant impacts: voluntary measures and design features, applicant measures, and other measures. As discussed in the Master Response for Mitigation Framework, the first two categories propose measures that could be required of the applicant and would be enforceable by a permit. The third category, other measures, are identified in the Draft EIS even if they are outside the control of

the applicant and no specific regulatory process may be in place to require implementation. These measures are still important to identify because they help decision-makers and planners prioritize actions within their authority and jurisdiction to implement.

As noted in the comment, these other measures are primarily associated with minimizing the impacts associated with rail or vessel transport to and from the project site and in some cases would require extensive coordination across local, state, and federal agencies, as well as other stakeholders, including the Grays Harbor Safety Committee. To the extent possible, the role of the applicant has been clarified in the Final EIS with respect to these other measures consistent with the regulatory framework described in detail in the Master Response for Mitigation Framework.

Comment SA4-8

Rail Infrastructure (Chapter 4.5.2 & Appendix M)

The Draft EIS states that there were four train derailments on the PS&P line between Grays Harbor and Centralia in 2014. Table 6 in the Risk Assessment Technical Report presents a 4-year average for accident rates on the PS&P mainline that is over 18 times higher than the national average for Class 2 mainline track. The PS&P mainline parallels the Chehalis River and the Chehalis River Surge Plain Natural Area, two sensitive habitats managed by DNR. A derailment of and subsequent release from laden tank cars poses a serious threat to these resources.

Response SA4-8

Draft EIS Appendix M, Section 4.2.2, *Accident Rates*, explains the data sources and rationale for determining the accident rates used in the risk assessment. As noted in Section 4.2.2, a chance of derailment or collision is based on accident rates derived from Federal Railroad Administration data finalized through October 2014. Train accident rates were collected from all operations on Class 2 track nationwide, both for mainline operations and for all track including main lines, industry tracks, yards, and sidings. The same data were collected specific to the PS&P rail line. Although PS&P accidents rates through 2014 are roughly ten times the national average, at 2.2E-5 per train mile, with the changes made by PS&P since the accidents in April and May 2014, and assuming the improvements that PS&P has planned prior to implementation of the proposed actions, a long-term rate of 1E-5 per train mile was applied in this analysis. This is still higher than the national average for accidents. Refer the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

Comment SA4-9

The Draft EIS does not adequately describe what infrastructure maintenance and/or repairs have been completed and/or scheduled to reduce the risk of accidents prior to transporting crude oil along this corridor.

Section 4.5.2.1 states that federal regulations for high-hazard flammable trains (49 CFR 171-180) require operating speeds to not exceed 40 mph and emphasizes that the PS&P line is limited to 25 mph or less. However, all four of the local trains that derailed in 2014 were traveling at speeds between 5-10 mph - well below the maximum speed limit. The Final EIS should include a comprehensive analysis of the high risk sections of the PS&P mainline, recently completed and planned infrastructure improvements, and opportunities and constraints for additional improvements that could increase mainline safety. Without a clarification of how these

improvements decrease the likelihood of a derailment, the statistical references assuming a reduction in accident risk from 15.95 to 10 accidents per million train miles appear speculative and may misrepresent the true risk as indicated by recent incidents along the PS&P line.

Response SA4-9

As noted in the Master Response for Baseline and No-Action Alternative, the Draft EIS considers the potential for reasonably foreseeable changes that would occur unrelated to the proposed action, including planned infrastructure improvements on the PS&P rail line and regulatory requirements for improved rail tank car design. The specific assumptions relevant to the rail traffic and safety analyses are described in Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, and Appendix M, *Risk Assessment Technical Report*. As noted, the risk assessment evaluates the likelihood of certain incidents occurring and considers all causes of failure, including construction defects, natural hazards, human error, and material failures.

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment SA4-10

Crude-by-Rail Spill Response Planning (Chapter 4.5)

DNR applauds the expansion of facility contingency planning requirements (RCW 90.56.210) to include railroads as enacted in Laws of 2014, Chapter 273. The law directs the Department of Ecology to adopt rules establishing contingency plan requirements for the railroads transporting bulk oil in Washington. However, this effort has not been completed and the applicant states that federal oil spill response plans will be used to meet the state requirement prior to rule adoption. Interim federal oil spill response plan requirements (49 CFR 130) are outdated and do not adequately protect Washington state natural resources. Rules do not require equipment and personnel to be contracted at sufficient levels to support immediate and effective spill response in the event of a train-related spill. This places an unrealistic reliance on already over-taxed and potentially undertrained local first responders.

Response SA4-10

As noted in the revisions to Final EIS Chapter 4, Section 4.2, *Applicable Regulations*, a new rule, WAC 173-186, Oil Spill Contingency Plan—Railroad, has been finalized that establishes railroad oil spill contingency plan requirements, drill and equipment verifications that would be required of PS&P prior to operations. The mitigation measure presented in Draft EIS Chapter 4, *Environmental Health*

and Safety, recommending that contingency planning by PS&P be completed will remain in place into the rule takes effect.

Comment SA4-11

The Draft EIS provides insufficient details on the existing capabilities and training of local first responders. This information is critical to understanding the regional level of emergency preparedness to deal with significant spills of Bakken crude oil. The Final EIS should outline minimum contracted equipment and personnel resources required to ensure rapid and effective spill response capabilities, where they will be stationed, and their response times to various spill scenarios along the rail transportation corridor as part of the proposed interim contingency planning requirements until permanent state rules are adopted. Spill response contractors are only available for immediate response if a contract is executed prior to a spill.

Response SA4-11

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. Final EIS Chapter 4, Sections 4.4.3, 4.5.3, and 4.6.3, include applicant measures to ensure the appropriate response equipment is available within acceptable timeframes. Additionally, as noted the previous response, proposed mitigation includes a recommendation that PS&P complete contingency planning before the applicant begins operations. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment SA4-12

Crude-by-Rail Financial Responsibility and Advance Notice of Transfers (Chapter 4.5)

The Draft EIS identifies as a mitigation measure to be considered that "Ecology should urge the legislature to amend current laws, including RCW 90.56, RCW 88.40, and RCW 88.46 to require contingency plans, advance notice of transfers, and certificates of financial responsibility from railroads transporting oil, including PS&P." This is not an applicant-driven mitigation measure.

Response SA4-12

This measure is not a proposed mitigation measure for the applicant. The recommendation has been removed in the Final EIS because it has been addressed through rulemaking.

Comment SA4-13

DNR supports the requirement for advance notice of transfers and certificates of financial responsibility; however, the measure requires no commitment by the project proponent and does nothing to ensure a responsible party has the financial resources that provide for recovery of the full costs of cleanup and natural resources damages. The Draft EIS also leaves considerable ambiguity

around the responsible party: is the owner of the oil, the shipper, or the railroad ultimately responsible for environmental damages? DNR requests this is clarified in the Final EIS.

Response SA4-13

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment SA4-14

On-Site Spill Containment and Response (Chapter 4.4 and 4.7)

The Draft EIS proposes applicant mitigation to conduct an independent engineering analysis and feasibility study for pre-booming oil transfers. The results of this study should be disclosed in the Final EIS. This information is needed to understand feasible oil spill prevention and containment alternatives and to assess the true risks involved in operating a crude oil export facility at Terminal 1.

If pre-booming is not feasible, to what extent are on-site spill containment and response capabilities compromised? How effective are the proposed alternative measures compared to pre-booming? How far could the released oil travel in the small, medium, and large spill scenarios before alterative response and containment measures could be deployed? Wha is the potential impact to aquatic resources in each of these scenarios?

Response SA4-14

The mitigation measure proposing the independent engineering analysis and feasibility study, described in Draft EIS Chapter 4, Section 4.4.3.1, *Applicant Mitigation*, would be submitted prior to the first oil transfer operation. If the analysis and feasibility study finds no measures are feasible to allow for prebooming, WAC 173-180 identifies alternative requirements that must be met. Chapter 4 discusses spill scenarios and risks from facility operations, including vessel loading, and the potential impacts on resources in the event of a spill.

Comment SA4-15

The Draft EIS states that drains on the dock will be blocked prior to oil transfers. What is the storage capacity of containment features on the dock to prevent releases from reaching the water? How does this capacity relate to projected oil transfer rates?

Response SA4-15

Draft EIS Chapter 4, Section 4.4.2.1, *Oil Spills, Prevention*, describes design standards and personnel training and certification related to preventing oil spills at the proposed facility. The mitigation measure referred to by the commenter, presented in Draft EIS Chapter 4, Section 4.4.3.1, *Applicant Mitigation*, is a best practice intended to prevent small spills during transfers, which the Draft EIS notes may occur more frequently. Blocking the drains is not intended to act as permanent containment to meet regulatory requirements but serves as a preventive measure.

Comment SA4-16

The Draft EIS discusses the potential for a large-scale spill that would result in the total release of the contents of one storage tank (approximately 80,000 barrels at Imperium; 200,000 barrels at Westway) from material failure, containment failure, or seismic or tsunami event.

Although the documents disclose adverse environmental impacts would be significant and unavoidable, it does not provide a complete assessment of the ecosystem damage, clean-up timeframes and costs, regional economic losses, or timeframes for ecosystem recovery. The Final EIS should provide additional details on potential population level impacts to sensitive species and percentage of nearshore habitat types impacted by oil based on the various small, medium, and large scale spill scenarios. This information is important to understanding regional economic impacts and the level of ecosystem resilience in the event of a large spill.

Response SA4-16

Final EIS Chapter 4, *Environmental Health and Safety*, addresses potential impacts from various spill scenarios. As discussed in the Master Response for Environmental Health and Safety Analysis, because the approach used in the risk assessment did not predict the specific consequences that would affect individual resource areas or populations along rail and vessels transportation corridors, Draft EIS Section 4.7, *Impacts on Resources*, describes the general types of impacts that would be expected if an incident occurs. Final EIS Section 4.7 has been revised to acknowledge the potential for prolonged recovery after a spill. Final EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, reflects additional information about the range of impacts, including societal costs that could occur in the event of an incident.

Comment SA4-17

DNR also requests additional discussion of the impacts of a worse-case scenario. Currently, the large spill scenario assumes the full release of the entire contents of one storage tank. Cumulatively, the two projects propose 14 storage tanks and in the event of major natural disaster—albeit this has a low probability of occurrence—it seems plausible that infrastructure damages could result in release of the contents of more than one tank. Given that storage tank containment at the facilities is required to hold the contents of the largest tank, any additional failures would be released directly into the environment.

Response SA4-17

All the release scenarios considered in the risk assessment were developed in accordance with applicable regulatory requirements and based on project-specific information. To that end, worst-case release volumes were considered consistent with WAC 173-182-030 and WAC 480-62-300 as discussed in the Master Response for Environmental Health and Safety Analysis.

Comment SA4-18

The Draft EIS provides limited information about potential vessel refueling at the site. If vessels are going to be fueled within Grays Harbor, the Final EIS should discuss fueling operations and measures to both avoid and respond to potential spills.

Response SA4-18

Final EIS Chapter 2, *Proposed Action and Alternatives*, clarifies that proposed operations would not include vessel bunkering (refueling) at the project site. Final EIS Chapter 4, Section 4.6, *Environmental Health Risk—Vessel*, and Chapter 5, *Extended Rail and Vessel Transport*, reflect additional information about federal and state regulations related to bunkering operations.

Comment SA4-19

Berthing Capacity & Oil Transfer Rates (Chapters 4 and 6)

The draft EIS states that vessel transfers are anticipated to take between 24 and 48 hours depending on tank vessel size, but does not specify proposed transfer rates in barrels per unit measurement of time. The final EIS should disclose potential transfer rates and elaborate on how these figures were utilized to inform (1) the potential spill scenarios evaluated in the Environmental Health Risks analysis, and (2) the berthing capacity analysis for Terminal 1.

Response SA4-19

As identified in the applicant's Notice of Construction Application (Trinity Consultants 2015),[4] loading rates could vary between 10,000 and 20,000 barrels per hour. Based on these loading rates, a tank barge with a 150,000-barrel capacity would require between 7.5 and 15 hours to load; a tanker with a 360,000-barrel capacity would require between 18 and 36 hours to load. Assumptions for berth occupancy times for tank barges and tankers, 24 and 48 hours, respectively, account for docking, preloading activities (e.g., Declaration of Security, Declaration of Inspection, possible U.S. Coast Guard inspections, oil spill prevention measures, vessel inspection by surveyor) loading of product, gauging of vessel holds by surveyor, and preparation for departure (e.g., hose retraction, taking on of stores). Additionally, the tanker estimate accounts for time that may be needed to wait for an ideal tide for transit. Predicted release rates for the scenarios evaluated in Appendix M, *Risk Assessment Technical Report*, were based on a number of past studies that analyzed historical data along with guidance for use in risk assessments as described in Chapter 3, Section 3.2, *Approach and Data*, of the appendix.

Comment SA4-20

The draft Cumulative Impacts analysis states that industry best practices for bulk liquid terminals assume 90 percent berth availability, equating to the capacity of Terminal 1 to receive vessels 328 days per year. Assuming 100 percent of vessel calls associated with the proposed expansion (projected maximum of 319 calls) are completed by tank barges, cumulative berthing occupancy would reach 363 days per year- exceeding projected capacity by 35 days. The draft EIS states that if some proportion of vessel calls were completed by tankers - as opposed to tank barges - berth occupancy could be as low as 318 days per year. The assumptions and calculations supporting the capacity analysis are not clearly documented. The final EIS should identify what combination(s) of vessel types are necessary to ensure berth capacity is not exceeded. Although tankers have increased storage capacity, they also require longer transfer periods and have increased constraints with respect to navigation windows within the harbor.

[4] Trinity Consultants. 2015. Westway Terminal Company LLC Crude by Rail Project for Hoquiam Terminal—Westway's Response to ORCAA's December 5, 2014 Preliminary Required Revisions for NOC Application. June 23.

Response SA4-20

Final EIS Chapter 6, Section 6.5.6, *Vessel Traffic,* reflects the addition of a footnote explaining the calculations for berth occupancy assuming that all vessels are tankers. The analysis of berth capacity is based on the assumptions described in Draft EIS Section 3.17, *Vessel Traffic*, and Appendix M, *Risk Assessment Technical Report*; the Draft EIS does not specify exact combinations of vessel types to ensure berth capacity is not exceeded.

Comment SA4-21

Under what scenarios could additional deep water berth capacity be required to support the proposed maximum throughput of bulk liquids? If the proposed terminal expansion could contribute to a long-term need for additional berth capacity, the potential impacts of additional infrastructure should be considered.

Response SA4-21

The proposed action does not include the construction of additional vessel berths.

Comment SA4-22

Proposed Bulk Liquids (Chapter 4.3)

The document states that both Bakken crude and diluted bitumen oil will be received at the proposed facilities. Will mixing of fuels will be conducted on-site in order to meet order specifications? Mixing can alter physical and chemical properties of oil and complicate effective spill response if not communicated properly. Contingency planning standards for coal tar sands are still being developed.

How would the long-term projections for crude oil throughput - and associated rail and vessel transit—change if the U.S. lifted the ban on crude oil exports?

Response SA4-22

The proposed action would include receiving and unloading crude oil by rail, storing on site, and loading to vessel for transport. Proposed operations do not include blending or manufacturing. As described in Final EIS Appendix Q, *Crude Oil Market Analysis*, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States in December 2015, the likely destination for crude oil transshipped through the proposed facility remains West Coast refineries in Puget Sound and California. Refer to Appendix Q and the Master Response for Crude Oil Extraction, Transport, and Combustion for more information.

Comment SA4-23

Propeller Wash and Vessel Wake (Chapter 3.3, 3.5 and 3.17)

The Draft EIS does not provide sufficient details to support the claim that only small, incremental impacts to water quality, fish species, and benthic habitats are expected from the proposed increase in vessel trips. The proposed action would approximately double the number of vessel trips within the harbor. The Final EIS should model potential vessel wave energy levels generated by different

types of ships at representative speeds. How do the energy levels generated by a representative cargo ship compare to an average tank vessel?

Response SA4-23

A 2003 wave modeling study conducted by Pacific International Engineering[5] (for the Port of Grays Harbor and coastal communities of southwest Washington) to address Washington Department of Natural Resources concerns about potential wave impacts on state-owned aquatic lands caused by the navigation channel in Grays Harbor concluded that, "energy from wind-generated waves generated in Grays Harbor and vessel-generated waves are shown to be insignificant in relation to the contribution from oceanic waves." The study focused on the Washington Department of Natural Resources Natural Preserve Whitcomb Flat, which is a sandflat that is mostly submerged during high tide and exposed during low tides; it is directly adjacent to the navigation channel and is the nearest unprotected erodible feature to the navigation channel. The study concluded that waves from vessels (a variety of large commercial vessels traveling at 15 knots were modeled) made an insignificant contribution to all waves and that natural waves (storm waves and swell from ocean) were the driving force that affected the movement and erosion of the sandflat. Although large, deep-draft vessels have been shown to result in increased vessel wake, based on the results of this study, it is not possible to separate the potential impacts attributable to a vessel from those caused by natural processes.

Comment SA4-24

How could this change in wave energy within the harbor potentially impact salmonid nearshore migration and Pacific herring spawning along Damon Point and South Bay? What vessel mitigation measures (e.g., speed limited and tidal restrictions) could be proposed to minimize the threat of fish standings and shoreline erosion?

Response SA4-24

Pacific herring spawning locations along the South Bay shoreline are, at a minimum, 2.85 miles from the navigation channel, and the conclusions of the 2003 wave modeling study[6] indicate that vessel wakes would be immeasurable at these locations, compared to natural waves in Grays Harbor. Another spawning site is more than 1 mile north of the navigation channel along the Westport Airport, but Whitcomb Flats is located between the navigation channel and the spawning site. A third spawning site is more than 0.5 mile from the navigation channel in the Westport Marina, but the site is largely protected by an existing breakwater. A fourth spawning site is located in South Bay approximately 1.65 miles south of the navigation channel, but again, Whitcomb Flats lies between the site and the channel. One spawning site is found on the north side of Damon Point (nearly 2 miles north of navigation channel), but it is completely protected from any vessel wakes because Damon Point is entirely between the spawning site and the navigation channel. Thus, no herring spawning sites are subject to measurable vessel wakes or any associated effects.

[5] Pacific International Engineering. 2003. *Dynamics of Whitcomb Flats.* Grays Harbor. July 10. Prepared for Port of Grays Harbor in Coordination with the Coastal Communities of Southwest Washington.

[6] Pacific International Engineering. 2003. *Dynamics of Whitcomb Flats.* Grays Harbor. July 10. Prepared for Port of Grays Harbor in Coordination with the Coastal Communities of Southwest Washington.

Comment SA4-25

The Final EIS should identify the specific tides levels at which various types of ships are expected to generate propeller wash that could disturb benthic habitats and degrade water quality. What is the minimum under keel clearance required to avoid and minimize potential impacts? Does the applicant propose to avoid transit of certain size and draft ships below certain tide levels to avoid these impacts? If not, with what frequency do we expect these impacts to occur? Would these impacts be confined to certain areas of the shipping channel and/or berthing areas? How are these impacts different if the channel is not deepened to the anticipated 2017 Project Depths?

