Shell Anacortes RAIL UNLOADING FACILITY

Environmental Impact Statement

Scoping Report

December 18, 2015

DEPARTMENT OF ECOLOGY State of Washington

SKAGIT COUNTY WASHINGTON Serving With Pride

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1. Acronyms and abbreviations

- ADA – Americans with Disabilities Act
- AMC – Anacortes Municipal Code
- ARUF – Anacortes Rail Unloading Facility
- BPD – Barrels per day
- BNSF – BNSF Railway
- Co-leads – Skagit County and the Washington State Department of Ecology
- CTUIR – Confederated Tribes of the Umatilla Indian Reservation
- DOT – Department of Transportation
- DNR – Washington State Department of Natural Resources
- DS – Determination of Significance
- Ecology – Washington State Department of Ecology
- EFSEC – Washington State Energy Facility Site Evaluation Council
- EIS – Environmental Impact Statement
- EPA – Environmental Protection Agency
- ESA – Endangered Species Act
- FRA – Federal Railroad Administration
- GHG – Greenhouse gas
- GIS – Geographic information system
- HIA – Health Impact Assessment
- JARPA – Joint Aquatic Resource Permit Application
- MDNS – Mitigated Determination of Non-Significance
- NEPA – National Environmental Policy Act
- NOAA – National Oceanic and Atmospheric Administration
- NOx – Mono-nitrogen oxides
- PDF – Portable document format
- $PM_{2.5}$ – Particulate matter with a diameter of 2.5 micrometers or less
- RCW – Revised Code of Washington
- SCC – Skagit County Code
- SEPA – State Environmental Policy Act
- Shell ARUF – Shell Anacortes Rail Unloading Facility
- Shell PSR – Shell Puget Sound Refinery
- US – United States
- USC – United States Code
- USDOT – United Stated Department of Transportation
- UTC – Washington Utilities and Transportation Commission
- VOC – Volatile organic compound
- WAC – Washington Administrative Code
- WDFW – Washington Department of Fish and Wildlife

2. Introduction

How to use this report

Skagit County and the Washington State Department of Ecology are co-lead agencies jointly overseeing the preparation of an environmental impact statement under the State Environmental Policy Act for a project proposed by the Shell Puget Sound Refinery. An EIS provides an impartial discussion of probable significant adverse environmental impacts, reasonable alternatives, and mitigation measures that would avoid or minimize adverse impacts.

The purpose of scoping is to identify the issues to be analyzed in the EIS. The purpose of this scoping report is to summarize the issues identified by individuals, tribes, organizations, and agencies during the scoping comment period for the Shell ARUF EIS. This report distills the comments into key themes, giving equal weight to each issue and concept; it does not contain all comments received verbatim nor does it quantify comments by topic.

Please also note that comments often mix statements of fact with statements of opinion, and as a result this report may include inaccurate or incomplete information in the form it was provided by commenters.

All comments received during the scoping comment period are posted on the project website: ShellRailEIS.com.

Scoping comments will be used by the co-lead agencies to help determine the issues and extent of the analysis to be included in the Shell ARUF EIS, as well as options for reasonable alternatives to the proposed project and mitigation measures that could be considered. The co-leads and their consultants will have the opportunity to review comments as they develop the draft EIS.

Proposal overview and context

Shell PSR is located within the Anacortes Urban Growth Area in western Skagit County, Washington, on a peninsula extending into Padilla Bay and across Fidalgo Bay from Anacortes, Washington. The land is designated as a Heavy Manufacturing District by the Anacortes Comprehensive Plan.

Shell is proposing to build a rail spur from the existing BNSF Railway line onto Shell PSR property to accommodate unit trains of 102 tank cars transporting crude oil. The facility is being designed to receive and unload a maximum of six unit trains per week. The Shell ARUF project also involves installing equipment and facilities to pump oil from rail cars to existing tanks within the Shell PSR, constructing several stormwater retention ponds, and other safety and spill response measures. The crude received by rail at this facility would replace crude that Shell PSR currently receives by ship. The proposed project would not increase Shell PSR's refining capacity or marine vessel traffic associated with the refinery.

In addition, Shell proposes mitigation for approximately 26 acres of on-site wetland impacts by restoring a portion of a nearby tree farm on Padilla Bay back to a tidally influenced estuary.

Purpose of the scoping process

The first step in the development of an EIS is called scoping. During scoping, agencies, tribes, local communities, organizations, and the public may comment on factors that should be analyzed and considered in the EIS. Specifically, the scoping process is intended to collect input on the following topics:

- Range of reasonable alternatives
- Potentially impacted resources and extent of analysis for those resources
- Potential measures to avoid, minimize, and mitigate impacts of the proposal

While the co-lead agencies are not required under SEPA to respond to individual comments during scoping, this report allows them to review and consider all comments when developing the scope of the EIS.

3. Scoping process

Notification of scoping

Determination of Significance

On September 21, 2015, the co-lead agencies released a DS that stated Shell's proposed project, Shell ARUF, may have a significant adverse impact on the environment and, therefore, required the development of an EIS under SEPA (Appendix A).

The scoping period began with the issuance of the DS. Washington State law mandates a 21-day public comment period for the scoping phase of an EIS. The co-lead agencies received and considered requests to extend the standard comment period prior to the release of the proposed project's DS. Upon release of the DS, the co-lead agencies announced a 45-day scoping comment period scheduled to end on November 5, 2015. The notice also included announcement of three scoping meetings with verbal public comment sessions scheduled in Mount Vernon, Anacortes, and Lynnwood, Washington.

Public and media notification

The co-lead agencies notified key stakeholders, interested parties, agencies, and the general public of the DS and scoping comment period using a variety of communication tools. Notifications included:

- Announcement of the scoping comment period
- Description of the proposed project and area map
- Identification of Skagit County and Ecology as the EIS co-lead agencies
- Proposed EIS process timeline
- Description of opportunities to provide scoping comments
- Details about the three scoping meetings
- Link to the EIS scoping comment period online open house

The tools used to announce the release of the DS and start of the scoping period included (Appendix B):

- Press release to Skagit County and Ecology local news outlets
- Mailer to more than 900 addresses, including:
    - Those provided by Skagit County from stakeholders involved in previous phases of the project
    - Other key stakeholders identified by the co-lead agencies
- Email sent to 2,555 addresses, including:
    - Those provided by Skagit County from stakeholders involved in previous phases
    - Key stakeholders identified by the co-lead agencies
    - Those who emailed the co-leads requesting an extended scoping comment period
- Print and online ads placed in local papers (over 2 million estimated impressions)
    - The Daily Herald (print and online)
    - Skagit Valley Herald (print)
    - Anacortes American (print)
    - The Argus (print)
    - Stanwood/Camano News (print)
    - Seattle Times (print and online)
    - LaConner Weekly (print)
- Article on the EIS process website: ShellRailEIS.com

Opportunities to provide comment

The co-lead agencies invited comments through a variety of methods as described below. The table below provides a count for the number of comments submitted during the scoping comment period using each option.

Comment options	Number of comments submitted
Online open house comment form	114
Verbal public comment session comments	236
Voicemail	19
Email	35,302
Written (letters and comment forms)	135
TOTAL	**35,806**

Online open house

The co-lead agencies hosted an online open house that provided an opportunity for people to learn more about the proposed project, take notes on the same content that was on display at the in-person open houses, and then submit their scoping comments online. The site was live throughout the entire scoping comment period (September 21 – November 5, 2015). The online open house received more than 1,458 visits from 992 users during the scoping comment period.

Topics of the online open house included:

- Proposed project
- EIS process
- Scoping
- Crude by rail
- Project history
- EIS topics
- Next steps

The online open house employed the Google Translate function that allowed visitors to translate each web page to one of 90 languages. Information for those interested in ADA or visually impaired accommodations was included on every web page. Also on every page was a web form to sign up for EIS process updates from the co-lead agencies.

Scoping meetings

Three in-person scoping meetings were hosted by the co-lead agencies. Each scoping meeting included an open house with information about the proposed project and a verbal public comment session (see below).

Meeting Date & Time	Location	Attendance*
October 13, 2015 4–8 p.m.	Best Western Plus, 2300 Market St. Mount Vernon, WA	172

October 14, 2015 4–8 p.m.	Anacortes Middle School, 2202 M Ave. Anacortes, WA	170
October 19, 2015 4–8 p.m.	Lynnwood Convention Center, 3711 196th St. SW Lynnwood, WA	268

* These numbers are the total count of people who signed in at the meeting. Some participants declined to sign in.

Each scoping meeting open house featured eight stations (matching the online open house) with information related to the Shell ARUF EIS process and proposed project. Co-lead agencies and consultant staff were present at each station to answer questions and encourage people to submit a scoping comment. Laptops were available at a comment station allowing attendees to visit the project website, participate in the online open house and submit comments online. Comment forms were also available for people to leave written comments. A meeting guide for each scoping meeting open house was handed out at the sign-in table and included information about the types of information available at the open house, an event map, details about the verbal public comment session, instructions for how to provide a written comment, and other options available to provide scoping comments after the scoping meeting.

Verbal public comment sessions

A total of four verbal public comment sessions were held during the scoping meetings: two held simultaneously during the Lynnwood scoping meeting and one each during the Mount Vernon and Anacortes meetings. Each verbal public comment session was facilitated from 5 – 7:30 p.m. in a separate room from the concurrently running open house.

More than 230 people provided verbal public comments. A lottery system was used to determine speakers and their order, since the co-lead agencies anticipated a high level of interest from participants. Each speaker was given up to two minutes to provide comments, which were documented by a court reporter.

Voicemail

A toll-free number was available for people to call and leave a verbal comment. Each voicemail was limited to five minutes and transcribed for comment analysis. A total of 19 voicemails were received.

Email

Stakeholders were encouraged to email comment@ShellRailEIS.com to submit their comments. Any emails received directly by staff during the comment period were reviewed and, if considered a scoping comment, forwarded on to this address for comment analysis. More than 35,000 email comments were received by the project team during the scoping comment period.

Written

Those who wished to provide written comments could either submit them at the scoping meetings, mail them to a PO Box set up for this EIS process, or hand deliver them to Skagit County Planning and Development Services during regular office hours. A total of 135 written comments were received.

Comment analysis process

The scoping period began September 21, 2015, and after an extended scoping comment period of 45 days, closed on November 5, 2015. During this time, a total of 35,637 scoping comments were received through the various methods described in the previous section. All submissions were reviewed and analyzed to prepare this report. A copy of all scoping submissions received can be found on the project website: ShellRailEIS.com.

Processing communications

The full text of all submissions were reviewed and entered into a single database for analysis. Analysts recorded the name and contact information of each commenter, the source of the submission, and other relevant details specific to each submission.

Once all submissions were entered into the database, analysts read each submission to identify and code unique comments. Comments were defined as unique concepts or ideas within a submission. Many submissions contained multiple comments. Each unique comment was assigned one or more unique categories.

Each unique submission was reviewed at least twice: once by the primary coding analyst, and then again by a second analyst for quality assurance and control and/or during the preparation of this scoping summary. This process allowed for any discrepancies or inconsistencies to be resolved.

Analysis methodology

To create this report, analysts queried the database to generate lists of comments organized by comment categories. Comments within each category were then summarized to capture the unique issues and concerns expressed by commenters.

For the purpose of this summary, every comment has value, whether it is stated only once or multiple times. The analysis represented in this report does not tally the number of comments received on any given topic, nor determine whether comments supported or opposed the proposed project. Scoping is designed to help identify issues that should be addressed and analyzed in the EIS and is not intended to function as a “voting” process.

4. Public comments summarized by issue of concern

Organization of this section

The following sections are organized into categories that reflect the issues and concerns heard during the scoping period. These issues and concerns are summarized and do not capture every comment for each category; they are not quantified. Quotes highlighted in the comment analysis are used to illustrate the range of comments received, but may be opinions and are not intended to represent statements of fact.

Geographic scope

Commenters generally requested the scope of analysis cover at least the state of Washington and, in most cases, the entire rail corridor from the source of oil to the destination (Shell PSR). These comments mentioned Washington, Idaho, Oregon, Montana, North Dakota, and South Dakota specifically. Other commenters suggested the scope be even broader, encompassing all communities that would be impacted by Bakken and tar sands crude transportation generally.

Other commenters recommended the study be limited to the immediate project vicinity.

Areas of concern included private property, National Monuments, state and county parks, conservation lands and easements, National Parks and National Historic Parks, marine sanctuaries, National Wildlife Refuges, and DNR lands.

Comments regarding the extent of analysis for specific topics are included in the summary of comments below.

Comments summarized by topic

Air quality

Commenters emphasized the need to evaluate the direct, indirect, and cumulative impacts of air pollution in the area near the facility, as well as along the railway. They noted that the proposed project, trains traveling along the railway, as well as cars, ships, and trains idling due to the project may contribute to air pollution.

Commenters noted that increased rail traffic would result in higher levels of exhaust from diesel engines, which impacts human health and increases risk of asthma, cancer, and degenerative brain disease.

Commenters requested the EIS study diesel particulate matter from train exhaust, VOC concentrations, saturated and aromatic hydrocarbons, nitrogen oxide emissions, and residual pollution. Commenters also expressed concern about historical and ongoing pollution by Shell PSR and Tesoro, siting EPA's Enforcement Compliance History Online website.

Increased pollution and risk of disaster from increased train traffic may also have negative impacts on wildlife and the environment that commenters asked to be addressed.

Commenters requested analysis of health and safety impacts of poor air quality from idling trains, including a study of all fossil fuel trains to determine the amount and duration of traffic delays in communities along the rail corridor from source to destination.

The link between air pollution and health, including various cancers, respiratory diseases, neurological diseases, cardiovascular diseases, premature death, and other illnesses was noted as a concern by commenters. The health impacts on vulnerable populations, such as children, the elderly, and those that depend on natural resources for their livelihoods, were also highlighted. The health risks for workers at the facility and along the rail line were also emphasized by commenters. The impact of air pollution on health was also noted by commenters as impacting the economy due to lost work time and increased medical spending, as well as impacting overall quality of life.

Commenters suggested that air pollution associated with the project could reduce property values in the area near the facility and along the rail line. They noted that the pollution might also encourage current residents to move out of the area, and discourage others from moving to the area.

Commenters expressed concern that toxic emissions and industrial fumes would be carried several miles by winds, and could impact populations outside of the immediate proposed project vicinity. They asked how this air pollution would impact citizens waiting for trains to pass at crossings, both in the immediate vicinity of the project and along the railway.

Commenters identified the potential impacts of air pollution on wildlife and the environment, including its impact on:

- Amphibians
- Aquatic invertebrates
- Columbia River Gorge
- Fidalgo Bay Aquatic Reserve
- Fish
- Gardens and farms
- Herons and other bird species
- Ocean acidification
- Padilla Bay National Estuarine Research Reserve
- Reptiles
- Resident and transient marine mammals (e.g., orcas)
- Salish Sea
- Skagit River
- Terrestrial environment
- Wetlands

Commenters asked that the EIS study how a spill, explosion, or fire would impact air quality. They also requested that the EIS examine the difference between the emissions and air pollution caused by Bakken crude oil and other feedstocks. Commenters expressed concern that gas flaring, off gassing, and equipment leaks will be detrimental to air quality. They suggested the use of air pollution-reduction features on older diesel engines, increased use of newer and less polluting engines, and a new air quality analysis lab to address these potential impacts.

Commenters indicated that Shell PSR may be in violation of the Anacortes Municipal Code standard for smoke and ozone levels and has exceeded National Ambient Air Quality Standards. They also noted that

Shell has been cited for violations of air quality standards several times in the last five years and expressed concern about future violations.

Climate change and greenhouse gases

Commenters expressed concern about the proposed project's potential for contributing to climate change and asked that this be analyzed in the EIS. Potential direct, indirect, short-term, long-term, and cumulative impacts of contributing GHG sources or actions were noted by commenters, including:

- Construction activities related to the proposed project
- Effect of cheaper gas and its subsequent increase in use
- Emissions from the new rail service
- Emissions of idling trains
- Emissions of vehicles idling while waiting for a passing train
- End users of the products from Shell PSR, both domestic and overseas
- Export of the refined oil by large ships overseas
- Extracting crude oil, both Bakken and tar sands feedstocks
- Flares used at Shell PSR and when extracting Bakken crude
- Oil spilled during transport
- Refining crude oil at Shell PSR
- Removing forest land/trees which would have processed carbon dioxide
- Trucks used by Shell PSR
- Unloading operations

Commenters asked that the potential GHG emissions of all proposed project alternatives be stated and compared in the EIS.

Commenters noted skepticism that Shell PSR would decrease the use of vessels once the new facility is built, which would result in less carbon dioxide emissions overall. Commenters also expressed concern with previous GHG analysis conducted by Shell PSR, noting the debit included only in-state fuel consumption, while their credit included fuel consumption from out of state. Commenters suggested new analysis be done that includes consumption of fuel by the trains all the way from the source to the destination.

Commenters stated the amount of GHG emissions by the proposed project would be above Ecology's emission limit, which would require Shell PSR to disclose all GHG emissions in full. Commenters also noted that extraction of Bakken crude potentially involves significant methane leakage.

Commenters questioned how GHG emissions from the proposed project will impact the Washington Governor's mandated GHG limits. Commenters encouraged the use of outside experts to measure and study the impacts of GHG as it relates to the proposed project, such as the University of Washington and/or the US military.

Commenters asked that the EIS include economic analysis related to the increase in GHG emissions by the proposed project. Commenters also asked that the EIS include a life-cycle analysis of the crude oil to be delivered to Shell PSR.

Commenters noted several potential impacts of continued climate change, including:

- Decreased farm production
- Decreased property values
- Decreased snow pack on local mountains
- Degradation of natural resources
- Diseases
- Increase in injuries
- Increase in landslides
- Increase in wildfires
- Increased use of pesticides in agricultural production
- Fewer glaciers in the local mountains
- Melting permafrost
- Ocean acidification
- Poorer human health
- Sea level rise
- Storm surges
- Tribal treaty and fisheries rights
- Warmer water (oceans and rivers)
- Warmer weather

Commenters asked that impacts related to GHG emissions by the proposed project be mitigated, if at all possible. Commenters suggested several mitigation options, including:

- Denying the proposed project permits
- Prohibiting the use of tar sands crude
- Purchasing offset credits from a verified source
- Requiring Shell PSR to produce renewable energy
- Requiring Shell PSR to track and report all GHG emissions through the life of the proposed project

Cumulative impacts

Commenters noted the recent increase in proposed or built crude by rail projects and expressed concerns about the cumulative impacts of this trend. Commenters suggested that other crude by rail sites undergo an EIS or the current EIS be expanded to be a cumulative study of all oil, tar sands, and coal projects in the region, both on land and water. Commenters stated that SEPA requires consideration of cumulative effects and pointed to NEPA regulations for a definition of cumulative impacts. Commenters also acknowledged that more trains will lead to a higher risk of accidents or disasters.

Commenters requested that all areas of study in the EIS include the cumulative impacts and consider regional projects, including:

- BP/Phillips 66 Refineries (Ferndale, WA)
- Gateway Pacific Terminal (Cherry Point, WA)
- Kinder Morgan Trans Mountain Pipeline (British Columbia)
- Tesoro Refinery (Anacortes, WA)

- Tesoro-Savage (Vancouver, WA)
- Westway and Imperium Expansion Projects (Grays Harbor, WA)
- Other projects at Port of St. Helens, Port of Morrow, Port of Coos Bay and British Columbia ports

Commenters noted that the cumulative impacts of these different projects will likely be greater than the sum of their individual impacts. Commenters noted that small increases in rail traffic could have much larger impacts on various resources. Commenters also asked that the EIS study the entire project from source to refinery.

Commenters requested that the EIS compare other crude by rail train routes in North America with the proposed routes in the Northwest. Commenters stated that this EIS will set a precedent for the future. Commenters asked that this project be considered as the construction of a massive crude by rail infrastructure system throughout the State.

Commenters also expressed concern about the potential cumulative effects of Tesoro's planned rail operations expansion to extract xylene for export from Bakken shale oil delivered by trains.

Economics

Economic impacts

Commenters conveyed concern that Shell profits from this project, but the risks and costs of the project are being socialized and passed onto the community and tax payers. Specifically, commenters were worried that the cost of the following would be a financial burden to local and regional governments and the general public:

- Cost of emergency response, planning, and staffing
- Externalized cost of healthcare and climate change
- Infrastructure construction and improvement
- Improvements to at-grade crossings that are required to accommodate the increase in rail traffic

Some commenters emphasized that these costs should be covered by the applicant and other rail users, whereas others suggested it be divided equally among the railway, the refineries, and public entities. Commenters also noted that governments, including tribes, have invested heavily in the development of commercial business districts, especially along waterfronts. The project may undermine these investments, leading to a loss in revenue necessary to provide government services.

Commenters requested a thorough economic evaluation that includes quantifying:

- A range of cost estimates for the social cost of carbon and climate change, including but not limited to the US Office of Management and Budget, the International Monetary Fund, and scholarly articles
- Contribution of rail and freight commerce and jobs to the region
- Costs and benefits to Shell workers compared to Shell executives

- Cumulative cost of health impacts
- Economic impact in terms of lost work time and medical expenses for the thousands of people exposed to air pollution
- Exact number of jobs the project will provide, including jobs at the Shell PSR and at local firms that Shell contracts with, their pay levels and benefits, their longevity and stability, and the tax revenue generated
- Financial benefits to Washington residents
- Impact of increased supply on market interest in electric cars or hybrids
- Impact of this project on the cost of gasoline and the related impact to the public, especially low income populations
- Impact of workers travelling to the region to perform ongoing maintenance at Shell PSR
- Impact to Sea-Tac, military installations, and drivers if Shell cannot deliver gasoline
- Impacts to all businesses within a half mile of the rail corridor between source and destination
- Jobs that may be lost in the renewable energy sector
- Long-term impacts of economic dead zones that would occur after an explosion
- Loss of future businesses moving to the area due to the perception of strict regulations and government "hoops"
- Number of permanent jobs versus temporary jobs created by this project
- Opportunity costs of oil transport infrastructure development and ways that it may obstruct clean economic growth and progress
- Past cost to taxpayers from remediation of Shell PSR's former tank farm
- Real and perceived risks associated with oil train fires and explosions
- Regional oil demand scenarios that justify expanding refining capacity
- Shell's charitable giving to the local community
- The loss of public services like hospitals, schools, and government buildings and emergency response cost
- Trickledown impact of Shell's profits to the local economy
- Type and cost of infrastructure improvements needed to mitigate traffic and safety impacts

Commenters also requested a study and tabulation of the number of oil transport rail accidents in Canada and the US in the past two years that includes an analysis of the accumulated economic costs.

Commenters acknowledged that this project impacts indigenous populations and should factor in how the proposed project impacts the next seven generations, because that is an indigenous tradition for making decisions.

Commenters requested that the EIS compare short-term job gains versus long-term job losses.

Commenters also asked that the study quantify the cost and benefit of each train per day.

Commenters noted that the economic analysis should not include money contributed to gross domestic product from goods and services that are used to mitigate damage from an accident.

Commenters asked that the environmental analysis address market changes and how they may impact the profitability of transshipping oil versus refining it, which in turn impacts employment for Shell PSR's workers. Commenters also expressed concern that an economic evaluation is outside the scope of an environmental review.

Commenters were concerned that Washington might lose its competitive economic advantage by regulating what commodities can flow through communities. Commenters also noted that Shell PSR needs to build this rail unloading facility to remain competitive since Shell PSR is the only refinery in northwest Washington without a rail track. Commenters also stated that the economy is built on fossil fuels and crude is needed to keep the economy stable. Commenters included that Skagit County Code 14.12.140 requires the EIS to include analysis of the positive economic impacts of this project.

Commenters were concerned that the increase in rail traffic, noise, and vibration could negatively impact the economy by:

- Causing a loss of wages from workers stuck in traffic
- Causing competition on the rail lines for shipping other goods and commodities, especially impacting Amtrak and passenger rail services
- Damaging infrastructure such as the Swinomish Channel bridge
- Damaging nearby homes leading to costly retrofitting repairs
- Decreasing access to businesses for customers and commercial deliveries
- Decreasing the appeal of communities, thus lowering property values and turning away potential employers and job seekers
- Distracting workers and leading to a decrease in productivity
- Impacting access to ferries
- Impacting tourism and recreation opportunities
- Loss of revenue from missed appointments, impacting shipping ports' abilities to receive shipments

Commenters also noted that the project could increase climate change, ocean acidification, pollution, dust, and diesel emissions, which could impact public health, agriculture, and livestock, and lead to an increase in the cost of medical care and insurance, and impact areas businesses, industries, and commerce. Commenters also noted that once Shell expands its operations, it will want to recoup on the investment, which will financially encourage the continued use of oil and the related environmental impacts.

Commenters stated that a future increase in vessel traffic could impact regional commerce and the transport of goods via ships and lead to a loss of income from recreational boating.

Commenters explained that Shell PSR decreases area aesthetics, which could also impact the appeal of the community, thus lowering property values and turning away potential employers and job seekers.

Commenters were concerned that shipping crude is prioritized over shipping other commodities along the rail lines. Commenters suggested that rail costs are a significant factor impacting the lack of competitive status of Washington Ports as compared to others on the west coast due to the prioritization of higher freight rates paid by oil shippers. Commenters pointed to existing state studies indicating that coal rail traffic is already having a significant negative impact on the ability of Washington shippers to access markets where coal traffic from the Powder River basin is dominating the rail lines. Commenters requested that the EIS address and quantify the economic impact of job loss related to the container industry and the Port of Seattle, including multipliers, as a result of container cargo being delayed or displaced because oil commodities are using more rail capacity. Commenters requested that these impacts be studied along the rail corridor between the source and destination.

Commenters specifically identified the 20-30 full time workers in the town of Conway who work for businesses (Conway Feed and Bell Lumber & Pole) being impacted by delays in rail shipping caused by oil and coal traffic, which threaten their jobs.

Impacts from accidents and spills

Commenters noted that damage from previous oil trains explosions has been in the billions of dollars. Commenters also explained that the cost of an oil train disaster may be severely understated due to the Value of Statistical Life which is used in settlements and judgments. Commenters suggested looking to previous oil train explosions to estimate the actual cost of an accident.

