



May 20, 2014

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

Via email and website

Scoping Comments of FOGH (Friends of Grays Harbor) on the Proposed Imperium and Westway EIS

Thank you for the opportunity to comment on these two projects. We hope our input will be of assistance in making decisions that will benefit the economy, environment, visitors and residents of the Chehalis Basin Watershed. We incorporate by reference comments from the Willapa/Grays Harbor Oystermen's Association, Washington Dungeness Crab Fisher Association, Brady Engvall, Brian Sterling, Audubon Societies, Arnie Martin, the Quinault Indian Nation, Washington Environmental Council, Climate Solutions Friends of the Earth (FOE), FOGH November 2013 comments re Millennium Bulk Terminals, FOGH et al December 2013 comments P-1577, P-1587, P-1595, PHMSA, and U.S. Fish and Wildlife Service.

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

The following needs to be discussed for all the operational areas required by the proposed Imperium, Westway and US Development terminals, separately and cumulatively including for:

- Surface transportation into the Port of Grays Harbor (hereinafter "Port"): rail, auto and truck;
- Facility operational area including side rails, storage areas, storage terminals, pier and trestle;
- Marine transportation to and from Port: Panamax ships, barges, ATB barges and other vessels, including tenders.

Specific Areas of Concern:

1. Land use and public infrastructure requirements and alterations including new roads or bridges/overpasses necessary to decrease disruption of current traffic flow. Decrease of land values due to increased rail disruption and noise.
2. Cultural, historical and archeological:
Native American Issues:
 - Treaty fishing rights - loss/interruption of usual and accustomed fishing sites;
 - Public's perception of negative effect on PNW totemic species: Salmon, Orca (cetaceans) and eagle.
 - Shellfish and crab viability
3. Power used to operate Port Facility – amount and source. Backup sources for power outages similar to 2007 storm or greater. Air quality measures during operation.

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4. Wetlands – loss from fill; stormwater runoff pollution including from rain or spray of water to tanks and piping at site and on loaded and empty cars; and mitigation. Setback from Fry Creek and other Critical Areas Ordinance (CAO) areas.
5. Water Resources:
 - Fresh water, both surface and groundwater – for use at Imperium and Westway, define source and amount; normal/permitted pollution from discharges, stormwater runoff, from petroleum products and solvents and other industrial fluids and substances; from heavy metals from brakes; and from accidents;
 - Salt water – normal/permitted pollution from discharges including sewage, ballast, bilge, stormwater, petroleum products and solvents and other industrial fluids and substances; from accidents and from introduction of invasive species.
 - Aquatic Invasive Species: A Guide to Least Wanted – Washington; Aquatic Nuisance Species Committee Report to the 2012 Legislature
 - Special attention to aquatic areas defined as “critical” under relevant Critical Areas Ordinances and to the Grays Harbor National Wildlife Refuge next to which the US Development Project will be located. http://www.dnr.wa.gov/ResearchScience/News/Pages/nr09_105.aspx http://www.fws.gov/refuge/grays_harbor/
6. Physical oceanography and coastal processes including alteration of littoral drift. Changes due to dredging activities. Erosion potentials.
7. Coastal and nearshore ecosystem changes due to shading from docks and lingering boats, both as to vegetative and animal habitat issues.
8. Human Health impacts especially from increased industrial-type pollution and from crude oil.
9. Animal and plant - The impacts of oil spills on marine mammals and seabirds are well documented. Direct mortality results from contact with the floating and/or sinking oil and long-term exposure to oil toxins residing in the spill-affected areas.
 - Impacts on the following including identification of abundance status (e.g., there are over 50 species in the Grays Harbor and Washington Coast area determined either federally or state endangered or threatened, state sensitive or candidates for protection status or federal species of concern. Discussion should include impacts from any alteration in landform or physical oceanographic change/habitat change (e.g., changes in nearshore currents); light changes (on land or at water, light pollution at night, changes in ability of light to penetrate water columns and to reach bottom such as shading from dock/lingering ships); noise pollution from operation of Port Facility or from vessels; from other pollution, both permitted and accidental, oil spills, ballast and bilge water or storm water discharges); and implications of expected changes in species composition, distribution and absolute numbers as a result of the above, including introduction of invasive species from hull fouling and ballast water discharge with special attention being paid to species in areas defined as “critical” under relevant Critical Area Ordinances.
 - Terrestrial Mammals, especially Long-eared Myotis, Long-legged Myotis, Keen’s Long-eared Bat and roosting concentrations of Big Brown Bats, Myotis Bats, and Pallid Bats;
 - Terrestrial and fresh and salt water plants including willow groves, old- growth trees, wetland species, eelgrass and phytoplankton species;