Response SA4-25

Tankers related to the proposed action would be restricted to travel in the navigation channel and tank barges and tugs would be expected to travel in the navigation channel. As stated in Draft EIS Chapter 3, Section 3.3, *Water*, the area of the channel near Terminal 1 and the Cow Point Turning Basin already have high baseline turbidity levels; any resuspension of sediments from vessel movements or propeller wash in this area of existing high turbidity levels is likely to have little or no additional impact on the benthic communities living in these turbid environments. Similarly, because temporary resuspension of sediments in the navigation channel occurs on a regular basis, it is unlikely that vessel traffic associated with the proposed action would cause any perceptible impacts on the benthic communities present, which are already adapted to living with the disturbance in the navigation channel.

Comment SA4-26

Dredging (Chapter 3.17)

The Draft EIS discuss 2014 controlling depths, congressionally authorized 2014 project depths, and 2017 project depths for the Grays Harbor shipping channel. The 2017 project depths were the subject of a USACE General Investigation Feasibility Study in 2014 at the request of the Port of Grays Harbor. The Final EIS should clarify the connection between the 2017 projects depths and the proposed terminal expansion projects. If these actions are connected, then the impacts associated with dredging needed to achieve the 2017 project depths should be fully disclosed within the environmental analysis.

Response SA4-26

The proposed action is not a part of the Grays Harbor Navigation Improvement Project nor is it dependent on the implementation of this project in order to proceed; therefore, the projects are not considered connected actions. See the Master Response for Connected or Similar Actions for more information.

Comment SA4-27

Water Quality (Chapter 3.3.4 & 3.5.5)

The Imperium Expansion EIS discusses how stormwater is managed according to where within the project site rainfalls occurs. A portion of the stormwater discharges to the Port's MS4 system that is also covered under the Industrial Stormwater General Permit (ISGP). The stormwater BMPs in place are general in nature (e.g., an oil/water separator). If the facility is not able to meet ISGP

benchmarks additional stormwater treatment will be required. DNR recommends that the Final EIS discuss alternatives to construct a stormwater treatment BMP alongside the facility prior to construction rather than potentially waiting until after benchmarks have been exceeded and adverse impacts have occurred.

Response SA4-27

This comment is specific to the REG (formerly Imperium Terminal Services) Expansion Project and would be addressed in response to comments as part of the Final EIS for that project.

Comment SA4-28

The Draft EIS identifies the Fry Creek diversion channel as a fish bearing stream that supports Coho salmon, winter steelhead, and fall Chinook salmon. The Draft EIS does not discuss potential impacts to salmonids in Fry Creek other than with respect to noise result from pile driving. The Final EIS should discuss potential water quality impacts to Fry Creek as a result storm water runoff and potential releases of hazardous materials. The discussion of groundwater suggests that groundwater could be a mechanism for transporting contamination to Fry Creek.

Response SA4-28

Draft EIS Chapter 3, Section 3.3, *Water*, addresses potential contamination of surface waters and groundwater from construction activities. As stated in Section 3.3.5.2, *Proposed Action*, the potential for these water resource impacts would be reduced the site-specific stormwater pollution prevention plan for construction that includes BMPs for material handling and construction waste management. Final Section 3.5, *Animals*, clarifies that these measures would reduce impacts on aquatic habitat via groundwater as well as surface water.

Comment SA4-29

Artificial Lighting (Chapter 3.5.5 & 3.9.5)

Chapter 3.9.5 states that proposed night loading at Terminal 1 would require additional overwater lighting for an estimated 200 nights per year. The Final EIS should provide details on the type, location, and intensity of lighting and discuss potential impacts on the adjacent aquatic environment, including changes in species behavior, abundance, and predator-prey relationships. Mitigation measures should be proposed to minimize illumination of the aquatic environment.

Response SA4-29

As described in Draft EIS Chapter 3, Section 3.9.5, *Artificial Lighting*, additional lighting may be required at the dock for the hose tower and dock safety unit (a component of the marine vapor combustion unit) during vessel loading. Specific details on facility lighting would be determined during final project design and permitting; however, it is anticipated that lighting would be minimized due to costs and to adhere to code requirements and standards for a safe working environment. Moreover, lighting would likely be directed downward at the facility, as under existing conditions, and not to the water surface where it could affect the aquatic environment. Because the project site and Port of Grays Harbor are currently well lit and because new lighting would be kept to a minimum and directed at the facility, the potential impacts of the additive increase in lighting

for nighttime operations up to 119 nights per year on fish behavior and predator-prey relationships is not considered significant.

Comment SA4-30

Shorebirds (Chapter 4.7.1.3)

The Grays Harbor estuary is designated as a Western hemisphere Shorebird Reserve Network Site in recognition of the area's internationally-significant shorebird habitat. The Draft EIS proposes as mitigation to halt crude oil-vessel loading during two weeks of the peak spring shorebird migration. The Final EIS should discuss potential impacts to shorebird foraging in nearshore habitats as a result of increased vessel operations (e.g., noise and vessel wakes) outside of this window. Also, what are the population level impacts to shorebirds if a spill was to occur on either side of this two week window?

Response SA4-30

Draft EIS Chapter 3, Section 3.5, *Animals,* addresses the potential for impacts on animals in and around Grays Harbor associated with increased vessel traffic. As noted in Section 3.5, the increase of one additional tank vessel trip every other day would result in a small increase in activity compared to the no-action alternative. As noted in the discussion of impacts, increased noise and impacts from increase vessel wake would be minimal.

Draft EIS Chapter 4, *Environmental Health and Safety,* states that the analysis focuses on the relative risks for a set of release scenarios that could occur as the result of terminal operations and rail and vessel transport associated with the proposed action. Appendix M, *Risk Assessment Technical Report*, Appendix N, *Oil Spill Modeling*, do not predict precise spill sizes or locations where spills might occur. This approach provides decision-makers and planners with a range of potential outcomes related to the proposed action to help them understand potential risks and propose targeted mitigation measures. By extension, the Draft EIS does not predict the consequences that would affect individual resource areas or populations along rail and vessel transportation corridors with any one release scenario. Therefore, the Final EIS does not include a detailed evaluation of response capabilities or natural resource damages for any one potential outcome. Rather, as discussed in the Master Response for Environmental Health and Safety Analysis, Section 4.7, *Impacts on Resources*, describes the general types of impacts that would be expected if an incident occurs, including natural resource impacts.

Although ceasing vessel-loading operations for 2 weeks during the Grays Harbor Shorebird Festival would reduce risks related to oil spills that could affect migratory birds as well as other species in the area, the Final EIS reflects revisions to clarify that the applicant's primary intent in committing to this voluntary measure is to recognize the importance of the annual Grays Harbor Shorebird Festival to the community and those attending the festival and to eliminate the chance of a spill from vessel-loading operations during this time. The measure has been moved to Final EIS Chapter 3, Section 3.10, *Recreation*, to reflect this clarification.

Comment SA4-31

Regional Oil Transport

Rail Transit on BNSF Mainlines (Chapter 5.5.2)

Increasing crude oil transport from the Bakken formation in North Dakota to Centralia along the BNSF mainline in Washington state adjacent, over, and through state-owned lands poses a significant risk to DNR managed trust resources and state-owned aquatic lands. A number of recent crude-by-rail incidents throughout the United States highlight the risks associated with derailments, spills and explosions. The Draft EIS does not disclose the potential increased risk of (1) explosion and resulting wildfire from additional train traffic through adjacent forest and grasslands; and (2) potential oil spills into waters of the state. The Draft EIS states that risk of incident involving a major spill, fire, explosion or derailment is low based on the small increase in overall rail traffic due to the proposed action; however, this statement ignores the fact that crude-by-rail represents a higher environmental risk than cargo trains.

The Final EIS should clearly disclose the incremental growth in cumulative crude-by-rail transport within Washington State if the proposed projects are approved. It should analyze what types of sensitive resources are adjacent to the BNSF mainlines -especially along routes traversed by laden tank cars - and identify mitigation measures to reduce potential risk of incidents. It should also conduct a risk analysis outlining accident history along the BNSF mainlines, potential areas of increased risk along the track (e.g., landslide hazard areas), and maintenance needs similar to the analysis completed for the transport along the PS&P line between Centralia and Grays Harbor. Various spill scenarios should be analyzed to evaluate the range of potential adverse impacts to natural resources, including DNR managed trust resources and state-owned aquatic lands. Prior to the adoption of state regulations for contingency planning requirements pursuant to the Laws of 2014, Chapter 273, interim contingency planning requirements and minimum mitigation measures should be identified. DNR also requests additional information be disclosed about the current and projected levels of spill response capabilities- including trained personnel and equipment- along the routes proposed for crude oil transport throughout Washington State.

Puget Sound Vessel Transit (Chapter 5.5.3 and 6.5.6)

Increasing oil laden tank vessel transit within the Strait of Juan de Fuca and Puget Sound represents a significant risk to state-owned aquatic lands. It is unclear what percentage of vessels originating from the proposed facilities would transit to Puget Sound refineries. The Draft EIS states that the Westway and Imperium proposals could represent eight percent of overall tank vessel traffic in Puget Sound. What percentage of existing tank vessels calls involve transport of crude oil? The Final EIS should clarify the incremental increase in cumulative oil-by-vessel trips expected if the proposed projects are approved. The cumulative impacts analysis should also be expanded to analyze the projected growth, associated risks, and potential mitigation of vessel traffic in Puget Sound.

Response SA4-31

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about

the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

SA5, Washington State Department of Transportation, Megan White

Comment SA5-1

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Lynn Peterson Secretary of Transportation

October 20, 2015

Westway and Imperium Terminal Services Expansion Projects EISs
C/o ICF International
710 Second Avenue, Suite 550
Seattle, WA 98104

RE: Westway Expansion and Imperium Terminal Services Expansion Projects Draft Environmental Impact Statement (EIS) Comments

Dear Co-Leads:

Thank you for providing the Washington State Department of Transportation (WSOOT) with the opportunity to comment on the Draft Environmental Impact Statements (EISs) for the Westway and Imperium Expansion Projects.

In general, our comments highlight that highway operational impacts along US 12 within the City of Aberdeen and along SR 507 in the City of Centralia are not adequately addressed in the documents. We also noticed a need to update information regarding planned and completed rail capacity enhancements. Please see our specific comments attached.

We look forward to working with Ecology and the City of Hoquiam, the SEPA co-lead agencies, in addressing our comments in the Final EISs. Please contact me at (360) 705-7480 if you have any questions or would like to discuss any of these comments.

Sincerely,

Megan White, P.E., Director
Environmental Services Office

MW:eg

Attachment: WSDOT comments

Chapter & Section, Page: Chapter 3.16.3.2, pg 3.16-5 Reviewer: Ahmer Nizam Comment: In the section titled 'Vehicle Queuing' - It is not clear if the evaluation accounted for RR traffic signal interconnection at appropriate intersections. Perhaps none of the adjacent intersections have signal Interconnections? Please clarify.

Response SA5-1

Traffic signal timing data were obtained for US 12/Tyler Street and US 12/Chehalis Street to conduct the vehicle traffic analysis. Both traffic signals operate without interconnection to the adjacent rail line.

Comment SA5-2

Chapter & Section, Page: Chapter 3.16.7.1, pg 3.16-27 Reviewer: Ahmer Nizam Comment: The first sentence under the first bullet in the section on 'Applicant Mitigation' should mention the need to work with the City of Centralia (in addition to the other-entities listed) to address vehicle delay etc.

Response SA5-2

The proposed mitigation measure does not include working with the City of Centralia because it is specifically intended to address vehicle delay between the project site and Poynor Yard.

Comment SA5-3

Chapter & Section, Page: Chapter 3.16.7.2, pg 3.16-28 Reviewer: Ahmer Nizam Comment: 3rd bullet—Please consider replacing the word 'warranted' with something like “recommended by the railroad and jurisdictional authorities”.

Response SA5-3

The installation of railroad crossing treatments follows guidance in the Federal Highway Administration *Railroad-Highway Grade Crossing Handbook*,[7] which uses the word *warrant* to describe the evaluation process of potential treatments. However, Final EIS Chapter 3, Section 3.16.7.2, *Other Measures to Be Considered*, has been revised per the commenter’s suggestion to better clarify the process.

[7] Federal Highway Administration. 2007. *Railroad-Highway Grade Crossing Handbook*. August. Available: http://safety.fhwa.dot.gov/xings/com_roaduser/07010/.

Comment SA5-4

Chapter & Section, Page: Chapter 3.16.8, pg 3.16-29 Reviewer: Ahmer Nizam Comment: 3rd bullet on RR infrastructure improvements—Does the statement 'Vehicle delay could be reduced by adding new railroad infrastructure on the PS&P rail line.' include addressing current speed restrictions?

Response SA5-4

The Draft EIS does not assess revising current speed restrictions as a potential strategy to reduce vehicle delay.

Comment SA5-5

Chapter & Section, Page: Chapter 3.16 Reviewer: Southwest Region Traffic Comment: The potential safety issues with traffic volumes in the PM peak need to be more fully evaluated due to the length of the unit trains and their operating speed in Centralia on SR 507.

Response SA5-5

As shown in Draft EIS Table 3.16-6, the SR 507 rail crossings (at Tower Street and Pearl Street) during the PM peak hour would operate at level of service (LOS) F under the no-action alternative and continue to operate at LOS F under the proposed action. Table 3.16-7 shows that the average vehicle queue lengths at the SR 507 rail crossings would increase by one to two vehicles (20 to 40 feet) as a result of a proposed action train pass-by during the PM peak, so the potential impact of long vehicle queues during PM peak on vehicle safety due to the proposed action would be small. This is because PS&P already moves long grain and auto trains across the Tower Street and Pearl Street crossings.

Comment SA5-6

Chapter & Section, Page: Chapter 5.5.1.1, pg 5-25 Reviewer: Jason Beloso Comment: 1st paragraph under Planned Capacity Enhancements: Request clarification of referenced projects in context to capacity enhancements. While there are certainly freight rail benefits, WSDOT Rail Division projects are being implemented with the premise of improving reliability and on time performance for passenger rail. Also, the amount and location of capacity enhancement projects (entire BNSF main line vs. adjacent to study area), including project implementation status (many of the projects have moved beyond the environmental review process) should be clarified or corrected.

Chapter & Section, Page: Chapter 5.5.1.1, pg 5-25 Reviewer: Chris Herman Comment: 2nd paragraph under Planned Capacity Enhancements: Blakeslee Junction project - This project, previously documented in the 2008 Marine Cargo Forecast, was designed to make modest improvements to the existing rail infrastructure at Blakeslee Junction (Centralia) in order to allow for the addition of an extra lane of traffic in each direction on I-5. These improvements are completed and no current plans exist to make any additional rail improvements as a part of this project.

Response SA5-6

The planned capacity enhancements discussed in Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, and resulting impacts on BNSF main lines in Washington State, Planned Capacity

Enhancements, are based on the Washington State Rail Plan.[8] Final EIS Section 5.4.2, *Rail*, has been revised to indicate that although these projects are designed to improve reliability and on-time performance for passenger rail, they would have benefits for freight rail traffic as well. The section also reflects updates to the status of the projects and removal of those that have been completed.

Comment SA5-7

Chapter & Section, Page: Appendix L, pg L-17 Reviewer: Olympic Region Traffic Comment: Eastbound right turners (into the mall) would be expected to back up on US 12. Where is the analysis that shows expected queue on US 12? What about Level Of Service? What is the mitigation for this?

Response SA5-7

As stated in Draft EIS Appendix L, *Vehicle Traffic Analysis*, page L1-17, queuing was analyzed at for westbound and eastbound vehicles on US Route 12 turning into the Olympic Gateway Plaza at Tyler Street, Chehalis Street, and Newell Street. Table L-8 shows the available and estimated queue length at these locations. As noted, queue lengths under the proposed action compared to those anticipated under the no-action alternative (Tables L4 and L-5) show relatively small increases (a few vehicles). Therefore, the Draft EIS does not evaluate level of service for US Route 12 and no additional mitigation is proposed.

SA6, Washington State Parks and Recreation Commission, Randy Kline

Comment SA6-1

Don Hoch
Director

State of Washington
Washington State Parks and Recreation Commission
1111 Israel Road SW • P.O. Box 42650 • Olympia, WA 98504-2650 • (360) 902-8500
Washington Telecommunication Relay Service at (800) 833-6388
www.parks.wa.gov

VIA EMAIL

November 16, 2015

Westway and Imperium Terminal Services Expansion Project EIS
c/o ICF International
710 Second Street, Suite 550
Seattle, WA 98104

[8] Washington State Department of Transportation. 2014. *Washington State Rail Plan, Integrated Freight and Passenger Rail Plan*, 2013-2015. Rail Division. March.

Re: Comments on the Draft Environmental Impact Statements (EISs) for the Westway Expansion Project and the Imperium Terminal Services Expansion Project

Dear Project Manager,

Thank you for the opportunity to provide Draft Environmental Impact Statement (EIS) comments for the proposed Westway and Imperium expansion projects. The Washington State Parks and Recreation Commission (Commission) manages a diverse system of over 100 parks located throughout the state. Growth in population and the popularity of outdoor recreation have increased pressure on the agency to provide more recreational opportunities while continuing to preserve the unique natural and cultural resources under its management. The Commission is concerned that the proposed project and associated rail traffic may have the potential to negatively impact State Park users.

State Parks appreciates that the co-lead agencies have included "Recreation" as an area for analysis in the EIS. To adequately determine potential impacts, State Parks requests that each State Park located within 1000 feet from the Puget Sound & Pacific Railroad railway line should be evaluated for the following potential impacts to recreation:

- The potential impact of noise due to increased frequency of railroad operations on the day-use, overnight recreating public camping in tents, trailers or RVs, and park employees in close proximity to the rail spur and BNSF railway;
- The potential for vibration from increased train traffic to impact cultural and historic park resources;
- Consideration of the timing of rail operations that may run through or are in close proximity to camping parks to align with State Parks quiet hour restrictions which are from 10:00 pm to 6:30 am;
- Consideration of sharing and making readily available rail transport schedules so that state park visitors in close proximity to rail traffic can be apprised of dates when heavy rail traffic is anticipated.

Thank you for the opportunity to provide comment. If you have any questions I can be reached at 360.902.8632 or randy.kline@parks.wa.gov.

Sincerely,

Randy Kline, Environmental Program Manager

CC via email: File

Randy Kline, Environmental Program Manager
Washington State Parks and Recreation Commission
1111 Israel Road SW, Tumwater, WA 98501
Phone: 360.902.8632
randy.kline@parks.wa.gov
www.parks.state.wa.us

Response SA6-1

Draft EIS Chapter 3, Section 3.10, *Recreation*, describes recreational uses and areas in the study area, including parks and natural areas, fishing, bird watching, and whale watching. The study area for recreation consists of recreational uses and areas near the project site that could be affected by construction and routine operation at the project site and areas that could be affected during routine rail transport along the PS&P rail line and vessel transport through Grays Harbor out to 3 nautical miles from the mouth of the harbor. Draft EIS Table 3.10-2 identifies state parks along the PS&P rail line. The closest state park to the PS&P rail line is Lake Sylvia State Park, located north of Montesano. This state park is approximately 1 mile from the PS&P rail line at its closest point. Therefore, no state parks within 1,000 feet of the PS&P rail line have been identified. For a description of the of rail transport along mainline routes beyond Centralia and vessel transport along commercial vessel routes off the Washington coast, refer to Chapter 5, *Extended Rail and Vessel Transport*.