Commenters questioned the true cost of a catastrophic disaster from a spill, fire, explosion, or derailment and requested that the economic assessment factor in the cost of:

- Commercial marine traffic
- Damage to fishing and shellfishing industries
- Damage to state-owned DNR resources
- Damage to the marine environment
- Funerals
- Impacts to drinking water, including sole source aquifers
- Lost agricultural lands
- Lost boat moorage fees
- Lost jobs and wages in fishing, salmon habitat restoration, crabbing, and recreation
- Lost local businesses, specifically tribal businesses and casinos and the related loss of tax revenue
- Lost property and decreased property values
- Lost tourism and recreation opportunities
- Medical expenses
- Protecting and possibly relocating prisoners

- Relocating families

Commenters asked that Shell and BNSF prove that they carry insurance sufficient to cover all costs of a spill or disaster. Commenters were concerned that there would be no insurance large enough to pay for damages to a large city such as Seattle, Vancouver, or Spokane. Commenters worried that taxpayers will end up covering the cost of the damage. Commenters requested that the EIS investigate Shell's capital structure and available insurance or bonding. Commenters also suggested that the EIS estimate the financial viability of the oil industry as demand shrinks, comparing it to the coal industry. The coal industry has shrunk in recent years as demand dropped, leading major companies to seek bankruptcy and neglect their environmental responsibilities.

Commenters also recommended that the EIS include mitigation requiring a bond be kept in escrow to cover the cost of an accident. Commenters suggested the bond cover three times the worst-case scenario and compensate workers for illnesses associated with the project. Other commenters recommended the state tax the movement of carbon-based products through the state in order to sufficiently clean up and repair oil spills.

Commenters feared that Shell might avoid paying cleanup cost by declaring bankruptcy or litigating.

Earth, geology, and soils

Commenters were concerned about the impact from the removing, transporting, storing, and disposing excavated material from the project site and asked that the EIS identify the specific locations for this disposal, the means of transportation, and the local traffic and safety impacts of moving it.

Commenters recommended that the 1.1 million cubic yards of soil excavated from the site be studied for importance to flora and fauna. Commenters also asked for an ecosystem study of the delivery location of excavated material and were interested in knowing the impact moving this soil would have on local roads. Commenters were also interested in having the soil tested after it is removed and before it is used elsewhere.

Commenters were concerned about the seabed impacts of anchors and chains of vessels staged for loading at Shell PSR. Commenters asked that the EIS include information on any proposed dredging in waterways along the train route or near the facility. Commenters also requested that the short and long term impacts of terra forming on the shoreline and waters of Padilla Bay be considered.

Erosion, especially as related to Washington's heavy precipitation, was a concern of commenters. Commenters would like the EIS to consider the impact of the project on erosion, including impacts to groundwater. Commenters suggested a study of March Point Road's potential for erosion due to construction and higher use.

Commenters noted that Skagit County shorelines and floodplains are especially vulnerable to liquefaction, landslides, severe ground cracking, uplifting, and subsidence.

Commenters suggested the EIS review the environmental impacts that the different types of crude oil may have on the nearby soils and sediment at the refinery and during transportation, including a study of the effects of toxic fumes on soils. Commenters noted that past and future soil pollution would negatively impact local salmon. Commenters also suggested that soil pollution from an oil spill accident would affect the health (perceived or real) of Skagit County's agriculture and soils. Commenters also noted that many of the lands along the rail corridor are leased to forestry operations and contain toxic pesticides.

Commenters asked for a wide geographic study of how landslides may impact oil trains in transit along the entire rail line, including potential for derailment and spills. Commenters requested the EIS include previous derailments that have been caused by landslides, such as the 2012 incident in Everett. Commenters were particularly concerned about landslides north of Golden Gardens Park in Seattle and along the Chuckanut slope.

Commenters would also like the EIS to examine the environmental, safety, and economic impacts of landslides. Commenters noted that climate change and more intense and frequent rain events may impact the risks of landslides along the rail routes.

Commenters requested that the EIS study the vibrations and destabilization of hazardous slopes from an increase in heavy oil trains and the likelihood that they could induce a landslide. Commenters would also like the EIS to examine rock slides along the rail line, particularly in the Columbia Gorge.

Commenters asked what systems could be installed to mitigate damage caused from landslide-induced derailments. This may include fire suppression systems or advance warning systems for landslides on the tracks. Commenters suggested the EIS consider slope stabilization, tunneling, or covering track susceptible to landslides to increase safety. Commenters asked if the project could use state-of-the-art slope-monitoring tools to detect potential slippage and take preventive actions to protect oil trains.

Commenters suggested that land and soil under the rail is not suitable for oil transportation and should be studied. Commenters stated that the EIS should study the likelihood of earthquakes occurring in our region and the impact of earthquakes of varying magnitude (up to a magnitude nine), associated liquefaction, and tsunamis occurring along the rail corridor or at the site of the unloading facility.

Commenters stated that emergency and community response to both on- and off-site oil train disasters during an earthquake should be assessed.

Commenters asked that the EIS consider Shell PSR's internal protocols and abilities to handle seismic activity at the refinery. Commenters requested that this study also evaluate the impact of a seismic event on the Swinomish Channel swing bridge, the Skagit River rail bridge, the Ballard Locks rail bridge,

the Padilla Bay railroad causeway, and the Nisqually River rail bridge. Commenters also asked for a study of how volcanic events and lahars would impact oil trains in transit or at the refinery. Commenters asked who would be responsible for losses during a large catastrophic event and who would be responsible during any potential litigation.

Commenters noted that Shell proposes mitigation for approximately 26 acres of on-site wetlands and saltwater marshes. Commenters requested more information on the source of fill material for the wetland mitigation. Commenters stated that fill material for the proposed mitigation site must be contaminant free. Further, commenters asked how any contaminants would interfere with the ecosystem at the mitigation site. Commenters also requested the EIS evaluate the impact of soil erosion at the wetland mitigation site.

Emergency response

Commenters requested a comprehensive analysis of the adequacy of federal, state, and local emergency response capabilities to respond to a derailment, spill, explosion, and/or fire along the entire transport route for all types of crude being transported. These comments included requests for documentation, analysis, and discussion of:

- Availability and adequacy of response plans (e.g., Geographic Response Plans) up to and including a variety of "worst case" scenarios that address the geographic differences along the rail corridor
- Availability and source of funding, including the financial responsibilities of local governments, Shell, and BNSF
- Availability of fire suppression or advance warning systems
- Available emergency medical services including transport times to specialty care facilities
- Communication strategies including ensuring emergency responders are aware of what hazardous materials are being transported and the potential for communications systems failure
- Community awareness and education, including evacuation routes and communications contingencies
- Train routes, crude types, and how emergency responders are notified
- Estimated response times required compared to known capacity
- Evacuation plans for communities along the rail lines
- Hazardous materials disposal facilities
- How natural disasters (e.g., earthquake, wind, flood, tsunami) may contribute and/or complicate response
- Long-term response plans for accidents that may take years to clean up
- Personnel requirements, including quantity and specialized training using a gap analysis
- Potential for disaster to damage or destroy needed emergency equipment and availability of satellite locations of cached emergency equipment (e.g. fire station destroyed by derailment and explosion)
- Potential use of and impacts of surfactants and oil dispersants

- Quantities, descriptions, capabilities, expertise, and experience of emergency response personnel in various categories (e.g., BNSF, Shell PSR, county, state, federal, union, contract, volunteer)
- Role of on-board rail crew and factors that may inhibit their ability to respond in a timely manner (e.g., fatigue, safety compromises, mental errors)
- Types and quantities of specialized equipment needed (e.g., alcohol-resistant foam) and how response techniques vary by feedstock

Commenters noted information from previous crude by rail oil spill incidents may be useful including Culbertson, Montana; Aliceville, Alabama; Casselton, North Dakota; Lynchburg, Virginia; Mount Carbon, West Virginia; Galena, Illinois; Heimdal, North Dakota; Gogama, Ontario; Timmins, Ontario; Plaster Rock, New Brunswick; and Lac Megantic, Quebec.

Commenters requested a detailed analysis and map of the transport route, including Spokane, Tri-Cities, Columbia River Gorge, Vancouver, Seattle, and the Interstate 5 corridor, and the quantities of schools, hospitals, emergency facilities, and special care facilities that could be impacted by an accident.

Commenters requested studies to determine railroad crossing closure durations and assurances that those durations do not violate federal regulations limiting closure durations.

Commenters recommended consultation with local firefighters about the impacts of an oil train explosion on all rail communities.

Commenters requested that the EIS determine how many at-grade crossings currently exist in Skagit County and also asked that the EIS study how often each day an emergency medical response vehicle (ambulance, police, or fire) crosses each at-grade crossing. Commenters asked that the EIS calculate the risk of an emergency response vehicle being delayed at an at-grade crossing every day by a mile-long unit train, and how these delays would impact the delivery of emergency response services to the residents of and visitors to Skagit County, and other communities along the rail line.

Commenters also requested a detailed analysis of alternative emergency access routes.

Commenters noted that patient care decisions that are influenced by transport time rather than the best facility for the patient's condition increase the likelihood of a poor outcome. Commenters requested the EIS study how a unit train blocking an intersection might impact the survival rate of a person suffering from traumatic injuries, or from a cardiac or respiratory emergency. Commenters also requested the EIS require quick disconnects on trains to allow access for first responders.

Commenters requested consideration of disaster response specialty teams to help address perceived shortcomings in existing emergency response capacity.

Commenters asked how long it would take different types and quantities of oil spills to be completely cleaned up. Commenters requested the analysis of the amount and effectiveness of cleanup include potential spills over waterbodies (such as the Skagit River and Padilla Bay), rivers, streams, non-marine waterways, and wetlands.

Commenters noted that response strategies, plans, and analyses should address known and potential future crude feedstocks because risks vary by crude type.

Commenters requested documentation of the level and application of insurance that will be used in the event of an emergency. Commenters also requested the permit include a bonding requirement sufficient to cover all reasonably foreseeable costs of emergency response, clean-up, and habitat restoration.

Commenters requested an analysis of the potential delays to emergency vehicles from rail congestion at intersections due to oil trains, particularly in communities such as Mount Vernon. Commenters specifically mentioned the East March Point Road crossing, which may not have been included in the previous traffic study, but is a critical access route for Fire District #13 and other emergency responders to the east March Point area.

Commenters requested analysis of the potential health impacts to emergency response personnel that might result from additional exposure to hazardous materials related to a spill, fire, or explosion.

Commenters identified a range of location-specific emergency response concerns including:

- Cities and neighborhoods along the transport corridor
- Evacuation strategies, especially for isolated locations and within the blast zone (e.g. Bayview State Park, Edmonds Senior Center)
- Response in arid, less urban areas where a disaster could trigger wildfires and the practice of "burn-out" as a response
- The potential for a closure of State Route 20, including access impacts for food and fuel to the San Juan Islands and personnel to Naval Air Station Whidbey Island
- The tunnel used to transport crude through Seattle
- Skamania County Fire District #4, Skamania County, and the Columbia River Gorge

Commenters requested mitigation include robust funding for disaster preparedness, training for first responders, funding to state agencies for additional track and hazardous material inspections, and a requirement that response plans be completed prior to permitting.

Skamania County Fire District #4 included a resolution passed by the District Board of Commissioners requesting that Bakken Oil Train traffic be halted until 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.

Energy dependency

Commenters said Washington State and the US should move away from dependence on fossil fuels, noting specifically:

- Dependence on oil, gas, and coal is outdated
- Further proof is needed to demonstrate the national and international demand and supply for crude oil
- Continuing to combust a finite carbon-based natural resource risks irreversible damage to the environment
- Moving forward with the project will only render a shift to renewable energy more difficult, as there will be a deeper commitment to fossil fuel infrastructure
- Fossil fuel transport via rail is extremely dangerous
- Providing additional means and capacity for oil transportation and refining only encourages more extraction, which goes against Washington State's progress with clean, renewable energies, making it impossible to meet climate change goals
- Rather than produce more gasoline, the demand for which is declining, the US should move towards more electric vehicles
- Coal and oil companies are struggling as demand for fossil fuel declines; Shell would likely profit less than projected
- Scientists support cleaner forms of energy to protect humans and the environment
- The use of fossil fuels only further contributes to global warming
- Protection of humans and the environment should be prioritized over the production of fossil fuels

Commenters suggested that Shell PSR pursue renewable energy production, instead of refined oils that could contribute to climate change.

Alternately, commenters noted that oil production is booming in the US due to increases in the use of fracking, and additional infrastructure will help meet the need. Commenters claimed that refining US crude is the best option for national security, especially during uncertain political times.

Commenters also noted that fossil fuels are dependable sources of energy, and the best transportation system would be a pipeline. Commenters asked that Shell identify more sources of oil supply, given that the primary source, the Alaska North Slope, is in decline. Other commenters stated that there is enough Alaska North Slope crude in production, but it is more expensive and therefore unappealing to Shell.

Commenters said that while Washington State may be moving away from fossil fuels in the long-term, oil is still required in the near-term to meet consumer demand, and to create and maintain jobs in the energy sector. Alternately, commenters said any jobs created by expansion of refineries will be short-lived as the nation transitions to cleaner energies. Other commenters stated that gasoline will continue to be needed to meet our transportation needs.

Commenters said energy producers and regulators do not ask the public which type of energy they prefer; citizens should have a say in which technologies are developed and used to create electricity.

Commenters asked that the EIS state Washington State's position on cleaner and more renewable energies.

Commenters asked that the EIS include the following:

- A study of how an increase in oil dependency will negatively impact clean energy industries
- An estimate of regional oil demand scenarios that considers the various market price levels, the cost-learning curves of solar and wind generation and battery storage, fuel efficiency improvements, and projections of vehicle miles traveled
- Economic benefits of supporting alternative clean energy jobs versus fossil fuel jobs
- Impact of this project on the global pricing and consumption of fossil fuels

Commenters asked that crude oil be left in the ground until the need for oil is greater and better extraction and transportation methods are identified.

Environmental justice

Commenters requested that the EIS include a thorough analysis of potentially impacted environmental justice communities, including minority, low-income, and Native American populations. Commenters requested this analysis extend from source to destination and actively solicit participation in the permitting process from those communities. Commenters noted that addressing acute impacts versus averaging is essential for environmental justice analysis. Commenters also emphasized the need to take into account the high concentrations of non-native English speakers in many communities, with special attention to indigenous peoples, Spanish speakers, and members of Asian Pacific Islander communities.

Commenters identified a range of potential impacts to be considered in the context of environmental justice including:

- Accidents, derailment, spill, fire, smoke, and explosion
- Air, water, and environmental pollution
- Degradation of aesthetics, loss of open space, and nuisance concerns such as odor, noise, and dust
- Economic conditions such as changes in employment, income, the cost of housing, or other metrics
- Human health including illness rates (e.g., cancer, exposure to carcinogens, asthma)
- $PM_{2.5}$ (trains are designated as a "major source" of diesel $PM_{2.5}$ by Washington State Department of Health); high levels of diesel $PM_{2.5}$ can increase risk of cancer, cardiovascular disease, reproductive and developmental disorders, and pulmonary diseases, among other health impacts for surrounding communities.
- Social conditions such as reduced access to hospitals, safe drinking water, and public transportation

Commenters noted a variety of population groups and geographic locations likely to be disproportionately impacted including:

- Children, the elderly, and other vulnerable members of the community
- Communities and individuals in proximity to the transportation corridor with income, ethnic, race, and educational differences; preliminary Washington State Department of Health analysis indicates a disproportionately high number of minorities and people with lower incomes and lower educational attainment live near the rail lines
- Homeless populations and encampments near the rail lines
- King, Snohomish, and Skagit County jails located near crude by rail corridors
- Native American tribes including the Swinomish Tribe and Reservation and Fort Berthold Reservation
- Schools, hospitals, churches, and businesses within the blast zone
- Schools, hospitals, churches, businesses, and natural resources like the Skagit River, Padilla Bay, the Great Blue Heronry on Padilla Bay, fisheries, and communities, like Anacortes, that depend on the Skagit River for drinking water
- South Seattle (e.g., Georgetown, International District)
- Linguistically isolated communities

Historic and cultural preservation

Commenters emphasized the need to evaluate the direct, indirect, and cumulative impacts on cultural and historic resources, including historic properties, archaeological sites, and traditional cultural properties such as sacred sites, traditional fishing and plant collecting localities, and cultural landscapes in and adjacent to the project area.

Commenters said the EIS should describe any and all reasonable alternatives for the proposed project, including measures to avoid, minimize, and mitigate for temporary, permanent, direct, indirect, and cumulative impacts to natural and cultural resources.

Commenters specifically requested archeological studies be conducted to look for any tribal artifacts or burial remains that may be located on the properties to be developed, noting the area has been inhabited by tribes for thousands of years. The project site is in proximity to areas used for finfish and shellfish harvesting, increasing the likelihood of finding tribal artifacts and/or burial remains on the site.

Specific areas of tribal interest mentioned include:

- Bellingham Bay
- Fidalgo Bay
- Hale Passage/Portage Bay
- Lummi Bay
- Padilla Bay

Commenters requested studies of the indirect and cumulative impacts to formally recognized places of interest including:

- Columbia River Gorge National Scenic Area (related to state and federal obligations to protect this area)
- Historic, scenic towns that rim the Salish Sea and Puget Sound
- Mount Vernon's historic buildings, including the Lincoln Theater
- National Scenic Area Treatise

Washington State Parks requested that each State Park located within 1,000 feet of the proposed spur from the BNSF railway line be evaluated for the potential for vibration from increased train traffic to impact cultural and historic park resources.

Commenters also expressed concerns about impacts on local culture, character, and quality of life. In this context they requested the analysis include:

- Environmental, economic, and social impacts to places of worship along the route (Christianity mentioned specifically)
- Impacts to normal and historical activities and events, such as the Skagit Valley Tulip Festival
- Impacts to the cultural and social dynamics of neighborhoods suddenly exposed to unit trains, such as reduced walkability in urban neighborhoods
- Impacts to the rural character of the region, including Mount Vernon and Anacortes
- Impacts to unique places such as bridges, centers of commerce, places where people gather, important habitat, unique ecosystems, and critical areas
- The impact of this project upon cultural resources through the shipment, processing, and burning of fossil fuels. Tribal members are concerned it will impact their livelihood, their traditions, and the passing on of knowledge to tribal youth.
- The potential for a disaster within the Swinomish Reservation that could result in the loss of an entire culture

Commenters noted at least eight registered archaeological sites within one mile of the proposed project site, including one which is less than 200 feet away. In addition, a number of other archaeological sites or known prehistoric village sites are located on or near March Point and the proposed project site.

Commenters noted the EIS must adequately address compliance with Section 106 of the National Historical Preservation Act or other Federal and state laws requiring the protection of archaeological and cultural resources. The EIS must also include the development of an adequate cultural resources management plan, including adequate inadvertent discovery procedures.

Land use and social elements

Agriculture

Commenters identified the Skagit Valley and flood-plain as a rich agricultural area with important alluvial soil. The BNSF rail tracks traverse it, concerning commenters that a spill, derailment, or explosion

in the area could ruin the soil and the rural character of the region and cause contamination by air-borne surfactant loads.

Commenters also pointed out the importance of agriculture to the Columbia River area and requested that the impacts of a spill be considered there. Commenters noted that eastern Washington is also an important agricultural community that ships products to western ports and should be considered by the EIS. Commenters requested that the EIS study the impacts of extracting and processing crude to North Dakota farmland as well. Commenters stated that the EIS should also examine the potential impacts of the project on tribal members harvesting treaty-reserved resources gathered for nutritional, medicinal, and cultural purposes.

Commenters emphasized that the new SEPA checklist question B-14-g requires consideration of impacts to agricultural and forest product transport conflicts. Commenters noted that the rail transport study (March 2, 2015) and the 2013 SEPA checklist for the proposal failed to include these. Commenters would like the EIS to examine the regional direct, indirect, and cumulative impacts of oil trains, including the number of farming jobs and wages that may be lost. Commenters suggested that Washington State University economists help with these calculations.

Commenters expressed concern about the black particulate matter from Shell PSR that lands on nearby crops and fields and its potential health impacts. Commenters requested the EIS consider the impacts of oil refinery sludge on alfalfa plants. Commenters questioned how pollution (including dust and diesel exhaust) from trains impact crops, organic gardening and agriculture, and the safety of consuming produce grown in home gardens near the tracks.

Commenters also noted the burning of oil products leads to climate change and negatively impacts the environment. Identified impacts from climate change include: drought, increased temperatures, decreased snow pack, and increased water temperatures. Commenters stated that these environmental factors impact crops and farmers' economic success. Specifically, increased temperatures can lead to more pests, which requires farmers to spend more money on pesticides, which in turn exposes workers to more toxic chemicals.

Commenters identified that livestock grazing near the tracks may also be impacted by pollution from trains.

Commenters were concerned that a spill from one of the trains could contaminate the irrigation water used for crops. Commenters questioned who would pay for damages to irrigation systems and loss of crops in the event of an oil train spill or explosion.

Commenters expressed concern that the cumulative increase in rail traffic will impact the shipping of agricultural products along the rail line. Commenters were worried that oil trains will take precedence over trains transporting agricultural products even though oil deliveries are not as time-sensitive as crops, which can spoil if they remain in their shipping crates for too long. Commenters were concerned

that new small railcar users are not being allowed on BNSF tracks. Commenters recommended that Washington farmers be given highest priority to rail transport access. Commenters stated that hauling produce via trains is the cheapest option for farmers and loss of access to trains will impact the economic success of Washington's farmers. Commenters also noted that when farmers cannot ship their products by rail, local communities lose access to fresh produce and food security is lost.

Commenters suggested the EIS evaluate how the increase in coal trains from the Powder River Basin has impacted the shipping of agricultural products to help understand how the proposed project may impact agriculture. Commenters also recommended looking at how Washington farmers were adversely impacted by the dock-workers strike (2014) as a measure of potential impacts resulting from a crude train accident halting farm produce traffic for an extended period of time.

Commenters noted that it is no longer economical to subsidize the four lower Snake River dams that make barge transport possible. If the dams were removed, it will mean more Palouse grain crops will need train transportation to get to ports for export, putting them in direct competition with crude by rail transportation.

Commenters said that the increase in train traffic may limit farmers' access to their fields and pose a safety risk to farmers moving farm machinery across train tracks.

Commenters also expressed concern that the mitigation plan for wetland loss converts farmlands into wetlands, which means the county is losing farmlands to gain more industrial areas.

Commenters identified several specific crops that could be impacted by the project, including:

- Barley
- Corn
- Potatoes
- Soy beans
- Tulips
- Wheat

Aesthetics

Commenters noted that the project, including the facility and oil trains, would impact the aesthetic and natural beauty of several regions associated with the project, such as:

- Chuckanut (Bellingham, WA)
- Clark Fork River
- Columbia River Gorge Scenic Area
- Fidalgo Bay
- Lake Pend Oreille
- Padilla Bay trails and interpretive center (Mount Vernon, WA)
- Seattle, WA
- The Pacific Northwest
- The Skagit Valley
- Tommy Thompson Trail (Anacortes, WA)

Commenters also expressed concern that the project would be detrimental to the health and beauty of the marine environment, alter one's experience in natural areas near the project, and lead to a loss of open space.

Employee safety

Commenters expressed concern about the health and safety of workers during the extraction, transportation, and refinement of crude oil. Commenters noted concerns about the safety record at Shell PSR, pointing to previous accidents at the refinery. Other commenters noted Shell's commitment to worker safety, that the oil industry is heavily tested and personnel trained in health and safety, and that the rail industry has reduced employee injury rates in recent years.

Commenters asked that the EIS assess the direct, indirect, and cumulative impacts of this proposal on worker health and safety including extraction, transportation, and refinement. Commenters would like this analysis to consider the following factors related to workers:

- Adverse health impacts of noise, vibration, diesel particulate matter, and emissions
- Aging equipment at Shell PSR
- Comparison of full-time union employees as compared to contract workers and how operating the project as a union facility would impact worker safety
- Correlation between the use of temporary workers and an increase in criminal activity
- Emergency response planning, training, and qualifications
- Health care costs that are passed on to tax payers
- Impacts of fatigue and human error on worker safety, especially related to emergency responders
- Inspection protocols, including the use of infrared cameras to detect vapor leaks from the tank cars and the impact to worker safety
- Past safety record
- Potential automation of rail transport
- Protocols to test drivers for marijuana, alcohol, and other drug use
- Risk due to fire, spill, explosions, and derailments, including the risk of burns
- Risk due to the delay of emergency vehicles
- Risk of cancer, specifically leukemia, non-Hodgkin's lymphoma, and other blood related cancers
- Staffing levels and crew size
- Staffing shifts and hours, including impacts of forced overtime
- The increased risk of a refinery accident from handling new feedstock(s)
- The potential for loss of life
- Use of underqualified, incompetent, or temporary workers

Other commenters stated that an assessment of worker safety and staffing levels at the Shell PSR following an accident or oil spill is irrelevant as the EIS assesses environmental impacts to the community and, therefore, worker safety should be considered out of scope for this assessment.

If the project is permitted, commenters would like Shell to commit to binding mitigations ensuring that all workers at the oil by rail offloading facility will have a contractual right to stop operation if they perceive unsafe conditions, and union protection if they exercise that right. Commenters emphasized that the lessons learned in the recent whistleblower judgment against BNSF should be considered.

Commenters also requested an increase in the overall number of highly trained emergency response personnel who work at the Shell PSR. Commenters also asked that mitigation require workers to be members of the Steel Workers Union.

Commenters questioned how Shell would financially compensate workers and their families for illness, injury, or death associated with the project.

Land use

Commenters expressed concern for how increased train traffic or accidents could have a negative impact on the current and future use of property along the rail corridor, especially businesses, residences, and public parks. Commenters specifically mentioned how additional trains could have an impact on the use of Mount Vernon's historic downtown and waterfront.

Commenters questioned whether or not certain land uses that involve high population density should be allowed along the rail corridor, given the potential negative impacts of increased train traffic and the potential for an accident to occur. Commenters suggested new construction along the rail corridor should not be allowed and others requested the EIS include the number and locations of schools along the rail corridor.

Commenters noted that Padilla Bay is a shoreline of statewide significance as defined in RCW 90.58.020, a Globally Important Bird Area and a Washington State Important Bird Area.