- Birds, especially Marbled Murrelet, Northern Spotted Owl, Brown Pelican, Western Snowy Plover, Brandt's Cormorant, Cassin's Auklet, Common Murre, Short-tailed Albatross, Tufted Puffin, Western Grebe, Great Blue Heron, Harlequin Duck, Trumpeter Swan, Bald Eagle, Golden Eagle, Peregrine Falcon, Osprey, Sooty Grouse, Band-tailed Pigeon, Yellow-billed Cuckoo, Vaux's Swift, Pileated Woodpecker, Oregon Vesper Sparrow, Western Red Knot, Streaked Horned Lark, Northern Goshawk, and Purple Martin;
- Terrestrial invertebrates, especially Great Arctic, Island Marble, Sand-verbena Moth, Taylor's Checkerspot and Valley Silverspot;
- Amphibians, especially the Western Toad; Cascades frog, Olympic torrent salamander, Tailed frog; Van Dyke's salamander
- Reptiles, especially the Sharptail Snake
- Fish especially Pacific Herring, Pacific Sand Lance/Longfin Smelt, Surfsmelt, Bull Trout/Dolly Varden, Coastal Resident/Searun Cutthroat, Salmon (Chinook, Chum, Coho, Pink, Sockeye), Rainbow Trout/Steelhead/Inland Red-band Trout, Pacific Cod, Pacific Hake, Walleye Pollock, Eulachon, Rockfish (Black, Brown, Canary, China, Copper, Greenstriped, Quillback, Redstripe, Tiger, Widow, Yelloweye, Yellowtail), Spotted Ratfish, English Sole, Pacific lamprey and Rock Sole;
- Marine Mammals, especially Orcas Dall's Porpoise, Gray Whale, Harbor Seal, Pacific Harbor Porpoise, Northern Sea Otter, and Steller Sea Lion;
- Marine Invertebrates including Pinto Abalone, Geoduck, Clams (Butter, Native Littleneck, Manila, Razor), Olympia Oyster, Pacific Oyster, Dungeness Crab, Pandalid shrimp, Pteropods (especially "sea butterfly" and Zooplankton.

10. Hazardous materials to be present at Facility, used or generated with disposal protocols and accident prevention and remediation measures in place.

11. Rail traffic analysis given current state of infrastructure; discuss percentage rail infrastructure is fully utilized pre-Facility, accident likelihood and recent experiences, impacts response capability and remediation. The rail from Centralia to Hoquiam is about 59 miles long, but this does not adequately reflect the impacts nor dangers of CBR. What is the statistical danger of over 1100 rail miles? Please address the decreased ability to repair infrastructure due to rail traffic. A current TIGER grant application from the City of Chehalis states that the current grain and auto traffic to the Port of Grays Harbor is "overwhelming the system." Please study the logistics of added rail use and its impacts to existing rail customers.

12. Road and highway infrastructure and traffic changes due to interruption by rail or trucks that are project-associated, increased likelihood of accidents as well as need for additional roadside armoring indicated by climate change-induced sea level rise. Who will pay?

13. Vessel traffic along the Washington coast, the Grays Harbor estuary and destination routes to California and the Straits of Juan de Fuca including pre-facility status.

- List flag state of vessels to be used and first language of crew;
- Details of Panamax vessels as to age and structural and electronic components;
- Detail normal/permitted pollution impacts:
 - o Of air and water including from fuels, engine exhausts, crude oil, ballast or bilge water, noise and direct physical interactions or caused avoidance behavior;



- Pollution due to accidents by fuels, crude, etc.:
 - o History of single and multi-ship accidents of any nature and consequences for such vessels, current risk analysis and the prevention and remediation measures proposed including discussion of needed updates of Geographic Response Plans and any need for/who pays cost for/what time period needed to implement as to new deployment strategies and associated response equipment in Grays Harbor in spatial relation to shipping lanes.
- Interference by these vessels with other necessary ocean transportation uses both commercial including fishers, and as well as with recreational and tribal users;
- Interference by these vessels with marine mammal social structure and health including physical interaction through striking;
- Identification of location of anchorages for delayed/backed up vessels that cannot be at Facility dock.