SA7, Washington Utilities and Transportation Commission, Steve King

Comment SA7-1

State of Washington
Utilities and Transportation Commission
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November 30, 2015

Westway and Imperium Terminal Services Expansion Projects EISs
c/o ICF International
710 Second Ave., Suite 550
Seattle, Washington 98104

Diane Butorac, Regional Planner
Southwest Regional Office
Department of Ecology
P.O. Box 47775
Olympia, Washington 98504-7775

Sent via Email and First Class Mail

Subject: Commission Comments on Westway and Imperium Draft Environmental Impact Statements

Dear Ms. Butorac and ICF International:

The Utilities and Transportation Commission (commission) appreciates the opportunity to comment on the Draft Environmental Impact Statements (DEISs or Draft Statements) for the proposed Westway and Imperium projects in Grays Harbor County, Washington. The projects would

significantly expand the storage capacity for crude oil at adjacent facilities at the Port of Grays Harbor, and increase transportation of volatile Bakken crude oil by rail from the Midwestern United States to Grays Harbor. Oil would be shipped to the facility by Puget Sound and Pacific Railroad (PS&P).

The commission has responsibility under state law for regulating the safety of more than 2,800 public railroad crossings in Washington State and private crossings located on rail routes that carry crude oil tanker cars. Among other things, the commission inspects the surface conditions of railroad crossings and establishes clearances over and beside railroad tracks. The commission also reviews railroads' intent to increase train speeds, construct new crossings and alter or close existing crossings. The commission partners with the U.S. Department of Transportation Federal Railroad Administration (FRA) and employs staff who perform inspections in hazardous materials, signal and train control, track conditions, operating practices, and motive power and equipment in support of FRA's regulatory and inspection program.

Bridges

The commission has concerns about the load capacity of bridges on the PS&P line between Centralia and the project sites. These concerns are shared by many members of the public, as evidenced by the comments made in response to the initial proposal for both Westway and Imperium. The Draft Statements of both the Westway and Imperium project proposals provide very brief and general descriptions of the 52 bridges on this line (see pages 3.15-10), and equally brief reference to a future maintenance project to upgrade three steel bridges (see pages 3.15-13). This lack of detail is insufficient to determine whether the infrastructure can safely accommodate the increased loads envisioned in the proposed projects.

The FRA regulates bridge safety standards under 49 Code of Federal Regulations (CFR) Part 237. The CFR requires each track owner to have a "bridge management program" in place (Subpart B - 237.31) with specific criteria, including an accurate inventory of bridges, [Footnote 1: The inventory must include a unique identifier for each bridge, its location, configuration, type of construction, number of spans, and span lengths.] information about safe load capacity, and specific program for bridge inspections (237.33). Each bridge management program must include scheduling inspections by a qualified inspector once per calendar year for each bridge in railroad service (237.101). In addition, each track owner is required to keep bridge inspection records (237.109).

Recommendations:

- Require PS&P to:
    - Make inventory and inspection records available to the public process for all 52 bridges.
    - Demonstrate that a qualified inspector has verified that all 52 bridges have the load capacity to safely handle a unit train of 120 loaded tank cars.
    - Describe its bridge inspection program that includes annual inspections by a qualified inspector.
    - Describe in detail which bridges are scheduled for upgrade, the nature of the upgrade and approximate start date and completion date.

Response SA7-1

These actions have been added to Final EIS, Chapter 4, Section 4.5.3.3, *Other Measures to be Considered*.

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment SA7-2

Private Crossing Safety

The Draft Statements do not adequately address safety at private railroad crossings between Centralia and the project sites. While both Draft Statements state that they analyzed private crossings using the FRA general accident prediction formula (see page L-5), in fact the various lists of the 81 crossings identified between Centralia and the project sites include only a handful of private crossings. Many private crossings between Centralia and the Port of Grays Harbor that appear on the FRA crossing inventory do not appear anywhere in the Draft Statements.

House Bill 1449, which became effective July l, 2015, gave the commission limited authority over private crossings on crude oil transportation routes. The commission is currently promulgating rules establishing minimum standards for signs at all private grade crossings on crude oil routes and a process for ordering additional signage or other safety measures at private crossings with restricted sight distances or other safety deficiencies.

Recommendations:

- Require PS&P to provide an accurate list of all private crossings along the route between Centralia and the Port of Grays Harbor.
- Require PS&P to be required to comply with the new rules before transporting crude oil over the Centralia to Port of Grays Harbor route.

Response SA7-2

Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety,* analyzes public and select private crossings throughout the study area. As discussed in Appendix L, *Vehicle Traffic Analysis,* the impacts on most public crossings would be low. Impacts on private crossings would be lower still because traffic volumes are normally substantially lower at private crossings. Section 3.16 analyzes select private crossings that were identified by Washington State Department of Transportation as potential areas of concern due to higher traffic volumes than are typical for private crossings (i.e., the entrance to the port area). Subsequent to release of the Draft EIS, the Washington Utilities and

Transportation Commission amended and adopted rules establishing safety standards at private crossings (WAC 480-62-270). These rules became effective March 11, 2016. Final EIS Table 3.15-1, Laws and Regulations for Rail Traffic, has been revised to refer to the requirements of the new rules. Final EIS Appendix B, *Laws and Regulations*, Section B.2.33, *Washington Utilities and Transportation Commission*, has also been revised with a more comprehensive description of the new rules. It is assumed that PS&P will comply with the new rules, similar to compliance with other applicable rules and regulations, and Section 3.16.7.2, *Other Measures to be Considered,* has not been revised.

Comment SA7-3

Public Crossing Safety

The Westway (see pages 3.16-27, 3.16-28 and L-5) and Imperium (see 3.16-27, 3.16-29 and LS) Draft Statements both purport to address public rail crossing safety, but as discussed below fail to address 17 public crossings identified by the commission as "at-risk crossings." The Draft Statements must address more fully how the companies intend to address safety at these crossings.

The Draft Statements state on page L-5 that the companies have analyzed public grade crossings using the FRA GradeDEC.Net modelling software. This is an accident prediction software sponsored by the FRA that is used nationwide by railroad safety specialists; including the commission. However, the GradeDEC.Net model has its limitations and is useful as only one tool of many.

First, the underlying data used by the model comes from the FRA's crossing inventory and cannot be changed in the computer modeling. If data element in the FRA inventory is incorrect, which happens frequently, it cannot be changed in the model, and the only option is to recalculate the results using the general accident prediction formula. The general accident prediction formula is a complex, manual calculation using a myriad of data elements. The chance for misinterpretation or error is high.

Second, the GradeDEC.Net model captures only the most basic of data elements and produces a very basic result. For instance, the model captures such things as accident history, train and traffic volumes, level of protection, and number of roadway lanes, but does not capture other site specific characteristics such as the angle of the crossing, train and vehicle speeds, and sight distances.

The use of the GradeDEC.Net (and manual calculation using the general accident prediction formula when necessary) has produced some good, but very basic and very preliminary results in the Draft Statements. However, the Draft Statements err in assuming that these results are determinative in deciding whether additional safety devices are necessary at the 81 grade crossings between Centralia and the project sites.

The Draft Statements state on page 3.16-27:

> *The Railroad-Highway Grade Crossing Handbook- Revised Second Edition* (Federal Highway Administration 2007) indicates that active devices with automatic gates should be considered when certain criteria are met. One criterion is if the expected accident frequency, as calculated by the U.S. Department of Transportation Accident Prediction formula, exceeds 0.075. As shown in Appendix L, *Vehicle Traffic Analysis,* no grade crossings would exceed this frequency using the formula. Therefore, using this threshold, no crossings under the no-action alternative would require consideration of automatic gates.

While this statement about this one criterion is true, this particular criterion is just *one of 19* to be considered when determining whether active warning devices are necessary at a particular

crossing. Other criteria (e.g., inadequate sight distance in at least one quadrant, a crossing angle of less than 60 percent, and the presence of a highway intersection less than 75 feet from the crossing) are not discussed.

Based on the USDOT Federal Highway Administration (FHWA) publication *Guidance on Traffic Control Devices at Highway-Rail Grade Crossings,* published November 2002, the commission has identified 17 crossings that require further study and field analysis before any crude oil is transported over this line.

These 17 are crossings with a combination of passive protection and flashing lights only (i.e., they have no gates). Some of these crossings are listed in both the Westway and Imperium Draft Statements (see page L-11, Table L-6, identified as "Grade Crossing Infrastructure Projects Planned but Not Funded - No-Action Alternative (2017 and 2037)." [Footnote 2: Two crossings, Tower Street and Pearl Street, should be removed from Table L-6. These crossings were recently upgraded as part of WSDOT's Section 130 program.]

The 17 crossings are:

	USDOT #	COUNTY	ROAD	ANGLE <60%		# OF TRACKS	LIMITED	PROTECTION
1	092577M	Thurston	Moon Rd SW		X	2	X	Passive. No lights. No stop or yield signs.
2	092583R	Grays Harbor	Blockhouse Rd			1	X	Passive with stop signs.
3	092595K	Grays Harbor	Elma-Gate Rd W	0-29		2	X	Passive with stop signs.
4	096510U	Grays Harbor	Dunlap Rd	30-59	X	1	X	Passive with stop signs.
5	096515D	Grays Harbor	Blockhouse Rd N	30-59		1	X	Passive with stop signs.
6	096518Y	Grays Harbor	Blockhouse Rd N	30-59		1	X	Passive with stop signs.
7	096525J	Grays Harbor	N 2nd St			2	X	Passive with stop signs.
8	096638P	Grays Harbor	N 10th St			1	X	Passive with stop signs.
9	096641X	Grays Harbor	N 17th St-Baily			1	X	Passive with stop signs.
10	096642E	Grays Harbor	Calder Rd			1	X	Passive with stop signs.
11	096649C	Grays Harbor	Hewitt Street		X	1	X	Passive with stop signs.
12	096657U	Grays Harbor	Glenn Rd		X	1	X	Passive with stop signs.
13	096659H	Grays Harbor	Beacon Rd	30-59		1	X	Lights only.

14	096677F	Grays Harbor	County Farm Rd			1	X	Passive with stop signs.
15	096678M	Grays Harbor	Devonshire Rd	30-59		1	X	Lights only.
16	096679U	Grays Harbor	Heikkinen Road			1	X	Passive with stop signs.
17	096682C	Grays Harbor	Central Park Dr			1	X	Lights only.

The Westway DEIS at page 3.16-28 and the Imperium DEIS at 3.16-29 describe "Other Measures to be Considered" to mitigate hazards at railroad crossings on the line. Bullet #3 for both reads:

To reduce the risk of an accident at grade crossings, PS&P should install flashers, gates, and/or cantilevers at crossings where warranted to improve vehicle and rail safety conditions. Begin to install these upgrades before initiating oil train traffic.

In our view, this measure is insufficiently precise and should be clarified.

Recommendation:

- Move this measure in both Draft Statements to Section 3.16.7. 1, Applicant Mitigation, and changed to the following:
    - To mitigate the risk of an accident at the 17 grade crossings identified by the commission as at-risk crossings, PS&P will conduct on-site diagnostic reviews with commission staff and representatives of the affected road authority (city or county). PS&P will implement the recommendation s of the diagnostic team, which may include installation of flashers, gates, and/or cantilevers, and other crossing safety upgrades on a timeline recommended by the diagnostic team. Some grade crossing upgrades and installations may be required prior to PS&P initiating oil train traffic and the applicant(s) will be solely responsible for funding these projects.

Response SA7-3

The intent of the analysis in the Draft EIS is to provide information about the relative change in risks related to the proposed action. Consistent with this approach, general consideration was given to the 17 intersections listed in the comment. As noted, while the Federal Railroad Administration's GradeDec.Net model has some limitations, it was deemed sufficient for the purposes of this analysis. Draft EIS Appendix L, *Vehicle Traffic Analysis,* page L-5, describes the GradeDec.Net model used to evaluate potential proposed action-related changes to safety at selected grade crossings. Model inputs were adjusted to use more accurate vehicle traffic data, where available, from the Washington State Department of Transportation or local jurisdictions and to include the increased rail traffic anticipated as a result of the proposed action. The Draft EIS determines that impacts on vehicle safety due to the increase in rail traffic under the proposed action would be minimal.

Final EIS Appendix L, *Vehicle Traffic Analysis,* Table L-6 has been revised to eliminate Tower Street and Pearl Street in the analysis.

Comment SA7-4

Emergency Notification Signs (ENS)

The Westway (at pages 3.16-28, S-46, S-63) and Imperium (at pages 3.16-29, S-47, S-65) Draft Statements address ENS issues within the sections titled "Applicant Mitigation" and "What are the applicant measures that would address these impacts." Both Draft Statements state:

> To address potential vehicle safety impacts each of the public at-grade crossings on the rail line, the applicant will work with PS&P to provide permanent signs that prominently display both a toll-free telephone number and a unique grade-crossing identification number in compliance with Federal Highway Administration regulations (23 Code of Federal Regulations 655). The toll-free number would enable drivers to promptly report any accidents, malfunctioning warning devices, stalled vehicles, or other dangerous conditions. The signs will be in place prior to the beginning of operations involving transport of crude oil.

This language is unnecessary. These measures are already mandated by federal regulation, which required PS&P to install such signage by Sept. 1, 2015. If the railroad has not yet installed the required signage, the commission will address this as a compliance issue before any oil is transported on this line.

Recommendations:

- Do not include language related to these signs in the final EIS.

Stop and Yield Signs

The Westway (at page 3.16-28) and Imperium (at 3.16-29) Draft Statements both address Stop and Yield signs within the section titled "Other Measures to Be Considered." The Draft Statements state:

> To reduce the risk of an accident on the PS&P line, PS&P should work with local jurisdiction including WSDOT and the Washington Utilities and Transportation Commission to ensure all of the public grade crossings meet Manual on Uniform Traffic Control Devices (23 U.S.C. 109(d) guidance to include a yield or stop sign on every cross-buck post.

The commission will assist PS&P in assessing its public crossings for Manual on Uniform Traffic Control Devices (MUTCD) compliance and in installing Yield signs at appropriate crossings. Installation of a Stop sign at a crossing currently protected only by cross bucks requires an engineering study at PS&P's expense (MUTCD 8B.04 Standard 05). Commission staff fully expects to be invited by PS&P to participate in a corridor study of every grade crossing on the line to make determinations on MUTCD compliance as well as any other safety related issue.

Response SA7-4

Final EIS Chapter 3, Section 3.16.7.1, *Applicant Mitigation*, has been revised to remove the mitigation measure related to emergency notification signs. Final EIS Chapter 3, Section 3.16.4.2, *Vehicle Safety*, has been revised to add PS&P's protocols related to emergency notification signs.

Comment SA7-5

Track Issues

The Westway (at page 3.15-11) and Imperium (at page 3.15-11) Draft Statements both address track issues within the section titled "Federal Railroad Administration Class of Track and Speeds," bullet number four. Both state:

For about 1,000 feet at a point about 4 miles west of Montesano, the speed limit is 10 mph. The track is on the bank of the Chehalis River. The soil condition is such that maintenance to the tolerance required for 25 mph speed limit is difficult.

The integrity of the track, ballast, sub-ballast and subgrade are critical to the safe transportation of the train over the rail line. The commission is very concerned that PS&P experienced three derailments on this line in 2014 due in large part to poor soil conditions.

Recommendation:

- Require PS&P to address the underlying soil issues before it transports volatile Bakken crude oil, regardless of the speed at which the trains travel. Any derailment involving crude oil is potentially disastrous in terms of human injury or death, and extensive property and environmental damage.

Response SA7-5

As above, Draft EIS Section 3.15.4.5, *Ongoing Maintenance and Inspections*, Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Refer to the Master Response for Mitigation Framework for more information about the development and enforcement of mitigation under SEPA.

Comment SA7-6

Blocked Crossings

The commission has significant concerns about blocked crossings from the cumulative effect of both the Westway and Imperium proposals. The Draft Statements indicate that PS&P will be blocking public crossings at both the Centralia interchange location and in the city of Aberdeen. Recent court decisions have determined that state rules addressing blocked crossings, such as the commission rule at Washington Administrative Code (WAC) 480-62-220, [Footnote 3: The Commission rule would prohibit blocking a public crossing for more than 10 minutes and define a blocked crossing as a crossing where a train sits without moving for 10 minutes or more.] are preempted by federal law and therefore unenforceable.

Blocked crossings pose both an inconvenience to the public and a safety hazard as motorists and pedestrians make unsafe moves to avoid becoming trapped by a stationary train. Where trains blocking the crossing include tank cars containing volatile crude oil, the safety concerns are heightened due to the higher risk of damage or injury in the event of an accident, collision, or terrorist act. The commission has no jurisdiction over blocked public grade crossings, but commission staff will continue to work actively with railroads when blocked crossings are reported.

Response SA7-6

Draft EIS Chapter 6, Sections 6.5.4, *Rail Traffic,* 6.5.5, *Vehicle Traffic and Safety,* and 6.5.7, *Environmental Health and Safety* discuss the cumulative impacts of the proposed action, REG

(formerly Imperium Terminal Services) Expansion Project, and Grays Harbor Rail Terminal Project on rail traffic, vehicle traffic and safety, and environmental health and safety.

Comment SA7-7

Switching Operations

The Draft Statements address switching operations on pages 3.15-23 and 3.15-24. According to the Imperium DEIS, it appears that PS&P is planning switching operations that will occupy public crossings longer than other feasible switching movements. Its DEIS states that although other switching movements may block the crossings for a shorter period, they are not the "most time-efficient and cost-efficient."

Choosing to inconvenience businesses and citizens and create unnecessary safety problems related to blocked public crossings because it is more "time-efficient and cost-efficient" to the railroad is not acceptable.

The Westway Draft Statement raises similar concerns. Under its proposal, 120-car trains will be brought into the city of Aberdeen to a small PS&P yard. Because the Westway facility can only receive 20 cars at a time, PS&P will conduct a switching operation at the yard that breaks the train into six 20-car trains. This means significant longer times for switching operations, which will block crossings for excessively long periods of time both east and west of the yard, during which time no vehicles will be able to cross the tracks.

The Westway (at page 3.16-27) and Imperium (at page 3.16.28) Draft Statements address mitigation of these problems under the sections entitled "Applicant Mitigation." The Draft Statements propose mitigation by tasking various entities, including the cities of Hoquiam and Aberdeen, Port of Grays Harbor, Grays Harbor Council of Governments, and PS&P, with addressing solutions to the vehicle delay that the proposed switching operations will cause.