Commenters questioned if Shell PSR's current facility and proposed project are nonconforming uses in the Anacortes Heavy Manufacturing District, shorelines of statewide significance, and the Rural Shoreline Area:

- Shell PSR's emissions are a prohibited use in the Anacortes Heavy Manufacturing district.
- Location of the proposed project would be 15 feet from Padilla Bay National Estuarine Research Reserve and within the 100-year floodplain which is an incompatible use on shorelines of statewide significance.

Commenters proposed that the land currently owned by Shell PSR be used for a new purpose, including technology companies, research facilities, and green energy production, limiting leases to only those uses with a net positive impact on the environment.

Commenters disagreed with the use of existing farmland for both the proposed project and the proposed wetland mitigation site.

Commenter suggested the government not allow Weyerhaeuser to use the land adjacent to the railroad in order to minimize the amount of potentially harmful chemicals being left on this property.

Light and glare

Commenters requested that the EIS study the various impacts of construction and operational light pollution on neighboring wildlife and residences. Specifically, the potential impact on nesting, foraging, and roosting of migrating and resident birds, including herons, and the potential for increased colony abandonment were of concern. Changes in species abundance and dominance due to prey visibility under artificial light was also highlighted.

It was noted that the ability to see night sky could be negatively impacted within the region, and that the existing Shell PSR may already be in violation of the Anacortes Municipal Code standard for glare.

The impacts of the shipboard deck lighting on Vendovi Island were also of concern.

Public health

Commenters requested the EIS study the direct, indirect, and cumulative impacts of the project on public health.

Commenters suggested the project co-leads conduct an HIA in conjunction with the EIS, should there be significant public interest in community health concerns. An HIA is a process for combining public input and project-relevant data to inform policy recommendations to reduce or eliminate adverse health impacts.

The airborne and waterborne byproducts of refining, and of Bakken crude oil, were of concern. Commenters emphasized the relationship between air pollution potentially caused by the project and public health, noting that air pollution could be related to various cancers, respiratory diseases, neurological and behavioral diseases, endocrine disorders, cardiovascular diseases, premature death, and other illnesses. They also noted that the potential water pollution could also impact public health. They emphasized the potential health impacts of the contamination of drinking water along the railway, from source to destination, by spills, leaks, or other accidents. Additionally, the impacts to farmed and wild fish and shellfish consumed by people in and out of the project area were of concern. Commenters also noted concern regarding the pollution of soil and farmed foods as a potential impact to public health.

In addition, commenters emphasized the potential psychological and mental health impacts of the project, such as:

- Noise and light disturbances, potentially impacting sleep
- Odor disturbances
- Stress related to the risk of accidents (e.g., fires, explosions, derailment)

- Stress related to car and ferry traffic impacts

Commenters noted that the health impacts of the project will likely impact vulnerable populations, such as children and the elderly, and will worsen socio-economic health disparities. The health impacts to refinery and rail workers, as well as emergency responders, were also highlighted.

In the event of a fire, commenters noted the potential for health impacts caused by smoke, toxic fumes, and burns. During an accident such as a fire, commenters expressed concern that emergency vehicles could be delayed along the railway, from source to destination. The health impacts of dispersant chemicals used during cleanup of an oil spill were also of concern.

Commenters asked if the public would be able to sue for injuries to health, and who would be held responsible for these health impacts. They also expressed concern that healthcare costs for workers in the project area may be passed along to taxpayers. Overall, it was suggested that an HIA of the project be conducted, along with an estimate of the annual and cumulative costs of health impacts.

Property values

Commenters explained that areas with rail traffic are perceived as less desirable and expressed concern about the project's potential impact on property values reducing the ability to sell homes. The commenters would like the EIS to look specifically at and quantify the loss of property value from oil train traffic compared to other rail traffic. Commenters requested the EIS consider how lost property values will impact the greater economy and the cumulative financial impact from decreases in property value along the rail line. Commenters emphasized that a decrease in property value could have implications for homeowners wishing to improve their homes using home equity loans, as well as retirees who are hoping to sell their home and land in order to fund their retirement. Commenters also questioned how the potential decrease in property values will be mitigated.

Commenters identified several factors that could potentially influence property values and requested they be studied in the EIS, including:

- Air pollution
- Diesel emissions
- Displacement of Washington goods (e.g., agriculture)
- Fuel storage tanks
- Lack of access to property
- Landslides from cliffs caused by heavy, frequent trains
- Loss of outdoor recreation
- Loss of views
- Noise
- Pollution
- Potential closure of the Swinomish Channel due to swing bridge failure
- Rail congestion
- Risk of spill, explosion, and fire
- Shifting of soil and sediments
- Vessel congestion
- Vibration

In addition, commenters requested the EIS consider the potential for property damage in the event of a spill, explosion, fire, or other accident. Commenters asked who would be liable for property damage in the event of an accident. Commenters wondered if the public can sue for (direct or indirect) damage to property in the event of an accident. Commenters suggested insurance be acquired to cover potential property damage. Commenters also stated that the devaluation of property in rail communities could lead to a decrease in tax revenue for local cities.

Commenters suggested several geographic areas to conduct the aforementioned studies, including:

- All properties within one mile of the rail corridor between the source and destination
- Columbia River watershed
- Northern Idaho
- Puget Sound and Salish Sea region
- San Juan Islands
- Skagit Land Trust property (Mount Vernon, WA)
- Spokane, WA

Recreation and tourism

Commenters pointed out that much of the local community's economy is dependent on tourism and recreation. Unique wildlife (such as salmon, orcas, and bird species) attracts visitors to the region from all over the world. Commenters pointed out that large sums of tax dollars have been invested in public recreation and tourism. Commenters noted that recreation and tourism contribute millions of dollars in economic benefits and job creation that need to be accounted for in the EIS.

Commenters specifically mentioned a range of communities, recreation facilities, and federal, state, and local parks that depend on tourism and should be considered in the EIS, including:

- Anacortes, WA
- Bellingham, WA (Clayton Beach, Locust Beach, Boulevard Park)
- Cape Horn Trail and Recreation Area (Skamania County)
- Carkeek Park Marine Preserve (Seattle, WA)
- Chuckanut (Bellingham, WA)
- Columbia River Gorge National Scenic Area
- Deception Pass State Park (Oak Harbor, WA)
- Discovery Park (Seattle, WA)
- Edmonds, WA
- Environmental Park (Auburn, WA)
- Fidalgo Bay
- Forgotten Creek Natural Area (Everett, WA)
- Golden Gardens (Seattle, WA)
- Interurban Trail
- La Conner, WA
- Larrabee State Park (Bellingham, WA)
- Matthews Beach (Seattle, WA)
- Meadowdale (Edmonds, WA)
- Mount Vernon Riverwalk and Historic Downtown (Mount Vernon, WA)
- National Forests
- Nisqually Wildlife Refuge (Thurston County)
- Northern Idaho
- Northwest rivers
- Pacific Northwest National Scenic Trail
- Padilla Bay
- Padilla Trail (Mount Vernon, WA)
- Picnic Point Park (Edmonds, WA)
- Pigeon Creek Beach Trail (Everett, WA)

- Port Susan (Tulalip, WA)
- Possession Sound
- Samish Island
- San Juan Islands
- Seattle, WA (including the waterfront)
- Shilshole Bay Marina (Seattle, WA)
- Skagit River
- Skamania County (including the Stevenson waterfront)
- Squalicum Beach (Bellingham, WA)
- Stevenson, WA
- Tacoma, WA and Pierce County (Pt. Defiance, Waterfront Park, Titlow Beach, Chambers Bay, Steilacoom Waterfront Park)
- Tommy Thompson bike-walking trail (Anacortes, WA)
- Washougal sports field (Camas, WA)
- Waters of the Puget Sound and Salish Sea

Commenters expressed concern that rail and vessel congestion, noise, exhaust, displacement of Washington goods, and vibration would impact tourism and negatively impact access to, participation in, and enjoyment of recreational activities. Commenters expressed concern that a spill, derailment, or explosion would be catastrophic to tourism and recreation-based economies. The loss of recreation opportunities could cause businesses and individuals to move away from the areas near the tracks and terminal.

Commenters identified types of tourism and recreation activities that may be impacted by the project, including:

- Beachcombing
- Bird watching
- Boating (including sailing, kayaking, and paddle boarding)
- Camping
- Cycling
- Diving
- Fishing (including recreation shellfishing and crabbing)
- Hiking
- Lighthouse tours
- Painting
- Sight-seeing
- Tulip viewing and the Skagit Valley Tulip Festival
- Walking
- Wildlife viewing

Specifically, commenters described potential impacts to recreation and tourism from the proposed project, including:

- Bicycle access and tourism within proximity to the rail lines
- Burning of oil products may lead to a drought and a decreased snow pack in Whatcom and Skagit Counties
- Damage to the Swinomish Channel Bridge which would limit access
- Ferry traffic interruptions caused by increased vessel traffic
- Impacts to boat launch access and safe access to beaches, which may be blocked by train traffic
- Impacts to Mount Vernon Y recreational facility access due to increased rail traffic
- Impacts to tourist businesses including campgrounds, motels, hotels, restaurants, bicycle repair and supply shops, and vacation rentals

- Potential for damage to Seattle sports arenas from an incident in the rail tunnel
- Proximity of play areas and athletic facilities (e.g., Ferndale High School) to the existing and proposed route
- Timing of rail operations and the impact to State Park quiet hour restrictions (10:00 pm – 6:30 am)

Commenters requested an analysis of the number of parks and recreational facilities within the designated evacuation zone from source to destination. Commenters also requested that the EIS include an evacuation strategy to mitigate the risks of a crude oil rail incident.

Commenters noted that mitigation plans should consider public access along the proposed setback dike for the restored wetland area, which would help to connect the Padilla Bay Trail with the Tommy Thompson Trail.

Commenters would like the EIS to address mitigation for recreation and tourism impacts along the entire rail corridor between the source and destination. Commenters were also interested in an evaluation of the measures to avoid, minimize, and mitigate the impacts of the facility to enhance the view, especially for first-time tourists.

Commenters requested Shell/BNSF share and make 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.

Mitigation

Commenters were concerned that there are no adequate mitigation measures to address potential impacts caused by the project. This included impacts related to:

- Acceleration of climate change
- Environment and wildlife
- Human health/loss of life
- Increased air pollution, carbon production
- Increased train, vessel, and vehicular traffic
- Light and glare on surrounding communities
- Watersheds, waterways, and wetlands

Commenters requested that existing environmental impacts from Shell PSR be considered when determining mitigations and that Shell be transparent and sincere in its examination of impacts and mitigations.

Commenters asked that trains serving the other three refineries be subject to retroactive mitigation measures.

Commenters asked how all identified impacts will be monitored, mitigated, and managed once the refinery ceases operation or Shell goes out of business.

Commenters requested the study of previous refinery and crude by rail disasters to determine appropriate mitigation measures.

Commenters asked that mitigation measures be considered for contemplated future impacts.

Commenters emphasized employing policies and practices that promote prevention as opposed to mitigation.

Commenters asked how Shell will address a multi-car spill if they are only prepared to handle one at a time in the proposed facility.

Commenters asked that mitigation be considered for the entire length of the rail line and all areas potentially affected by a rail or refinery disaster.

Commenters requested the EIS identify ways to avoid, minimize, and mitigate effects of construction on historic and cultural artifacts.

Commenters asked for mitigation to address a variety of impacts:

- Adverse health and safety impacts to workers on the trains, at ARUF, and at the refinery
- Any discovered inadequacies in emergency medical services for train and refinery workers
- Delays and reduced safety of passenger rail service
- Delays of emergency responders
- Delays to the state ferry system
- Economic, tourism, recreation, community, and social impacts
- Endangered species (eagles, orcas, herons)
- Explosion/fire/derailment/oil spill cleanup
- Increased noise pollution
- Public safety
- Pollution of water, air, and land
- Tsunamis and earthquakes

Specific mitigation requests included:

- Reducing train volumes during peak recreational times of day (such as summer mid-afternoons)
- Detailed hazard mitigation plans and equipment at key points along the Puget Sound mainline
- Improvements to existing rail function and infrastructure including:
    - Tracks
    - Bridges
    - Train speeds

    - Train braking distances
    - Tank car design
- Monitoring of hazardous slopes, including the use of state-of-the-art slope-monitoring tools, to detect potential slippages and take preventive actions
- Participation - both financial and technical - in Edmonds' at-grade rail crossings alternatives analysis and implementation
- Providing drinking water in the event of groundwater contamination due to spill or other disaster
- Railroad beds fully compliant with non-environmental destructive practices
- Use of air pollution-reduction features on older diesel engines or increased use of newer, less polluting engines
- Use of rail tank cars equipped with the latest DOT-approved spill-prevention features (beyond DOT-117 Specification tank cars as further improvements are developed)
- Whistle-free train crossings

Commenters requested binding mitigation meaures that address risks of different types of feedstock.

Commenters expressed concerns regarding the costs of mitigation and asked who would be responsible for:

- Compensation for decreased property values
- Disaster preparedness and emergency response
- Health impacts of the shipment of crude, the building of the facility, and pollution created on site
- Payment of medical expenses due to increased exposure to harmful pollutants
- Property damage
- Reduction in tourism
- Replacement/repair/improvement of infrastructure
- Safety upgrade of sports stadiums
- Spill, fire, explosion, and/or derailment clean up

Commenters also stated that insurance or bonds should be obtained by Shell to cover worst case scenarios and cost of mitigation measures. Although commenters noted that there may be no amount of money that could cover the impacts from this project and no insurance available for this kind of liability.

Commenters asked that a cost (in total dollars) be placed on the risk of various impacts to compare them to the economic benefit of shipping crude by rail.

Commenters outlined the requirement of RCW 88.40.025 as a means to determine financial responsibility for potential damages resulting from activity at the facility.

Commenters asked how the risk of failure and temporal loss compare to the no action alternative. Commenters stated that the EIS should determine the real risk of failure and loss of habitat rather than simply making comparisons to, for example, the previous remote mitigation proposed by Shell.

Commenters said it is likely that an international Salish Sea Marine Sanctuary will be established and the EIS should anticipate and evaluate compliance with regulations consistent with Best Available Science, Best Available Technology, and Best Management Practices.

Commenters said that all greenhouse gasses should be mitigated and suggested the following:

- Denial of the project outright
- Prohibition on high-GHG sources like tar sands
- Requirement to purchase credits from a legitimate and verified source to offset all net GHG emissions on an annual basis, including lifecycle well-to-wheel emissions that are proximately caused by the project

Commenters asked that mitigations include ongoing, long-term monitoring, and oversight of Shell's operations to ensure reductions in vessel traffic.

Commenters wondered how the closure of roads, highways, and other major transportation routes due to disaster can be mitigated to ensure goods and services reach the San Juan Islands, the Navy base, and Fidalgo Island.

Commenters noted that proper mitigation can be assessed only if the scope is broadened (source to destination).

Commenters requested a timeline for implementing mitigation measures associated with each potential impact. Commenters noted that cost and lag time between environmental mitigation project completion and transition to the comparable ecosystem desired should be considered.

Commenters asked for proof of work being done to create real methods for disaster response and cleanup.

Commenters expressed concerned that the wetland mitigation proposal is inadequate and does not meet the minimum buffer requirements of SCC 14.24.230 (1)(a) or any other wetland buffer specification of SCC 14.24.

Commenters stated that Shell's refusal to mitigate for areas bisected by a rail trench, which they believe have reduced habitat function and value, should be addressed in the EIS. Commenters noted that the habitat evaluation and mitigation plan only covers about 50 percent of the area.

Commenters said that hydrological and water quality benefits provided by the wetland mitigation bank have no significant connection to the Shell project site and cannot mitigate for loss of hydrological function on the Shell site.

Commenters stated that stormwater detention and water quality facilities proposed for the Shell site do not mitigate for loss of existing naturally dispersed hydrological and water quality functions of the destroyed wetlands. Commenters added that the stormwater facilities collect and treat water only from the construction areas, and concentrate discharge into small portions of the remaining wetlands and uplands, which is a very different hydrological regime than the present dispersed system.

Commenters noted that Shell provided no scientifically credible analysis showing that the mitigation bank site would provide useful or used alternative habitat for the predominant bird populations local to the March Point area.

Commenters asked how lost wildlife habitat values can be mitigated.

Commenters stated that they would like the EIS to recommend advanced implementation of risk mitigation strategies (proposed in Federal Register Vol. 78 No. 148) in Washington State to address safety issues that have been raised by citizens and the city councils of Spokane, Vancouver, and Montesano, WA.

Commenters asked that the crude shipped to the refinery be treated to reduce its flammability.

Commenters asked that there be a requirement to include an optimized audible warning device in the emergency preparedness plan.

Tribal Governments and Native Americans

Commenters requested broad analysis of how Native American tribes, people, lands, traditional practices, cultural and archaeological resources, and treaty rights might be impacted by the construction and long-term use and operation of the new facility. Factors to consider include, cumulative release of the crude oil; increased train traffic and transport of refinery waste; oil spills; fires; and explosions. Commenters requested analysis of tribal impacts be conducted across the entire route from the oil's point of origin to its destination. Areas of study specific to tribes are summarized below.

- Access to tribal fishing sites due to the greater number and frequency of obstructions at crossings, many of which are along the Columbia River where tribes have reserved rights for salmon, lamprey, and other fish species
- Adverse environmental, economic, social, and socio-psychological impacts to indigenous peoples
- Climate change and ocean acidification to which First Foods and tribal communities are particularly vulnerable

- Economic and traffic impacts to tribal business including the Swinomish enterprises (lodge, casino, RV park, and gas station/convenience store)
- Fisheries including ESA-listed salmonids and shellfish in both marine or fresh waters
- Hunting and gathering
- Natural resources, including but not limited to wetlands, eelgrass, shellfish beds, ESA-listed species, and forage fish
- Rail tank car safety
- Resources gathered for nutritional, medicinal, and cultural purposes, including tree and fish oils
- Spill cleanup plans and contingencies
- Traditional ways of life near extraction sites
- Tribal lands and traditional use areas, traditional cultural properties, ancestral human remains, archaeological resources, historic properties of religious and cultural significance, and sites protected and governed by state and federal laws such as the National Historic Preservation Act, the Archaeological Resources Protection Act, the Native American Graves Protection and Repatriation Act, and other laws
- Types of oil shipped (including their health risks)
- Water bodies and water quality including the Pacific Ocean, Puget Sound, Padilla and Fidalgo Bays, rivers (Columbia and Skagit), streams, wetlands, marine resources including salmon migration areas, salt/tidal marshes, shellfish beds, eelgrass beds, benthic habitats, shoreline habitats, water columns, and organisms that depend on these habitats such as seals and orcas

Commenters requested that the reviewing agencies formally consult with all impacted tribes, both as individual sovereign nations and through organizations such as the Northwest Indian Fisheries Commission and the Columbia River Inter-Tribal Fish Commission. Commenters noted that if a permit is granted it should require Shell to notify the Swinomish Tribe prior to shipment of the types of crude oil contained in the shipment.

Commenters noted that air quality and respiratory impacts may be exacerbated for those in direct proximity to the project site and rail corridor, and requested that air quality and air pollution from both the facility and diesel trains be carefully studied.

Commenters noted several potential sources of pollution that may directly impact tribes in the region, including diesel pollution over the projected lifetime of the rail facility (along the route traveled as well as at or near the facility); fugitive emissions from tank cars and loading/unloading equipment; soil and water contamination by crude oil; odor; and noise. Commenters requested these be analyzed and evaluated for health impacts with a focus on those most vulnerable, and consider the cumulative impacts in conjunction with other pollution sources.

Commenters requested the document discuss treaty agreements and tribal sovereignty, in particular how this project will impact those agreements, in the context of rail traffic. Commenters referenced the

active Swinomish Tribal federal lawsuit against BNSF regarding contracted train capacity. Commenters also noted an EIS may be premature, pending the outcome of this ongoing litigation.

Commenters described the Swinomish Channel Bridge as particularly vulnerable and requested careful study of the legal, economic, environmental, and social impacts of a disaster resulting from bridge failure.

Tribes specifically mentioned in comments included:

- Confederated Tribes of the Umatilla Indian Reservation
- Confederated Tribes of the Warm Springs Reservation
- Duwamish Tribe
- Lummi Nation
- Muckleshoot Indian Tribe
- Nisqually Tribe
- Samish Nation
- Sauk-Suiattle Tribe
- Suquamish Tribe
- Swinomish Tribe
- Tulalip Tribes
- Upper Skagit Tribe

Noise and vibration

Commenters expressed concerns about the impact of noise and vibration from trains on the health of those who live and work near the rail corridor. Concerns about noise from trains at night and its impact on residents trying to sleep was also shared by commenters.

Commenters noted concern about noise and vibration occurring during project construction and the potential impacts to a nearby heron colony. Additionally, commenters expressed concern about noise and vibration impacts during the construction or repair of existing railroad structures.

Commenters asked for studies to measure the impact of noise and vibration on any state park within 1,000 feet of the rail corridor, including day-use, overnight recreating, and park employees. Additional requests included the use of receptors placed along the rail corridor and polling of businesses to inform the in-depth study of noise impacts. Commenters also expressed interest in knowing the current noise levels of trains along the rail corridor from source to destination and what the new level of noise would be as a result of the proposed project. Commenters also requested that evaluations be conducted on the health risks of noise and vibration impacts on all who live near the rail corridor, taking into account age and health status.

Commenters also asked for data about current noise levels at different distances from the track, at the three nearby schools, and at the port using standard metrics, such as day-night averages and the projected noise levels from transporting oil and related proposed project operations. Commenters also asked that the assessment include the cumulative impact of noise levels within specific ranges, given current housing patterns and location of schools and other critical facilities, such as child care, adult care, hospitals, and emergency services.

Commenters asked for additional study of short-, long-term, and cumulative impacts of noise from trains or the construction and operation of the proposed project between source and destination. Areas and topics specifically mentioned included:

- Cities:
    - Anacortes, WA
    - Bellingham, WA
    - Blanchard, WA
    - Conway, WA
    - Edmonds, WA
    - Everett, WA
    - Mount Vernon, WA
    - Seattle, WA (e.g., Seattle Waterfront)
- Environmental concerns:
    - Animals
    - Business health and productivity of employees, ability to attract employees, and interaction with customers
    - Herons nesting, feeding, and staging
    - Home values and resulting tax income
    - Migrating and resident birds
    - Public health in communities along the rail corridor, including stress, lack of sleep, lack of concentration, cardiovascular health, cognitive function, and mental health
    - Public health of Swinomish Reservation residents
    - Recreation
    - School student's ability to be outside, as well as not be distracted when in class
    - Tourism
- Other areas:
    - Cape Horn Trail (Skamania County)
    - Carkeek Park (Seattle, WA)
    - Chrysalis Hotel (Bellingham, WA)
    - Columbia Gorge
    - Matthews Beach Park (Seattle, WA)
    - Meadowdale Park (Lynnwood, WA)
    - Picnic Point Park (Edmonds, WA)
    - Skagit region
    - State and local parks
    - Three schools near the proposed project
    - Vendovi Island

Types of noise from trains noted by commenters:

- Whistles
- Tracks
- Coupling and decoupling
- Engine, active and idling

- Movement along the tracks
- Squeaky wheels
- Crossing guard bells

Commenters requested additional study of short-, long-term, and cumulative impacts of vibration from trains or the construction and operation of the proposed project on the following along the entire rail corridor from source to destination (as close as one mile away):

- Animals near the proposed project
- Bluffs along the corridor, currently unstable or become unstable
- Businesses
- Herons near the proposed project
- Historic buildings
- Historic downtown Anacortes, WA
- Homes: structure, property values, and resulting tax income
- Hospitals
- Landslides
- Lincoln Theatre in Mount Vernon, WA
- Public health in communities along the rail corridor
- Railroad structures
- Train track stability
- Water main running along Highway 20

Commenters noted that:

- Herons stop feeding when they hear a train whistle
- Trains can be heard up to six miles away and for several minutes at a time as they pass
- Current noise levels of trains are well above the levels that can cause hearing loss

Commenters asked about mitigation or strategies to address the increased noise from trains and the proposed project. Commenters suggested:

- Retrofitting homes to mitigate noise impacts from trains
- Building whistle-free crossings
- Establishing quiet zones (in general, as well as specifically noted in Conway and Edmonds, WA)
- Covering the short- and long-term monetary cost of treatment for those impacted by noise from trains
- Mitigation for property value losses.

Other requests included a noise buffer between the proposed project and the heron colony nearby and for limiting the use of train whistles and engine idling near the colony.

Permitting

Commenters stated that the permits for the proposed project should be denied for several reasons, including:

- Impact on climate change
- Inability to mitigate impacts
- Increase in unlawful amount of emissions
- No safe way to transport crude, including unsafe rail bridges
- Nonconforming use
- Nondisclosure of information from Shell
- Risks to human life
- Risks to wildlife, including endangered species

Conversely, commenters expressed support for Shell PSR's proposed project and their confidence in Shell fulfilling its burden of proof to be granted permits.

Commenters asked which standards must be met before any permits are issued. Commenters requested that certain requirements be met as a condition of permitting, including:

- Analysis of cumulative air and water quality
- Capture of methane gas from the fracking process, not burned
- Commitment to binding mitigations ensuring all workers at the oil by rail offloading facility will have a contractual right to stop operations if they perceive unsafe conditions
- Demonstration of fundamentally safe methods of transportation and practices when Bakken crude oil is to be transported by rail through Mount Vernon
- Development of stringent and effective measures by industry and regulators sufficient to assure the safety of all communities through which oil trains pass
- Proof that 100 percent of a spill could be mitigated within a few months to protect fish species
- Proof that mitigations planned for the heronry will be successful
- Proof the Swinomish Channel Rail Bridge is safe for increased rail traffic

Commenters asked when regulators can deny the project and if residents, landowners, or municipalities can also deny the project.

Commenters questioned why the EFSEC has not been involved in the environmental review and permitting process considering that trains are crossing over marine waters to reach March Point.

Commenters said that the MDNS delays substantive analysis of and decisions on impacts, as well as compliance with environmental codes, and in turn denies the public the right to comment on project revisions or conditions attached to grading and building permits.

Commenters asked that the EIS study how potential loopholes in this process could lead to permitting for one type of use that then morphs into something different, for example a change of materials or methods used at the refinery.