14. Grays Harbor Safety/ Geographic Response Plans – Plan is based on slack tide, what would happen and how would the plan be deployed in alternate tides, surge and weather conditions?

15. Air quality:

- From operation of Port Facility machinery;
- Due to associated train, truck, ship engine pollution; (include vehicles delayed by rail traffic)
- From fugitive air escape from crude from all aspects of operation including from rail transport, off-loading, storage, vessel loading and shipping – extent and impact to human health and to other creatures in natural environment, both terrestrial and fresh and salt water

16. Noise and vibration:

- From operation of the Port Facility machinery;
- From increased train, truck and vessel traffic:
- Assessment of potential for increased land/mudslides and derailment
 - o due to more and longer trains and the associated increase in trains
 - o vibration;
- Impacts on marine life from significant increase in underwater noise associated with increase in vessels. Impacts and modeling of wake stranding due to vessels.

17. Light pollution at night from Facility and vessels.

18. Socioeconomic:

- Human health affects:
 - o Reduced employee productivity;
 - o Increased health care costs;
- Fisheries, especially for Salmon, Shellfish, Crab;
- Agriculture;
- Aquaculture;
- Tourism;



- Potential for change in values of property affected by increased rail, road or vessel traffic, or by other Port Facility-related alterations of the environment such as air, light and noise pollution.

19. Ecological damage from a severe natural disaster such as an earthquake or tsunami – discuss mitigation planned to prevent massive pollution.

20. Cumulative Impacts, relative to crude: if one to three projects are fully built out and all proposed west coast crude export ports come on line and all coal export ports come on line (including the Oregon Gateway Terminal at the Port of Coos Bay, Oregon; the Coyote Island Terminal site at the Port of Morrow, Oregon; at the Millennium Bulk Logistics site in Longview, Washington; two separate facilities at the Port of St. Helens, Oregon [Ambre Energy and Kinder Morgan]) there could be a projected total annual potential western coal export of hundreds of metric tons - and there are upwards of 70 mmt that may be exported from Canadian ports; relative to vessel traffic: all of the above export vessels will use Grays Harbor, the Salish Sea, the ocean coast, the Strait of Juan de Fuca and, in addition, further expansion of Kinder Morgan's pipeline and the subsequent increase in tanker traffic in and out of the Port of Vancouver must be considered.

21. Recreational parks and facilities, e.g., Morrison Park

- Accessibility for people attending events at these destinations
- Noise disruption during the event due to increase train traffic
- Community loss of these public venues for events, due to access, noise, safety and the impacts upon a sense of place and community heritage
- Increased safety concerns because of train traffic, train derailment (actual and perceived)
- Access of first responders to any emergencies at the events. We have had emergencies at past events and this is a significant concern to mitigate

22. Business entities rely upon the easy and safe access to their places

23. Visual and aesthetic considerations

24. State contributions to infrastructure. In 2003 the State of Washington contributed \$2 million to the Port of Grays Harbor Grain Terminal Loop Track. How will the citizen's dollars be protected when a spill or explosion happens involving crude oil?

25. Specific Project Related Concerns

(a) The containment design does not appear to be adequate for a design-basis accident. It appears that a catastrophic accident which released 8,400,000 gallons of crude plus 6" of rain water is proposed to be contained by a single containment wall whose integrity would be suspect in a catastrophic accident. The mitigation does not reveal how this would be handled and cleaned up. How would this be handled? What is the "bathtub" effect of containment?

(b) The review and design process does not account for sea level rise. Please discuss the calculations for projected rises scenarios.

(c) The review does not appear to take into consideration that the area is in a tsunami hazard zone and would be inundated by an event and subject to liquefaction. How will you account for the impacts due to tsunami and liquefaction?

(d) The proponent lists that controls for the loading, unloading and emergency monitoring have redundant processes, but they are all electronically controlled. As the 2007 storm proved the access to electricity can be interrupted for long periods of time. What emergency power will be associated with this installation?