While the commission has no jurisdiction over public crossings within Aberdeen city limits, it does have experience and expertise in switching operations in other locations across the state. Compared to switching operations elsewhere in Washington, the commission finds the proposal here to be ill conceived, poorly designed, and unworkable. It is unfair and unsafe to businesses and patron s in the Olympic Gateway Plaza as well as the general public and affected businesses west of Poynor Yard.

The applicants are required to ensure acceptable mitigation measures are in place prior to beginning project operations. The Westway (at page S-34) and Imperium (at page S-35) Draft Statements describe under the heading "Vehicle Traffic and Safety" the crossing blocking problem at the Olympic Gateway Plaza and Port areas of Aberdeen as "unavoidable and significant adverse impacts." They go on to say that mitigation plans and infrastructure improvements would reduce the impacts but not completely eliminate them. The commission strongly disagrees. Every other railroad company in Washington has figured out how to conduct its switching operations without blocking public crossings. While such solutions are likely to be more expensive than the companies would like, it should be the responsibility of the applicants, the port, and PS&P to solve this problem to the satisfaction of the city of Aberdeen, its businesses, and its citizens before any oil moves to the project sites.

Recommendation:

- Require the applicants, the Port, and PS&P to solve this problem to the satisfaction of the city of Aberdeen, its businesses, and its citizens before any oil moves to the project sites.

Response SA7-7

Draft EIS Section 3.16, *Vehicle Traffic and Safety*, provides a discussion of the potential vehicle delay impacts at Olympic Gateway Plaza. As noted in PS&P's comments on the Draft EIS and in revisions to Final EIS Section 3.15, *Rail Traffic*, there are various ways that trains may be assembled and tested prior to departure that could result in greater or lesser impacts specific to the proposed action. The analysis in the Draft EIS is based on the best available information and provides a representative estimate of blocked crossing times based on those assumptions. Section 3.16.7.1, *Applicant Measures*, requires the applicant to work with PS&P and other stakeholders to minimize the impacts of rail operations related to the proposed action in the Olympic Gateway Plaza area and between Poynor Yard and the project site. As suggested, this could include changes in operating procedures implemented by PS&P. The stakeholders identified in that process include local public agencies with responsibility to represent the best interest of the local community.

Additionally, Draft EIS Section 3.16.7.2, *Other Measures to be Considered,* recommends continued coordination between stakeholders to improve existing congestion and delay, access, and safety issues along US 12 and at the Olympic Gateway Plaza. The Grays Harbor Council of Governments in partnership with the Port of Grays Harbor and the City of Aberdeen initiated the East Aberdeen Mobility Project in late 2013 with funding from the federal Surface Transportation Program. This project analyzed options for easing congestion and improving safety along US 12, and facilitating access to businesses in and around Olympic Gateway Plaza. The final report[9] recommends conceptual design alternative C, Chehalis Street Overcrossing, as the highest-rank design concept based on public feedback. This roadway design concept incorporates a two-lane roadway bridge with bike lanes and a sidewalk over US 12 and the PS&P rail line. The north bridge approach is located near Chehalis Street and the south bridge approach touches down inside Olympic Gateway Plaza.

Refer to Master Responses for Mitigation Framework for more information about the development and enforcement of mitigation under SEPA.

Comment SA7-8

Financial Responsibility

In reviewing the two DEISs, one of the more glaring omissions is the ability of the parties involved to pay for any costs associated with an accident, spill, or explosion. There is no federal requirement detailing financial responsibility outside of limited liability insurance ranging from $50 million to 250 million and railroad companies are not required to report or verify how much insurance they carry. Absent a dedicated clean-up fund established by the railroad, any damage from a spill or accident would likely be borne by the state. There needs to be dedicated funds available to pay for the damage resulting from an oil spill and the cost of clean-up.

[9] Grays Harbor Council of Governments. 2015. *East Aberdeen Mobility Project. Preferred Alternative Selection.* April. Prepared by David Evans and Associates, Inc. Available: http://www.ghcog.org/Transportation/EastAberdeenMobility2014/East%20Aberdeen%20Alt%20Study_Final%20-%20Report%20and%20Cover%20minus%20Appendix.pdf. Accessed: May 3, 2016.

Currently, Class I railroads submit to the commission annual reports that contain the state portion of reports they file annually with the Surface Transportation Board (STB). The STB has authority to collect financial data, limited by statute to that necessary for the economic oversight of the regulated industry. Class II and III railroads do not have the same accounting or reporting requirements, but do file annual reports with the UTC. Neither the federal or state reports state address whether PS&P has the financial means to address a spill or accident involving a volatile product like Bakken crude oil.

Recommendation:

- Require PS&P to show financial responsibility in the event of a worst case spill or accident.

Thank you for the opportunity to comment on the Draft Statements for the proposed Westway and Imperium projects in Grays Harbor County. Please contact Jason Lewis, Transportation Policy Advisor, at 360-664-1206 or jlewis@ute.wa.gov for additional information.

Sincerely,

Steven V. King
Executive Director and Secretary

Response SA7-8

RCW 81.04.560 requires railroad companies to provide financial assurance of their ability to pay damages in the event of a spill or accident involving crude oil transportation in Washington State. The Washington Utilities and Transportation Commission administers this requirement and recently approved regulations that require rail operators transporting crude oil in Washington to provide annual information sufficient to demonstrate the railroad company's ability to pay the cost to clean up a reasonable worst-case spill of oil (WAC 480-62-300).[10] Final EIS Appendix B, *Laws and Regulations*, Section B.2.33, *Washington Utilities and Transportation Commission*, has been revised to show the requirements of the new rules. Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

[10] Washington Utilities and Transportation Commission. 2016. *Rail Safety Rulemaking.* Docket TR-151079. March 11. Available: http://www.utc.wa.gov/docs/Pages/RailSafetyRulemaking151079.aspx. Accessed: May 3, 2016.

3.3 Regional and Local Agencies

The regional and local agencies listed in Table 3-3 submitted comments on the Draft EIS. These comments and responses to those comments are presented after the table. Master responses were developed to address commonly raised comments and are presented in Chapter 2, *Comment Themes and Master Responses*.

The responses refer to the Draft EIS unless information has been revised, in which case the Final EIS is specified.

Table 3-3. Comment Letters Submitted by Regional and Local Agencies

Number	Agency
RLA-1	Aberdeen Fire Department, Tom Hubbard
RLA-2	Board of Thurston County Commissioners, Sandra Romero
RLA-3	City of Ocean Shores, Crystal Dingler
RLA-4	City of Olympia, Stephen Buxbaum
RLA-5	City of Washougal, David Scott
RLA-6	Grays Harbor County Water District #2, Reg Hearn
RLA-7	Jefferson County Board of Commissioners, Tami Pokorny
RLA-8	Marysville Fire District, Martin McFalls
RLA-9	Port of Grays Harbor, Gary G. Nelson
RLA-10	Port of Olympia, George Barner, Jr.
RLA-11	Skamania County Fire District #4, Timothy Young

RLA1, Aberdeen Fire Department, Tom Hubbard

Comment RLA1-1

City of Aberdeen Fire Department
Tom Hubbard, Fire Chief
Rich Malizia, Assistant Chief

October 14, 2015

Westway and Imperium Terminal Services Expansion Projects EISs
c/o ICF International
710 Second Street, Suite 550
Seattle, WA 98104

To Whom It May Concern,

The purpose of this letter is to provide comment on the Draft Environmental Impact Statements for the proposed Westway and Imperium Expansion Projects in Grays Harbor County, and specifically the City of Aberdeen.

The Aberdeen Fire Department would like to provide input on four areas addressed within the EIS documents.

1. Response and mitigation of spills,
2. Response and mitigation of fire or explosions associated with crude oil or Methanol,
3. Emergency vehicle access to areas impacted by the PSAP rail line with specific reference to the East Aberdeen Gateway Mall area, the commercial area adjacent to the Poyner Switching Yard, and the commercial occupancies within the boundaries of the Port of Grays Harbor, and
4. Marine terminal shore side firefighting response capabilities.

Agency Background

The Aberdeen Fire Department is rated a Class 5 fire protection organization by the Washington State Survey and Ratings bureau. The department has a minimum daily staffing of eight personnel operating out of two stations, one located at 700 W. Market St. and the South Aberdeen Station located at 700 W. Curtis St. Operationally, the department consists of 33 line personnel, 1 Fire Chief, and 1 Assistant Chief who also serves as the Fire Marshal.

The department provides Advanced Life Support Emergency Medical response and transport (90% of total call volume) and fire suppression and light rescue (10% of total call volume). In 2014 the department responded to 4,593 emergency medical calls and 453 fire service calls. Our operational response to a fire or HAZMAT incident includes 1 Command Unit with 1 Battalion Chief, 1 Ladder Truck with 2 personnel, 1 Fire Engine with 3 personnel, and 1 ambulance with 2 personnel. On escalating incidents the Fire Chief and Assistant Chief respond as well as the call back of off duty personnel using predetermined alarm escalations. Aberdeen Fire Department personnel are trained to the HAZMAT Operations level.

Response RLA1-1

Final EIS Chapter 4, Section 4.4.1.3, *Response*, reflects the addition of information describing the location, staffing, and response capabilities of the Aberdeen Fire Department. The section also reflects the addition of information related to the Hoquiam Fire Department and other local responders.

Comment RLA1-2

1. Response and Mitigation of Spills

The Aberdeen Fire Department has limited spill response materials at its disposal. We are not equipped to effectively mitigate spills above fuel volumes found in typical passenger vehicles.

According to the Westway Expansion Project, Volume 1, Chapter 4, pages 4.5-7 to 4.5-8, the following actions are to be taken in the event of a product spill:

Typical actions for responding to a spill from a crude oil train derailment (if there is no fire) are as fallows. Similar actions would be taken for all products proposed to be transported.

- *Implement emergency response plan required under federal law. This includes notifications and initial actions for incidents.*
- *Protect public health and safety.*

- *Contact railroad emergency contact.*
- *Contact shipper (owner of the oil) using the shipping papers, railroad emergency contact, or CHEMTREC.*
- *Conduct hazard assessment and risk evaluation*
- *Conduct continuous air monitoring, as appropriate.*
- *Confine the spill.*
- *Apply foam for vapor suppression, if available.*
- *Isolate or evacuate based on recommendations in the product-based emergency response guide (for example, Guide No. 128 for petroleum crude oil recommends initial downwind evacuation for at least 1,000 feet). For first responders from the local jurisdictions or the railroad emergency response team, the posture for an oil or hazardous material spill on the rail is the same-defensive and protective. For local responders will do what is necessary to evaluate and report on the situation, keep themselves and the public safe, and monitor response and cleanup operations for compliance with local ordinances and permits. (Westway Expansion Project Volume 1 Chapter 4, p. 4.5-7 to 4.5-8)*

Referencing the above actions, the fire department is able to make notifications to initiate the Geographic Response Plan including notification of the appropriate local, county and state agencies as well as initiate contact with the railroad. We will also initiate the actions contained within Guide 128 of the Emergency Response Guidebook with regards to product identification and provide for life safety by following the recommended evacuation distances.

We do not have the equipment or resources necessary to confine a large spill or apply Class B or Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF) for vapor suppression. The Aberdeen Fire Department's AR-AFFF capability will be discussed in the next section of this document.

Response RLA1-2

Final EIS Section 4.5.2.1, *Oil Spills,* reflects the addition of information on response actions. See responses to detailed comments below regarding Aberdeen Fire Department capabilities to respond to a large spill resulting from a derailment.

Comment RLA1-3

2. Response and mitigation of fire or explosions associated with crude oil and Methanol

As the Fire Chief of the Aberdeen Fire Department I am tasked with planning and preparing for the safety of the citizens of Aberdeen. A fire involving a railcar carrying either crude oil or Methanol would require a coordinated response from multiple agencies including local, state, and federal response organizations. Chapter 4, Environmental Health and Safety, Section 4.5.2.2-Fires or Explosions, p. 4.5.11 of the Draft EIS states the following:

"PHMSA provides guidance for a fire or explosion from a train carrying crude oil (Pipeline and Hazardous Materials Safety Administration 2014), which states that, 'in the event of an incident that may involve the release of thousands of gallons of product and ignition of tank cars of crude oil in a unit train, most emergency response organizations will not have the available resources, capabilities, or trained personnel to safely and effectively extinguish afire or contain a spill of this magnitude (e.g., sufficient firefighting foam concentrate, appliances, ***equipment****, water supplies). Response to unit train derailments of crude oil will require specialized outside resources that may not arrive at the scene for hours; therefore it is critical that*

responders coordinate their activities with the involved railroad and initiate requests for specialized resources as soon as possible."

According to the US Department of Transportation's Commodity Preparedness and Incident Management Reference Sheet (PHMSA Petroleum Crude Oil Reference 09/2014), a single tank car containing 30,000 gallons of crude oil involved in a spill with fire would require a minimum of 216 gallons of 3% Class B foam for the INITIAL 15 minutes of operations. They add that reapplication of foam will be necessary to maintain an adequate foam blanket. That quantity of Class B foam is well beyond the current capability of the Aberdeen Fire Department to carry or apply effectively. With regards to Methanol, as previously stated the Aberdeen Fire Department does not have AR-AFFF capability. A mutual aid response agreement with the Hoquiam Fire Department does provide access to a flatbed truck (HFD 7319) that carries four (4) 265 gallon AR-AFFF foam totes and a 300 gallon Purple K dry extinguisher. This apparatus does not have pumping capability and must be paired with a fire engine to pump and provide the foam. This resource is not staffed on a daily basis by the Hoquiam Fire Department and its response and deployment timeframe has not been tested within the City of Aberdeen under emergent conditions.

Response RLA1-3

Final EIS Section 4.5.2.2, *Fires or Explosions,* reflects the addition of information on response actions. Final EIS Sections 4.4.3 and 4.4.3 reflect two additional applicant mitigation measures. The first measure proposes that the applicant will ensure that the City of Hoquiam Fire Department has adequate fire-fighting equipment to respond to incidents at the project site. The second measure proposes that the applicant provide training related to fire or explosions on the facility site for fire department personnel from both jurisdictions (Hoquiam and Aberdeen). In addition, the applicant has voluntarily committed to supplying three totes of foam at the project site. This voluntary measure has been added to Final EIS Section 4.4.3.1, *Voluntary Measures and Design Features*.

The mitigation measures in Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* propose that the applicant ensure there is prepositioned spill containment, cleanup equipment, and trained personnel to respond to a rail incident. In addition, mitigation is proposed for the applicant, along with PS&P, to engage local fire districts in a public safety drill at least once every 2 years and to test one geographic response plan strategy (for oil spills) annually. Other proposed mitigation measures support enhancement of current first-responder capabilities, including a meeting between local emergency management officials and PS&P to identify training needs for local responders who will respond to an emergency on the PS&P rail line. The Grays Harbor Local Emergency Planning Committee and its emergency response plan are important resources already in place that can be leveraged to improve local responder effectiveness and capabilities in response to an incident related to the proposed action.

Comment RLA1-4

3. Emergency Vehicle Access

The impact to emergency vehicle access to the areas of the Gateway Mall in East Aberdeen, the commercial area adjacent to the Poyner Switching Yard, and the commercial occupancies at the Port of Grays Harbor that are isolated when a train occupies the tracks are well documented in the Draft EIS. The process of making up trains headed East, according to the Draft EIS, would block all access to the Gateway Mall for a significant amount of time. The Draft EIS in Chapter 3 - Affected

Environment, Impacts, and Mitigation, p. 3 .16-25 reports two existing alternate access points for the Gateway Mall area.

"As described previously in the vehicle delay discussion, vehicle delay would be most substantial in Centralia and Aberdeen. Therefore, emergency response in Centralia and Aberdeen would experience the most delay from blocked grade crossings under the proposed action.

Vehicle delays in the Olympic Gateway Plaza area are substantial because the seven grade crossings at the plaza provide the only vehicular emergency access to and from the plaza area and Morrison Riverfront Park, immediately east of the plaza. Emergency response vehicles would experience more frequent and longer delays to access the Olympic Gateway Plaza area under the proposed action because there is no alternate roadway access to the plaza area. However, there are two existing alternate options to access the Olympic Gateway Plaza area when trains block grade crossings.

- A paved recreational path approximately 1 mile long and 8 feet wide extends from Morrison Riverfront Park immediately east of the Olympic Gateway Plaza to Junction City Road to the east, the grade crossing east of the Fleet Street entrance to the Olympic Gateway Plaza area. The path parallels the Chehalis River and the PS&P rail line.
- A paved trail approximately 750 feet long extends from the Aberdeen Hotel parking lot (located between East Heron Street [US 12 eastbound] and the PS&P rail line) to the west side of Walmart The trail passes underneath the PS&P rail line Wishkah River bridge. This underpass is approximately 11 feet wide and 8.5 feet high.

These paths could provide alternate emergency vehicle access to the Olympic Gateway Plaza area and Morrison Riverfront Park when a train blocks all emergency vehicular access to the plaza area. (Chapter 3 - Affected Environment, Impacts, and Mitigation, p. 3.16-25)

In reference to the paved recreational path that extends 1 mile along Morrison River Front Park; it is designed for foot traffic only and is accessible from Sargent Blvd which is the access road to Junction City. The pathway will not accommodate emergency response vehicles. Approximately 1/4 mile from the Sargent Blvd. access point the trail consists of a 7 1/2 foot wide by approximately 200 foot long metal grated pedestrian bridge that connects the two sections of paved pathway.

In reference to the paved trail and underpass that extends under the PSAP rail line that is accessed from the Aberdeen Hotel Parking lot, it is a temporary solution at best. Only our Command Unit, which does not have firefighting or medical patient transport capability, can access this site. It is important to note access this property is the private property of the hotel. We cannot access this underpass with either an ambulance or fire engine. As of today, 10/14/15 at11 AM, this access point was blocked by a large debris pile generated from the ongoing remodel of the hotel. An easement and improvement of this access point would need to be negotiated with the land owner for this to be considered a viable temporary solution.

Response RLA1-4

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, has been updated to clarify the PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas. The Final EIS reflects the addition of a proposed mitigation measure to improve the timeliness of emergency response to properties south of the rail line in the Port area.

Comment RLA1-5

Chapter 3 -Affected Environment, Impacts, and Mitigation, Section 3.16.7.1, Applicant Mitigation, p. 3.16.28, states the applicant "will ensure that an emergency response vehicle with an 8-foot clearance is available and staged at the City of Aberdeen Fire Department". This concept has not been discussed in detail with the Aberdeen Fire Department. From an operational perspective, choosing which apparatus to respond with based on possible railway grade crossing closures is not practical with our current staffing and response model. The capabilities of the 8 foot clearance emergency response vehicle are not defined in the EIS. We are assuming the intent for this vehicle would be to access the low clearance access points at the Gateway Mall and the Wishkah River Bridge (intersection of River and F St.) for medical responses. Not addressed is the inability of our agency to provide fire suppression to the areas isolated when the railway grade crossings are blocked. The crossings include the Gateway Mall, Poyner Yard and the commercial properties south of the rail line in Aberdeen and the Port of Grays Harbor. The Draft EIS indicates that foam equipped fire engines would be provided to the Cities of Elma and Hoquiam and that the Washington State Department of Ecology should be tasked with providing agencies with grants for fire apparatus. The Aberdeen Fire Department is responsible for providing initial fire response for railway incidents on the east side of the Port of Grays Harbor, the Poyner Switching Yard, and the rail line through East Aberdeen. Guide #128 of the ERG indicates the initial evacuation distance for fires in railcars (Crude Oil or Methanol) is 1/2 mile. The rail line is within 1/2 mile of the city's densely populated downtown core, residential neighborhoods, and the occupancies of the Gate Way Mall.