Commenters noted several laws that the proposed project would violate, fail to address, or should follow, including:

- Air Operating Permit
- AMC 17.15.020
- AMC 17.60.01 0
- Quality Assurance Requirements
- RCW 43.21C
- RCW 43.21C.030 (2)(e)
- RCW 90.58.030 (2)(d)
- SCC 14.14 (Critical Areas)
- SCC 14.24 (Critical Areas)
- SCC 14.24.070
- SCC 14.24.080 and 14.24.220
- SCC 14.26
- SCC 14.24.250 (1)(a)
- Shoreline Permit PL13-0468
- Standards of Performance
- WAC 173-22-030 (1)
- WAC 173-22-030 (7)
- WAC 197-11
- WAC 197-11-060(3)(b), (5)(d)
- WAC 197-11-060(5)(b)
- WAC 197-11-060(5)(e)

Commenters noted that the list of grading and building permits in the April 22, 2014, staff report is incomplete because Skagit County has made no determination of compliance with shorelines and critical areas at the time of the SEPA MDNS determination.

Commenters emphasized that Skagit County has a mandate and responsibility under SEPA to condition the project to mitigate environmental impacts, regardless of conflicting jurisdictional boundaries from other state and federal agencies.

Commenters stated that Skagit County cannot process PL13-0468 until the full extent of shoreline jurisdiction with respect to the project has been determined.

Commenters requested that the EIS define each permit, identify the lead agency, answer why it is necessary, describe its process, and state if there is an opportunity for public input. In addition, commenters asked that the EIS include a list of all related permits.

Commenters noted that permits for drilling, transportation, and transshipment will become stranded assets in the near future.

Commenters stated that there should be a moratorium on adding to the current oil train traffic, and no permit should be issued to Shell for its oil by rail project unless and until spill response plans are in place, and local emergency response agencies are trained and equipped to implement the plan. Commenters state that the response plan must comply with section 311(j)(2)(C) of the Clean Water Act.

Commenters questioned how the project can receive a Shoreline Variance Permit when they feel the project does not sufficiently fulfil the burden of establishing that the code would impose unnecessary hardship and that the compliance with these regulations prohibits any reasonable use of the property. Commenters also noted that if Skagit County were to ignore the Shoreline Master Plan and variance code, the EIS should still include comprehensive risk analysis of Padilla Bay, Skagit Bay and the main stem of the Skagit River

Commenters noted that despite Shell's claim that oil received by rail will replace oil received by marine vessel, nothing in the permit makes it a binding requirement.

Commenters asked if any permits have been issued for this project to date, including:

- Permits for other plans that have not yet been released for public input
- Permits related to infrastructure improvements such as bridges and rail crossing improvements
- Permits related to the proposed wetland mitigation plan
- US Fish and Wildlife permit to remove a Bald Eagle nest

Commenters emphasized that permits for the project must:

- Comply with the 1977 Magnuson Amendment to the Marine Mammal Protection Act, 33 USC §476(b)
- Fully disclose and analyze the maximum physical potential of the infrastructure to handle more traffic than six trains per week
- Include a forest practices permit from DNR
- Limit Shell's refining capacity to current levels (145,000 BPD)
- Limit the number of vessels arriving and leaving from Shell's dock annually
- Meet the criteria under the Skagit County's Shoreline code
- Prohibit the export of crude or tar sands to either domestic or foreign destinations
- Prohibit the export of "lightly refined condensate"
- Provide binding commitment that Shell will not ship crude oil received by rail without refining it first
- Shell must not be allowed to replace incoming marine transfers with outgoing transfers

Commenters asked that the Washington State Legislature approve legislation requiring disclosure of volumes, types of petroleum, petroleum products, and petroleum derivatives; transportation routes; and the frequency and duration of transfers of petroleum, so that the state and local communities can be fully informed of and plan for risks posed by the transport of petroleum by rail.

Commenters stated that documentation in the RCW, WAC and SEPA guidelines showed that the boundaries of the project area can go beyond the Washington State border and include rail routes over the Canadian Rocky Mountains, through Stevens Pass Tunnel, through the Stampede Pass Tunnel, and along either side of the Columbia River and I-5 Corridor.

Commenters note that accurate project emissions estimates would likely trigger additional permit requirements (Prevention of Significant Deterioration Permit and GHG reporting requirements).

Commenters noted that the Portland, Oregon City Council passed a resolution to ban the transport of fossil fuels by train and barge through the city and encouraged Ecology to do the same.

Commenters questioned whether Shell is exempt from portions of the EIS because of international corporate laws.

Commenters asked Skagit County and Ecology to study the policy that enables Shell to have a crude off-loading facility.

Commenters asked that the EIS review the Columbia River Gorge Commission's resolution concerning crude by rail shipments through the Columbia River Gorge National Scenic area, which identifies state and federal obligations to protect the natural and human resources described in the Gorge Act.

Commenters stated that all permits must be considered together, rather than piecemeal. Commenters said it would be appropriate for the EFSEC to assert its jurisdiction over the project.

Commenters noted that Shell proposed to hold a license to part of a former poplar plantation that would allow for the development of the mitigation site, as well as subsequent monitoring and long-term maintenance of wetlands. Commenters questioned how this applies to future mitigation and permitting. Commenters asked that long-term impacts of the destruction of wetlands and uplands, and the restoration of a poplar plantation be analyzed before permits are issued.

Commenters asked who will be the lead agency for permits related to infrastructure improvements and asked how these improvements will be funded.

Commenters stated that the precedent set by other refineries in the area does not exempt Shell from undergoing an EIS. Commenters encouraged further scrutiny into other refineries that currently receive oil by rail. Commenters said that Shell should not be denied a permit for a rail yard when other refinery facilities were approved for permits.

Commenters asked how and why other locally permitted projects for similar crude by rail off-loading facilities have been permitted without public input or environmental impact review. Commenters also asked that these facilities go through an EIS at this time.

Import/Export

Commenters said not enough information is available to determine if Shell PSR intends to export crude oil. Commenters expressed concern with the potential for the proposed project to become a transshipment center for the import and export of crude oil. Concerns included:

- The increase of marine traffic from foreign suppliers
- Impacts of increased marine traffic on marine and terrestrial species, including endangered species and the southern resident orca whales
- Violation of the Magnuson Amendment of the Marine Mammal Protection Act

- The risk of petroleum coke disposal should oil-sand bitumen from Canada be processed at the Shell PSR
- Strained relationships with foreign interests should the US become contributors to the foreign oil market
- Contributing to Asian countries' pollution and dependence on fossil fuels
- The loss of domestic jobs to foreign competition
- Growth of Bakken and/or oil-sand bitumen transport across Washington State and over Puget Sound
- The potential for Washington State to be deemed an oil refining and exporting state, creating an undesirable quality of life

Commenters asked how the repeal of the ban on crude oil exports will impact Shell's proposal, specifically how lifting the ban would impact the amount of oil entering and exiting the region via marine traffic. Commenters asked for an analysis of impacts should the Shell PSR be used as a transshipment terminal. Commenters noted that if the export is lifted, the only limit to how much oil is transported through the Shell PSR is supply and demand. Commenters asked that the EIS include information about the long-term oil supply chain, including the potential for foreign supply.

Commenters asked that Shell enter a binding agreement not to export anything (crude oil, refined oil, and other products) overseas as a condition of their permit, with limits placed on the amount Shell imports by rail. Commenters asked for the prohibition of the export of lightly refined Bakken crude, also known as condensate. Commenters asked that Shell also be prevented from upgrading infrastructure and changing business practices to include exporting in the future.

Commenters asked for a vessel traffic risk assessment, which could be an update of the George Washington University Vessel Traffic Risk Assessment based on 2010 vessel traffic data.

Commenters said the EIS should analyze all potential impacts from the export of crude oil, including the possibility of accidents, explosions, and spills. The EIS should also study the direct, indirect, and cumulative impacts on the environment throughout the life of the project, and evaluate what happens to the crude oil after it leaves the unloading facility, both during refinement and export.

Commenters said the EIS should assess potential increases in GHG associated with increased production or export of crude oil. The EIS should also disclose the extent to which Shell could or already is loading unrefined crude oil onto marine vessels.

Commenters said they are uncomfortable sending crude oil to other countries, contributing to the already high pollution levels and without a commitment to reducing GHG emissions. Commenters asked that the EIS analyze the consequences of fostering overseas economies' dependence on fossil fuels, contrasted with the projection of the impact of overseas markets developing renewable energy systems.

Alternately, commenters noted that China has recently started moving away from fossil fuels, so an export market would not be as valuable as previously thought.

Commenters noted that refined/processed materials need to be transported elsewhere and asked for an analysis of the impacts from the delivery of products via trains, trucks, and vessels.

Plants and animals

Wildlife

Commenters emphasized that train traffic has killed a large number of wildlife to date and requested that there be mitigation to prevent animals from migrating across and down tracks as they do now.

Commenters noted the Skagit Wildlife Areas likely to be directly affected by an oil spill resulting from an oil train derailment: Cottonwood Island Unit, Fir Island Farms Reserve Unit, Headquarters (Skagit) Unit - Island Unit, Samish Unit, Skagit Bay Estuary Unit, and Telegraph Slough Unit.

Commenters requested the EIS include GIS mapping of land use, land cover, shoreline use, existing habitats, sensitive areas, and all species. Commenters also requested a baseline analysis of the species near the proposed project over the course of 12 months.

The potential for persistent bioaccumulation of pollution in the food chain was also of concern to commenters. They also noted that pollutions related to the project could contribute to acid rain.

Commenters expressed concern about potential impacts during construction and operation on several species, including:

- Benthic organisms
- Cotton rats
- Fish, particularly salmon
- Grey-bellied brants
- Harbor seals
- Lugworms
- Mud shrimp
- Padilla Bay mollusks
- River otters
- Shellfish, including Olympia oysters
- Skeleton shrimp

Commenters asked about the risk of introduction and/or expansion of non-native invasive plant and animal species.

Commenters recommended that the EIS consider the short-, long-term, and cumulative impacts of oil spills on sensitive marine habitats and wildlife resources found within the project area, including:

- Commercial shellfish and fishing
- Other WDFW-listed Priority Habitat and Species
- Recreational shellfish and fishing activities
- Resident and migratory birds and marine mammals
- Salt marshes, tidal flats, and other sensitive shallow water habitats
- State and federally listed threatened and endangered species

- Tribal shellfish and fishing concerns

Birds

Commenters expressed interest in studying direct, indirect, and cumulative impacts on all birds that use the area near the proposed project. Several shared that birds use nearby bodies of water, wetlands, intertidal areas, and subtidal habitat as their home or foraging locations.

Commenters noted that there are several species of birds that have been seen in the area, including year-round birds as well as those that rest here during their yearly migrations. A full list of the bird species mentioned in comments is provided below.

Commenters asked to study the short- and long-term, direct, indirect, and cumulative impacts on birds due to removal of wetlands, potential oil spills, vessel traffic, construction of the proposed project and mitigation site, other nearby projects, climate change, and potential explosions. Commenters also requested study of how noise, light, air, and water pollution could potentially impact all birds at the proposed project area and along the entire rail corridor. Some commenters asked that direct, indirect, and cumulative impacts of oil drilling or mining on all bird species be studied, especially neotropical birds.

Commenters noted that any potential spill or explosion could have a severe impact on birds and their food source along the entire rail corridor and the surrounding bodies of water. They also noted that eelgrass is important for birds and their food sources. Commenters shared doubt for whether mitigation could succeed, especially the effectiveness of cleaning oil off of birds.

Commenters expressed interest in the wetland mitigation planned and its potential impact on birds, their food source, and their habitat.

Commenters noted that the area near the proposed project is designated by the National Audubon Society as an Important Bird Area. The area nearby is also considered a Globally Important Bird Area, shoreline of statewide significance, National Estuarine Research Reserve, Western Hemisphere Shorebird Reserve Network, and a key stop along migratory routes.

Commenters stated that the proposed stormwater retention ponds and oil spill containment systems will have a negative impact on birds. Commenters also stated the Swinomish Channel River Bridge is unsafe and could have a negative impact on birds.

Commenters noted several bird species or types of interest, including:

- American white pelican
- Brandt's cormorant
- Common murre
- Common loon
- Cormorants
- Ducks
- Dunlin
- Eagles
- Goldeneyes
- Greater sage grouse and sagebrush habitat
- Grebes (Western Grebes)

- Grey-bellied brant geese
- Loons
- Long tailed ducks
- Marbled murrelet
- Migrating shorebirds
- Snow geese
- Overwintering waterfowl
- Peregrine falcon
- Scoters
- Terns
- Trumpeter swans
- Tufted puffin
- Tundra swans
- Western grebe

WDFW noted several areas of interest, with descriptions and maps.

Eagles

Commenters stated that at least two or three eagle nests could be impacted by the proposed project, whether during construction or future activities of the facility. They also noted seeing or hearing about eagles near the proposed project area year-round.

Commenters expressed interest in whether mitigation was possible for the potential impacts to eagles and their nests, and encouraged avoidance of impacts if possible. If mitigation is proposed for potential impacts to eagles, commenters asked for a clear and viable plan that can be vetted by the appropriate state agencies and monitored to ensure its success. Commenters suggested that mitigation could include the preservation of equal foraging acreage needed for eagles. Commenters asked whether more than two replacement nests could be built as mitigation for removing existing eagle nests.

There was also general interest in the location of the nests built as mitigation. Commenters suggested that moving the nests closer to the heron colony could result in more herons being hunted by eagles. Commenters also suggested that moving the nests closer to the heron colony could improve security for the colony, since eagles eat the heron's predators. Commenters also stated that moving the existing nests at all could result in fewer eagles in the area. Commenters shared interest in how close the new nests would be to the final location of the power lines near the proposed project area, since the power lines could pose a hazard.

Commenters requested a study on the potential short-term, long-term, and cumulative impacts this project may have on eagles, looking at their entire life-cycle. Commenters stated that the eagle population near the proposed project area has not been studied closely and suggested a year-long or longer study be done. Commenters suggested the study of potential impact to eagles include the risk due to a spill or explosion near the proposed project area, including the eagle's food sources. They also asked whether the increased train traffic could lead to more stress for eagles or whether the train's emissions could also prove to be a negative impact on eagles.

Eelgrass

Commenters conveyed the vital role eelgrass habitat plays in estuarine ecosystems. Commenters highlighted that eelgrass provides the following benefits:

- Offers a nutrient-rich habitat essential to species reproduction, foraging, and rearing
- Protects species from predation

- Forms the basis of a highly productive marine food web
- Produces oxygen
- Improves water quality by filtering polluted runoff
- Absorbs excess nutrients
- Stores GHG such as carbon dioxide
- Protects shorelines from erosion
- Offers shade and cools the water temperature during summer low tides

Commenters emphasized the different wildlife species that rely on vital eelgrass beds. These included:

- Bald eagles
- Brant species
    - Commenters noted that Padilla Bay eelgrass is the last remaining overwintering site in the US for the High Arctic Brant, who use this habitat for foraging
- Dungeness crab
- Forage fish
- Gray belly crab
- Great Blue Herons
- Harbor seals
- Herring
- Krill
- Marine mammals
- Migratory birds
- Pacific salmon species (particularly juveniles)
    - Chinook
    - Chum
    - Coho
    - Pink
    - Sockeye
- Peregrine falcons
- Orca whales
- Resident birds
- Shellfish
- Skeleton shrimp (Caprellid amphipod)
- Waterfowl

Commenters specifically noted the ecological importance of eelgrass beds in Padilla Bay. They noted that this area has around 8,000 acres of continuous eelgrass meadow, the largest on the West Coast south of Alaska. This meadow represents between 30 – 50 percent of the total eelgrass in Puget Sound, is designated as a Shoreline of Distinction, and is the only National Estuarine Reserve in Washington State. Commenters noted that many researchers come to this meadow to study estuarine ecology. In addition, commenters highlighted areas as important eelgrass habitat, including:

- Bellingham Bay
- Birch Bay
- Burrows Bay
- Carkeek Park Marine Preserve
- Deception Pass
- Drayton Harbor
- Fidalgo Bay
- Guemes Channel
- Hunter Bay
- Lummi Bay
- March Point
- Mud Bay
- Puget Sound
- Rosario Strait
- Salish Sea
- Samish Bay
- Skagit Bay
- Skagit River
- Swinomish Channel

Commenters outlined the impacts an oil spill would have on eelgrass, which would likely cascade throughout the entire food chain. Thus they asked for studies to be comprehensive and look at how impacts to eelgrass would impact other species.

Commenters recommended that the EIS study the project's direct, indirect, and cumulative impacts on eelgrass beds, including the development of a risk assessment for the impacts an oil spill would have on this habitat. Commenters called out specific areas a risk assessment or study should consider, including:

- How eelgrass beds would recover after an oil spill
- How filling in wetlands would impact sedimentation and water clarity and whether this would impact eelgrass growth
- Impacts of aerosolized loss (natural gas seepage during hydrocarbon transfer) on eelgrass beds
- Impacts to eelgrass based on a worst case scenario
- Potential increase in toxic compounds to which eelgrass would be exposed to
- The economic impacts an oil spill would cause if it harmed eelgrass beds
- The impacts an oil spill would have on skeleton shrimp that live in eelgrass beds
- The specific risks of a train derailing and causing an oil spill at the Skagit River Bridge and Swinomish Channel Bridge
- Understanding how tar sands would accumulate and disperse into the mud in eelgrass habitats

Commenters highlighted that eelgrass beds should be identified and included in emergency response plans in order to minimize possible damage to this habitat. Commenters noted that eelgrass is typically found in shallow waters that are vulnerable to oil spills and can be difficult to clean up. They also called for liability plans that ensure responsible parties provide the proper funding to mitigate in the event of an oil spill on eelgrass habitat.

Commenters said that eelgrass and other resources are protected under treaty rights and should be preserved by the Federal Government.

Fish

Commenters expressed concern about the potential direct, indirect, adverse, short-term, long-term, and cumulative impacts on fish populations if an oil train derailment, explosion, fire, or spill were to occur.

Commenters noted that fish populations have a direct impact on the trophic cascades of other species, including:

- Benthic organisms
- Birds
- Bottom fish
- Herring
- Sand lance
- Shellfish
- Southern resident killer whales
- Surf smelt

Commenters noted that many of these species within the trophic cascades of fish populations are:

- Keystone species
- Iconic symbols to regional geography and culture
- Listed as endangered or threatened under the ESA

Commenters requested that the EIS address how fishing treaty rights, belonging to Native tribes, will be protected in the event of an oil train derailment, explosion, fire, or spill occurring on tribal land from source to destination, with an emphasis on tribes including the:

- Lummi Nation
- Swinomish Tribe
- Tulalip Tribe

Commenters requested an analysis of impacts on aquatic species such as herring and salmon related to any increase in lighting installations or time periods associated with project operations, including changes in species abundance and dominance resulting from increased prey access under artificial lighting. Commenters requested that the EIS address ways to reduce or eliminate any identified impacts.

Commenters also asked if the EIS could address the effort to re-seed and restore Olympia oysters, and address the data collection efforts of the Fidalgo Bay Aquatic Reserve Citizen Stewardship Committee surveys for forage fish eggs and intertidal biota.

Commenters expressed concern for tribal members who engage in fisheries harvest and depend on healthy fish stocks for subsistence living, from source to destination.

Commenters noted that special attention should be given to assessing the potential impacts on fish and shellfish within the Usual and Accustomed harvest areas for Native American tribes, in the event of an oil train derailment, explosion, fire, or spill.

Commenters noted that the protection of aquatic resources is a treaty right preserved by the Federal Government. Treaties with Native tribes ought to be honored in terms of having healthy and sustainable fish to take and to have constant access to such resources.

Commenters expressed concern for the impact increased train traffic will have on recreational and tribal access to fishing.

Commenters requested that the EIS evaluate the cumulative economic impacts in the event of an explosion, fire, derailment, and oil spill from source to destination on commercial, recreation, tourism, and tribal fishing industries, as well as fisheries along the rail corridor between source and destination.

Commenters noted that particular nutrient-rich habitats are essential to the reproduction, forage, and rearing success of numerous fish species. Commenters expressed concern about the potential direct, indirect, adverse, short-term, long-term, and cumulative impacts of an oil train derailment, explosion, fire, or spill on these species and populations:

- Bull trout
- Black rockfish
- Boccacio rockfish
- Brown rockfish
- Canary rockfish
- China rockfish
- Chinook salmon*
- Chum salmon*
- Coho salmon*
- Copper rockfish
- Cutthroat trout
- Flatfish
- Geoduck
- Herring
- Juvenile salmon
- Lamprey
- Longfin smelt
- Northern abalone
- Pacific cod
- Pacific hake
- Pink salmon
- Rainbow trout
- Rockfish*
- Sockeye salmon*
- Steelhead*
- Sturgeon*
- Walleye pollock

(* indicates the species was noted by commenters as being federally listed under the ESA as either threatened or endangered)

Commenters expressed concerns about the toxic properties of burning oil and the impacts on fish populations.

Commenters urged that the EIS include a thorough analysis of the potential direct, indirect, adverse, short-term, long-term, and cumulative impacts on fish populations and their associated habitats in the event of an oil train derailment, explosion, fire, or spill from source to destination, with a strong emphasis on geographic locations including:

- Bellingham Bay
- Birch Bay
- Burrows Bay
- Cherry Point
- Columbia River
- Drayton Harbor
- Estuaries
- Fidalgo Bay
- Guemes Channel
- Hale Passage
- Lummi Bay
- March Point
- Nooksack River
- Padilla Bay
- Pipers Creek Watershed
- Rosario Strait
- Salish Sea
- Samish Bay
- Sauk River
- Skagit River

- Strait of Juan de Fuca
- Swinomish Channel

Commenters expressed concerns over resources where fish reside, feed, migrate, and spawn. Commenters urged that the EIS include a thorough analysis of the potential direct, indirect, adverse, short-term, long-term, and cumulative impacts of a train derailment, explosion, fire, or oil spill on established known habitat for fish populations, including:

- Eelgrass beds
- Estuaries
- Intertidal zones
- Kelp beds
- Rivers
- Salt marshes
- Shellfish beds
- Streams
- Subtidal zones
- Wetlands

Commenters noted that the decrease in snowpack, increase in water temperatures, and increase in ocean acidification are causing harm to fish populations. Commenters requested cumulative impact studies be performed for fish populations, from source to destination, in the event of an oil train derailment, explosion, fire, and spill.

Commenters requested that the EIS address what type of fill would be utilized in the proposed mitigated wetlands, noting that certain types of fill may pose a risk to fish species living within the affected habitats.

Commenters requested that the EIS look at alternatives that would avoid or minimize construction impacts to fish populations in streams and wetlands.

Commenters requested an economic evaluation to understand how increased train and vessel traffic will affect commercial, recreational, and tribal fishing industries, including tourists who travel to the area for fishing.

Commenters requested that a comprehensive study be performed on the direct, indirect, and cumulative impacts of increased vessel traffic on fish populations and the habitats they depend on.

Commenters expressed concern about the toxic properties of crude oil and requested comprehensive strategies and recovery plans for salmonids and fish populations in the event that oil-sand bitumen and/or Bakken crude oil spilled into a waterway, affecting fish populations.

Commenters noted that extensive restoration efforts and large sums of money have already been invested to restore critical fish habitat along waterways, such as the Skagit River, and that they are concerned about the degradation of these efforts in the event of an oil train derailment, explosion, fire, or spill.

Herons

Commenters expressed concern over the displacement of the heron colony near the proposed project, whether it is done intentionally or as an indirect impact of the proposed project. Commenters noted

that herons use the area near the proposed project area and other relatively nearby locations for nesting and foraging. Commenters requested that an adequate buffer remain between the proposed project and the heron colony. Commenters also noted that herons continue to thrive, even though the area they currently use is considered low quality.

Commenters asked that the EIS study the potential indirect, direct, and cumulative impacts on herons or their food source from an oil spill, stormwater runoff, fire, explosion, nearby projects, and industrial operations. Others asked for a study of the impact on herons of light, noise, vibration, and air emissions from the proposed project, including train engines and cars. Commenters also stated concern with project construction impacts, since they note it will include increased truck traffic, noise, and other activities. Concern was also raised about how activities near the heron colony in the spring, including increased train traffic, could have a negative impact, since this is their typical breeding season.

Commenters suggested that independent Great Blue Heron experts be used to clearly identify the direct, indirect, and cumulative impacts of the proposed project and other projects near the site. Commenters noted that herons are an indicator species, making a study of impacts on their habitat even more important.

Commenters stated their interest in mitigation for disruption to the heron colony, whether the mitigation could be successful, and if it is even possible to mitigate for these potential damages. Commenters also wondered how the herons would find the new mitigation site and, if they did, what the impact would be to the ecosystem to have the herons leave. Commenters suggested that mitigation for impacts on herons be a guaranteed bond to pay for a new habitat if the one created as mitigation does not work.

Commenters suggested that moving the new eagle nests closer to the heron colony could result in more herons being hunted by eagles. Commenters also suggested that moving the nests closers to the heron colony could improve security for the colony, since eagles eat the heron's predators.

Commenters noted that the area near the proposed project is designated a National Estuarine Research Reserve and emphasized the importance of the mature coastal forest at the March Point heronry.

Plants

Commenters asked that the EIS study the direct, indirect, and cumulative impacts of how an oil spill, toxic fumes, fire, and explosions will impact aquatic and terrestrial plants, as well as how the impacts will be mitigated. Commenters also asked that impacts be considered around the proposed project area, including the Padilla Bay National Estuarine Research Reserve, Fidalgo Bay Aquatic Reserve, the Skagit River, the Salish Sea, wetlands, and terrestrial environments near the rail route. Commenters requested that the analysis include how different types of oil will impact plant species.

Commenters noted that BNSF already conducts routine railroad track maintenance that includes brush, tree, and shrub clearing that adversely impacts streams, aquatic habitats, and riparian shading

vegetation. Commenters noted increased train traffic would increase the need for maintenance, further contributing to the degradation of plants around the tracks and the habitats they support. The increased use of herbicides along the tracks was also highlighted as a concern.

Commenters said impacts to vegetation communities, including eelgrass and estuarine wetlands, should be evaluated in the EIS. Impacts to the excavated soil that hosts the plant species should also be evaluated, as well as its eventual backfill location and how it will be maintained. Commenters noted that any replanted trees or shrubs in the project area should be identified and remain consistent with the needs of surrounding ecosystems. New and unknown results from mitigation could negatively impact plants and other species.