- (e) The SEPA checklist states that there will be one terminal operator dedicated to the dock facility. Since the tank location is over 500 feet away from the dispensing tank, how will a single person be able to monitor the entire system, check for any leaks or spills, and make sure the equipment is functioning properly? Who else would be available to assist?
- (f) Where will spill containment equipment be stored? Will there be a redundancy in equipment at the tank site and dispensing site?
- (g) Considering alternatives is good planning, however there doesn't appear to be any consideration of alternatives.
- (h) The EIS must include a discussion of treaty rights or impacts to fisheries and the environment subject to those treaties. What are the consequences of ignoring Federal treaty rights and promises?
- (i) The EIS should adequately discuss sensitive area impacts and the duration of those impacts. What will be the impacts to these areas? How will short-term and long-term impacts affect these areas?
- (j) There should be a discussion that all of the terminal areas have natural gas available. What would be the likelihood of crude oil igniting due to catastrophic incident that severs gas lines?
- (k) Lack of consideration for crude oil containing toxic chemicals, many of which are carcinogens: benzene, chromium, mercury, nickel, sulfur, toluene, lead, carbon monoxide, PAH's and VOC's. What considerations have been given to the introduction of these toxic chemicals?
- (l) Any oil spill would have devastating impacts to Grays Harbor, which contains unique wetlands and habitats and has been designated a shoreline of Statewide Significance. A spill would impact an Area of Hemispheric Importance for migratory birds, which are directly threatened by the presence of crude oil tanks, tankers, and railcars. Also at risk would be one of only two known glass sponge coral reefs and numerous threatened and endangered species. Placed at risk would be marine industries that account for 31% of the Grays Harbor workforce. How does the DS address the potential loss of function, value and workforce?
- (m) The increase in train traffic through Grays Harbor County will have a significant impact on communities that are literally bisected by the train tracks. Emergency access can be delayed over 15 minutes due to mile long rail cars blocking crossings. In addition, rail cars cross over more than 100 creeks, rivers and streams, the majority fish-bearing. We are also concerned about impacts to surface transportation in the Hoquiam/Aberdeen facilities. How will the EIS address surface traffic along the rail into Washington heading towards Centralia to Hoquiam?
- (n) How will the EIS adequately address facility operations, including storage, existing piers and transfer methods?
- (o) What is the analysis of impacts on marine transportation to and from facilities, Panamax ships, Articulated Tug Barges, other vessels, including present traffic and projected additional traffic?
- (p) What is the analysis of impacts on land use and public infrastructure requirements, including alterations to roads, culverts, bridges, and overpasses in order to decrease disruption of current flows, analysis of costs and methods of payment to achieve these goals?
- (q) What is the analysis of impacts on cultural, historical and archeological issues, e.g., Treaty fishing rights/loss or impairment of usual and accustomed fishing sites?
- (r) What are the short-term and long-term effects of negative impairment of totemic species, e.g., salmon, razor clams, Orcas and other cetaceans and migratory birds?



(s) What are the effects to the function and value of wetlands due to modification, or loss from fill, stormwater run-off pollution including from rain or wash down facilities and increased impervious surfaces and potential oil spill?

(t) How will water resources, including fresh water, surface and groundwater be impacted? The DS does not consider water use at Facilities and pollution discharges.

(u) Salt water concerns: normal/permitted pollution from discharges including sewage/ballast/bilge/stormwater/petroleum products, solvents and other industrial substances including those unknown substances that are part of the crude oil fracking process; from accidents and from introduction of invasive species. How has the DS addressed these specific concerns?

(v) There are potential impacts to sensitive areas within the Harbor and on the open ocean coast. How will these areas be protected?

(w) Aquatic invasive species introduction due to increased freight traffic – rail and vessel are a significant probability. How will these issues be addressed and controlled?

(x) Nearshore changes due to increased shading from added vessels, including impacts to plants and animals. How will this be minimized or eliminated?

(y) Human health, increased diesel fumes from trains, vessels and loading equipment. What preventive measures will be taken to eliminate or avoid these impacts? How will health issues that arise from this increase be addressed and paid for?

(z) Impacts to federally-listed or state-listed and concerned marine species, including but not limited to: changes to currents, alteration of landforms; light changes (on land or at water), light pollution at night, changes in ability of light to penetrate water columns and to reach bottom as shading from dock/lingering ships noise pollution from operation of Port. How will these issues be eliminated or averted?

(aa) Impacts to salmonid species, sea run cutthroat, bull trout, pacific sand lance, smelt, English sole, essential forage fish, shellfish, razor clams, oysters, etc. could be catastrophic and long-term. What preventions will be in place and what mitigation would in place if a problem occurred? Would those affected be compensated? Who would pay that compensation?

(ab) What would be the impacts due to increased vessel traffic to visiting whale, gray whale, harbor seals and other large animals?