It is my recommendation, based on the preceding factors listed, that the Aberdeen Fire Department's fire suppression capabilities be evaluated and augmented to effectively mitigate flammable liquid rail car fires. Included in this recommendation is the request that specialized flammable liquid response training, such as that offered at the Security and Emergency Response Training Center in Pueblo, CO be made available to the members of the Aberdeen Fire Department.

Response RLA1-5

Final EIS Chapter 4.4.1.3, *Response,* includes the information on initial response actions. Final EIS Chapter 3, Section 3.16.7.1, *Applicant Mitigation*, reflects the removal of the mitigation measure to provide the Aberdeen Fire Department with an emergency vehicle with an 8-foot clearance. Refer to Response to Comment RLA1-4.

Final EIS Chapter 4, Section 4.4.3.1, *Applicant Mitigation*, reflects the addition of a mitigation measure proposing that the applicant ensure that the City of Hoquiam have adequate fire-fighting equipment to respond to an incident at the project site. A second added measure proposes that the applicant provide training related to fire or explosions on site for fire department personnel from both jurisdictions (Hoquiam and Aberdeen). A third proposed mitigation measure is to develop a GIS layer that identifies critical facilities near the facility and along the PS&P rail line to improve local emergency planning and response.

Draft EIS Chapter 4, Section 4.5.3.2, *Applicant Mitigation*, proposes measure that the applicant will not accept crude oil by rail until PS&P meets with local emergency management officials to identify training needs for local responders who will respond to an emergency on the PS&P rail line. This effort would include development and execution of a training program to these responders to increase level of awareness and understanding of the hazards associated with an oil train incident.

The training, to be offered at least annually, would include identification of notification protocols, use of personal protective equipment, and equipment deployment procedures.

Comment RLA1-6

4. Marine terminal shore side firefighting response capabilities.

Contained within the Draft EIS are the impacts that increased production or storage of crude oil and Methanol would have on the marine transportation of the products. Strictly from a Hazards Analysis and Capability assessment viewpoint, neither the Aberdeen nor Hoquiam Fire Departments are equipped or trained to mitigate a ship fire involving flammable liquids. We do not have access to a fire boat nor do we have the expertise or personnel to adequately and safely manage these labor intensive and technical incidents.

In closing, thank you for taking the time to review the comments I have provided in response to the Draft EIS. If you have further questions please do not hesitate to contact me directly.

Respectfully,

Tom Hubbard
Fire Chief

Response RLA1-6

Final EIS Chapter 4.6.2.2, *Fires or Explosions,* added the information on the capabilities for initial response actions by the Aberdeen and Hoquiam Fire Departments for a ship fire. Waterside fire-fighting capabilities require coordination among the assets of Grays Harbor County, the U.S. Coast Guard, and private interests. Final EIS Chapter 3, Section 3.17.4.2, *Large Commercial Vessels, Large Commercial Vessel Operations, Tug Services*, has been updated to reflect fire-fighting capabilities of the Z-drive tug stationed in Grays Harbor.

RLA2, Board of Thurston County Commissioners, Sandra Romero

Comment RLA2-1

Thurston County
Washington
Since 1882

County Commissioners

Cathy Wolfe
District One
Sandra Romero
District Two
Bud Blake
District Three

Board of County Commissioners

Westway and Imperium Terminal Services Expansion Projects EISs

c/o ICF International
710 Second Avenue, Suite 550
Seattle, WA 98104

SUBJECT: Draft Environmental Impact Statements (EIS) for Westway and Imperium Expansion Projects

To Whom It May Concern;

Thank you for the opportunity to comment on the Draft Environmental Impact Statements (DEIS) for the proposed Westway and Imperium Terminal Crude Oil Storage and Handling Expansion Projects in the Port of Grays Harbor in Southwest Washington.

As a County Commissioner, I represent the citizens of Thurston County who are both directly and indirectly impacted by rail traffic and the growing risk of oil leaks, spills, fires, and explosions in our community.

The draft DEISs for these projects indicate that there have been accidents on the spur rail line that runs through south Thurston County. According to the DEISs, necessary repairs will be made sometime in the future, but there are no specifics about maintenance, or the funding sources for such repairs. This is not acceptable to the safety of Thurston County residents.

Increased oil and coal trains already snarl traffic; delaying emergency vehicles, truck freight, and commuters at at-grade crossings. Adding poorly maintained rail lines to the equation adds catastrophic risks from oil train derailment, explosion and fire to my list of concerns. I urge you to ensure the final EISs analyze how my community, and others along the railways and waterways, would be impacted by these proposals. Thank you again for the opportunity to comment.

Sincerely,

Sandra Romero
Commissioner, District 2

Response RLA2-1

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

RLA3, City of Ocean Shores, Crystal Dingler

Comment RLA3-1

The Ocean Shores' City Council passed a resolution on November 23, 2015 (attached) authorizing me to submit this response on behalf of our City government and citizens. Ocean Shores was not mentioned in this DEIS. We have miles of beaches and shoreline both in the Harbor and on the ocean without any viable local response mechanism in place. Nearly 6,000 people live on this 8 mile long, 2 mile wide peninsula at the mouth of Grays Harbor, and 50,000 may visit on a weekend, helping maintain our economy healthy. Thousands come to dig razor clams, view Snowy Owls, and enjoy the beach. 2014 B & O Tax showed gross revenues of over $91 million, supporting hundreds of local jobs. A single oil spill would devastate our environment, way of life, and livelihood. We request that no permits be issued to Westway and Imperium on these projects.

Response RLA3-1

Refer to the Master Response for Purpose and Focus of the EIS. Responses to specific issues are below. All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

Comment RLA3-2

If shipping crude oil through Grays Harbor is further considered, we have many questions and concerns.

1. Small spills. How would frequent small oil spills while loading or unloading crude oil be prevented or mitigated? Such spills would severely and adversely affect our beaches, birds, marine life, and economy.

Response RLA3-2

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment RLA3-3

2. Increased shipping traffic and ship size. The DEIS Summary p. S-16 states that vessel traffic would increase by about one vessel per day. The Draft EIS Vessel Traffic Fact Sheet states that, "The Westway project would add up to 238 additional vessel trips (one-way travel) per year. The Imperium project would result in up to 400 vessel trips a year." Which is correct? How will such an increase in vessels be managed? Will vessels be milling around outside the bar waiting to be allowed into the Harbor? Can unwieldy fully-loaded vessels exiting the Harbor avoid collisions with them?

Response RLA3-3

As described in Draft EIS Chapter 3, Section 3.17, *Vessel Traffic*, the proposed action would result in up to 238 tank vessel trips per year, which is equivalent to 0.7 vessel trip per day, on average. Chapter 6, *Cumulative Impacts*, considers the impacts of increased vessel trips related to the cumulative projects, including the REG (formerly Imperium Terminal Services) Expansion Project. Section 3.17.4.4, *Vessel Traffic Management*, describes vessel traffic management authorities and practices in Grays Harbor. Final EIS Section 3.17.4.4 reflects additional information related to the role of the pilots in preserving a safe vessel traffic system. Draft EIS Section 3.17.7.1, *Applicant Mitigation*, proposes mitigation measures to reduce the risk of a potential vessel incident.

Comment RLA3-4

The barge Nestucca dumped as much as 231,000 gallons of crude oil into the Pacific Ocean off Ocean Shores (Pullman Daily News 11/2/89). Oil hit beaches from Coos Bay to Cape Flattery. Panamax class oil ships could carry 17 million gallons. The Exxon Valdez 1979 oil spill was 11 million gallons. How would 17 million gallons of oil be cleaned off the beaches? What would it do when the crude sank? How would this disaster be paid for? How would the blow to our City's economy be mitigated?

3. Large oil spill planning and preparedness. The 1989 Nestucca spill resulted in ~2400 dead and dying birds on our Ocean Shores beaches, with an estimated 56,000 dead birds overall. In the Nestucca spill, our Convention Center was turned into a bird cleaning station for thousands of birds. Few survived. How will treatment of birds, marine life and animals be dealt with? Who will pay? How will the loss of business, perhaps for years, be mitigated? Will the applicants help us prepare, purchase equipment and supplies, store them, and train our potential volunteers (and keep those materials and people at a readiness level that is meaningful) to save our miles of beaches and bay-front tidelands? As mitigation, at least a round-the-clock oil spill response unit should be placed in Ocean Shores.

Response RLA3-4

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Final EIS Chapter 4, *Environmental Health and Safety,* and Chapter 5, *Extended Rail and Vessel Transport,* reflect additional information about the existing emergency response framework available to respond to oil spills in the study area and extended study area. Final EIS Chapter 4 also proposes additional mitigation measures to help address the risks of oil spills, fires, and explosions related to the proposed action.

Comment RLA3-5

4. Earthquake and tsunami threats. How will the design of the storage and loading facilities be done to avoid oil spill damage caused by earthquakes and tsunamis? Can the lack of required tsunami planning in such construction be overruled by the State?

Response RLA3-5

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment RLA3-6

5. Critical coastal areas. In a spill, environmentally critical areas will be addressed first. In our view, the entire coast, associated wetlands and estuaries are environmentally critical. Will some areas wallow in crude oil while others are addressed? Will large commercial oyster interests take priority over the recreational razor clam beds we share with Quinault Nation commercial interests? 6. Further study. The DEIS states several times that large spill mitigation is impossible. That should preclude the issuing of permits altogether. If it does not, the potential for spill impacts and mitigation must be further studied and scoped, and oil spill mitigation responses factored in.

Response RLA3-6

The response to any oil spill is unique and will be managed using federal and state regulations and guidance. Plans are developed at the federal, regional, state and local levels to assist in responding to oil spills. Draft EIS Chapter 4, Section 4.2.2.2, *Northwest Area Contingency Plan*, describes the planning framework in place for Washington State and discusses the factors considered when planning and implementing a response effort, including the development of geographic response plans. Geographic response plans are part of Northwest Area Contingency Plan. Each plan is written for a specific area (e.g., the Chehalis River or Grays Harbor) and includes tactical response strategies tailored to a particular shore or waterway at risk of injury from oil. Geographic response plans have two main objectives: to identify sensitive resources at risk of injury from oil spills and to direct response actions related to sensitive resource protection during the initial hours of a response. These plans help coordinate response efforts by the responsible party and federal and state agencies. Strategies in the plan are deployed by responders after the immediate concern of controlling and containing the source of a spill has been addressed. Geographic response plans contain maps and descriptions of natural, cultural, and economic resources and identify strategies to reduce harm to those resources. They also prioritize which response strategies should be implemented based on the location of the spill.

Draft EIS Chapter 4 considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

RLA4, City of Olympia, Stephen Buxbaum

Comment RLA4-1

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olympiawa.gov

November 30, 2015

Westway and Imperium Terminal Services Expansion Projects
c/o ICF International
710 Second Avenue, Suite 550
Seattle, Washington 98104

Subject: Draft Environmental Impact Statements (EIS) Scoping for Westway and Imperium Expansion Projects

To Whom It May Concern:

We are responding to the draft Environmental Impact Statements (EISs) prepared in consideration of the proposed Westway Terminal Company LLC and Imperium Terminal Services application to expand existing bulk liquid storage terminals located at the Port of Grays Harbor Terminal 1.

The City of Olympia has previously opposed development and expansion of oil by rail transfer by unanimous resolution of the City Council [November 25, 2014, Resolution #M-1812]. We believe it is important to reiterate our serious concern over the projects proposed for Grays Harbor County.

The draft EIS should more carefully and fully qualify and quantify the devastating impact that expanded facilities will have on the communities, regional economy and environment of Washington State. Consideration of facilities in Grays Harbor need to be viewed in a broader context given the number and the extend to which oil and coal export facilities are being proposed for coastal Washington and Oregon.

Our concerns include:

Projected derailments on shared track that serves the entire region is not clearly or completely quantified and qualified. movement of empty trains, which some studies show as being more at risk of derailment than full, is of serious concern given how interconnected the state's rail system is. Derailment of even one train containing petroleum could potentially create chaos on our rail system for months or years.

Response RLA4-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

Comment RLA4-2

Environmental concerns continue to be understated in terms in the consequences of global warming. Ocean acidification, loss of marine habitat, sea level rise, changes to weather patterns and cycles - these and other issues must be directly considered when it comes to the transfer and expansion of high volumes of oil to Pacific Rim Nations. The consequences of filling our atmosphere from cargo transferred through our public ports must be fully considered.

Additional concerns pertain to potential for treaty right violations and inadequate local regulatory and emergency response systems and protocols.

We implore you to fully consider the devastating consequences of expanding transport of products that are responsible for global warming. Thank you for your consideration.

Sincerely,

Stephen H. Buxbaum
Mayor

Nathaniel Jones
Mayor Pro Tem

cc: Olympia City Council

Response RLA4-2

Draft EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, acknowledges that greenhouse gas emissions from the cumulative projects would contribute to global greenhouse gas emissions, which contribute to climate change. The section also describes the projected impacts of climate change in the Pacific Northwest.

Draft EIS Chapter 3, Section 3.12, *Tribal Resources*, describes potential impacts of the proposed action on tribal resources.

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for information on emergency response systems and protocols.

RLA5, City of Washougal, David Scott

Comment RLA5-1

COMMENTS on the Draft Environmental Impact Statements for Westway and Imperium Expansion Projects

1. Reference: General Comment

Comment:

Washington State, in this case the Department of Ecology, has a responsibility under its SEPA regulations to evaluate proposed actions to determine the extent of a potential impact to citizens of the state and to apply reasonable mitigation actions to reduce risk to insignificant levels before the proposed action is approved.

The greatest potential risk to public safety presented by the proposed actions involves a unit train accident/derailment in a populated area with a release of crude oil, resulting in a major explosion/fire. Such an event would quickly overwhelm the abilities of local first responders and could require mass evacuation of local residents. The loss of human life is a real possibility. These risks are not just theoretical – these scenarios have occurred throughout the nation.

A significant impact to public health presented by the proposed actions involves a unit train accident/derailment in a populated area with a release of crude oil, resulting in contamination of groundwater supplies for municipal drinking water wells serving urban populations. Such an event would totally compromise the drinking water supply for a municipality, resulting in a significant impact to the public health of a community.

The geographic "study area" specified in the DEISs is limited to a very small portion of the unit train transportation route. Ecology has evaluated the public safety and health risks of a unit train accident within the study area and has included mitigation actions to protect the local citizens.

The far greater threat to Washington citizens is related to crude oil-by-rail transport through the state before the trains reach the study area; i.e., the "extended study area". Unit train speed limits, for example, are significantly higher in the extended study area. The threat to citizens who live in the extended study area is also significantly increased by the sheer volume of crude oil transported through their communities on a daily basis. Crude oil unit trains other than those associated with the proposed action include existing traffic that transits through these communities along the Columbia River Gorge. Additional proposed projects within the region (e.g., Tesoro-Savage and NuStar facilities at the Port of Vancouver and a refinery at the Port of Longview) would overshadow the unit train traffic along the Columbia River Gorge attributable to the proposed Westway and Imperium expansion projects. Nevertheless, the proposed Westway and Imperium expansion projects have an additive effect and further stress the abilities of local communities to respond to a rail incident and add to the overall risk of the local citizens.

Ecology has not done an adequate job of analyzing cumulative impacts of the proposed actions within the extended study area and has dismissed the need for any mitigation actions to protect the citizens. This level of analysis within the extended study area, and specifically for the City of Washougal, is substandard and unacceptable. Many of the following specific comments offered by the City of Washougal are based on this theme.

Recommendation:

Ecology should conduct the risk analysis related to crude oil-by-rail transport throughout the extended study area in Washington State in the same manner as it analyzed risks within the study area. This would include a thorough analysis of cumulative impacts within the extended study area, as required by the SEPA regulations. Ecology should specify appropriate and realistic mitigation measures for transport of crude oil-by-rail in the extended area.

Additional recommendations related to this comment are detailed in the other specific comments offered by the City of Washougal.

Response RLA5-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

Comment RLA5-2

2. Reference: DEIS Chapter 3.15

Comment:

The study area for rail traffic includes the Puget Sound & Pacific Rail line from Hoquiam to its junction with the BNSF main line in Centralia. It does not include the portion of the BNSF main line that passes through the City of Washougal. The impact analysis is based on risk factors for the study area, not risk factors associated with the trains that pass through Washougal. The "extended study area", as defined in the DEISs, includes the BNSF main line from Centralia, Washington to the Bakken formation in North Dakota.

The extended study area within the State of Washington, which includes the City of Washougal, should receive the same level of analysis as the study area so that the state and local governments, including Washougal, can understand the potential impacts to their jurisdictions.

Recommendation:

Expand the rail traffic study area to include the City of Washougal. Perform a public safety risk analysis that considers risk factors that are specific to Washougal, including the potential for a derailment, the consequences of such an event and the City's vulnerability.

Response RLA5-2

Refer to Response to Comment RLA5-1.

Comment RLA5-3

3. Reference: DEIS Chapter 3.15 and Chapter 5.4.3

Comment:

The proposed projects would receive crude oil in unit trains of up to 120 rail tank cars. These trains would pass through the City of Washougal in route to their destination in Hoquiam. The combined projects could add 11.4 additional loaded unit trains per week.

According to BNSF, 18 unit trains loaded with crude oil on average passed through Washougal each week in 2014 (Ch.5.4.3, page 18, Figure 5-7). The combined number of trains passing through the City now rise to an average of 29.4 per week or 1,528 per year. This is an increase of approximately 63 percent. This does not include the additional rail traffic that would be generated by proposed major crude oil facilities in the Vancouver area (e.g., Tesoro-Savage and NuStar) and the cumulative impacts of all oil-by-rail traffic.

Recommendation:

Expand the rail traffic analysis to include crude oil unit trains that pass through the City of Washougal. The analysis should also include the cumulative impact of existing and anticipated future unit trains over the design life of each proposed expansion project as a risk factor.

Response RLA5-3

Refer to Response to Comment RLA5-1.

Comment RLA5-4

4. Reference: DEIS Chapter 3.15.4.2 and DEIS Chapter 5.4.3.2

Comment:

Federal Railroad Administration (FRA) regulations limit the maximum train speed at 25 mph for the unit trains that pass through the study area. These same unit trains are allowed to travel at speeds up to 40 mph (Ch. 5.4.3.2, page 11) when transiting though Washougal, a city with numerous grade-level crossings. This increased speed is a significant factor in the analysis of the likelihood of a major train derailment.

Recommendation:

Perform a risk analysis of unit train rail traffic transiting through the City of Washougal. The analysis should include a 40 mph train speed as a risk factor.

Response RLA5-4

Refer to Response to Comment RLA5-1.