Commenters asked that the EIS study whether increased train traffic and construction of the proposed project will require removal of trees and plants that support local biological life, including the mature trees and vegetative cover required for eagle nests. Commenters requested that any removal should be mitigated with additions to habitat of greater or equal value/acreage.

Commenters noted that acres of forested or shrub habitat and pasture will be removed for the project, and asked that the EIS identify what portions of the acreage will be used for biological resources and how they will be mitigated. Commenters said the loss of forested acreage will contribute to Ecology's emission limit of 10,000 metric tons of carbon dioxide per year, which would trigger SEPA and require Shell PSR to disclose their GHG emissions and mitigation plans. Commenters asked that the risk and impacts of a fire or explosion in a forested area be included in the EIS, including in a drier or warmer climate due to climate change and the increase of western forest fires.

Commenters noted the existing impacts of climate change on plant species.

Commenters requested the EIS include analysis of air pollution on plant species resulting from increased train traffic, as well as the impacts on plants from increased marine vessel traffic. Commenters indicated that adverse impacts to plants in the project area will negatively impact the species that rely on them as a food source, as well as the rest of the food chain.

Commenters asked that the plant species present in wetland and saltwater ecosystems be identified and evaluated in the EIS, noting the potential for their erosion and degradation as a result of increased train traffic and potential accidents.

Commenters referenced the National Scenic Area Treatise and the importance of Puget Sound's scenic quality, including wildflowers. Commenters also noted concern for the health of tulips, their contributions to the local economy, and the continuation of the Skagit Valley Tulip Festival.

Whales

Commenters identified the southern resident orca whales as an ESA-listed species that will be particularly susceptible to any oil spills in Puget Sound waterways, including Padilla Bay, the Skagit River,

and the Salish Sea. Commenters noted that any spill would adversely impact the food sources orcas depend on, including Chinook salmon, and that any impact to the food chain could lead to the extinction of the orcas currently a part of the southern resident pod.

Commenters asked that the EIS study impacts and needed mitigation for all types of resident and transient whales, not just the southern resident orcas, especially from the risk of explosions, fires, smoke, toxic fumes, and oil spills.

Commenters referred to the southern resident pod as "Island Icons," that are the largest contributors to local economies dependent on tourism, especially between April and September, in the San Juan Islands. The resident orcas provide jobs and attract visitors to the region, and impacts to their health should be studied over the life of the proposed project. Commenters noted that as tourists, they would like to be able to visit the Puget Sound in the future and still be able to see the orcas, including the new baby orcas.

Commenters said an oil spill due to the failing integrity of the aging Swinomish Channel Swing Bridge would threaten and contaminate the food supply that orcas depend on.

Commenters noted that any adverse impacts to the WDFW's Wildlife Areas from an oil spill would impact forage fish and the orca whales that depend on them for subsistence. Commenters said an oil spill would poison eelgrass beds, which provide habitat for krill and other creatures essential for whales. Commenters noted that an oil spill that impacts salmon and their spawning ground would impact the entire ecosystem, including whales that serve as an indicator species for ecosystem health.

Commenters asked that the EIS study direct, indirect, and cumulative impacts of possible increased marine shipping from the Shell PSR on orcas and their habitat. Commenters noted that increased vessel traffic will add noise pollution to waterways in the Puget Sound, preventing orcas from communicating and using echolocation to locate their prey, as well as scare away orcas' food sources. Commenters said current and proposed levels of train traffic in Skagit County should be analyzed for their potential oil spill risks and impacts to orcas. Commenters asked that the permitting process require a binding agreement that vessel traffic not increase due to the potentially devastating impact on Puget Sound orcas, including the potential of being hit, injured, or killed.

Commenters referenced a study completed on the southern resident killer whales, which identified the pods as an icon of the Pacific Northwest that inspires widespread public interest. They are recognized for their cultural and spiritual importance to coastal tribes, as well as their value as a keystone species in the marine ecosystem. The report identifies that the southern resident orcas are also among the most contaminated marine mammals in the world due to noise, overcrowded vessel traffic, and scarce food supply. In addition, small population size and vulnerability to oil spills and disease were identified as significant concerns. The population has declined since 2005 and consisted of 82 whales in the summer of 2013. Commenters asked that several NOAA reports regarding orcas be considered during the EIS process.

Commenters said ESA-listed orcas have already had a hard time recovering their populations, and a spill or accident would only threaten them further. Commenters noted that there are indicators that the ecosystem is finally in recovery, as evidenced by new-born baby whales that appear to be healthy, which also proves that salmon appear to be returning to the region. Commenters said it would be extremely harmful to approve a project that could harm the progress being made.

Orcas in the Salish Sea accumulate pollutants, and commenters asked for the EIS to study impacts to whales due to bioaccumulation of polycyclic aromatic hydrocarbons (PAHs) released during oil spills. Commenters asked that a basis for current PAH levels already in the environment be established for the EIS, as well as the potential for increased levels of contamination from the proposed project.

Commenters asked that the impacts from climate change on sea levels, tidal flats, and increased pollution in Padilla Bay be studied in relation to their impacts on whales.

Project alternatives, design, and extraction methods

Alternatives

Commenters stated that in order to reach minimum required compliance with SCC 14.24 and 14.26, the SEPA review should proceed to an EIS and analyze impacts and alternatives.

Commenters noted that there is no safe way to transport crude by rail. Commenters suggested permitting agencies consider supporting a no-action alternative due to lack of community support or if the proposed project could not mitigate impacts, including the following:

- BNSF safety record for transporting crude by rail
- Burden of emergency response to an oil spill
- Climate change
- Environmental justice
- Heron colony
- Impact on species and environment near the proposed project
- Impacts to natural and cultural resources
- Increased risk of accident due to coal trains using the same railroad
- Lack of stability in certain railroad structures
- Oil spill, explosion, or fire at the proposed project location or anywhere along the rail corridor
- Risk of forest fires
- Streams
- Wetlands

Commenters suggested alternative methods to the proposed transportation of crude by rail from the source to destination, including:

- Barges from the Columbia River
- Less frequent trains; less than the currently proposed average of six shipments per week
- Pipelines
- Shorter trains with new engines

- Use tracks that do not go by or through large populations, including inland routes and railroads in Canada
- Have Canada assume the risk and refine the crude then transport it to the US

Commenters also suggested alternative locations for the railroad spur, including:

- At least 600 to 800 feet from the heron rookery
- East of the Swinomish Channel
- Vicinity of the Bakken Shale deposits

Commenters proposed several alternatives to the proposed project for the EIS to consider, including:

- Building an unloading facility with more narrow capabilities, resulting in fewer trains needed
- Building windmills to produce energy
- Building solar panels to produce energy
- Configuring the facility to result in less impacts to wetlands
- Constructing the rail spur to be entirely underground to minimize spills
- Encouraging the use of electric and hybrid vehicles
- Encouraging the use of or research of new renewable energy and not fossil fuels
- Including grade separation at the proposed facility between rail and vehicles
- Leaving the oil in the ground; a no-build alternative
- Options that minimize the impact to local vehicle traffic at crossings
- Relocating the Edmonds Terminal to Point Edwards with a separated grade crossing
- Restricting train traffic during peak ferry use
- Using less overhead powerlines
- Using the site of the proposed facility for creating renewable energy instead
- Zero-point energy systems

Commenters asked that the EIS evaluate the impact of freight railroads capacity alternatives in the Pacific Northwest by Class I railroad cooperation in the Columbia River Corridor. Commenters requested that the alternatives in the EIS include several factors, including:

- Analysis of risk associated with potential impacts to the environment
- A detailed map
- A detailed description of the alternative

Commenters questioned whether there was evidence that the oil produced by the proposed project is even needed, whether trucks would be needed if trains could not be used, and if there were less polluting or lower risk alternatives. Commenters also asked how the train traffic and train cars would be handled on site, including storing, traffic control, noise, spills, and unloading.

Commenters requested the EIS evaluate the range of alternatives to stage train cars that are waiting to enter the proposed facility and whether these staging areas include high-density population locations.

Commenters noted that the proposed facility does not fit in the project area identified, while others noted no objections or suggested changes to the proposed project.

Design

Commenters stated that the design of the proposed project should include the replacement of the swing bridge over the Swinomish channel, grade separation at all crossings, creation of quiet zones, and precautions to manage an oil spill along the entire length of the new rail track for the proposed facility.

Commenters asked if any changes had been made to the proposed project design or assumptions since the SEPA determination, how long it takes for the trains to travel the length of the rail corridor from source to destination, the risk to the pipelines being so close to the proposed project, and the potential for the stormwater basins to flood. Commenters also wondered if Shell PSR had plans to move oil or products by marine vessels and if the new railroad tracks would be built to Department of Transportation standards.

Commenters requested that the adequacy of the rail facility design be thoroughly examined by experts with no connection to Shell PSR for its ability to preclude derailments and spills, as well as to safely address and contain spills or the effects of explosions. They also requested a hazard analysis of the railroad grade changes for the proposed facility.

Commenters requested the railroad bed be compliant with non-environmental destructive practices.

Commenters also requested that oils being carried be subjected to a maximum travel speed of 5 miles per hour at every stage of travel, that at least two senior executives from Shell ride on each and every journey, each and every communication between them be logged and registered, and that in built up areas and other safety-conscious designations, contact must be open continuously until the train has safely cleared from such areas.

Commenters expressed interest in the impacts associated with moving the existing pipelines and powerlines as part of the proposed project. Commenters shared concerns about the use of derailers along the railroad.

Commenters wondered what impact the proposed project's new culverts would have on the nearby ecosystems.

Commenters noted that the railroad already passes by the proposed project and that Shell PSR would use state-of-the-art safety and environmental features. Commenters also noted that the current design of storm drainage will not mitigate for riparian and stream impacts, since it is designed to treat stormwater from only the new facilities. Commenters suggested covering or moving the stormwater collection basins to minimize their attraction to local animals.

Commenters requested specific changes to the drainage design including shorter culvert lengths, stream relocations designed as natural channels, and riparian planting.

Commenters wondered how the waste or leftover product from refining crude will be processed, kept safe and monitored.

Commenters asked that the proposed project description include several details, including:

- Any reasonable potential future uses of the new rail spur in addition to the transport of crude oil
- Amount of oil to be received and processed
- Role of BNSF as a co-proponent of the proposed project
- Capacity and weight of each rail car
- Capacity of the stormwater ponds
- Current versus future stream channel systems
- Definition of a "unit" when referring to unit trains
- Detailed plans for the riparian barrier
- Effectiveness of the liner used to capture oil spills
- Larger project area that includes the rail corridor between source and destination, including transfer sites
- Marine ports used for import and export of product
- Maximum number of trains per week the rail spur and facilities could handle
- Minimum and maximum number of rail cars
- Precautions built into the project to protect against accidental oil spills on land and/or sea from derailments and explosions
- Rail car types and their safety design features
- Refining capacity
- Route the trains will take to the proposed facility for both full and empty trips
- Security for the facility and trains on the rail corridor between the source and destination
- State-of-the-art firefighting capabilities
- Structural standards to mitigate the potential impact of an earthquake
- Types of auxiliary services needed to support the proposed project, including tug boats
- Types of crude to be received; as well as any potential modifications needed to receive other types of crude than currently being received

Commenters asked if any utilities would be relocated and, if so, where they would be moved.

Comments also expressed interest in the proposed restoration of the poplar tree farm and noted the current plans lack details about monitoring, maintenance, and financial assurance related to its success as mitigation.

Extraction methods

Commenters requested that the scope of the EIS include identification and assessment of all activities related to the extraction of crude feedstock including direct, indirect, and cumulative impacts.

Commenters were concerned about the environmental impacts of hydraulic fracking used to extract Bakken crude. Commenters specifically noted the following impacts:

- Air pollution
- Contamination and pollution of water
- Disruption to Native Americans at the extraction site and infringement on their lands and rights
- Earthquakes associated with reinfusion
- Emissions from trucks at the extraction sites
- GHG emissions, especially from the release and burning of methane
- Impacts of using large quantities of water for fracking
- Impacts to drinking water
- Impacts to nearby animal life and the environment they depend on
- Impacts to the lives and lands of farmers and ranchers in extraction areas
- Risk of spills of fracking wastewater

Commenters noted that the crude produced from fracking contains chemicals that could make it more devastating to the environment in the event of a spill. Commenters suggested that crude extracted by fracking should be banned in Washington and Oregon since fracking is banned in these states. Commenters also requested that the EIS consider how much longer fracking will be a viable option.

Commenters stated that the equations used in the state analysis on GHG related to fracking need to be updated, because a lot of new information has been learned in the last few years. Commenters emphasized the environmental impacts of mining tar sands, including the large amount of energy it requires and the related GHG and heat emissions from pumping and processing. Commenters encouraged Shell to mitigate the impacts of the GHG emitted during crude and tar sand extraction.

Commenters also stated concern about Shell's artic drilling and the possibility of sea drilling and drilling in Washington.

Commenters recommended that in addition to environmental consideration, the EIS should include an evaluation of the public safety impacts at the crude feedstock extraction sites. Commenters also noted the sonic and blasting methods used to search for oil may have impacts.

Feedstock

Commenters asked if Bakken crude will be the sole source of crude for this project site or if other feedstocks such as Canadian tar sands or diluted bitumen could be used. Commenters noted the application material only indicated that Shell seeks to take advantage of mid-continent "crudes of opportunity" and it is not specific about the types of crude. Commenters requested that the EIS analyze the exact type, nature, and characteristics of the oil to be shipped in order to fully evaluate the potential risks and toxicity, and to explore the advisability of potential limitations on materials allowed to be shipped. Other commenters stated that an analysis of the safety of transporting the specific types of proposed Bakken and tar sands feedstocks is outside the scope of this project. Commenters requested that Shell disclose all planning documents pertaining to planned feedstocks and their transportation.

Commenters would like the EIS to analyze the different feedstocks to determine if they could corrode refinery equipment or rail tank cars, or lead to maintenance issues that could result in accidents. Commenters asked that studies take into account the unique characteristics, behaviors, and toxicities of each type of crude when spilled on land, fresh water, tidal water, and salt-water.

Commenters asked that the lifecycle GHG impacts of various feedstocks be considered. However other commenters stated that the lifecycle GHG emissions from Bakken and tar sands feedstocks is no different than other feedstocks and an analysis should not be required.

Commenters noted that using US crude makes the most sense when it comes to replacing declining Alaskan North Slope crude.

Commenters pointed out that crude oil is a hazardous material as defined by the US Department of Transportation, and is capable of posing an unreasonable risk to health, safety, and property when transported in commerce. Commenters noted that crude oil contains a wide range of contaminants, including sulfur and arsenic; toxic metals like mercury, nickel, and vanadium; and organic compounds like phenols, ketones, and carboxylic acids. Commenters requested the EIS include a discussion of what makes crude oil more dangerous than motor oil.

Commenters noted that crude oil poses greater risks of harm and more difficult containment and cleanup than refined oil products. Commenters noted crude oil is also generally less flammable than other hazardous liquids (like ethanol and gasoline), meaning that it is more likely to migrate some distance before reaching an ignition source and catching fire. Commenters stated that crude oil has been shown to have toxic properties when released into the air, water, and soil, with potentially serious impacts upon fish, wildlife, and the aquatic environment. Commenters also stated that crude oil can also get trapped in sediments, rocks, and other debris, which allows the oil to be remobilized into the environment days, weeks, and even decades later.

Commenters expressed concern about the transportation of Bakken crude, stating it is very volatile, with low density and high vapor pressure. Commenters asked that the EIS compare the vapor pressure for Bakken crude with the vapor pressure in the Quebec explosion. Commenters also pointed out new legislation that has been introduced which would regulate the volatility of crude oil transported by rail. Commenters asked that the EIS evaluate whether removing the most volatile fractions from Bakken crude before loading rail tank cars could result in a significant reduction in the explosive potential of Bakken crude. Other commenters suggested the Bakken crude be refined on site before transportation to increase safety.

Others noted that Bakken crude has been shown to be hazardous and asked if it is defined by EPA or BNSF as a hazardous material. Commenters inquired if Bakken crude requires special safety measures for handling and transport. Commenters asked that the EIS include an evaluation of why Bakken crude is more dangerous than more typical crude oils from Alaska or the Midwest. Commenters also wondered if the change in temperature from North Dakota to Washington would affect the types of solvents that off-gas during transport.

Commenters noted the potential health risk associated with Bakken crude, its byproducts, and the refining effluent. Commenters requested information about the compounds in Bakken crude, how long they can persist in the environment, bioaccumulation of the compounds, and if the compounds are carcinogenic.

Commenters also asked that the EIS consider the impacts of Bakken oil in the marine environment which are different than those of crude oil from North Alaskan slopes. Commenters requested a study of the ground penetration and flow rates of Bakken crude and its solvents before and after burning. Commenters stated that the use of Bakken shale leads to lower gasoline prices, which encourages increased carbon dioxide emissions.

Commenters requested the EIS study the direct, indirect, and cumulative impacts of the mining and delivery of tar sands crude because of the likelihood of it being delivered to Shell PSR by the proposed rail facility.

Commenters noted that Canadian bitumen and tar sands crude is very heavy and difficult to clean up when spilled in water since it sinks. Commenters were concerned that response capabilities are not adequate to deal with a bitumen spill. Commenters requested that the EIS study all aspects of shipping and introducing the different types of crude oil into the marine and terrestrial environments. Commenters stated that diluted bitumen refining produced a large volume of petroleum coke. The storage and handling of this toxic by-product creates air and water pollution problems. Commenters requested that the EIS include the impacts to air and water from petroleum coke produced from the refining of diluted bitumen.

Public involvement

Commenters asked that the EIS public involvement process be long, thorough, and evaluative of all perspectives, as well as honest and transparent. Additional requests were made to extend the comment period. Commenters noted their appreciation for the public process to date, and alternately, others noted public process fatigue.

Commenters made recommendations about the public scoping process, including:

- 120-day comment period
- Additional publicity to ensure the public is aware of meetings
- Comments received via hard copy, email/online, or verbal testimony
- Detailed meeting agendas posted throughout impacted communities
- Public hearings in:
    - ADA facilities with accommodations for the hearing/sight/mobility impaired
    - Convenient locations that accommodate work and transit schedules
    - The evenings or weekends
    - Timeframes designed to accommodate high fishing, commercial, and tourist seasons

Commenters asked the co-leads to seek additional input from a variety of sources, including tribes, schools, cities, neighborhoods, professional organizations, health departments, fire departments, rail workers, and businesses.

Commenters asked that the results of independently reviewed environmental research be made available to the public.

Commenters suggested the public be polled on whether the project should move forward, as well as what they consider to be the impacts to their communities, businesses, and natural environments. Commenters also asked that the project be put to a vote. Commenters asked that surveys be used during the EIS process to involve users of public places in the information gathering phase, as well as to make recommendations for mitigation.

Commenters indicated that there are portions of the community not able to participate in the public process or voice their concerns, including the prison population, who might be limited in their ability to avoid a spill or explosion. Commenters asked that those with the potential to suffer environmental injustice as a result of the project be actively engaged in the permitting process.

Commenters asked if the public is informed enough about the project, as well as about what to do in the event of a spill or explosion. Commenters requested information on public outreach methods being employed for the project, including the use of translation services for non-English speaking communities.

Commenters suggested that the MDNS and SEPA Staff Report delay substantive analysis of critical impacts, preventing the public from commenting on any project revisions or conditions attached to future grading and building permits, which are only subject to appeal, not public comment.

Commenters said the project proposal does not meet the minimum requirements of SCC 14.24 Critical Areas or SCC 14.26 Shorelines (Exhibit B) and thus the permit review under SEPA should be suspended until the deficiencies identified through public comment can be corrected and re-released for public review and comment.

Commenters asked for public review and comment on the Route Analysis and Risk Assessment for Hazardous Materials documents.

Commenters noted that the JARPA Report available online was only provided in black and white, and it would have been more helpful to be provided a color copy to review the finer details.

Commenters said there appear to be many instances of factual or legal basis for the public or public agencies to initiate litigation against Shell's proposal, including from a Superfund perspective.

Commenters noted that it is the responsibility of Ecology and Skagit County to consult with all impacted tribes through regular government-to-government consultation, as well as with representative organizations such as the Northwest Treaty Tribes and the Columbia River Inter-Tribal Fish Commission.

Safety

Derailment

Commenters noted that derailments could lead to fires, explosions, and oil spills, which could have large impacts on the local environment, public health, and economy. Commenters pointed to recent oil train derailments and asked that the EIS quantify previous train derailments, calculate the risk of derailment, include an estimate of economic and human damage from similar derailments, and identify who will be responsible for this cost. Commenters requested that the EIS study steps that could be taken to lower the risk of derailment along the entire corridor.

Commenters suggested decreasing the maximum train length to help mitigate the risk of derailment. Other commenters suggested mitigation include a standardized method for timely evacuation of communities adjacent to the rail line in the event of a derailment.

Commenters ask that the EIS study what progress is being made to comply with the Positive Train Control Deadline for 12-31-15.

Commenters also identified the potential risk of a person remotely taking control of the train's computer systems and making the train derail.

Commenters identified potential causes of derailment for study in the EIS, including:

- Aging infrastructure
- Avalanche
- Axle failure
- Bridge failure
- Coal dust along the tracks
- Cold temperature
- Downed trees
- Health of train operator
- Landslides
- Natural disasters, such as earthquakes and mudflows
- Oil slosh factor
- Poor maintenance
- Storms and adverse weather
- Track problems
- Vehicle collisions
- Weight of crude trains

Commenters identified specific locations where they were concerned about a derailment, including:

- Anacortes
- Bellingham
- Bluffs near Mukilteo
- Columbia River Gorge
- Everett
- Highway 20
- Hospitals near tracks
- Marysville, including Quil Ceda Village
- Mount Vernon
- Portland
- Richmond Beach (Shoreline)
- Schools near tracks
- Seattle
- Sites containing flammable materials

- Skykomish Valley (Snohomish County)
- Spokane
- Tacoma
- The Senior Center in Edmonds, due to limited access and proximity to rail line
- Vancouver

Explosions

Commenters expressed concern about the safety of tank cars, noting that they can rupture at speeds below 40 miles per hour. They also noted that Bakken crude oil is a more volatile and flammable feedstock with a higher vapor pressure, and that the addition of oil trains along the rail route would increase the likelihood of an explosion. They also suggested that the EIS consider the risk of empty-tank car explosions, which can be as much or more damaging than full car explosions.

Commenters requested a report of the number of tanker trains that have derailed and ruptured, a study of how far an oil train explosion could reach, what the worst-case scenario would be, the risks and consequences of an explosion, and the relationship between spills, explosions, and fires. They also suggested that the facility design be examined for its ability to reduce the chance of and safely address the effects of an explosion. They also requested an evaluation of emergency and fire response preparedness in the event of an explosion.

Commenters asked who would be held financially responsible for an explosion, and highlighted the potential for liabilities and costs to be passed on to taxpayers. They also requested that Shell and BNSF be required to carry insurance to cover all impacts of an explosion.

Commenters expressed concern that an explosion could destroy towns along the route and be detrimental to their economies, damaging their ability to attract residents, businesses, and tourists. The impact to major highways and critical access to towns along the route was also of concern. Damage to property and a decline in property values were also highlighted as concerns.

Commenters suggested that explosions could threaten human, plant, and animal life in the area along the rail route, from source to destination. They noted the physical and psychological health impacts explosions could have on residents along the rail route. They added that explosions could lead to leaks into marine and freshwater areas, damaging ecosystems and industries that rely on these areas. The potential for drinking water pollution was also highlighted as a concern.

Commenters also noted that several jails are located close to the rail route, and asked how prisoner safety would be addressed in the event of a large explosion. They expressed concern that a large explosion in a rail tunnel or on a rail bridge could be catastrophic, especially in large cities such as Seattle, Spokane, or Vancouver, Washington. Damage to state-owned resources and state-managed lands, as well as the impact to tribal rights were also highlighted as areas of interest by commenters.

Commenters asked that the EIS study how many schools, parks, hospitals, play fields, and other public gathering locations are near the tracks and could be potentially affected by an explosion and how many

miles of the track are in areas populated by humans. Commenters also asked that the project include a thorough evacuation plan in the event of an explosion.

Fires

Commenters requested the EIS include a report of how many and how often similar oil trains have caught fire. They expressed concern that transportation of Bakken crude oil, a more flammable feedstock, would increase the chances of a large fire. The cumulative impact of additional trains for fire risk was also highlighted as a concern.

Commenters emphasized the potential for loss of human life due to fires, as well as the impact on wildlife and ecosystems, drinking water, businesses, and the economy. The financial burden of planning for and responding to fires was also highlighted. Commenters expressed concern over the potential health risks of fires to workers and communities along the rail route. Air quality, smoke, toxins, and burns caused by fires were also of concern.

Commenters suggested that unsafe tank cars would increase fire risk. They also asked who would be held responsible for a fire caused by a tank car vapor leak. They asked if water mains along the railway are buried deep enough to withstand the heat of oil fires lasting several days. Commenters also expressed concern that large oil fires could cut off critical access to regions along the rail corridor, from source to destination.

Commenters warned of the potential for oil train fires to compound ever-increasing seasonal fires along the railway, especially as droughts increase. Commenters noted that increased train traffic, and thus increased risk of explosions through fire-prone regions in Eastern Washington, would make the summer fire season worse. They also noted the potential for oil spilled in waterways to catch fire, causing harm to marine and freshwater ecosystems. The impact to tribal treaty rights due to fires was also of concern.

Commenters requested an assessment of fire and emergency response preparedness in the event of a fire. They expressed concern that many oil fires are too hot to fight and many local fire departments do not have access to the foam needed to extinguish oil fires. Commenters noted they felt the only appropriate response would be to evacuate the surrounding areas while the fire burns. In this event, they noted that property and community damage could be abundant. They also requested an economic analysis of the risks associated with fires and asked how Shell could insure itself against fires. Commenters suggested studying steps that can be taken to potentially reduce the risk of fire along the entire railway, from source to destination.

General (Safety)

Commenters expressed concern with the safety of this project and stated that the risks are unacceptable. Commenters noted specific concerns about the safety of children and future generations. Commenters noted that the risks are being forced upon the community with no benefit. Other commenters noted that risks are present, but they stated that the risks were acceptable and to be

expected in a society that requires oil. Others stated that the required slow speeds make crude by rail transport safe.