(ac) Impacts to migratory birds. Grays Harbor is a hemispherically important stopping point for 500,000 – 1,000,000 migratory shorebirds. GH hosts over 50% of the western Red Knot population each year. What would be the effect of an incident on the mudflats and feeding grounds for the migratory bird population?

(ad) What are the hazardous materials on hand as part of operations and how are they protected from entering the waste flow on-site and off-site?

(ae) Vessel traffic increases and conflicts with existing marine resource uses such as crabbing, trolling and recreational fishing. How will these traffic flows be monitored and enforced? If the tide or fishing window is optimal for existing marine resource industries and a vessel is scheduled to depart, who will have precedence?

(af) Air Pollution. Studies assessing the potential impacts of international shipping on climate and air pollution demonstrate that ships contribute significantly to global climate change and health impacts through emission of GHGs (for example, carbon dioxide [CO₂], methane [CH₄], chlorofluorocarbons [CFC]), aerosols, nitrogen oxides (NO_x), sulfur oxides (SO_x), carbon monoxide (CO) and particulate matter (PM). Air quality impacts may result



from the chemical processing and atmospheric transport of ship emissions. For example, NO_x emissions from ships can combine with hydrocarbons in the presence of sunlight to produce ozone pollution, which can potentially affect visibility through haze, human and environmental health and has been associated with climate change effects. All classes of ocean-going marine vessels equipped with engines have the capacity to cause air pollution. Will there be facilities to allow the vessels to operate on cleaner energy while in port?

(ag) Because more than 50% of a ship's operating expense is generally the cost of fuel oil, most of the world's ship operators seek the cheapest fuels available; in which high levels of pollutants is the price of their cheaper cost rather than cleaner alternatives. Accordingly, the diesel engines that power the vessels are often significant mobile source emitters of pollution in terms of sulfur oxides, fine particulate matter, nitrous oxides and resultant low-level ozone. How will these be addressed and eliminated or minimized?

(ah) Visual and aesthetic considerations, as the area becomes an oil port. How will this affect housing, business and other real estate values?

(ai) Increased global climate change and ocean acidity due to burning of the product. The global warming impacts of this facility would be significant, both on a local and global scale. The Westway facility alone would generate approximately 15,000 metric tons/year of CO₂ equivalent from rail, marine vessel, automobile, and Marine Vapor Combustion. Further, 10 million barrels of new shipping capacity will expand a presently transportation constrained market, allowing for increased rates of extraction, refining and end-use consumption that will lead to significant global warming pollution. Increased production also threatens public health as there is little to no regulation on toxic pollution coming out of wells and facilities where hydraulic fracturing is the primary mode of extraction. The significant influx of rail, automobile and shipping transportation resulting from the crude-by-rail shipping facility also will have impacts on local air quality and will exacerbate traffic congestion. How will this affect global greenhouse gas emissions and efforts to control these issues? How will this meet the intent of Executive Order 14-04?

(aj) Wave and current impacts from increased ship activity. Dredging depths impact inner Harbor mudflats and sand islands. Decrease in lease values or elimination of oysterlands. How will increased vessel-oriented maintenance support current marine resources?

(ak) Impacts of the additional transportation of crude oil into domestic ports in Washington State and California. What has been the analysis of the indirect impacts of the proposed project(s)?

(al) There has been an inadequate analysis of alternatives and project purpose.

(am) There has been an inadequate analysis of indirect impacts.

(an) Inadequate discussion of fire and emergency response along the entire rail line. Hoquiam has been experiencing increased incidents with fewer personnel and less equipment to respond. If there were more than one incident at one of the terminals or elsewhere in the City, how would the emergency services be able to respond?

(ao) Special fire-fighting equipment and supplies are required depending on the type of fire. What supplies would be needed to suppress and extinguish a unit train accident? Where would these supplies be stored and made available?

(ap) Increased vessel traffic will impact the estuary and the ocean shipping lanes. What is the risk of these vessels as they traverse towards Anacortes, through the Marine Sanctuary, and as they traverse southward to California. What are the potentials for conflict in the shipping lanes and reaching destination in a timely manner?



Finally, These Global Issues Must Be Addressed

- Increased presence of mercury in environment due to increased use of crude.
- Increased ocean acidification from burning more carbon.
- Climate change: Impacts such as sea level rise and greater erosion from more intense storms on the planet, and especially implications for dredge filled areas.
- Option of not building the terminals.
- Discussion of leaving the crude in the earth and of domestic fuel security issues

Sincerely,



Arthur (R.D.) Grunbaum