Comment RLA5-5

5. Reference: DEIS Chapter 4.1

Comment:

The study area for Environmental Health and Safety impacts associated with unit train rail transport includes the Puget Sound & Pacific Rail Line from Hoquiam to its junction with the BNSF main line in Centralia. It does not include the portion of the BNSF main line that passes through the City of Washougal. The impact analysis is based on risk factors for the study area, not risk factors associated with the trains that pass through Washougal.

Recommendation:

Expand the Environmental Health and Safety study area to include the City of Washougal.

Response RLA5-5

Refer to Response to Comment RLA5-1.

Comment RLA5-6

6. Reference: DEIS Chapter 3.16

Comment:

The impact on emergency vehicle access and response at grade level crossings was analyzed within the study area. The analysis identified areas where emergency vehicle access and response would be substantially impacted. An emergency vehicle impact analysis was not done for the City of Washougal.

Recommendation:

Expand the analysis of rail traffic impact on emergency vehicle access and response to include the City of Washougal.

Response RLA5-6

Refer to Response to Comment RLA5-1.

Comment RLA5-7

7. Reference: DEIS Chapter 5.5.1.1

Comment:

The DEISs note that the risk of a derailment, oil spill, or incident involving rail cars is expected to increase with the increase in rail traffic in the extended study area. This level of risk increase, however, was not described or quantified in any way.

Recommendation:

The increased risks to Washougal should be analyzed and quantified so that residents and government agencies can better understand the public safety and health impacts of the proposed projects.

Response RLA5-7

Refer to Response to Comment RLA5-1.

Comment RLA5-8

8. Reference: DEIS Chapter 5.6

Comment:

The DEISs state that rail accidents have a low likelihood in the extended study area, apparently in consideration of the "low" number of trains per day that would support the proposed expansion projects. The proposed projects have a maximum of 1,188 trains per year, or 142,560 oil tanker cars per year (average 120 cars per train) passing through Washougal. This is 23,760 trains or 2,851,200 tanker cars over the 20-year project period. The assumption of a low likelihood of a rail accident in the extended study area is not supported by the information in the DEISs.

Section 5.6 also states that "a risk of a major spill, fire, explosion, or derailment in the extended study area exists but has a low likelihood based on the small increase in overall rail and vessel traffic due to the proposed actions. Therefore, no mitigation is proposed in the extended study area". SEPA regulations clearly state that although the likelihood of an event may be small, the consequence of that event can be sufficient to categorize the risk of that event as "significant". The decision that "no mitigation is proposed in the extended study area" is without basis and cannot be supported by the DEIS.

Recommendation:

The SEPA analyses should consider the likelihood of rail accidents in the extended study area by specific locations and particularly in or near population centers, such as the City of Washougal. Calculations should include the likelihood of rail accidents in these areas over the design life of the proposed expansion projects (assumed to be 20 years).

Categorize the overall risk of a rail transport accident in and around the City of Washougal using the same quantitative methods of risk calculations that were used for the study area. Apply mitigation actions to the transport of oil-by-rail through Washougal, based on the actual risks posed. The actual risks are a function of likelihood and consequence of an accident involving a crude oil unit train.

Response RLA5-8

Refer to Response to Comment RLA5-1.

Comment RLA5-9

9. Reference: DEIS Chapter 5.7

Comment:

The DEISs state the potential for significant adverse impacts is high in the extended study area. They state that the likelihood of a large spill, fire or explosion is low, "the potential for significant adverse

impacts on the environment and human health in the case of such an incident is high". The magnitude of these impacts, however, is not further described or quantified.

Recommendation:

The analysis should assess and describe and quantify these potential high impacts to locations within the extended study area over the design life of the proposed expansion projects. A quantitative analysis of risk to public safety and health is of particular importance to population centers, including the City of Washougal. A detailed analysis of local conditions (e.g., number of miles, train speeds, number of at-grade crossings, etc.) is necessary to conduct a defensible quantitative statement of risks and impacts to public safety.

Response RLA5-9

Refer to Response to Comment RLA5-1.

Comment RLA5-10

10. Reference: DEIS Chapter 5.6 and Chapter 5.7

Comment:

The DEISs state that no mitigation measures are proposed for the extended study area, apparently because none would completely eliminate adverse consequences of large spills, fires or explosions. This is despite the description of many mitigation measures for the study area (see DEIS Section 4.5.3), where they also could not completely eliminate adverse consequences.

Recommendation:

The analysis should describe specific mitigation measures for Washougal, including first-responder capabilities and assets, and their effectiveness in mitigating the potential high impacts to public safety, and mitigation to the impact to groundwater supplying Washougal's drinking water wells.

Response RLA5-10

Refer to Response to Comment RLA5-1.

Comment RLA5-11

11. Reference: DEIS Chapter 6.4.2

Comment:

The plans and elements reviewed for the cumulative impacts were limited to those related to the study area. The cumulative impacts do not address plans for the extended study area, which would include, among others, foreseeable actions for new oil terminals, storage and transfer facilities and a refinery proposed in or near Vancouver, Washington. These are not addressed in Section 6.5.8 and will all increase the cumulative impacts in the extended study area.

Recommendation:

The discussion of cumulative impacts should address the reasonably foreseeable actions in the expanded study area. Specially, a discussion and quantitative assessment of cumulative impacts of

reasonably foreseeable actions related to public safety and health near and within the cities of Vancouver and Washougal should be provided.

12. Reference: DEIS Chapter 6.5.8.1

Response RLA5-11

Refer to Response to Comment RLA5-1.

Comment RLA5-12

Comment:

The DEISs describe that the cumulative impacts could result in increased risks of a derailment, oil spill or other incidents involving rail cars in the extended study area. The likelihood and consequences of this increased risk are not described, nor are the increased risks quantified.

Recommendation:

The analysis should assess and describe the likelihood and magnitude of these increased risks to Washougal. The same process for quantifying cumulative impacts within the study area should be used to quantify the cumulative impacts of increased rail traffic within the City of Washougal.

Response RLA5-12

Refer to Response to Comment RLA5-1.

Comment RLA5-13

13. Reference: DEIS Appendix M

Comment:

The risk assessment in Appendix M includes only the terminal and the study area (PS&P rail line and Grays Harbor Navigation Channel). The extended study area is not included, which excludes Washougal from the analysis.

Recommendation:

The risk assessment scope should be expanded to include the City of Washougal.

Response RLA5-13

Refer to Response to Comment RLA5-1.

Comment RLA5-14

14. Reference: DEIS Appendix M

Comment:

The risk assessment used the train speeds in the study area, which is a maximum of 25 mph. It notes that, in general, "slower speeds result in fewer cars derailed" (Appendix M, page 4-4). The DEISs did not describe the rail conditions and train speeds that may occur in areas outside the study area (e.g., Washougal), which may be greater than 25 mph.

Recommendation:

The risk assessment scope should be expanded to include the rail conditions and maximum train speeds near and within the City of Washougal.

Response RLA5-14

Refer to Response to Comment RLA5-1.

Comment RLA5-15

15. Reference: DEIS Chapter 4.1 and Chapter 4.5.2

Comment:

The Environmental Health and Safety Rail Transport analysis identified several accident scenarios ranging in size from small to large. The study makes an assumption that large accidents involving up to 30 tank cars with the potential for fire and explosions are less likely to occur than smaller accidents. Statistics show that the vast majority of accidental releases are relatively small and do not involve fires or explosions. The analysis used to determine the likelihood of a rail accident, its size and potential for fire and explosions was based on historical data for the rail study area (PS&P rail line), not the BNSF rail line that runs through Washougal. As pointed out in comment 3, the maximum train speed within the rail study area is 25 mph. The maximum train speed for the BNSF rail line that passes through Washougal is 40 mph. As stated in Ch.4.5.1, page 3, "The length of the train and train speed are critical factors in predicting the severity of a derailment. In general, the greater the mass and speed, the greater the force and potential impacts". A mile long unit train of crude oil derailing at 40 mph is much more likely to result in a large accident involving many, leaking, burning, exploding tank cars.

Recommendation:

Expand the Environmental Health and Safety study area to include the City of Washougal. The rail transport risk analysis should include historical data for rail traffic passing through Washougal and should also include the higher train speeds as a significant risk factor.

Response RLA5-15

Refer to Response to Comment RLA5-1.

Comment RLA5-16

16. Reference: DEIS Chapter 4.5.2.1

Comment:

This section of the Environmental Health and Safety Rail Transport analysis states: "The risk of an oil spill from train operations typically relates to the risk of derailment. A derailment does not mean a spill will happen; a train can derail with no spill resulting. A leak could occur during transport of the rail car but the spill quantity at a single point along the rail would likely be small because the leak could occur over several miles of track. Because of the increased number of rail trips to and from the project site, the proposed action would result in the potential for more frequent spills of bulk liquids relative to the no-action alternative, although the orders of magnitude are very similar. The likelihood of very large releases would remain low. As noted previously, it is not possible to

predict the timing or magnitude of an incident; therefore, the following spill scenarios were considered to provide an understanding of risks under the proposed action."

The analysis determined the likelihood of a rail accident that results in a spill could range from once every 105 years for a small spill (1 tank car involving up to 1,000 gals); to once every 74,000 years for a large worst-case scenario (30 tank cars involving up to 900,000 gals). It is important to note that this analysis was limited to maximum train speeds of 25 mph and historical data for the rail transport study area (PS&P rail line). It did not analyze the likelihood of a spill and potential fire or explosion for the BNSF main line that passes through the City of Washougal with a maximum train speed of 40 mph.

Recommendation:

Expand the Environmental Health and Safety study area to include the City of Washougal. The rail transport risk analysis should include historical data for rail traffic passing through Washougal and should also include the higher train speed as a significant risk factor.

Response RLA5-16

Refer to Response to Comment RLA5-1.

Comment RLA5-17

17. Reference: DEIS Chapter 4.5.2.2

Comment:

This section of the Environmental Health and Safety Rail Transport analysis states: "Although fires or explosions can result from spills resulting from events like collisions and derailments, long-term historical data show that most spills do not result in fires or explosions. A fire or explosion would be less likely to occur than a spill. While there have been multiple recent derailments of trains on main lines that resulted in fires or explosions, the chance of an extreme derailment is very limited in the study area because of the slow speeds on the PS&P rail line, which are slower than typical mainline speeds. In general, large derailments from high-speed trains lead to releases from multiple rail cars. The energy involved in high-speed derailments and the resulting scatter of rail cars yield the greatest chance of a fire that affects other rail cars and possibly result in an explosion." This statement reinforces the recommendations made regarding train speed in other comments.

Recommendation:

Expand the Environmental Health and Safety study area to include the City of Washougal. The rail transport risk analysis should include historical data for rail traffic passing through Washougal and should also include the higher train speed as a significant risk factor.

Response RLA5-17

Refer to Response to Comment RLA5-1.

Comment RLA5-18

18. Reference: DEIS Chapter 4.5.2.1

Comment:

This section of the Environmental Health and Safety Rail Transport analysis looks at oil spill emergency response. It states: "The federal oil spill response plan (49 CFR 130) currently applicable to rail operators with oil shipments of a capacity of 3,500 to 42,000 gallons per car does not require equipment to be contracted and available for an immediate response to an oil spill incident. In August 2014, PHMSA issued an advanced notice of proposed rulemaking seeking comment on potential revisions to its regulation to require operators of high-hazard flammable trains to prepare comprehensive oil spill response plans (79 FR 45080). The comprehensive plans would require better coordination, identification of personnel, equipment, and training for responses to spills, and submission of the plan to the Federal Railroad Administration".

Recommendation:

Include an additional mitigation measure that would require railroads that operate high-hazard flammable unit trains to: 1.) Prepare comprehensive oil spill response plans and provide annual training on the plan to affected local, state and federal response agencies. 2.) Cache appropriate firefighting emergency response equipment and make it available to local emergency responders for immediate response to an oil spill emergency.

Response RLA5-18

As noted in the revisions to Final EIS Chapter 4, Section 4.2, *Applicable Regulations*, a new rule, WAC 173-186, Oil Spill Contingency Plan—Railroad, has been finalized that establishes railroad oil spill contingency plan requirements, drill and equipment verifications that would be required of PS&P prior to operations. The mitigation measure presented in Draft EIS Chapter 4, *Environmental Health and Safety*, recommending that contingency planning by PS&P be completed will remain in place into the rule takes effect. Additionally, Final EIS Chapter 4 has been revised to include additional mitigation measure to address emergency response gaps. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions.

Comment RLA5-19

19. Reference: DEIS Chapter 4.5.3

Comment:

This section of the Environmental Health and Safety Rail Transport analysis identifies a variety mitigation measures involving emergency planning, training and equipment that would help reduce impacts related to rail transport. It also includes an assessment of local emergency response capabilities. Unfortunately the assessment and mitigation measures are limited to the rail transport study area along the PS&P rail line. It does not assess local emergency response capabilities for the City of Washougal or identify mitigation measures that could help close any gaps the assessment might reveal.

Recommendation:

Conduct a comprehensive emergency response capabilities gap analysis for the City of Washougal. The analysis should focus on the threat presented by crude oil unit trains. The analysis should consider the consequences of a worst case scenario (i.e., burning oil spill involving up to 30 rail tank cars) and make recommendations for mitigating measures that would help close any gaps that the analysis might reveal. Nevertheless, it is important to note that Chapter.4.5.4, page 16 states: "no

mitigation measures would completely eliminate the possibility of a large spill or explosion, nor would they completely eliminate the adverse consequences of a large spill or explosion".

Response RLA5-19

Refer to Response to Comment RLA5-1.

Comment RLA5-20

20. Reference: DEIS Chapter 4.7.2.1

Comment:

This section of the Environmental Health and Safety Rail Transport analysis states:

"Fires or explosions of crude oil are most likely to occur during transport when higher speeds provide enough energy to generate a spark. Recent incidents involving rail transport provide information about the potential impacts on human health related to incidents involving fires and in some cases, explosions… Many of these incidents involved trains traveling at speeds greater than speeds allowed on the PS&P rail line (25 miles per hour)".

This statement reinforces the recommendations made in other comments regarding train speed.

Recommendation:

Expand the Environmental Health and Safety study area to include the City of Washougal. The rail transport risk analysis should include historical data for rail traffic passing through Washougal and should also include the higher train speed as a significant risk factor.

Response RLA5-20

Refer to Response to Comment RLA5-1.

Comment RLA5-21

21. Reference: DEIS Chapter 4.7.2.2

Comment:

This section of the Environmental Health and Safety Rail Transport analysis is focused on the public health impact of a fire or explosion resulting from a unit train oil spill. Section 4.7.2.2 states: "For a fire or explosion, evacuations could be used to protect nearby residents. Emergency responders would determine if evacuations are needed". This is the only reference to the direct human health consequences of a fire or explosion. The analysis also considers the indirect human health consequence of air pollutants that would result from a fire.

Recommendation:

The Environmental Health and Safety Rail Transport analysis should include a more comprehensive study of all possible impacts and emergency response mitigation measures that could be implemented to help reduce the human health consequences of a large spill, fire or explosion in an urban area. The analysis study area should also be expanded to include the City of Washougal.

Response RLA5-21

Refer to Response to Comment RLA5-1.

Comment RLA5-22

22. Reference: DEIS Chapter 5.7

Comment:

This section of the analysis asks a very important question: "Would the proposed action have unavoidable and significant adverse impacts on rail and vessel transport in the extended area?"

The answer given states: "As discussed in Chapter 4, Environmental Health and Safety, large oil spills, fires, or explosions would likely include unavoidable and significant adverse environmental impacts. Although the likelihood of a large spill, fire, or explosion is low, the potential for significant adverse impacts on the environment and human health in the case of such an incident is high. The specific impacts would vary based on the location, amount spilled, type of liquid, and weather conditions. Examples of these impacts are described in Section 4.7, *Impacts on Resources*. Existing regulatory requirements for the prevention, preparedness, and response to a large spill, fire, or explosion and mitigation measures to reduce impacts are detailed in Chapter 4. However, no mitigation measures would completely eliminate the possibility of a large spill, fire, or explosion from rail cars carrying crude oil or hazardous materials nor would they completely eliminate the adverse consequences of a large spill, fire, or explosion.

Unfortunately the analysis referenced above is based on the Rail Transport study area (PS&P rail line). It does not include the BNSF rail line that passes through the City of Washougal.

Recommendation:

Expand the study area for the Environmental Health and Safety rail transport analysis, to include the City of Washougal. The analysis should include historical data for rail traffic passing through the City of Washougal and should also include the higher train speed as a significant risk factor.

23. Reference: DEIS Chapter 3.3.4.5, 4.5.2.1 and 4.7.1.1

Response RLA5-22

Refer to Response to Comment RLA5-1.

Comment RLA5-23

Comment:

Chapter 3.3.4.5 addresses impacts to groundwater, but does not include impacts in the extended study area, specifically in the City of Washougal. Chapter 4.5.2.1 addresses the risk of an oil spill on Environmental Health, but does not include impacts in the extended study area, specifically in the City of Washougal. Chapter 4.7.1.1 addresses impacts on resources, specifically the impacts of an oil spill on groundwater, but does not include impacts in the extended study area, specifically in the City of Washougal. The City of Washougal's West-side wellfield, which consists of four wells and supplies two-thirds of Washougal's domestic drinking water supply, is located immediately adjacent to the BNSF rail line. Impacts from an oil spill along the BNSF line adjacent to the West-side wellfield have not been addressed.

Recommendation:

Expand the study area for Chapters 3.3.4.5, 4.5.2.1 and 4.7.1.1 to address impacts from an oil spill on the BNSF line adjacent to the City of Washougal's West-side wellfield. Impacts should be thoroughly evaluated and adequately analyzed and mitigation provided.

End of Comments

Response RLA5-23

Refer to Response to Comment RLA5-1.

RLA6, Grays Harbor County Water District #2, Reg Hearn

Comment RLA6-1

The rail line that will transport the crude passes within the water district's aquifer recharge area. The District would like specifics as to how a spill in that region would be handled. The District is surprised that we have not been contacted regarding this EIS.

Response RLA6-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. Section 4.7.1.1, *Water*, describes the potential impacts on groundwater as a result of an oil spill and acknowledges that the "highest risk of groundwater contamination from spilled crude oil would be along the PS&P rail line, which runs through several areas underlain by largely unconfined surficial aquifers."

The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including potential impacts on groundwater.

RLA7, Jefferson County Board of Commissioners, Tami Pokorny

Comment RLA7-1

November 23, 2015

Westway and Imperium Terminal Services Expansion Projects EISs c/o ICF International 710 Second Ave., Suite 550 Seattle, WA 98104

Dear Interested Parties:

The purpose of this letter is to comment on the Draft Environmental Impact Statements [*footnote: http://www.ecy.wa.gov/geographic/graysharbor/terminals.html*] (dEISs) for terminal expansion projects proposed by Westway Terminal Company LLC (Westway) and Imperium Terminal Services

LLC (Imperium). We have concerns surrounding these projects and the harm that they may cause to the people and resources of Jefferson County and Washington State, both directly and indirectly. Comments that we submitted during the scoping process are attached for your reference.