Commenters requested that the EIS study all safety risks associated with crude by rail and consider the possibility that there may be no safe way to transport oil by rail. Commenters suggested that the EIS should refrain from commissioning an expensive Probabilistic Risk Assessment since these are easily shown to be of suspect validity. Commenters recommended risk assessment methods used by the US Department of Transportation in its Draft Regulatory Impact Assessment on the High Hazard Flammable Trains rulemaking docket.

Commenters noted that tribes, Ecology, and all of the counties through which hazardous materials pass, should have access to risk assessments and the assessments should be subject to scrutiny by the agencies whose stakeholders will be affected should an explosion, derailment, or oil spill occur. Alternatively, commenters stated that the risk of accidents that could result in spills, fires, and explosions from transporting crude oil in mile-long trains is outside the scope of this project and is a better question for the rail company and the country as a whole.

Commenters expressed concern about Shell's past safety record and requested that the EIS consider Shell's previous safety violations. Commenters stated that there are no incentives in place to encourage safety at the refineries and current fines are not prohibitory.

Alternatively, commenters expressed support for Shell PSR's high level of safety training, drug and alcohol testing, and occupational medical testing.

Commenters stated that the BNSF Railway system is one of the safest in the world, noting that the US Department of Transportation requires railroads to conduct risk route analysis for high-hazard commodities. Other commenters claimed that BNSF failed to report spills in a timely manner and is being cited for numerous violations. Commenters requested that BNSF prove they are prepared to respond to a worst case scenario accident.

Commenters asked who would provide housing, both temporary and long term, if a rail accident caused individuals to lose their home. Commenters also wondered if parents could opt out of sending students to schools near rail lines due to safety concerns.

Commenters expressed concern about the risk of sabotage and terrorist attacks. Commenters asked how the project will protect these trains from attacks and who is responsible for ensuring national security. Commenters noted that NEPA requires EISs to consider terrorist attacks. Commenters were specifically concerned with the chance of hackers infiltrating the digital and internet-based systems that control train locomotives. Commenters were also concerned that train sidings were not well protected, citing train graffiti as evidence of security breaches. Commenters noted that homeless encampments near trains could also pose a safety risk.

Commenters noted that the issue of rail safety is very contentious and some citizens may perform illegal protest activities (similar to tree-spiking during the logging conflicts) that could result in catastrophe. Commenters asked that security and response be carefully assessed and the adequacy of proposed mitigation measures evaluated.

Commenters requested that oil and rail corporations fund safety improvements for every community along the track.

Inspection/enforcement

Commenters requested that the EIS include an evaluation of the direct and indirect impacts of project inspection and regulation enforcement. They expressed concern that there is not currently sufficient oversight within the rail industry, and suggested that safety measures be put in place for this project.

Commenters noted that local, state, and federal regulations should all be enforced, including:

- Clean air regulations
- Clean water regulations
- Crude oil export regulations
- Rail regulations
- Refinery regulations

In some cases, commenters added that the existing regulations may not be stringent enough and should be reevaluated. They asked that the EIS determine whether Shell can be trusted to comply with all permits and regulations, based on past compliance or violations. Commenters suggested making the failure to conform to EIS provisions illegal and that violators would be prosecuted. Other commenters noted Shell's commitment to safety at the refinery and expected the proposed project to be designed incorporating the most advanced safety features.

Commenters suggested that regular independent inspection, maintenance, and/or repair of structures be required, including:

- Chassis of the rail cars
- Entire railway from source to destination
- Hazardous materials
- Railroad ties (including inspecting for creosote)
- Rail bridges (e.g. Swinomish Channel Swing Bridge, Skagit River BNSF Rail Bridge)
- Railway coupling
- Refinery operations
- Roadbed
- Tank cars
- Train brakes
- Train speed limits
- Trestle
- Workers' conditions

Commenters requested that the EIS include a study of past and current inspections, including the method of inspection and technology used. Commenters felt this information could be used to evaluate

how effective inspections are at detecting problems. Commenters suggested that infrared cameras be used to detect vapor leaks from tank cars, and that other new technologies be explored to prevent leaks. They also requested that an analysis be done of the potential impacts of common maintenance issues.

Commenters noted that union workers are contractually protected if they report a problem, and thus suggested that the project require employees to be unionized. Commenters also requested that a study of how existing safety measures work with more volatile feedstocks be conducted. They also suggested that security be increased to prevent tampering with valves on train cars.

Commenters expressed concern that the cost of regular maintenance might be passed along to taxpayers. They suggested that Shell be held responsible for all inspection, maintenance, and repair costs. The responsibility for maintenance and repair of bridges over tribal land was also of concern. Commenters expressed concern that inspection and repair of private rail bridges is up to the discretion of the owner of the bridge.

Spills

Commenters asked that the EIS include a study on any area where trains go over water within the project to ascertain what happens to oil drips, diesel fumes, benzene, or other noxious substances which come from trains.

Commenters requested that the EIS include an evaluation of all direct, indirect, and cumulative impacts of oil spills along the rail route, from source to destination, and at the facility, including the potential impacts to ports that may be unable to ship or receive goods.

Commenters noted that spills could negatively impact human health and life, as well as plant and animal life, both wild and farmed. Commenters also noted that recreation, commercial operations, agriculture, tourism, and other industries could suffer due to oil spills, affecting the economy of the area along the entire rail route. Marine and freshwater ecosystem and habitat impacts were also highlighted. The impact on tribal treaty rights and the impact on public health were also of concern to commenters.

Commenters asked who would be held responsible for spills or leaks during transport, and who will pay for the costs of an oil spill cleanup. They noted that there is currently no technology available to effectively clean up sinking oils. The potential for cleanup costs to be passed along to taxpayers was of concern. They suggested that the EIS require an oil spill prevention and response plan that also addresses the financial burden of preparing for spills placed on local governments. They also asked that the EIS require Shell mitigate the risk of spills.

Commenters requested that Shell work with Ecology Spill Prevention staff to provide adequate financial resources for personnel and spill equipment in strategic caching locations along the rail route.

Commenters expressed concern that an increase in overall oil trains along the rail route will increase the chances of an oil spill. They also noted that any increase in oil transportation via vessel could also increase the risk of spills. They requested an evaluation of the risk of spills due to structure failure, as well as an evaluation of staffing levels at the refinery during normal operations and in the event of a spill. They also asked how a large spill at the refinery would be contained and controlled, considering the onsite containment system is designed to contain spills from one car.

Commenters asked that the EIS study how long it would take to restore a variety of different ecosystems in the event of an oil spill, the techniques that would be used, and the associated cost. They also asked how spilled oil would travel through the local drainage systems.

Commenters were interested in studying the potential impacts of spills in areas such as:

- Anacortes, WA
- Bellingham Bay
- Columbia River & Columbia River Gorge
- Fidalgo Bay
- Georgia Basin
- Grays Harbor, WA
- Guemes Channel
- Island County
- La Conner, WA
- March Point (Anacortes, WA)
- Pacific Ocean
- Padilla Bay
- Puget Sound
- Rosario Strait
- Salish Sea
- Samish Bay
- San Juan Islands
- Seattle, WA
- Skagit Bay
- Skagit River
- Skagit Valley
- Spokane, WA
- Strait of Juan de Fuca
- Swinomish Channel
- Vancouver, WA

Commenters requested that the EIS include an analysis of how earlier spills, either near the proposed facility or elsewhere, could provide insight on a potential spill.

Structures

Commenters noted that trains carrying oil, especially the new DOT 117 models, are very heavy and cause vibrations similar to a minor earthquake. Commenters also stated that these trains impart a higher than usual force on the tracks. Commenters were concerned that these trains may in turn impact the safety and stability of the rail line and nearby structures, especially since many structures are aging. Commenters asked that the EIS study these direct, indirect, and cumulative impacts of the increase in train traffic.

Commenters said that oil trains increase the rails susceptibility to metallurgical failure and flaw by pushing the rails too far apart to keep the wheels on the tracks. Commenters pointed to recent studies performed by the Canadian Safety Transportation Board that say oil trains are causing unusual track damage. Commenters said that the impact on the rails created by the weight of the unit oil trains is

amplified by the swaying movement of the train, as oil sloshes around in the tank cars. Commenters expressed concern about broken spikes, deteriorating wooden ties, and other defects in track components. Commenters also noted that cold temperatures can cause shrinkage of rail lines and freezing of rail beds which reduces the shock absorption capabilities. Commenters requested that the EIS study what track problems have led to recent derailments and fatalities and consider the effectiveness of recent changes to rail safety made in areas such as North Dakota. Commenters would like the EIS to consider how track defects caused by oil trains may impact other trains, including passenger trains that travel on the rail line.

Commenters were also concerned about the effects of coal dust on rail safety and the transportation of crude, stating that coal dust can destabilize rail bed ballast, interfere with track stability, and, when combined with water from extraordinary amounts of precipitation, weaken the rail bed and cause track failure. Commenters requested that the EIS study the amount of coal dust deposited by trains, identify which tracks Shell's cars will share with coal trains, and the quantity of dust that can cause track failure. Commenters noted that the Seattle seawall project and the State Route 99 tunnel have caused fluctuations and instability in the earth beneath downtown Seattle and this movement could cause train tracks to misalign.

Commenters suggest that the EIS look at the location of derailers, a device that acts to prevent a rail car on a sideline from finding its way back onto the mainline by simply throwing the car off the track along the BNSF oil train route. Commenters noted that the rail line in the project area should include way-side detectors.

Commenters raised concerns that the rail is built on fill that could liquefy during an earthquake. Commenters requested the EIS study what would happen to the refinery infrastructure and the rail lines themselves in the context of sea level rise and increased storm surges. Commenters also asked that the EIS consider the track reliability in areas that are prone to fires or have been fire-affected in the past. Commenters asked that the EIS study the polluting effects of creosote railroad ties, quantify how much of the rail corridor uses creosote ties, and examine how the increase in rail traffic affects creosote leaching. Commenters also requested an examination of the differences between creosote and concrete ties and their impact on track failure.

Commenters asked that the EIS include an inspection of all rail bridges that will be used en route from North Dakota to Anacortes. Commenters also requested that bridge girders be considered because a failed girder could slash the cars and cause leaks.

Commenters raised concern about the safety and structural integrity of the aging Swinomish Channel Swing Bridge. Commenters asked that the EIS consider:

- A funding plan showing how the bridge could be replaced without financial impact to the general public in the event the bridge is deemed unsafe or fails
- A review of the inspection logs before coming to a conclusion regarding the adequacy of BNSF inspections and repair/replacement of the bridge

- The bridge's capability of handling increased oil train traffic
- The bridge footings and erosion of the footing from higher tides and storm surges
- The effects of seismic events and high winds on the bridge's structural integrity
- The impact of a train derailment, oil spill, or explosion in the event of a bridge failure on the surrounding shorelines, the Swinomish Tribe, salmon and shellfish habitat, eelgrass meadows, the fishing industry, the heron colony, and tourism
- The impact of increasing temperatures that could create thermal expansion of bridge joints and could cause the bridge to reach its threshold for thermal expansion
- The West Conley rail slip joint and the rail anchor pattern approaching the bridge

Commenters raised concerns about the safety and structural integrity of the aging Skagit River Railway Bridge. Commenters asked that the EIS consider:

- How an oil spill, derailment, or explosion caused by a bridge failure could impact the City of Anacortes Municipal Water plant, salmon, and the surrounding environment
- Previous events where debris buildup upstream of the bridge caused the bridge to fail and almost caused the adjacent left bank levee to fail
- That bridge replacement is supported by Dike Districts 12, 17, and 1; but not by 3 (left bank downstream of Mount Vernon) or 22 (Fir Island)
- The foundation of the 13 supporting piers, nine of which rest on glacial silt, including the steel structure constructed to replace support piers, and the remaining cement piers
- The impacts to the adjacent levee system
- The past work of local stakeholders and representatives of BNSF to discuss and address the debris management practices, acknowledging that there has been disagreement between these groups as to how debris should be managed
- The pressures from floods, seismic events, vibrations from frequent heavy oil train traffic, and the side-to-side motion possibly exacerbated by sloshing of the oil with the tank cars

Other commenters cautioned that the visual appearance of these structures is not indicative of their structural integrity. Commenters stated that BNSF performs thorough and regular inspections on all railway bridges, which includes an underwater inspection by professional engineers. Commenters said that both the Skagit River and Swinomish Channel Bridges are in compliance with FRA standards.

Commenters noted specific bridges and structures to consider in the EIS, including:

- Ballard Locks Bridge
- Berentson Bridge to Fidalgo Island (within the blast zone)
- I-205 bridge (near Columbia River)
- Nisqually River Bridge
- Padilla Bay Railroad causeway
- Rail bridge in Seattle between Magnolia and Ballard
- Shell tank farms
- The Seattle downtown rail tunnel

- Trestle bridge just west of the swing bridge

Commenters stated that the noise and vibrations from the trains is affecting the stability and structure of homes near the track and requested that the EIS study these impacts. Commenters asked that culverts, water crossings, dikes, crossing guard mechanisms, and rail curves also be studied.

Commenters asked that the EIS include the impact of crude trains on rail tunnels and consider the safety and structural integrity of tunnels. Commenters would like the EIS to consider the structural integrity of rail overpasses. Commenters noted that the levee systems near the refinery are inadequate.

Commenters requested full track and track support structure inspections be performed by independent experts prior to approval of any increases in Bakken unit train transport. Commenters also asked that regular inspection of all rail lines and structures be performed if the project is permitted. Other commenters requested the Army Corp of Engineers conduct a comprehensive analysis of rail infrastructure.

Other commenters noted that BNSF invests large amounts of money into the rail maintenance program to replace and maintain existing infrastructure. Commenters stated that BNSF inspects bridges, including the Swinomish Channel Swing Bridge and Skagit River Rail Bridge, at a frequency meeting the FRA standards. Other commenters expressed concern that the Federal Rail Administration does not play a role in approving or developing the actual safety standards for railroad bridges.

Commenters also pointed out that track on most key routes on BNSF is inspected by a hy-rail vehicle and by foot regularly (daily, weekly, or monthly depending on the class of track). Commenters noted that rail detectors and track geometry cars are components of BNSF's track inspection program that utilizes state-of-the-art technology to help identify defects or problem areas that cannot be detected by the human eye.

Commenters asked if permits are required due to the needed infrastructure improvements and if so who will be the lead agency.

Tank cars

Commenters expressed concern over the safety of tank cars used to transport crude by rail. Commenters said the cars are thin-shelled, prone to puncture and leakage in an accident or derailment, and were not designed to carry explosive oil. Commenters explained that the FRA has observed an increasing number of incidents involving damage to tank cars in crude oil services in the form of severe corrosion of the internal surface of the tank, manway cover, valves, and fittings.

Commenters requested more information on the exact number of tanks cars required by the project, as well as the manufacture name and date constructed of any tank cars traveling to and from Shell. Commenters suggested that the project description include the type of rail cars, capacity/volume and

weight of each car, and the number and type (make/model) of locomotive per train. Commenters also questioned who owns the rail cars and who is responsible for their upkeep and maintenance.

Commenters noted that Shell is proposing to purchase the new DOT 117 tank cars. Commenters questioned how long it would be until these DOT 117 cars are available to Shell and if Shell is committing to wait until higher standard cars are available before beginning operations. Commenters requested that the EIS include a legally binding requirement that only DOT 117 cars be used, not DOT 111 or CPC 1232 cars, which have been involved in ruptures, fires, and explosions. Commenters asked that crude only be transported in double-walled rail cars that cannot leak, spill, or explode. Other commenters requested only cars meeting the strictest international standards be used. Commenters stated that cars need armor plate shields at each end to reduce puncture by the coupler. Commenters asked that rail cars be produced that have spouts inside the frame so they would not break off easily in the event of a rollover or accident. Commenters suggested that tank car valves be inspected for defects and infrared cameras should be used to look for vapor leaks. Commenters also recommended that Shell commit to an independent safety review of all rail cars.

Commenters stated that new federal car standards are inadequate and set weak requirements for retrofitting existing tank cars. Commenters were concerned that those who oversee rail traffic will allow the old tank car to continue shipping for almost a decade. Commenters also noted that the newer models of tank cars have performed no better than the old models when involved in accidents and derailments.

Commenters requested that the EIS include:

- A report of the crashworthiness of the different models of tank cars
- A report of the number of tanker train ruptures that have occurred since 2012
- Determination if tank cars can leak from any valves or flanges
- How much gas escapes from the tank car blow-off valves
- How oil sloshing and tilting in the tank car and the variation in center of gravity can increase the likelihood of an accident
- How tank cars perform when exposed to adverse weather conditions and extreme temperature
- The comparative speed at which external valves (with and without cowling) shear off of a fully loaded car contrasted with imbedded valves (i.e., set inside the tank wall)
- The corrosiveness of crude and tar sand feedstocks and their impact on tank cars
- The impact of a land slide on tank cars
- The risks associated with storing full or empty tank cars on sidelines in populated area
- The speed at which tank cars could puncture
- What are the impacts on braking distances for oil unit trains for the projected speeds in various urban/rural situations, include slope of grade
- What type of mitigation in terms of braking can be employed and how effective is the mitigation

- Whether North Dakota's regulations requiring reduction of crude oil vapor pressure are sufficient to eliminate all risk of tank car explosion

Commenters were also concerned about "crude shrinkage," which is when crude is lost during transit because of faulty valves and seals, vapor release from unpressurized tanks, or inadequate maintenance and retrofitting.

Transportation

Rail Traffic

Commenters stated that the scope of the EIS should include potential direct, indirect, and cumulative economic impacts of current and increased crude by rail traffic on other freight over the life of the project.

Commenters noted that increased rail traffic could have a negative impact on local economies by potentially cutting business off from their customers, employees, or deliveries.

Commenters requested that there be established management and communication protocols for dealing with train stoppages, operational problems, and crises at rail crossings.

Other commenters noted transportation by rail provides significant economic benefits to Washington State that should be documented in the EIS.

Commenters asked what impacts the terminal and rail traffic will have on local and tribal businesses and asked that the EIS include analysis of the economic impacts of rail congestion to the livelihoods, property values, and economic well-being of communities including impacts to local businesses, tribes, tourism, and fisheries. They suggested studying other parts of the world that have experienced similar increases in train traffic to determine how property values change in comparison to the economic benefits of additional jobs to assess the overall economic impacts.

Commenters asked that the EIS study the adverse impacts of increased rail traffic on local and state parks and campgrounds, motels, hotels, hostels, restaurants, bicycle repair and supply shops, and other tourism-related attractions.

Other commenters felt differently, stating that the EIS should not address increased train traffic, instead leaving it to cities or counties to work with BNSF.

Commenters expressed concern that train corridors are already at capacity, including bottlenecks at the Spokane-Sandpoint Corridor and Columbia Gorge, and that increased train traffic has already begun to impact Washington State goods that rely on the railroad for shipment. Commenters asked that the analysis include impacts on Washington products and ports such as losses due to commodities being

unable to reach market in a timely manner due to competition for rail transport. Alternative rail corridor users that could be impacted include:

- Agriculture (grains and fruit)
- Aircraft manufacturers
- Canadian rail service
- Coal
- Consumer goods
- Forest products/lumber
- Industry
- Intermodal users
- Passenger rail (Amtrak, Sounder)
- Ports

Commenters recommended that impacts of dock worker strikes in 2014 on Washington farmers be used to assess potential impacts resulting from train traffic increase.

Commenters expressed concern that rail costs are a significant factor impacting the lack of competitive status of Washington ports as compared to other west coast ports due to the prioritization of higher freight rates paid by oil shippers.

Commenters asked that shipments of produce and food products be given priority over Shell products because of their perishable nature and high cost to produce.

Commenters cited studies indicating coal rail traffic is already having a negative impact on the ability of Washington shippers to access markets and requested information on how railroads prioritize unit trains, like crude oil trains, over other shippers.

Commenters suggested an assessment of the type and cost of infrastructure improvements needed to reduce delays in passenger rail service. Commenters note that delays in passenger rail due to coal and oil shipping has resulted in a loss of ridership along the I-5 corridor. Commenters asked that the analysis document regional targets for increasing ridership in the I-5 corridor and how increased oil traffic impacts current and future ridership. Commenters requested that the EIS address potential cumulative impacts to service planned for future Amtrak use. Commenters asked how increased rail traffic would lead to an increase in potential train collisions.

Commenters noted that BNSF's policy of not allowing "new" small railcar users on Anacortes tracks impacts the sustainability of local Skagit Valley agriculture and rail-dependent businesses.

Commenters recommended a cumulative analysis evaluating freight capacity constraints, bottlenecks, and rail system accessibility be included in the EIS.

Commenters requested that Shell communicate the train schedules and routes to the general public.

Safety

Commenters noted that the probability of a derailment, spill, leak, or explosion increases as train traffic increases and asked that this be studied.

Commenters asked that train volumes be reduced during peak recreational times of day and that permits ensure there will be no further increase in trains. Other commenters asked that train schedules be arranged to avoid sending crude trains by the Seattle stadiums during events. Alternatively, commenters suggested constraining oil train movement to and from the refinery to daylight hours to prevent accidents at uncontrolled crossings.

Commenters requested that the EIS study the cost of replacing each at-grade crossing in Skagit County, calculating the costs to be borne by Shell, by BNSF, and by taxpayers, including studies that evaluate how these costs will impact the economy.

Commenters were concerned about the impact of increased train traffic on pedestrian safety, and they requested the EIS include an assessment of the impact of increased train volumes on traffic and pedestrian safety, specifically the potential increase in pedestrian injuries and fatalities. Commenters recommend that the EIS asses the safety of existing highway/rail crossings including safety infrastructure at the crossings, increased risk at unmarked crossings, and the safety history of each crossing along the proposed route and provide solutions to address potential risks.

Commenters requested an assessment of pedestrian walkway and roadway closures due to oil train traffic, including the number or times per day trains will impede vehicle and pedestrian traffic at all railroad crossings, the times of the day or night closures will occur, the estimated number of minutes for each closure, traffic patterns impacted, and the potential impacts on access to community facilities and businesses. Commenters noted that increased walkway and roadway closures due to train traffic can disrupt established communities, depress home values, dry up business centers, and create social isolation. They also noted that these impacts can disproportionally impact economically depressed communities.

Commenters requested a Rail Route Risk Assessment be completed using the Vessel Traffic Risk Assessment completed for Puget Sound as a model.

Commenters asked if increased rail traffic would increase the risk of landslides in areas already prone to landslides.

Commenters asked how increased rail traffic might impact public health and the rate of accidents, deaths, and property damage.

Commenters asked that speed limits be defined for trains carrying petroleum products through communities to increase safety. Commenters also asked that the EIS study the impact of reduced train speeds.

Commenters requested that the EIS assess the type and cost of infrastructure improvements needed to mitigate for traffic, rail, and safety impacts of increased oil-by-rail traffic. Commenters requested cost

estimates and identification of the parties responsible for funding these improvements (e.g., BNSF, Shell, and taxpayers).

Commenters specifically noted six state highway crossings along the BNSF Anacortes Spur (between the BNSF Bellingham Subdivision and PSR site) that would experience an increase in freight train traffic under this proposal and that they would like to see a cumulative assessment of these locations. Commenters also noted that many of these locations may not be able to adequately absorb additional delays without mitigation measures. These locations are:

- State Route 20 Burlington Boulevard at grade crossing – USDOT #092255Y; RRMP 16.27; SRMP 59.94
- State Route 20 intersections adjacent to the following county road railroad grade crossings:
    - Avon-Allen Road – USDOT No. 09.2249W, RRMP 13.85; SRMP 57.52
    - Farm to Market Road (Best) – USDOT No. 092242X; RRMP 10.99; SRMP 54.51
    - Garret Road (Peterson) – USDOT No. 092253K, RRMP 15.89; SRMP 59.49
    - La Conner Whitney Road (Bayview Edison) – USDOT No. 092241R, RRMP 9.68; SRMP 53.24
    - Pulver Road – USDOT No. 092252D; RRMP 15.16; SRMP 58.77

Commenters requested the EIS include the analysis of the above-listed impacts at these intersections to:

- Emergency response capabilities
- Highway-rail grade crossing safety (i.e., whether modification of warning devices or grade separation might be warranted with the projected increase in rail traffic)
- Levels of service at affected state highway intersections/interchanges
- Vehicle delay and queuing at state highway grade crossings and state highways impacted by local grade crossings

Commenters specifically called out the South Walnut Street grade crossing (USDOT#092259B) in Burlington to be evaluated, as it has been identified by UTC and BNSF as a potentially under-protected crossing.

Commenters expressed concerned about the BNSF Skagit River Railroad Bridge and BNSF Swinomish Channel Swing Bridge ability to handle increased train traffic to Shell PSR, especially considering that tank cars carrying oil are significantly heavier than other types of train cargo.

Vehicle traffic

Commenters asked that the EIS examine strategies to mitigate any adverse impacts from increased train traffic on state highways, including the estimated cost of implementing those strategies, determining whether public investment would be required, and examining alternate train routes that may result in fewer or less severe impacts to the state highway system.

Commenters noted that bus services are impacted by increased train traffic making it hard for buses to maintain schedules and making them less reliable for those who depend on them.

Commenters expressed concerns regarding the accuracy of Shell's previously submitted traffic studies and construction related traffic impacts (particularly the removal of dirt), and requested a Traffic Impact Analysis be prepared to disclose the transportation construction impacts on the local and state highway systems, including vehicular trips, level of service thresholds, channelization thresholds, and safety thresholds.

Commenters expressed concern that traffic congestion due to increased train traffic will increase and requested that the EIS identify alternate train routes that may result in fewer or less severe impacts.

Commenters asked that potential health and economic impacts due to possible disruptions of vehicle traffic in worst-case scenarios be studied, including Seattle, Portland, Vancouver, Tacoma, and Spokane.

Commenters requested that the cumulative impacts and potential mitigation of congestion and delays on state, regional, and local highways and roads caused by increased rail traffic be evaluated in the EIS. This includes a detailed analysis of every existing at-grade crossing along the transportation route, levels of service at state highway intersections and interchanges, vehicle and freight delay and queuing at state highway grade crossings, and highway-rail grade crossing safety.

Commenters noted that trains traveling through communities could shut down streets for a significant amount of time causing significant vehicle congestion and asked that the EIS estimate the cumulative increases in delays of at-grade crossings in communities along rail lines impacted by Shell's project and other proposed energy projects.

Commenters requested historical data of traffic patterns at crossings, school bus routes, and current and anticipated delays, and options, including the impact of increased vehicle traffic on public and school bus service.

Commenters noted that impacts from increased rail traffic could deter users of alternate modes of transportation such as passenger rail and ferries, thereby adding more cars to the road.

Commenters emphasized that traffic congestion should be addressed in the context of population growth around the I-5 corridor.

Commenters asked that economic impacts of increased vehicle traffic due to blocked crossings from rail transport be studied in the EIS, including accessibility to businesses and services.

Commenters requested that economic impacts to trucking traffic be studied, including delivery trucks' ability to transport produce, goods, and services.

Commenters asked how increased vehicle traffic would impact employees traveling to and from work, jobs that entail driving, and businesses shipping and receiving goods.

Commenters ask that the potential for increased air pollution resulting from vehicle traffic be studied.

Commenters ask that the health impacts of passenger vehicle emissions be studied.

Commenters emphasized that increased rail traffic could increase the number of accidents between cars, pedestrians, and trains and asked that the safety impacts of vehicle congestion due to rail traffic be studied.

Commenters ask that the impact of a rail explosion or other disaster on vehicular access and evacuation be addressed in the EIS.

Commenters requested to see a list of tsunami and other evacuation routes and options.

Commenters requested a health impact study to examine how increased vehicle traffic would impact communities near rail lines and emergency response times.

Commenters noted several traffic impact studies that have been completed for communities along the proposed rail transportation route for the proposed coal export and oil projects in Washington, including:

- Coal Train Traffic Impact Study, Parametrix (November 2012)
- Gibson Traffic Consultants Reports for Bellingham, Burlington, Edmonds, Marysville, Mount Vernon, Seattle and Stanwood
- Heavy Traffic Ahead, Western Organization of Resource Councils (July 2012)
- Washington State 2014 Marine and Rail Oil Transportation Study, prepared by the Washington Department of Ecology (March 2015)

Vessel traffic

Commenters emphasized that train traffic interrupts ferry traffic, notably in Edmonds where ferry loading and unloading operations occur at-grade over BNSF rail lines. Commenters expressed concerns that increased train traffic could increase delays to all modes of travel in areas where ferry traffic and trains cross paths. Commenters highlighted that disruptions in ferry traffic impacts the number of passengers and vehicles using the ferry system, potentially reducing revenues. Commenters also asked how ferry access to the San Juan Islands would be impacted by increased rail traffic. Commenters asked:

- How impacts to operations at the Edmonds Terminal would result in further impacts at intermodal connections
- How freight transporters that depend on ferry Services will be impacted
- How traffic impacts emergency services (WSF vessels provide critical emergency service transportation for ambulances, especially when weather conditions prevent use of aircraft for certain service areas)

Commenters requested the EIS include alternatives to mitigate potential cumulative effects of increased rail traffic on the Washington State Ferry system, including:

- Relocation of the Edmonds Terminal to Point Edwards with a separated grade crossing
- Grade separation at the current terminal site

- Train traffic restrictions during the busiest ferry travel times (i.e. commute, recreational, and weekend traffic peaks)

Commenters expressed concern about the potential for increased vessel traffic due to the proposed project and asked for detailed analysis of how vessel traffic might be impacted. Other commenters noted that the proposed project would decrease vessel traffic to the Shell PSR through oil by rail shipments that substitute for oil by tanker.

Commenters asked what the impact on navigation would be from increased use of draw bridges (like the one near the Ballard locks) and what that impact would be if trains were stalled on the bridge.

Commenters asked if increased train traffic would make it difficult for commercial and recreational vessels to estimate slack water to navigate the Swinomish Channel.

Commenters asked that the EIS address the potential increased risk of oil spills due to increased vessel traffic.

Comments requested that the EIS include a Vessel Traffic Risk Analysis, examining the cumulative impacts from all existing and reasonably foreseeable vessel traffic, including tanker and tank-barge traffic from all proposed new or expanded terminals in Washington that could enter Puget Sound, the Strait of Juan de Fuca, the Strait of Georgia, the Haro Strait, and the Boundary Pass. These new or expanded terminal locations include:

- BP/Phillips 66 Refineries (Ferndale, WA)
- Gateway Pacific Terminal (Cherry Point, WA)
- Kinder Morgan Trans Mountain Pipeline (British Columbia)
- Tesoro Refinery (Anacortes, WA)
- Tesoro-Savage (Vancouver, WA)
- Westway and Imperium Expansion Projects (Grays Harbor, WA)

Commenters stated that although the project does not propose any increase in the capacity of Shell PSR, the change in product type may alter the mix of vessel types and the number of marine water transits of oil-laden vessels with a potential impact on the total risk of spills. Commenters recommended that a Vessel Transportation Impact Analysis be conducted that includes evaluation of the items listed below and recommended solutions and mitigation measures to minimize any risks identified:

- Risks associated with combined existing conditions
- Risks associated with the facility's traffic increase (including the number and size of vessels) relative to existing conditions
- Risks associated with the Shell PSR traffic increase relative to potential increases of petroleum shipments through northwest marine and freshwaters (Columbia River, Strait of Juan de Fuca, Puget Sound, Georgia Basin, etc.)
- Risks of incidents and measures to mitigate the risk for potential groundings, collisions, loss of propulsion, or oil spill while underway in northwest marine and freshwaters

Commenters asked what other refined or "minimally refined" products could impact the number of vessels leaving Shell's dock and if increased production of petroleum coke results in increased marine ship traffic.

Commenters requested the EIS include mitigations or alternatives that would include ongoing, long-term monitoring and oversight of Shell's operations to ensure reductions in vessel traffic.

Commenters noted that Canada banned transport of oil across the Pacific Provinces because of the possibility of ruining Vancouver and Victoria harbors and questioned why Washington state or the US would be willing to take the risk.

Commenters identified Vendovi Island (Vendovi Anchorage) as an undesignated marine anchorage where tankers bound for March Point wait to load or unload. Commenters noted the island was purchased in 2010 by the San Juan Preservation Trust as a low-impact natural area and that it is a natural treasure easily accessible to residents of San Juan, Skagit and Whatcom counties, and places beyond. Commenters stated that the island is 215 acres, has extensive intertidal shoreline, and is highly vulnerable to impacts from marine industrial activity. Commenters requested that the direct, indirect, and cumulative impacts to this island be included in any discussion of increased shipping traffic in the area including addressing what the maximum number of tankers allowed in the Vendovi-Samish Anchorage and who tracks this number. Commenters would also like the following impacts addressed in an analysis of Vendovi Island:

- Auxiliary generator exhaust and noise
- Ballast water
- Bottom disturbance by anchors and chains
- Bunkering activity
- Gray water
- Spills
- Trespass light from shipboard deck lighting
- Wash-down water

Commenters noted that while the export of oil is not currently allowed under law, there is pressure by oil companies to change that law and make oil exports possible. Commenters requested the EIS include an analysis of how an action by the US Congress to lift the ban on crude exports would impact vessel traffic, the amount of oil coming into the region and how this facility could be used as a transshipment terminal.

Commenters stated that without a limit on the number of trains that can be unloaded at the Shell facility the project could be used to maintain its Alaskan crude deliveries and increase production of refined products thereby allowing more crude and refined product to be moved in the Salish Sea and could increase the risk of spills.

Commenters emphasized that if this project is permitted, the following conditions should be placed on the permit along with specific enforcement measures:

- Caps on the number and capacity of vessels, frequency and timing of vessel traffic, and year-over-year reductions in vessel traffic

- Disclosure by Shell of any export of either domestic crude oil or foreign tar sands to any domestic port whether by tanker or barge
- Limits on Shell's refining capacity to current levels
- Limits on the amount of crude Shell imports by rail
- Limits to the number of trains unloading at the facility
- Limit to the number of vessels arriving and leaving from Shell's dock annually
- Prohibition of export of crude or tar sands to either domestic or foreign destinations
- Prohibition of the export of “lightly refined condensate”
- Prohibitions on replacing incoming marine transfers with outgoing transfers

Commenters asked that the EIS study impacts on current and projected future ferry system operations which could be used to develop mitigation measures if the project moves forward.

Commenters note that an increase in vessel traffic would pose a threat to the marine environment of the Salish Sea and the San Juan Islands in particular, where commenters fear an oil spill would be nearly impossible to effectively limit and clean up.

Commenters asked that the EIS study the direct, indirect, and cumulative impacts of possible increased marine traffic on federal and state-listed species and the prey species and habitat upon which they depend. Commenters requested an assessment of impacts of existing and increased marine vessel traffic on marine species by specifically evaluating noise, physical disruptions of water, habitat and migration routes, and petroleum and chemical exposures from normal shipping traffic (without a known spill).

Commenters asked that the EIS study the cumulative impacts of possible increased vessel traffic to GHG emissions, air quality, climate change, and ocean acidification.

Commenters noted that federal law (Magnuson-Stevens Fishery Conservation and Management and Marine Mammal Protection Acts) would be violated if crude oil received by rail or pipeline is loaded as cargo onto vessels for transport and/or export.

Commenters ask that marine vessel spill impacts, risks, and resulting damage should be included in the study with mitigation including long term monitoring and oversight of herons at the March Point heronry.

Commenters noted that the US Coast Guard designated Turn Point/Boundary Pass a Special Operating Area because it is the most hazardous marine passage for commercial shipping on the west coast of the US. The increasing hazard posed by continuing expansion in the number of large ship transits could be partly mitigated by an industry-financed powerful towing vessel capable of rescuing the largest commercial ships should they lose power or steering, run aground, or collide with another vessel. Commenters recommend that this rescue tug be stationed in the San Juan Islands at Roche Harbor and be able to be deployed immediately 24 hours a day, seven days a week.

Commenters asked that boating safety be considered as vessel traffic increases in recreational waterways.

Commenters asked that the economic impacts of vessel congestion on recreational and commercial marine traffic, including ferry traffic, and delivery of goods and services be addressed in the EIS.

Commenters requested that the EIS include an economic evaluation of vessel congestion and the potential of oil spills on the livelihoods, property values and economic well-being of the region, including the impact to fishing and shellfish industries, tourism, and local businesses.

Water resources

Drinking Water

Commenters noted that in the event of a spill or derailment, the Anacortes Municipal Water Treatment Plant may be closed, which could severely impact neighboring communities that rely on the plant. Commenters requested study of the indirect, direct, and cumulative impact of an oil spill, diesel spill, diesel emissions, explosion or fire on drinking water near the proposed project, along the entire rail corridor and those serviced by the Anacortes Water Treatment Plant. Commenters requested study of the impacts to animals that may drink contaminated water after a spill. Commenters noted several communities (including businesses and residents) that could be impacted due to a contamination of drinking water between the source and destination, including:

- Anacortes, WA
- Idaho
- La Conner, WA
- Naval Air Station Whidbey Island
- Oak Harbor, WA
- Skagit Public Utility District #1
- Skagit Valley (Skagit County)
- South Fidalgo Island
- Spokane, WA
- Swinomish Tribe
- Vancouver, BC
- Whidbey Island

Commenters noted a spill could have a potential impact on the following list of drinking water sources:

- Aquifers along the rail corridor, including Spokane, Vancouver, and Rathdrum Prairie
- Aquifers near crude extraction sites or facilities
- Aquifers near the proposed project
- Columbia River
- Skagit River

Commenters also asked that the EIS include a total number of water supplies impacted by a spill anywhere along the rail corridor. Commenters requested that independent laboratories be used in the case of a spill and paid for by Shell PSR.

Commenters shared that other crude by rail train accidents recently have had an impact on drinking water in their respective areas. Commenters wondered how long it would take for an oil spill in fresh water to be cleaned up and who would be responsible for paying for the cleanup.

Commenters stated that Shell PSR could divert water to the proposed project, and therefore asked to study the potential impact of having less potable water for the Anacortes Water Treatment Plant to use.

Commenters asked whether the water main that runs along Highway 20 towards Anacortes, WA, is buried deep enough to withstand a significant and prolonged fire caused by a train explosion.

Commenters also asked about the impact on drinking water near the extraction points of the oil coming to the proposed project, whether this drinking water is monitored and how it is cleaned up if there is contamination.

Commenters expressed interest in mitigation plans if there is an indirect or direct impact on drinking water. They requested that mitigation include the requirement to provide drinking water in case of a spill. They also asked if the Anacortes Water Treatment Plant is equipped to deal with their water source being polluted with oil and, if so, how long would it take to have clean water again after a spill.

Groundwater

Commenters noted that crude has certain properties that make it uniquely dangerous and that it can migrate away from the site of an accident or release and travel into groundwater. Commenters requested study of the impact to groundwater from an oil spill or accident near the proposed project area and other aquifers along the rail corridor.

Commenters noted that Shell PSR is aware of the impact the proposed project may have on groundwater. Commenters asked for protection of a Category 1 aquifer recharge area and how an impact to groundwater could be mitigated.

Commenters requested a review and assessment of all former cleanup sites both Environmental Protection Agency and State of Washington have in order to reestablish baseline water quality data for both groundwater and estuary waters surrounding the proposed project. If any anomalies exist as a result of the study, commenters asked they be explained before additional train traffic is allowed in the area.

Rivers

Commenters asked for a study of the direct, indirect, and cumulative impacts on rivers due to oil spills (whether during an accident or a leaking train car), diesel emissions, or explosions. Commenters specifically referenced the cleanup of the Kalamazoo River as an example project to study.

Commenters also expressed concern about the potential damage to the ecosystem as a result of removing riparian vegetation from stream banks as part of the proposed project. Commenters requested the EIS include evaluation of the shorelines the proposed project may impact, how well they could be cleaned after an accident and the cost of the cleanup efforts. Commenters also asked that the potential impact of an accident during flood conditions be part of the analysis.

Commenters noted that the Skagit River is designated a Wild and Scenic River.

The following is a list of rivers mentioned by commenters as being potentially impacted or of interest:

- All rivers crossed by the BNSF route from the source to the Shell PSR
- Chehalis River
- Coweman River
- Cowlitz River
- Deepwater Slough
- Duncan Creek
- Freshwater Slough
- Hamilton Creek
- Hardy Creek
- Kootenai River
- Lake Chelan
- Lakes in Idaho
- Latah Creek
- Little White Salmon River
- Nisqually River
- Nooksack River
- Puyallup River
- Rock Creek
- Samish River
- Skagit River
- Skagit River tributaries
- Skykomish River
- Snake River
- Snohomish River
- Spring River
- Spokane River
- Steamboat Slough
- Stillaguamish River
- Stream in Carkeek Park, Seattle
- Swinomish Channel
- Telegraph Slough
- Tidal channels near the proposed project
- Washougal River
- Whatcom Creek
- White Salmon River
- Wind River
- Yakima River

Commenters noted several species along the rail corridor, from source to destination, that could be impacted by contamination to fresh water, including:

- Bull trout
- Cutthroat trout
- Eagles
- Fish
- Migratory shorebirds
- Protected species
- River otter
- Salmon
- Snow geese
- Steelhead
- Sturgeon
- Trumpeter swans

Commenters asked to study the risk of flooding rivers on the structural stability of crossings used by BNSF and whether this risk would also increase the impact of an oil spill.

Commenters also asked if the Department of Ecology has a spill response for the Skagit River, what capabilities does the US Coast Guard have to respond to a spill, how long would the Columbia River be closed if there were an oil spill, how difficult it would be to clean up the various types of crude from rivers, and whether the ditches mentioned in the Joint Aquatic Resources Permit Application were originally streams. They also noted the potential impacts an oil spill could have on fish ladders and dams along major rivers.

Commenters stated that no mitigation is possible for the Skagit River in the event of a spill. Commenters also requested that culverts be built to code and allow for fish passage.

Saltwater

Commenters expressed concern that the project will impact saltwater ecosystems, habitats, and food chains in several ways. Areas of interest included:

- Bellingham Bay
- Burrows Bay
- Fidalgo Bay
- Grays Harbor
- Guemes Channel
- Pacific Ocean
- Padilla Bay
- Puget Sound
- Rosario Strait
- Salish Sea
- Samish Bay
- Sams Bay
- Skagit Bay
- Strait of Georgia
- Strait of Juan de Fuca
- Swinomish Channel
- Willapa Bay

Commenters noted that oil spills and derailments are toxic to marine environments and habitats. Commenters added that the movement of tides and currents could lead to spreading of any oil and could extend the impact of the spill for miles. Commenters indicated that an increase in vessel traffic associated with the project could potentially increase spills. Spills could be particularly detrimental to marine organisms and the food web during spawning season according to commenters. Commenters also noted that spills in the area could negatively impact the recreation and tourism industries.

Commenters requested that the EIS include information on spill cleanup procedures and a cost analysis of a spill cleanup in marine waters. They also suggested that a study of the behavior of different types of oil in saltwater be conducted.

Commenters suggested that the EIS include an evaluation of whether the proposed project meets the criteria under the County and State Shoreline Code. Commenters noted that Shell may seek a variance for the Shoreline Code, and emphasized the need to ensure that issuance of a variance is appropriate.

Commenters added that the burning of fossil fuels encouraged by this project may contribute to ocean acidification and climate change, which could increase sea level. Additionally, commenters emphasized the need to protect tribal treaty rights in protecting marine environments.

Commenters asked if increased petroleum coke production would result in increased deposits of petroleum coke dust in the marine environment around the Shell PSR.

Stormwater

Commenters requested that the EIS evaluate the direct, indirect, and cumulative impacts of stormwater runoff and pollution associated with the project, both by the proposed project at Shell PSR and along the rail route where trains may leak.

Commenters asked how contaminated stormwater runoff will be prevented from entering surface waters, particularly during high-water events.

Commenters noted several concerns regarding the project's proposed stormwater management features:

- Stormwater detention facilities do not mitigate for loss of wetlands and tend to collect wastewater only from a small area and discharge it to a small area, creating a much different system from the previous natural system
- Stormwater collection basins can attract bird species such as ducks, geese, and small songbirds, whose fecal matter can have adverse impact on water quality. Keeping the ponds clear of vegetation or using bird-repellent reflective tape can prevent these birds from using the basins. Keeping the basins fully covered could also eliminate this potential for contamination.
- Potential for stormwater ponds to flood
- Capacity of ponds to reduce polluted stormwater reaching Padilla or Fidalgo bays
- In event of an oil spill, the potential that oil could end up in the stormwater ponds
- Stormwater facilities must have a rigorous maintenance program

Commenters also expressed concerns about cumulative impacts of contaminated stormwater entering nearby waterways and how it could impact plants and animals, both wild and farmed, including: herons, wetlands, agriculture, and aquaculture. The impact on wildlife areas, such as Chuckanut and Larrabee State Park, and watersheds, was also of concern.

Commenters suggested that an assessment of the Assets and Liabilities in a 50-mile radius from the proposed site be done, including an evaluation of industrial sites with stormwater discharge.

Wetlands

Commenters stated concern about the destruction of wetlands in order to build the refinery and the new train spur. They also emphasized the possibility of impacting wetlands along the rail line between the source and destination due to oil spills from oil trains on the way to the refinery. Commenters' concerns centered on:

- Fragmenting wetlands causing them to be isolated from one another rather than supporting the value of large contiguous semirural and pastoral wetland areas
- How losing wetlands could impact wildlife species, including:
    - Bald eagles
    - Great Blue Herons
    - Peregrine falcons
    - River otters
    - Salmon
- Loss of important tribal cultural and natural resources
- Loss of wetland ecosystem functions to offer natural water dispersal and improved water quality
- Potential cumulative impacts on shorelines from the loss of wetlands in addition to the other risks these sensitive habitats face
- Skepticism about whether natural wetlands can successfully be replaced through mitigation

- The importance of wetlands to providing fresh water into Padilla Bay and whether wetland removal would impact the Padilla Bay and Salish Sea ecosystems
- Unanticipated impacts from fill material used to fill in wetlands, including:
    - Bringing in soil contaminants that could enter Padilla Bay and impact the food web, habitat, and health of fish and wildlife species
    - The possibility that fill material could cause sedimentation and reduce water clarity, impeding the growth of eelgrass and other wetland plants

Commenters asked whether the destruction of wetlands would challenge the current Shoreline Variance Permit that requires 200-foot buffers around all wetlands.

Commenters emphasized the need to ensure any mitigation measures used to replace lost wetlands are adequate. They stated a need to ensure mitigated wetlands provide the same ecological value as natural wetlands. Commenters highlighted the importance of ensuring mitigated wetlands would support the March Point Great Blue Heron colony and not lead to disturbance or abandonment of the heronry. Commenters also raised concern that the mitigation plan called for replacing lost wetlands in an area more than 11 miles away from the proposed project site. They said the mitigation site is outside the watershed where lost wetlands are located and asked how this mitigation would provide equivalent ecosystem function if it is not an in-kind replacement. Commenters also noted the proposed mitigation site would not be owned by Shell, but rather leased. They recommended that since destruction of wetlands would be permanent, the mitigation site should be a permanent replacement not subject to change at the expiration of a lease.

Commenters noted that wetlands are complex systems that offer many services, and studies have reported that current methods for wetland mitigation are often unsuccessful. Commenters emphasized that wetland restoration efforts are unproven in replacing the value natural wetlands have in providing critical ecosystem goods and services, such as carbon storage, biodiversity conservation, fish production, water purification, and erosion control.

Commenters stated that there is also potential for an oil spill to impact the mitigated wetland. Commenters outlined concerns that the wetland mitigation plan may not meet minimum buffer requirements under SCC 14.24.230 (1)(a) and violates the “within the same drainage basin of the same watershed” regulation related to hydrological and habitat function under SCC 14.24.250 (1)(a).

Commenters highlighted that Shell had initially said that wetland mitigation could not occur in March Point, but have now changed their stance by proposing the poplar plantation as the site to construct mitigation wetlands.

Commenters stated that the mitigated wetlands may provide higher quality wetlands than the current low-quality pasture wetlands that will be lost by building the refinery and oil train loop.

Commenters identified multiple studies or analysis of impacted wetlands that should be included in the EIS, including:

- Analysis by Ecology of how industrial pollution would impact wetlands
- Analysis of food webs and the impact on wildlife species due to habitat loss and wetland fragmentation
- Analysis of how Bakken and tar sands would behave if spilled in wetlands, whether the oil would spread or sink, and the relative ease or difficulty of cleanup and containment
- Assessment of impacts on all species that rely on wetlands
- Assessment of the increased likelihood of oils spills and their impact on wetlands along the full train route, including the impact of a mile-long, 102-car Bakken crude oil train
- Detailed analysis of the short- and long-term impacts of the terraforming proposal
- Discuss significant adverse impacts on wetlands as a result of an oil spill, including a comprehensive study of emergency response to an oil spill that impacts wetlands. They suggested this discussion include:
    - Economic impacts that would occur from the oil spill
    - Personnel numbers for cleanup
    - Types and amounts of specialized equipment needed to contain an oil spill
- Discussion of the proposed impacts that relocation of the Olympic and/or Kinder Morgan pipelines would have on wetlands
- Review of alternatives that would avoid or at least minimize impacts to wetlands
- Review the short- and long-term impacts of train derailments, oil leaks, fires and explosions, toxic smoke, and diesel exhaust on wetlands

Wetland mitigation plan (proposed by Shell PSR)

Commenters asked for clarification of Shell's wetland mitigation plan, including where the mitigation would be taking place.

Commenters requested the wetlands on the proposed wetland mitigation site be delineated.

Commenters expressed concern about the legal relationship between Shell, the Dike District, and Triton America, and asked which entity would be held legally accountable for the establishment and successful ecological functioning of the wetland mitigation site. Commenters also asked who would be responsible for managing the site. Commenters asked for clarification of Shell and Triton America's relationship to the wetland mitigation plan.

Commenters asked that Shell's wetland mitigation plan clarify how and if it will provide an adequate equivalent substitution for serving the life-cycle needs of the Great Blue Heron population.

Commenters noted their support for creating a conservation easement to further mitigate the potential effects the project will have on the March Point heronry.

Commenters stated that Shell's proposed use of the wetland mitigation bank presents an unresolved conflict. The intended use of the wetland mitigation bank credits are to benefit wetland mitigation and wildlife habitat enhancement within the specified Nookachamps Wetland Mitigation Bank service area.

Commenters asked what percentage of the wetland mitigation bank credits could or should be allocated to out-of-service area sites without jeopardizing the intended habitat benefits and associated land development within the bank service area. Additionally, commenters asked what percentage of the available mitigation bank credits will be utilized. Commenters noted that requirements for off-site wetland mitigation are intended to keep land development and offsetting wetland mitigation within the same local functional hydrological and habitat units and systems.

Commenters stated that jurisdictional issues arise as a result of project documents identifying the Shell project site as outside the approved service area of the wetland mitigation bank proposed for wetland mitigation. Commenters encouraged that these issues be explored and evaluated under SEPA review specifically as they related to permits including PL13-0468.

Commenters raised concerns about the Shell PSR's proposed wetland mitigation plan including:

- The plan trades saltwater tidal habitat for freshwater wetland and thus is not a replacement in-kind
- The estuarine restoration would take place on land which Shell would lease rather than own; the wetland mitigation acres should constitute a permanent replacement not subject to change at the expiration of a lease
- A conservation easement would be placed on the estuarine restoration acres. Which agency or organization would hold this easement? What would be the terms of the easement and would it be in perpetuity?
- An oil spill along the BNSF Anacortes Subdivision resulting in oil reaching Padilla Bay would likely adversely impact the proposed restoration area, thus negating any effectiveness of the restoration project as mitigation for wetland loss; the poplar plantation area is directly adjacent to the rail line and could be directly impacted by a derailment along this section of the BNSF Anacortes Subdivision
- What will the true effectiveness be of the proposed mitigation sites in off-setting the destruction of wetlands?

Commenters asked what activities would be adjacent to, nearby, or surrounding the wetland mitigation area, particularly since a private corporation, Triton America, holds remaining acreage. Commenters also asked if these activities could undermine the function or goal of the wetland mitigation area or the usefulness of the area to fish and wildlife.

Commenters noted that the timing of the release of Shell's wetland mitigation plan (October 29) did not allow enough time for review prior to the end of the comment period (November 5). Commenters asked that supplemental questions and comments related to the wetland mitigation plan be accepted after the November 5 deadline, as the late submittal prevented the public from participating in an important part of the process.

Commenters also noted that the provided wetland mitigation plan appears incomplete. Commenters are concerned that components such as monitoring plans will be incorporated without public review.