The unavoidable and adverse significant impacts identified by the dEISs, in combination with the large number of recent crude-by-rail spills and the natural and human-caused disasters affecting bulk storage of oil, convince us that the proposed facilities present unacceptable risks to human health and safety, the ecological integrity of Grays Harbor, and to young people of today and generations to follow. The proposed projects will exacerbate climate change, ocean acidification and other worsening environmental conditions linked to human-caused C02 emissions - some of which have already impacted the shellfish industry and are risking jobs and resources within Jefferson County. [*footnote: http://www.ibtimes.com/co2-emissions-threaten-seafood-ocean-acidificati on-spreads-along-us-coastlines-1824158*]

The proposed projects will degrade the quality of day-to-day life for local people-for instance due to lost access to fishing areas and longer vehicle waits at railroad crossings-and the terminal projects will return relatively few local jobs. Instead, they will function to open the spigots wider for Bakken oil as well as Canadian tar sands oil destined for combustion in Asia. The proposed Grays Harbor projects, and the more than 20 other new oil, gas and coal terminals and pipelines proposed in the Pacific Northwest since 2012 [*footnote: http://www.sightline.org/research_item/northwest-fossil-fuel-exports-2*], point our region in the wrong direction -towards unmitigable degradation of our atmosphere, ocean, biosphere and climate.

Response RLA7-1

Comment acknowledged.

Comment RLA7-2

The new installations would create new ties between the Port of Grays Harbor and the fossil fuel industry just as renewable energy technologies gain ground elsewhere. [*footnote: http://www.huffingtonpost.com/adnan-z-amin/whatever-happens-in-pa ris_b_8523098. html*]

Grays Harbor estuary plays an important role in the lifecycles of iconic Northwest species such as Dungeness crab and salmon. Both are very important to Jefferson County's economy and to sustaining a way of life that is cherished by local residents as well as frequent visitors to coastal communities from places like Port Townsend, Sequim and Port Angeles.

Grays Harbor and the coast nearby provide habitat for numerous ESA-listed species. These include Southern Resident Killer Whales [*footnote: http://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/marinemammal/satellite_tagging/blog 2015.cfm*], marbled murrelets, snowy plovers, and streaked homed larks. Hundreds of thousands of shorebirds rely on marsh habitat in Grays Harbor during the annual spring migration. Increased numbers of vessel transits and increased vessel density in combination with the risks associated with challenging seas, weather and visibility place these animals at greater risk. Just one major oil spill could have dire consequences. Short of that, collisions with marine mammals will likely become more frequent. Releases of invasive species contained in ballast water or from vessels supporting biofouling organisms will become more serious. There will be more vessel noise, wakes and related impacts and consequences. We are convinced that unavoidable and adverse significant impacts to animals would indeed occur.

Response RLA7-2

Draft EIS Chapter 3, Section 3.5, *Animals*, addresses potential impacts on animals from construction and routine operation of the proposed action, including those described by the commenter. Impacts are not considered significant.

Comment RLA7-3

Anchoring in Grays Harbor is particularly challenging due to shifting current and sediments and periods of low visibility. In the EISs, please identify potential sites for a designated anchorage with specific requirements for tank vessels as described in 33 CFR 109.07 (Westway - 4.6.3.2) and describe how risks of grounding, dragging or losing anchor and collision at these sites will be minimized. Please also describe impacts to treaty rights, plants and animals due to shading and other impacts from anchoring activities in new location(s) and how these will also be¬ mitigated.

Response RLA7-3

Refer to Draft EIS Chapter 3, Section 3.17.4.2, *Large Commercial Vessels, Anchorage Areas*, for anchorage information and management discussion.

Comment RLA7-4

According to the dEIS (Westway 3.5),

Ballast water discharge and vessels supporting biofouling organisms could transfer a variety of materials into Grays Harbor that could harm aquatic ecosystems. Primary among these contaminants are invasive marine plants and animals, bacteria, and pathogens that could displace native populations and harm aquatic life. Should an introduced species become a successful invader in a new environment, it can cause a range of ecological impacts. These include competing with native species and altering environmental conditions (e.g., increased water clarity due to mass filter feeding), altering food web and the overall ecosystem and displacing native species, reducing native biodiversity and even causing local extinctions...These aquatic system impacts can also lead to economic and public health impacts.

Simply monitoring for these impacts, as recommended and described in the EIS, is insufficient to protect ESA-listed species and their habitats. Some invading species could be impossible to eradicate and their impacts extremely difficult to mitigate.

Response RLA7-4

Potential ballast water impacts on the aquatic environment are addressed in Draft EIS Chapter 3, Section 3.4, *Plants*, and Section 3.5, *Animals*. Existing federal and state regulations address ballast water management. The Washington State ballast discharge regulations (RCW 77.120.040 and WAC 220-150) include reporting, monitoring, and sampling requirements of ballast water; all vessels must submit nonindigenous species ballast water monitoring data. Washington Department of Fish and Wildlife may also board and inspect vessels under WAC 220-150-033 without advance notice to provide technical assistance, assess compliance, and enforce the requirements of Washington State ballast water management program laws and regulations. Penalties and enforcement of not complying with the regulations are covered in WAC 220-150-080. To further minimize the risk of ballast water on vegetation communities and animals, proposed mitigation is included in Sections 3.4 and 3.5 for the applicant to develop and implement a monitoring plan in consultation with

Washington Department of Fish and Wildlife prior to the start of proposed operations. Refer to the Master Response for Mitigation Framework for an explanation of how mitigation measures were identified in the EIS.

Comment RLA7-5

The DEISs also provide no mitigation for vessel strikes or impacts of vessel noise on marine mammals. The statement for that "large whales...are not likely to enter the harbor" is incorrect. Gray whales are widely known to feed in shallow waters and are frequently seen inside of Grays Harbor. The conclusion that "there would be no unavoidable and significant adverse impacts" to plants and animals is untrue and should be corrected.

Response RLA7-5

Final EIS Chapter 3, Section 3.5, *Animals*, reflects additional information to address whale use of Grays Harbor, including frequent use by the gray whale. The vessel impact mechanisms described in Section 3.5 remain the same, but marine mammals that are more common in Grays Harbor and nearshore coastal waters would be at a higher risk from vessel strikes. Final EIS Section 3.5.5.2, *Proposed Action, Operations*, has been revised to reflect the higher risk for these species. However, the likelihood of vessel strikes and the potential for population-level impacts would remain low; therefore, potential impacts are not considered significant. As described in Draft Section 3.5.5.2, potential vessel noise impacts on marine animals also would not be significant. Therefore, mitigation is not proposed for these impacts.

Comment RLA7-6

The vast majority of railway accidents involve derailment.[*footnote: http://www.scientificamerican.com/report/train-tragedies-and-transformations*] The Puget Sound & Pacific Railroad connecting Chehalis with the Port of Grays Harbor has suffered for lack of maintenance and its historical accident rate is ten times the national average (Imperium - Chapter 4). The EIS anticipates that the implementation of additional rail improvements designed to support the proposed projects will still allow for an accident rate that is higher than the national average. One reason is that,

> For about 1,000 feet at a point about 4 miles west of Montesano, the speed limit is 10 mph. The track is on the bank of the Chehalis River. The soil condition is such that maintenance to the tolerance required for 25 mph speed limit is difficult. (Westway 3.15-11)

Please provide additional information about the history of maintenance, repairs and vulnerabilities of this section of track and more specific information about the soil condition, how it might vary and why maintenance to achieve 25 mph is difficult. Please quantify the increase in risk of an accident in this location if the proposed action, in addition to the Imperium and U.S. Rail projects, are implemented. If an accident occurs in this stretch, who and what would be affected by a spill or explosion in addition to the Chehalis River? Is relocating the track a viable option for improving safety here? What other options may exist?

Response RLA7-6

Consideration of relocating the railroad is outside the scope of this EIS. Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection

requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

The risk analysis considers different potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety,* a spill could occur at any location along the rail or vessel routes. Scenarios were based on operations (and, in some cases, locations) where spills could occur more frequently or could result in a worst-case spill. The potential impacts from a spill would vary based on weather, tides, location and other factors. As noted in Section 4.5.2.1, *Oil Spills*, the risk of an incident along a specified length of railroad is proportional to that segment's length relative to the length of the PS&P rail line in the study area as the PS&P was analyzed for the full length, not individual segments. For example, the risk of an incident involving the release equivalent to one rail car (30,000 gallons [714 barrels]) anywhere along the 59-mile-long study area is once every 36 years. Because the 1,000-foot long segment identified in the comment is a small fraction of the study area, the chance of such an incident occurring in that location would a small fraction of the predicted frequency for the whole PS&P. This would be equal to once in 11,000 years for the proposed action and once in 3,300 years for the cumulative scenario. Even if the segment is viewed as more risky than an average stretch of track, the short length limits the overall risk exposure to a small fraction of the overall risk.

Section 4.2.2, *What framework prepares for an incident?* and Section 4.2.3, *What framework provides responses to an incident?* describe the regulations and guidance that govern how officials would respond to an oil spill, including information about response strategies developed in the Grays Harbor and Chehalis River Geographic Response Plans. The geographic response plans provide information on resources that could be affected by a spill at specific locations and on response strategies.

Comment RLA7-7

Around the world, crude oil storage terminals are vulnerable to natural disasters and disasters caused by human error. An online industry report from Control Global [*footnote: http://www.controlglobal.com/articles/2014/prevent-tank-farm-overfill-hazards*] from 2014 states,

It's safe to say that thousands of filling, emptying and transferring operations go on each month in these tank farms- maybe even every day. The overwhelming majority are done safely, but some result in overfills, which have led in a few cases to major incidents. Data compiled by a reputable operator in the United States estimated that an overfill occurred once in every 3,300 filling operations. [*footnote: "Atmospheric Storage Tanks," Risk Engineering Position Paper 01, Marsh Ltd*.]

Looking over the past couple of decades, we have some notable tank overfill incidents: Laem Chabang, Thailand, in 1999 (seven dead); Buncefield, UK, in 2005 (43 injured), and the Catano oil refinery in Bayamon, Puerto Rico, (three injured). All these involved spectacular explosions and fires with extensive damage to the facility.

Since 2012, it appears from the report that an updated standard (API 2350) is being adopted widely. This standard includes a risk assessment that "shall be used by the owner and operator to categorize risks associated with potential tank overfills". Please incorporate information about the updated API 2350 and this risk assessment into the EISs. Please also include a description of overfill incidents since 2012 that have occurred despite implementation of API 2350, if any. Can conclusions be drawn as to whether or not adoption of the new standard reduces the frequency and severity of incidents caused by overfills?

Response RLA7-7

While the recently published 4th edition of API 2350 is not a law or regulation, it is the accepted industry standard for safe practices related to preventing overtopping risks for aboveground storage tanks and the applicant will be following this guidance. Tank design requirements and prevention measures are discussed in Chapter 4, Section 4.2, *Applicable Regulations*. Final EIS Chapter 2, *Proposed Action and Alternatives*, reflects the addition of text to acknowledge that the proposed rail unloading facilities would include automated monitoring, which would be designed to shut down the offload pumps if the destination tank reaches a predetermined height, limiting the potential for overtopping risks consistent with the recommendations of API 2350, 4th edition. The applicant will also conduct a risk evaluation (assessment) following the format in API 2350, Appendix E, during the engineering design phase. Additionally, as noted in Master Response for Risk Assessment Methods, the risk assessment approach does not include an analysis of any single causal event. The approach is to consider the risks of the selected release scenarios presented in Appendix M and in Chapter 4 regardless of the causal event.

Comment RLA7-8

Another, perhaps more serious risk to tank farms is lightning. A study [*footnote: http://www.lightningsafety.com/nlsi_lls/Causes-of-Failures-in-Bulk-Storage.pdf*] from the UK states,

It is estimated that lightning accounts for 61% of all accidents in storage and processing activities, where natural events are identified as the root cause of the incidents. In North America, 16 out of 20 accidents involving petroleum products storage tanks were as a result a/ lightning strikes...there have been 150 tank fires in a 52-year period as a result of lightning. The Westway and Imperium dEISs each mention the word "lightning" once within a citation in the References listed in Chapter 8.1 of the Risk and Technical Reports (Appendix M). The word also comes up in two scoping comments. In the final EISs, please assess the risks posed by lightning within the Port of Grays Harbor and also to the unit trains and tank vessels within the extended study area.

Response RLA7-8

Draft EIS Chapter 4, Section 4.4, *Environmental Health Risks—Terminal (Onsite)*, describes the risk and potential for storage failure. Appendix M, *Risk Assessment Technical Report*, describes the data sources for the assumptions used to conduct the risk assessment for storage tank failure. Because storage tank failure could result from multiple factors, the analysis does not assume any one cause of tank failure. The tank failure rate for the analysis is based on studies that analyze historical data of previous storage tank releases caused by a variety of factors, including weather-related factors. Refer to Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

Multiple design and operating codes, standards, and recommended practices help protect aboveground storage tanks from lightning: the American Petroleum Institute 650—Aboveground Storage Tanks; National Fire Protection Association 780—Standard for Installation of Lightning Protection Systems; American Petroleum Institute Recommended Practice 2003—Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents; and American Petroleum Institute Recommended Practice 545—Lightning Protection for Above Ground Storage Tanks. Grounding and lightning protection minimize risks during unloading and loading and operating procedures limit operations under certain conditions.

Comment RLA7-9

Natural Hazard-Triggered Technological Accidents (Natech) are recognized internationally as a unique class of incidents "that manifests itself when the natural and technological worlds collide." These accidents are initiated by a natural disaster, such as an earthquake, that leads to the release of hazardous materials. [*footnote: http://enatech.jrc.ec.europa.eu*] Europe's Joint Research Centre summarizes the particular challenges inherent in events of this magnitude and complexity:

One of the main problems of Natech accidents is the simultaneous occurrence of a natural disaster and a technological accident, both of which require simultaneous response efforts in a situation in which lifelines needed for disaster mitigation are likely to be unavailable, as they may have been downed by the natural disaster. In addition, hazardous-materials releases may be triggered from single or multiple sources in one installation or at the same time from several hazardous installations in the natural disaster's impact area, requiring emergency-management resources occupied with responding to the natural disaster to be diverted Moreover, the ongoing climate change predicted to result in an increase of hydro¬ meteorological events may in turn increase the likelihood of [Natech] accidents.

Natechs include the Indian Ocean Tsunami of 2004, the 2005 Katrina Storm Surge and the 2011 Great East Japan Earthquake and Tsunami and others. The 2011 Tohoku tsunami in Japan damaged 418 oil storage tanks and moved 157 of them. Sloshing of contents during the earthquake also caused oil to flow out over the tanks' floating roofs. [*footnote: http://www.earthquakespectra.org/doi/abs/10.1193/050713EQS120M?journalCode=eqsa*] Major tank farm incidents have involved "floating roofs becoming dislodged and jamming, with a resulting fire being attributed to sparks from the damaged roof being shaken violently." [*footnote: http://www.lightningsafety .com/nlsi_lls/Causes-of-Failures-in-Bulk-Storage*]

The director of the Pacific Northwest Seismic Center recently estimated that there is a 10-15 percent chance for a magnitude 9.0 earth quake over the next 50 [*footnote: http://wwww.seattletimes.com/seattle-news/science/the-really-big-one-get-ready-now-quake-experts-advise*] years. This equates to a 1 in 300 chance each year. The dEISs cite USGS figures from 2009 – a likelihood of 6-8 percent. The most recent seismic event near the project area was a magnitude 2.5 quake which occurred beneath Grays Harbor on November 13, 2015. [*footnote: http://pnsn.org/earthquakes/recent*]

Response RLA7-9

Draft EIS Chapter 3, Section 3.1.2, *What laws and regulations apply to earth resources and conditions?* and Section 3.1.3.1, *Information Sources*, outline the requirements that inform the design, review, and permitting of the proposed action. Refer to the Master Responses for Seismic Risk and Design Requirements and Earthquake Probabilities.

Comment RLA7-10

On a similar note, the dEISs give a figure for sea level rise of 24 inches by the end of the century, but Washington Sea Grant, for one, now provides probabilistic forecasts of sea level rise. [*footnote: https://wsg.washington.edu/about-wsg/staff/ian-miller/*] These include a range of possible sea level rise magnitudes and the calculated risks of each. This form of information is likely of greater utility for communities and managers than a single forecasted figure.

Response RLA7-10

Mean higher high water (MHHW) is reported as 10.11 feet on the mean lower low water (MLLW) vertical datum and 8.47 feet on the NAVD88 vertical datum at Aberdeen, Washington (Station 9441187).[1] Final EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, reflects addition of the following description: *The expected sea level change in the project area by 2050 could be as great as 48 cm (1.57 feet) (National Research Council 2012). Adding 1.57 feet to the current mean sea level tide predictions, the expected high water from tides occurring in year 2050 would be 4.51 feet + 1.57 feet = 6.1 feet above mean sea level (projected). Accounting for this increase in sea level, the project site, which has an average elevation of approximately 11 feet above mean sea level, will remain approximately 5 feet higher than the projected high tide level of 6.1 feet above mean sea level, in 2050.*

Comment RLA7-11

In our letter last May, we requested that the EIS determine what additional infrastructure, plans, procedures and equipment should exist to minimize damage to the environment from a tsunami. In the final EISs, please include a discussion of Natechs involving bulk oil storage and transfer facilities that were affected by tsunamis and other natural disasters - including earthquakes, floods, subsidence, or liquefaction. Please also discuss lessons learned as they may apply to Grays Harbor and storage the of Bakken and tar sands oils specifically. We also request that the final EIS address risks associated with climate change driven sea level rise over the next 50 years in combination with the increasing risk of extreme storm events.

Response RLA7-11

Draft EIS Chapter 3, Section 3.1, *Earth*, addresses risks related to geologic conditions in the study area, including earthquakes and related hazards such as tsunamis and liquefaction. To inform the risk of tsunamis at the project site, an updated tsunami model was completed and an updated assessment of tsunami risks specific to the project site is presented in Draft EIS Appendix C, *Tsunami Impact Modeling and Analysis.* Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how building codes, engineering design standards, and applicant mitigation would reduce impacts of earthquakes and related hazards.

Final EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, clarifies predictions of sea level change in the study area and potential for flooding at the project site. With sea level in the study area predicted to rise 1.57 feet by 2050, the project site will remain approximately 5 feet higher than the projected high tide. As such, it would not be subject to flooding during extreme storm events.

[1] National Oceanic and Atmospheric Administration. 2016. *Tides & Currents Benchmark Datasheet for Station 9441187*. Available: http://tidesandcurrents.noaa.gov/benchmarks.html?id=9441187. Accessed: April 25, 2016.

Comment RLA7-12

The EISs correctly indicate that the most likely debris to impact the proposed storage tanks would be woody material like logs. However, past Natechs have also seen empty tanks colliding with fuller ones, vehicles colliding with tanks, empty tanks floating off of their foundations and drifting hundreds of meters away or colliding with and broaching containment dikes. In the final EIS, please discuss the possibility that, during a natural disaster, trains, tanks, vessels and vehicles (as well as logs or lumber) may impact and potentially rupture tanks containing oil or generate sparks that cause fires or explosions.

Response RLA7-12

Draft EIS Appendix C, *Tsunami Impact Modeling and Analysis,* calculates debris forces based on guidance from the Federal Emergency Management Agency,[2] which was developed for structures that would provide vertical refuge for evacuees above the level of tsunami inundation. Factors used in this document were derived from laboratory simulations of impenetrable vertical walls. Tsunami-borne debris may not accumulate around a circular tank the same way it would against a vertical structure. Stiffness between debris and vertical structures would differ from stiffness between debris and circular tanks, and impact and damming forces would likely differ for the proposed facilities and evacuation facilities. Uncertainties also exist regarding the size and type of debris that would float over the berm surrounding the site. However, these uncertainties are accounted for in the tsunami analysis by applying a factor of safety of 1.3, as described in Appendix C.

Draft EIS Chapter 4, *Environmental Health and Safety*, acknowledges that incidents involving the release of crude oil could result in fires and explosions. The Draft EIS does not assume any single cause of such an incident but considers the potential for an event to occur as the result of any cause, including from natural disasters.

Comment RLA7-13

The waters of the California current connect Jefferson County with Grays Harbor. Many species travel along our shores and thrive in the wide diversity of intact habitats that comprise the Washington Coast, including those found within Olympic National Park, the Olympic Coast National Marine Sanctuary, several National Wildlife Refuges and the reservations of Coast Treaty Tribes. People have thrived here over decades and generations in communities built, in large measure, around an exceptionally productive marine environment that has long supported fishing, shellfish, crabbing, tourism and other local businesses.

In closing, thank you for this opportunity to comment on these proposals and the contents of the dEISs. We appreciate your time incorporating our comments into the final documents. Please email Environmental Specialist Tami Pokorny with any questions you may have at tpokorny@co.je:fferson.wa.us.

Sincerely,

David Sullivan, Chairman

Phil Johnson, Member

[2] Federal Emergency Management Agency. 2008. *Guidelines for Design of Structures for Vertical Evacuation from Tsunamis.* FEMA-P646. Washington, D.C.

Kathleen Kler, Member

Cc: Governor Jay Inslee Co - Lead Agencies City of Hoquiam Administrator Brian Shay Department of Ecology Director Maia Bellon Department of Ecology SW Regional Direct Sally Toteff

Encls.

Response RLA7-13

Comment acknowledged.

RLA8, Marysville Fire District, Martin McFalls

Comment RLA8-1

November 18, 2015

Marysville Fire District 1094 Cedar Ave Marysville, WA 98270 Phone: (360) 363-8500 Fax: (360) 659-1382

Honorable Members of the Washington Congressional Delegation:

The Honorable Patty Murray, United States Senate

The Honorable Maria Cantwell, United States Senate

The Honorable Rick Larsen, U.S. House of Representatives serving the State of Washington

The Honorable Suzan DelBene, U.S. House of Representatives serving the State of Washington

The Honorable Jaime Herrera Beutler, U.S. House of Representatives serving the State of Washington

The Honorable Dan Newhouse, U.S. House of Representatives serving the State of Washington

The Honorable Cathy McMorris Rodgers, U.S. House of Representatives serving the State of Washington

The Honorable Derek Kilmer, U.S. House of Representatives serving the State of Washington

The Honorable Jim McDermott, U.S. House of Representatives serving the State of Washington

The Honorable David Reichert, U.S. House of Representatives serving the State of Washington

The Honorable Adam Smith, U.S. House of Representatives serving the State of Washington

The Honorable Denny Heck, U.S. House of Representatives serving the State of Washington

Shoshanna Lew, Deputy Assistant Secretary for Transportation Policy, Office of the Under Secretary for Transportation Policy, U.S. Department of Transportation

Dear Honorable Congressional Leadership and Washington Delegation,

As Fire Chief representing the Marysville Fire District Board of Directors, our first priority to the 78,000 citizens we serve is to see that their safety, quality of life and livelihood are sustained.

Proposed projects to develop oil export facilities that will significantly increase freight traffic on BNSF rail lines in our region will have adverse impacts on our communities and our aging transportation systems.

Negative impacts to our community include increased traffic congestion, higher risk of accidents, reduced levels of service, decreased ability to provide effective emergency response times, impacts on local commerce, and possible interference with local truck freight delivery systems also affecting the local economy.

While we are certainly supportive of job growth, the potential jobs from building and operating oil export facilities counties away from us brings no economic benefit for communities such as ours that would be left to deal with the negative impacts.

However, if the inevitable is to happen and we can assume increased future rail activity, we request that you authorize dollars to mitigate the adverse effects of rail traffic in general on safety, traffic flow and community quality of life. Furthermore, we request:

- BNSF be required to identify road improvement plans for grading, widening or otherwise provide crossings at intersections that would be impacted by rail traffic increases.
- Require the railroad to mitigate its impacts by funding the design and construction of these upgrades.
- Require the railroad to mitigate its impacts by funding related training costs of emergency personnel.
- Address grade separation issues.

On behalf of our citizens, we look forward to working with you as you consider this critical request.

Sincerely,

Martin McFalls, Fire Chief Marysville Fire District

Michael Stevens Board Chair, MFD

David DeMarco Chair, SCFPD #12

Gary Bontrager Vice Chair, MFD

Marilyn Sheldon Board Member, MFD

Rob Toyer Board Member, MFD

Donna Wright Board Member, MFD

Response RLA8-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts on local emergency service providers, described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action. Additionally, as noted in the revisions to Final EIS Chapter 4, Section 4.2, *Applicable Regulations*, a new rule, WAC 173-186, Oil Spill Contingency Plan—Railroad, has been finalized that establishes railroad oil spill contingency plan requirements, drill and equipment verifications that would be required of PS&P prior to operations. The mitigation measure presented in Draft EIS Chapter 4, *Environmental Health and Safety*, recommending that contingency planning by PS&P be completed will remain in place into the rule takes effect. Final EIS Chapter 4 has also been revised to include additional mitigation measure to address emergency response gaps. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions.

RLA9, Port of Grays Harbor, Gary G. Nelson

Comment RLA9-1

November 20, 2015

Westway and Imperium Terminal Services
Expansion Project EISs
c/o ICF International
710 Second Avenue, Suite 550
Seattle, WA 98104

Re: Draft EIS Comments

To Whom It May Concern,

After reviewing the potential impacts and mitigation measures outlined in the Draft Environmental Impact Statements for the Westway and Imperium Terminal Services expansion projects, the Port of Grays Harbor respectfully submits the following comments for the outlined topics:

3.12 Tribal Resources

The DEIS states that potential unavoidable and significant adverse impacts were identified due to increased vessel traffic related to the projects that could increase the potential for conflict with fishing areas and access to fishing areas compared to the no-action alternative. The Port respectfully disagrees with this assessment, citing both historic vessel calls and the fact that the some of the DEIS's proposed mitigation measures are out of the control of the project proponents and the Port,

with neither having the authority to regulate commercial traffic in the Chehalis Navigational Channel.

Response RLA9-1

Vessels related to the proposed action would travel through usual and accustomed fishing areas in Grays Harbor. Draft EIS Chapter 3, Section 3.12.8, *Would the proposed action have unavoidable and significant adverse impacts on tribal resources?* concludes that under current and future conditions, this vessel traffic could restrict access to tribal fishing areas in the navigation channel and adjacent to Terminal 1. It acknowledges that because other factors besides vessel operations affect fishing opportunities—such as the number of fishers, fish distribution, timing, and duration of fish windows—the extent to which this vessel traffic would affect tribal fishing is difficult to quantify and that no mitigation measures would eliminate the possibility of impacts.

Although vessel traffic levels were higher prior to the 5-year period analyzed in Draft EIS Chapter 3, Section 3.17, *Vessel Traffic*, no tanker and tank barge traffic occurred in Gray Harbor from 1999 through 2006.[3] When looking at traffic volumes, it is important to consider the type and size of the vessel, draft, commodities, and origins and destinations in the port. The 5-year period (2008–2012) was selected to represent a period when traffic levels with vessels carrying liquid bulk commodities began to increase in Grays Harbor.

Comment RLA9-2

Jurisdiction over the safety and control of movement of vessels in the waters of Grays Harbor is with the Captain of the Port, 13th District, U. S. Coast Guard, Portland, Oregon. In addition, the District Engineer, Seattle District, Corps of Engineers, U.S. Army has jurisdiction over certain navigation aids and controls.

Procedures are already in place to announce vessel traffic arrivals and departures. It is the Grays Harbor Pilots standard practice to announce vessel arrivals on VHF Channels 13 and 16 via "Security" calls after boarding an inbound vessel on Grays Harbor Bar Range, in the vicinity of Buoy "GH". They announce their departures on VHF Channels 13 and 16 via "Security" calls after boarding an outbound vessel at the terminal and around the time of last line. These "Security" calls are made each time a pilot moves a vessel, including when departing anchor and shifting berths.

Response RLA9-2

Draft EIS Section 3.17.4.4, *Vessel Traffic Management*, describes the roles of the U. S. Coast Guard in establishing and enforcing navigational rules and vessel safety and of the U.S. Army Corps of Engineers in working with the Coast Guard to determine the navigation channel's physical characteristics. Final EIS Section 3.17.4.4 reflects the addition of the information provided by the commenter regarding standard practice for Grays Harbor Pilots announcing vessel traffic arrivals and departures on VHF Channels 13 and 16.

[3] Washington State Department of Ecology. 1999 to 2006. *Vessel Entries And Transits for Washington Waters 1999–2006. Spill Prevention, Preparedness and Response Program.* Available: https://fortress.wa.gov/ecy/publications/UIPages/PublicationList.aspx?IndexTypeName=Program&NameValue=Spills&DocumentTypeName=Publication.

Comment RLA9-3

While every effort will be made notify tribal members of the vessel schedule and vessel movements, the Port cannot commit to adjusting the vessel schedule for fishing after already having a limited window to move vessels due to tides and weather.

Response RLA9-3

The mitigation measures propose that the applicant initiate a process between stakeholders and Quinault Indian Nation officials to discuss and propose additional mitigation measures to mitigate impacts on access to tribal treaty fishing areas as a result of vessels related to the proposed action still applies.

Comment RLA9-4

3.16 Rail and Vehicle Traffic:

Mitigation measures identified regarding Rail and vehicle traffic safety are also an area of concern as they are likely outside the control of the project proponent. As you know, the PSAP is a federally regulated utility and suggesting the project proponent can influence operating schedules and traffic delays are outside the purview and intent of the DEIS.

That being said, the Port of Grays Harbor does own and control the rail and Port Industrial Road within the Port's boundaries. The Port will work with the project proponents to ensure impacts to both existing tenants and vehicle traffic are kept to a minimum.

Response RLA9-4

Comment acknowledged.

Comment RLA9-5

3.17 Vessel Traffic:

The number of vessels expected from these projects, even in conjunction with existing vessel traffic, is still well below the numbers that used to call the Port and the other privately owned docks on Grays Harbor in the 1970's and 1980's.

Response RLA9-5

Refer to the discussion of historical vessel traffic in Section 3.17, *Vessel Traffic*.

Comment RLA9-6

The implementation of a formal Vessel Management System would be a costly and unnecessary burden to the maritime industry for the minimal amount of improved safety. Because there are only two pilots and vessel movements are done on high tides, ensuring vessel traffic is limited while a laden vessel is in the channel is routine for the duty pilot and should be left as a function of the Grays Harbor Pilots. An automatic identification system (AIS) antenna is already in place at Westport and is regularly monitored by the Merchant Exchange of Puget Sound, Merchant Exchange of Portland, PMSA and the Columbia River Steamship Association, amongst others. The Port of Grays Harbor Pilots and other stakeholders are committed to working with the U.S. Coast Guard, tug operators and

vessel agents via the Grays Harbor Safety Committee to draft specific procedures for escorting, tethering, and emergency maneuvering to control all vessels.

We thank you for the opportunity to comment on the DEIS. We would be happy to further discuss any of the mitigation measures as they relate to the Port of Grays Harbor should you have any questions or need additional information.

Regards,

Gary G. Nelson, Executive Director
Port of Grays Harbor

Cc: Sally Toteff
Southwest Washington Regional Director
Department of Ecology
PO Box 47775
Olympia, WA 98504-7775
stot461@ecy.wa.gov

Brian Shay
City Administrator
City of Hoquiam
609 8th Street
Hoquiam, WA 98550
bshay@cityofhoquiam.com

Response RLA9-6

Draft EIS Chapter 3, Section 3.17.4.4, *Vessel Traffic Management*, describes vessel traffic management authorities and practices in Grays Harbor. Final EIS Section 3.17.4.4 reflects the addition of information related to the automatic identification system (AIS) antenna at Westport. The mitigation measure proposed in Section 3.17.7.1, *Applicant Mitigation*, to develop a vessel traffic management system is intended to improve situational awareness of vessel traffic in a consistent manner to reduce the risk of a vessel incident. The proposed mitigation measure would include the ability to schedule, track, and monitor vessel movements in the harbor and off the entrance to the harbor.

RLA10, Port of Olympia, George Barner, Jr.

Comment RLA10-1

My name is George L. Barner, Jr. from Olympia, Washington. And I'm here representing the citizens of Thurston County who have expressed to me the concerns they have with the proposed movement of crude oil trains through southern—the southwestern part of Thurston County. The proposed route comes out of Lewis County and Centralia and proceeds west along the Chehalis River.

And I've had conversations with members of the Chehalis Indian Tribe Tribal Council about their concern because we've already had a train derailment last year on the Genessee and Wyoming short line that runs from Lewis County through Thurston County along the Chehalis River toward Grays

Harbor. That train was carrying wheat, which is not threatening, but the same line is proposed to be used by the folks in the oil business who want to move crude oil through Lewis County into Thurston County and into Grays Harbor. It appears that this line is vulnerable to train derailments, and they're going to have to spend multimillions of dollars to upgrade this line to be able to handle oil trains if the Department of Ecology allows the establishment of terminals on the coast of Grays Harbor. So I'm here to register my concern.

In 2013, the Port of Olympia, with my fellow commissioner then seated as a commissioner, Sue Gunn and I passed a resolution against oil trains coming to Grays Harbor through Thurston County along this rail line. I'm concerned about the potential threat to the Chehalis River fisheries as well as the members of the Chehalis Confederated Tribes because of the threat to their lifestyle, their fisheries, and their tribe.

I think it's shortsighted for the Port of Grays Harbor to want to site three terminals in Grays Harbor to be able to handle this crude oil which precludes the opportunity for the Grays Harbor Port to be using this substandard rail line to be able to ship crude oil out of Grays Harbor Port.

Commissioner Gunn and I made a very reasonable request, and we asked the Port of Grays Harbor to consider—to reconsider their decision to be shipping crude oil out of the Grays Harbor Port because it seemed to me to be a very shortsighted decision to allow the citizens of Thurston County to be subjected to the potential hazard of—possibility of the potential for train derailments moving that product through the area of Thurston County where that rail line runs, and then it comes into Grays Harbor.

We were just simply asking them to reconsider their decision because it seemed to me that it was a very short, short-term decision to allow them to run oil train tanker cars through our county which threatened the citizens of Southwestern Thurston County in the area where that rail line is positioned to be able to be used by the Genessee and Wyoming Rail Line to allow trains to be threatening the habitat, the fisheries, the Chehalis Tribe tribal members, and the citizens of Southwest Thurston County who would be exposed to the risk of derailment by the use of the Genessee and Wyoming line to be—to be allowed to be used for the transport of crude oil coming out of Thurston County going into Grays Harbor and ignoring the fact that that community and the region didn't even get the benefits of the refining activities that would be important to be able to have employment from that crude oil being refined and thereby providing job-related amenities to be benefiting from that rail line.

It seems to me that there's too much of a threat to the citizens, the fisheries, the confederated tribe population, and the members of the general public who live along that rail line that would be threatened by the transport of oil. It just doesn't make sense to me that we would be allowing citizens, fisheries of the Chehalis River to be put at great risk if there was a derailment, and it just didn't make sense to me that that was a wise decision.

So my fellow commissioner, then Commissioner Gunn, and myself didn't agree with the posture of Grays Harbor to be used for that purpose, and we hope that they would be able to reconsider their decision to transport oil potentially creating the possibility of a risk by derailment because it's just too much of a threat to the citizens of Thurston County, Grays Harbor County, and the Chehalis Confederated Tribe to see that kind of threat be placed on the citizens of the Chehalis Tribe and the fisheries of Thurston and Grays Harbor County.

Response RLA10-1

Refer to the Master Response for the Purpose and Focus of the EIS.

RLA11, Skamania County Fire District #4, Timothy Young

Comment RLA11-1

The following comments are in response to Westway Terminal Company LLC and Imperium Terminal Services proposed expansion of existing bulk liquid storage terminals located at the Port of Grays Harbor Terminal 1: Skamania County Fire District #4 provides Fire Protection and Emergency Medical Services in a 45 square mile area at the west end of Skamania County. There are approximately 7 miles of BNSF Railway Company tracks in the District from the Clark - Skamania County line in the west to Smith-Cripe Rd in the east. Concerned over the potential impact of a Bakken Crude Oil Train fire on the residents of Skamania County Fire District #4, the District Board of Commissioners passed a resolution (attached) at the July 9 meeting requesting Senators Murray and Cantwell and Representative Herrera Beutler work immediately with The Pipeline and Hazardous Materials & Safety Administration, National Transportation Safety Board and the Federal Railroad Administration to stop Bakken Oil Train traffic through the District, Skamania County and the Columbia River Gorge at large. The resolution also calls for the concurrent development of Federal Legislation requiring that railroads, as a condition of transporting Bakken Crude Oil through the Columbia River Gorge, establish and demonstrate the capability to provide required Hazardous Materials Response including Fire Suppression of Bakken Crude Oil fires in the Columbia River Gorge. BNSF has historically operated a minimum of two Bakken Oil Trains per day through the District. Each train consists of an average of 100 cars. Each car contains 30,000 gallons of Bakken Crude Oil, with Bakken Crude Oil identified as a highly flammable hazard. The District and surrounding agencies do not possess sufficient resources including manpower, Class B Foam and water supply to extinguish Bakken Crude Oil fires resulting from accident or derailment with the exception of the smallest fires. The non-intervention tactic of allowing Bakken Crude Oil fires to burn out on their own presents a clear Fire and Life Safety danger to the residents of the District. This is compounded by the fact that approximately 75% (5 miles) of the BNSF tracks in the District are inaccessible by fire apparatus. Given the region's susceptibility to high winds, this exposes the District, Skamania County and the Columbia River Gorge at large to substantial wildland fire risk. It is contrary to the public interest to expand oil terminals with accompanying increases in oil train traffic until such time as the railroads establish and demonstrate the capability to provide required Hazardous Materials Response including Fire Suppression of Bakken Crude Oil fires in the Columbia River Gorge. Respectfully, Timothy W. Young Chairman Board of Commissioners Skamania County Fire District #4 10042 Washougal River Rd Washougal, WA 98671 Cell: 201-247-3361

Response RLA11-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.