Commenters expressed concern that an increase in sediment deposited in marine waters from the proposed wetland mitigation plan will alter the marine ecosystems. Commenters added that sediment deposited could impact water clarity and lighting filtration through the water column, and marine organisms dependent on light. Commenters also noted that the proposed wetland mitigation plan does not replace the natural habitat that is a significant part of the marine wetland ecosystem and supports wildlife. They requested an analysis of the impact of salt marsh habitat removal on species that currently inhabit the area.

Commenters noted that shellfish populations may be threatened under the Shoreline Variance Permit. Commenters expressed concern about the effects of designated fish habitat within the proposed wetland mitigation design.

Commenters emphasized that the wetland mitigation plan needs to be reviewed in detail and scrutinized to ensure it will adequately mitigate the loss of natural wetlands. Commenters recommended that the wetland mitigation plan should:

- Describe the impacts to wildlife in the near term between the time wetlands are destroyed and the mitigation area is turned into a functioning wetland
- Discuss any impacts to wetlands caused by the refining facility, such as black particulate matter settling out of the air onto nearby wetlands
- Discuss the direct, indirect, and cumulative impacts of mitigation on wildlife species in general and Great Blue Herons from the March Point rookery in particular
- Evaluate the effect on plant species of mixing fresh surface water with tidal waters in the upland mitigation area
- Include a legal review to ensure the mitigation plan complies with all state laws and the Public Trust Doctrine
- Include how climate change and sea level rise in particular might impact the mitigation wetlands in the future to ensure they will not be under water and thus not provide wetland function in perpetuity
- Respond to the following questions:
    - What mechanisms will be used to ensure timely reporting and correction of any problem that arises in creating the mitigation site?
    - What mechanisms will be used if reporting and correction of any problems are not timely during the mitigation project?
    - Who would ensure that the appropriate work is done?
    - Who would oversee and enforce the mitigation outlined in the plan?
- Review the Best Available Science and include an in-depth study by independent ornithologists and/or biologists with expertise in the area to determine if the mitigation described in the plan would be ecologically equivalent to the destroyed wetlands

Appendix A: Determination of Significance

DETERMINATION OF SIGNIFICANCE
AND REQUEST FOR COMMENTS ON SCOPE OF ENVIRONMENTAL IMPACT STATEMENT FOR
SHELL PUGET SOUND REFINERY RAIL UNLOADING FACILITY

Description of proposal: Shell Puget Sound Refinery (PSR) is located in western Skagit County on March Point, along the south shore of Padilla Bay. Shell proposes to build a rail spur from the existing BNSF Railway line onto Shell PSR property to accommodate unit trains of 102 tank cars transporting crude oil. The facility is being designed to receive and unload a maximum of six unit trains per week. The project also involves installing equipment and facilities to pump oil from rail cars to existing tanks within the refinery, construction of several stormwater retention ponds, and other safety and spill response measures.

In addition, Shell PSR proposes mitigation for approximately 26 acres of on-site wetland impacts through restoration of a portion of a nearby tree farm back to tidally-influenced estuary on Padilla Bay. The crude received by rail at this facility will be used to replace and supplement crude that Shell PSR currently receives by ship. The proposed project does not increase Shell PSR's refining capacity.

Proponent: Equilon Enterprises, LLC dba Shell Puget Sound Refinery

Location of proposal: The Shell Puget Sound Refinery is located at 8505 South Texas Road, Anacortes, WA 98221 in western Skagit County on March Point, along the southwestern edge of Padilla Bay.

The project area is located on Parcel P33502 in the following Sections, Townships, and Range:
- NW ¼, Section 3, Township 34 N, Range 2 E
- NE ¼, Section 4, Township 34 N, Range 2 E
- NE and SE ¼, Section 33, Township 35 N, Range 2 E
- SW ¼, Section 34, Township 35 N, Range 2 E

Co-lead agencies: Skagit County Planning and Development Services and Washington State Department of Ecology. Skagit County is the nominal lead for the SEPA review process.

EIS Required. The co-lead agencies have determined this proposal may have a significant adverse impact on the environment. An environmental impact statement (EIS) is required under RCW 43.21C.031 and will be prepared in accordance with RCW 43.21.C.030(2)(c),(d)and (e).
The lead agencies have identified the following areas for discussion in the EIS:

- Earth
  - Geology
  - Soils
  - Topography
  - Unique physical features
  - Erosion/enlargement of land area (accretion)
- Air
  - Air quality
  - Odor
  - Greenhouse gas/Climate

- Water
  - Surface water movement/quantity/quality
  - Runoff/absorption
  - Floods
  - Groundwater movement/quantity/quality
  - Public water supplies
- Plants and animals
  - Habitat for and numbers or diversity of species of plants, fish or other wildlife
  - Unique species
  - Fish or wildlife migration routes
- Environmental health
  - Noise
  - Risk of explosion
  - Releases or potential releases to the environment affecting public health such as toxic or hazardous materials
- Land and shoreline use
  - Relationship to existing land use plans and to estimated population
  - Light and glare
  - Aesthetics
  - Historic and cultural preservation
  - Agricultural crops
- Transportation
  - Transportation systems
  - Vehicular traffic
  - Waterborne, rail, and air traffic
  - Parking
  - Movement/circulation of people or goods
  - Traffic hazards
- Public services and utilities
  - Fire
  - Police
  - Schools
  - Parks or other recreational facilities
  - Water/stormwater
  - Other governmental services or utilities

Scoping. Agencies, affected tribes, and members of the public are invited to comment on the scope of the EIS within a 45 day expanded comment period beginning on September 21, 2015 and closing on November 5, 2015.

Comments in the following areas are particularly valuable:
- Reasonable range of alternatives
- Potentially affected resources and extent of analysis for those resources
- Measures to avoid, minimize, and mitigate effects of the proposal

Scoping meetings: Scoping meetings will be held in the locations listed and will include an open house
- Mount Vernon: Tues., Oct. 13 • Best Western Plus, 2300 Market St., 4-8pm.
- Anacortes: Wed., Oct. 14 • Anacortes Middle School, 2202 M Ave., 4-8pm.
- Lynnwood: Mon., Oct. 19 • Lynnwood Convention Center, 3711 196th St. SW, 4-8pm.

Written scoping comments will be accepted at the scoping meetings.
There will be a facilitated verbal comment session from 5-7:30 pm at each public scoping meeting.

During the scoping comment period you may also submit comments by:

- Calling and recording a message at 1-844-254-9668 (toll free) *5 minute time limit for messages*
- Sending electronic written comments to: comment@ShellRailEIS.com
- Hand deliver to Skagit County Planning & Development Services, 1800 Continental Place, Mount Vernon, WA during regular business hours by November 5, 2015
- Mailing your comments to
  Shell Rail EIS, PO Box 21206, Seattle, WA 98111
  Must be postmarked by November 5, 2015

Documents available: An environmental checklist and other information can be viewed online at ShellRailEIS.com, or reviewed at Skagit County Planning & Development Services, 1800 Continental Place, Mount Vernon, WA 98273.

Responsible officials:

Dale Pernula, AICP
Director, Skagit County Planning & Development Services

Date: 9/21/15 Signature: _____

Josh Baldi
Director, Northwest Regional Office, Washington State Department of Ecology

Date: 9-21-15 Signature: _____

Appendix B: Scoping notifications

The following tools were used to announce the release of the DS and start of the scoping period:

Press release

Ecology and Skagit County news release distributed to local news outlets on September 21, 2015.

Agencies seek input before reviewing Shell refinery rail proposal

ANACORTES – The public is invited to comment on the scope of an environmental impact statement (EIS) that Skagit County and the Washington Department of Ecology plan to jointly prepare for a proposed facility to receive rail deliveries of crude oil at the Shell Puget Sound Refinery.

Comments on the EIS scoping will be accepted at public meetings, via the web, and by email and standard mail today through Nov. 5. The 45-day comment period is more than double the usual 21 days prescribed in state EIS regulations.

Shell proposes to build and operate a facility that would unload crude oil from up to six trains per week, with up to 102 tank cars in each train. The project would include construction of a rail spur from an existing nearby BNSF Railway line.

The county and Ecology are conducting the EIS process together as "co-leads" for the proposed rail facility, under the State Environmental Policy Act.

First step in EIS process

An EIS describes a proposed project's impacts, but does not address whether the proposal should receive permits. Permitting decisions occur after the EIS is complete.

Before writing an EIS, the co-leads conduct the scoping process to help decide the topics to be analyzed in the EIS. They seek input from other agencies, tribes, local governments and the public on how the EIS should address:

- A reasonable range of alternatives for the proposal.
- Potentially affected resources and the extent to which the EIS should analyze those resources.
- Identifying significant unavoidable adverse impacts.
- Measures to avoid, minimize and mitigate effects caused by the proposal.

After the comment period the co-leads will decide what should be included in the EIS. They expect to issue a scoping report this winter and begin work on a draft EIS, which may take approximately nine months to prepare. The lead agencies will seek public comment on the draft EIS, and then produce a final EIS.

Get information and make comments

People can view information about the proposed project and the EIS process at the official EIS website, shellraileis.com. Comments are welcome at any time during the comment period via:

- The website's comments section
- Email: comment@shellraileis.com
- Mail: Shell Rail EIS Comments, Box 21206, Seattle WA 98111
- Phone: 1-844-254-9668, toll free, record a comment up to five minutes
- Hand delivery: Skagit County Planning and Development Services, 1800 Continental Place, Mount Vernon, 7:30 a.m. to 4:30 p.m., weekdays

Public meetings

The county and Ecology also will host three scoping meetings, which will include information on the proposed project, staff available to answer questions, and opportunities to provide oral or written comments. There will be no formal presentation, and people may arrive and leave as they choose during the meeting hours.

Meetings are set for these dates and locations:

- Mount Vernon: Tue., Oct. 13, Best Western Plus, 2300 Market St.
- Anacortes: Wed., Oct. 14, Anacortes Middle School, 2202 M Ave.
- Lynnwood: Mon., Oct. 19, Lynnwood Convention Center, 3711 196th St. SW

The three meetings will follow the same schedule:

- An open house with information about the proposed project: 4-8 p.m.
- Facilitated verbal public comment session: 5-7:30 p.m.
- Comment forms and other options to provide comments.

People interested in speaking at the verbal comment sessions will enter random drawings for one of about 65 two-minute speaking slots at each event. The drawings will occur at the start of each hour during the 2½-hour sessions.

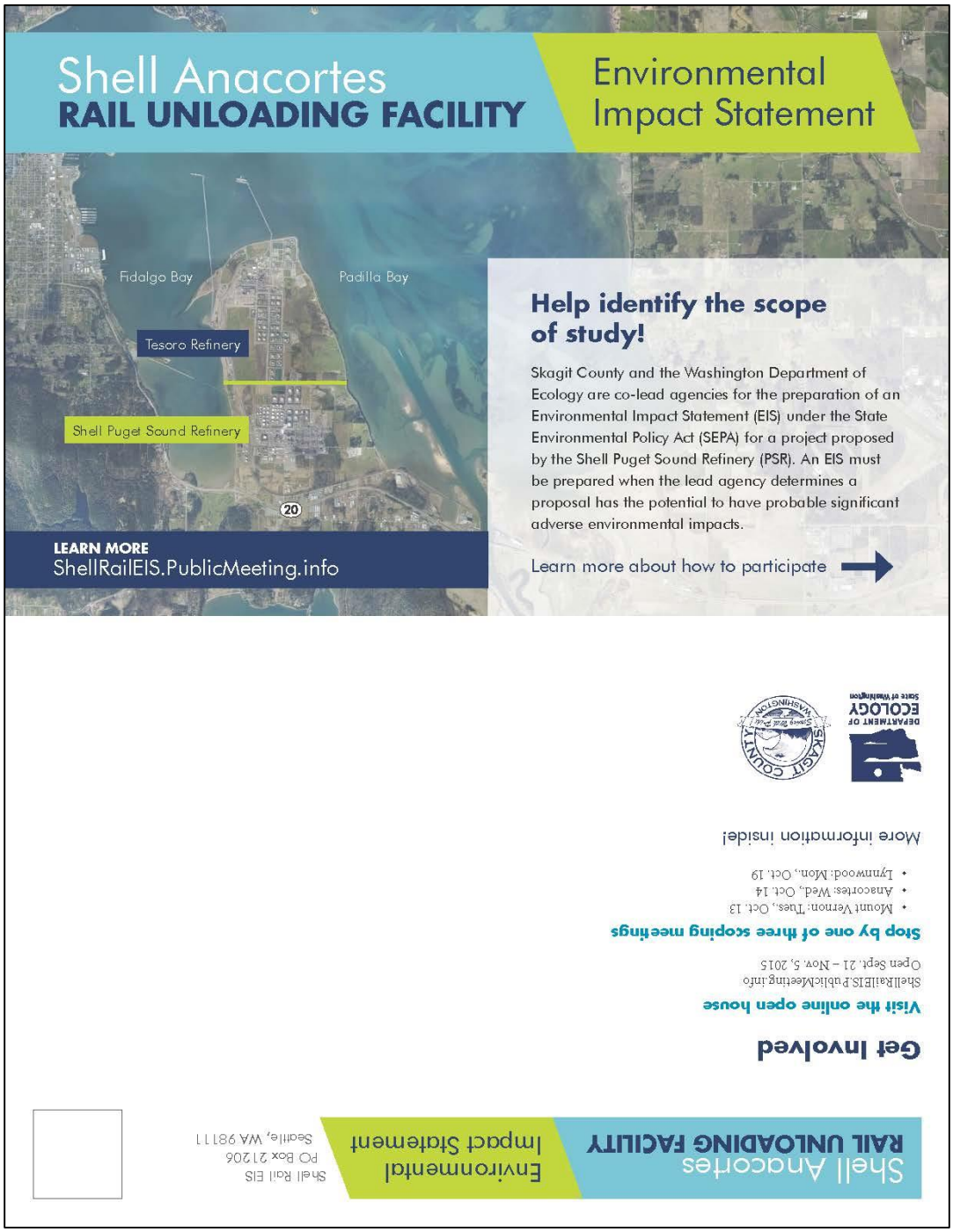
The shellraileis.com website includes an "online open house" that presents the same information that will be displayed at the three scoping meetings.

Contact:

Larry Altose, communications, 425-649-7009, @EcySeattle
Alice Kelly, Ecology regional planner, 425-649-7128
Dale Pernula, Skagit County Planning Director, 360-416-1328

Project Mailer

Mailer to more than 900 addresses, including those provided by Skagit County from stakeholders involved in previous phases of the project and other key stakeholders identified by the co-lead agencies.



Project Background

Shell PSR is located in western Skagit County on March Point, along the south shore of Padilla Bay. Shell proposes to build a rail spur from the existing BNSF Railway mainline onto Shell PSR property to accommodate unit trains of 102 tank cars transporting crude oil. The facility is being designed to receive and unload a maximum of six unit trains per week. The project also involves installing equipment and facilities to pump oil from rail cars to existing tanks within the refinery, construction of several stormwater retention ponds, and other safety and spill response measures.

In addition, Shell PSR proposes mitigation for approximately 26 acres of on-site wetland impacts through restoration of a portion of a nearby tree farm on Padilla Bay back to tidally-influenced estuary. The crude received by rail at this facility will be used to replace and supplement crude that Shell PSR currently receives by ship. The proposed project does not increase Shell PSR's refining capacity.

Scoping Comment Period: Sept. 21 – Nov. 5, 2015

The first step in the development of an EIS is called scoping. During this phase, agencies, tribes, local communities, organizations and the public will have an opportunity to comment on what should be analyzed and considered in the EIS. While the co-leads will not respond to individual comments during scoping, they will review and consider all comments when developing the scope of the EIS. Comments must be postmarked, submitted electronically or hand delivered to Skagit County Planning and Development Services, 1800 Continental Place, Mount Vernon, WA 98273 (during regular office hours) no later than Nov. 5, 2015.

LEARN MORE
ShellRailEIS.PublicMeeting.info

Get Involved During Scoping!

The public will play an essential role in the Shell Anacortes Rail Unloading Facility EIS process. There are several ways to learn more about the project and provide comments during scoping.

VISIT THE ONLINE OPEN HOUSE

ShellRailEIS.PublicMeeting.info
Sept. 21 - Nov. 5

- Take notes as you learn more about the proposed project and then submit your comments online.
- Information at the online open house is the same material that will be available at the scoping meetings.

STOP BY ONE OF THREE SCOPING MEETINGS

- Mount Vernon: Tues., Oct. 13 • Best Western Plus, 2300 Market St.
- Anacortes: Wed., Oct. 14 • Anacortes Middle School, 2202 M Ave.
- Lynnwood: Mon., Oct. 19 • Lynnwood Convention Center, 3711 196th St. SW

Each scoping meeting will have opportunities to learn more and comment:

- Facilitated verbal public comment session: **5:00 – 7:30 p.m.***
- An open house with information about the proposed project: **4:00 – 8:00 p.m.**
- Comment forms and other options to provide your comments.

** We will have a lottery system to determine speakers, unless there is adequate time to accommodate all those who wish to speak. For detailed information about how to comment during the scoping period visit ShellRailEIS.PublicMeeting.info.*

Proposed Environmental Review Process Timeline

2015 – SUMMER

Sept. 21 - Nov. 5
Determination of significance released.
Public and agency comments on the scope of the draft EIS.

2015 – FALL / 2016 – WINTER

Fall 2015 - Winter 2016
Public comments considered.
Draft EIS anaylsis and development.

2016 – SPRING

Spring - Summer
Draft EIS published.
Draft EIS expanded comment period.

2016 – SUMMER / FALL

Summer - Fall
Comments considered.
Response to comments.
Additional studies, if needed.
Final EIS developed.
Final EIS published.

OTHER OPPORTUNITIES TO SUBMIT YOUR COMMENTS DURING THE SCOPING PHASE

- **CALL** and record a message at 1-844-254-9668 (toll free)
  5-minute time limit for messages
- Send an **EMAIL** to comment@ShellRailEIS.com
- **MAIL** your comment to
  PO Box 21206
  Seattle, WA 98111
  Must be postmarked by Nov. 5, 2015

DEPARTMENT OF ECOLOGY State of Washington

SKAGIT COUNTY WASHINGTON Seeking Wild Beauty

Project Email

Email sent to 2,555 addresses provided by Skagit County from stakeholders involved in previous phases, key stakeholders identified by the co-lead agencies, and those who emailed the co-leads requesting an extended scoping comment period.

Shell Anacortes
RAIL UNLOADING FACILITY

Environmental Impact Statement

Help identify the scope of study!

Skagit County and the Washington Department of Ecology are co-lead agencies for the preparation of an Environmental Impact Statement (EIS) under the State Environmental Policy Act (SEPA) for a project proposed by the Shell Puget Sound Refinery (PSR). An EIS must be prepared when the lead agency determines a proposal has the potential to have probable significant adverse environmental impacts.

Project Background

Shell PSR is located in western Skagit County on March Point, along the south shore of Padilla Bay. Shell proposes to build a rail spur from the existing BNSF Railway line onto Shell PSR property to accommodate unit trains of 102 tank cars transporting crude oil. The facility is being designed to receive and unload a maximum of six unit trains per week. The project would also involve installing equipment and facilities to pump oil from rail cars to existing tanks within the refinery, construction of several stormwater retention ponds, and other safety and spill response measures.

In addition, Shell PSR proposes mitigation for approximately 26 acres of on-site wetland impacts through restoration of a portion of a nearby tree farm on Padilla Bay back to tidally-influenced estuary. The crude received by rail at this facility would be used to replace and supplement crude that Shell PSR currently receives by ship. The proposed project would not increase Shell PSR's refining capacity.

Scoping Comment Period: Sept. 21 – Nov. 5, 2015

The first step in the development of an EIS is called scoping. During this phase, agencies, tribes, local communities, organizations and the public will have an opportunity to comment on what should be analyzed and considered in the EIS. While the co-leads will not respond to individual comments during scoping, they will review and consider all comments when developing the scope of the EIS. Comments must be postmarked, submitted electronically or hand delivered to Skagit County Planning and Development Services, 1800 Continental Pl., Mount Vernon, WA 98273 (during regular office hours) no later than Nov. 5, 2015.

Get Involved During Scoping!

The public will play an essential role in the Shell Anacortes Rail Unloading Facility EIS process. There are several ways to learn more about the project and provide comments during scoping.

Visit the online open house Sept. 21 - Nov. 5, 2015

ShellRailEIS.PublicMeeting.info

Stop by one of three scoping meetings

Mount Vernon: Tues., Oct. 13, Best Western Plus, 2300 Market St.
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- An open house with information about the proposed project: **4:00 – 8:00 p.m.**
- Comment forms and other options to provide your comments.

**We will have a lottery system to determine speakers, unless there is adequate time to accommodate all those who wish to speak. For detailed information about how to comment during the scoping period visit ShellRailEIS.PublicMeeting.info.*

Other opportunities to submit your comments during the scoping phase

- **CALL** and record a message at 1-844-254-9668 (toll free)
  5-minute time limit for messages
- Send an **EMAIL** to comment@ShellRailEIS.com
- **MAIL** your comment to Shell Rail EIS, PO Box 21206, Seattle, WA 98111
  Must be postmarked by Nov. 5, 2015
- **HAND DELIVER** your comments to Skagit County Planning and Development Services, 1800 Continental Pl., Mount Vernon, WA 98273
  During regular office hours

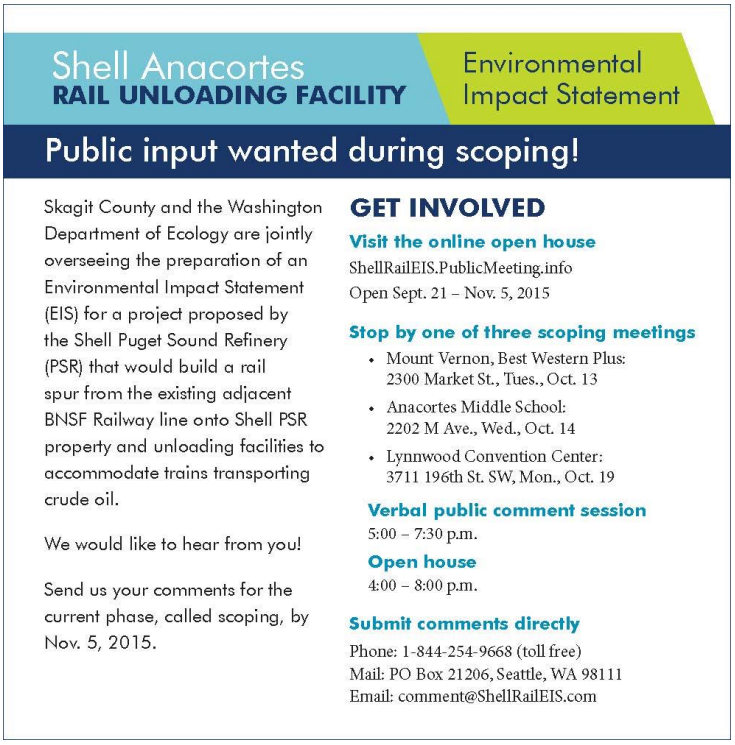
For more information

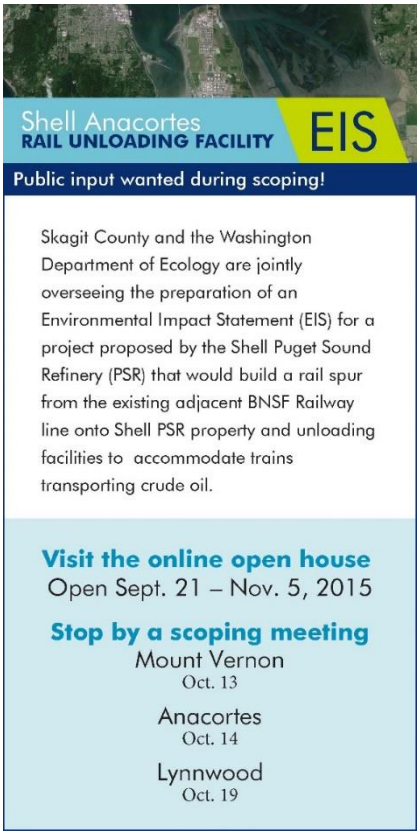
ONLINE OPEN HOUSE ShellRailEIS.PublicMeeting.info
EMAIL comment@ShellRailEIS.com
MAIL Shell Rail EIS, PO Box 21206, Seattle, WA 98111

Advertisements

Print and online ads placed in local papers (over 2 million estimated impressions).

Media Outlet	Geographic Area	Readership	Advertisements
The Daily Herald	Everett Metro	85,936	3 display ad runs 20,000 online impressions
Skagit Valley Herald	Skagit and Island Counties	3,1492	3 display ad runs
Anacortes American	Anacortes	7,631	1 display ad run
The Argus	Burlington Mount Vernon	34,721	1 display ad run
Stanwood/Camano News	Stanwood	8,970	1 display ad run 200,000 online impressions
Seattle Times	Seattle Metro	1,800,000	1 display ad run
LaConner Weekly	LaConner	~1,000	1 display ad run





Website Update

Article on the EIS process website: ShellRailEIS.com.

The Scoping Comment Period is Open

Skagit County and the Department of Ecology released a Determination of Significance for the Shell Anacortes Rail Unloading Facility. This decision begins the EIS process and the scoping comment period. During the scoping phase, the co-leads are seeking comments on what factors should be analyzed and considered in the EIS. Scoping will help the co-leads define the extent of the analysis. The scoping comment period ends on Nov. 5, 2015. There are several ways to learn more about the project and provide comments during scoping.

Visit the online open house

ShellRailEIS.PublicMeeting.info

Stop by one of three scoping meetings

Mount Vernon: Tues., Oct. 13, Best Western Plus, 2300 Market St.
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- Comment forms and other options to provide your comments.

**We will have a lottery system to determine speakers, unless there is adequate time to accommodate all those who wish to speak. For detailed information about how to comment during the scoping period visit ShellRailEIS.PublicMeeting.info.*

Appendix C: Tribes and Governments

The following is a list of tribes and government organizations who submitted comments during the scoping period.

Tribes

Columbia River Inter-Tribal Fish Commission
Confederated Tribes of the Umatilla Indian Reservation
Confederated Tribes of the Warm Springs Reservation
Skagit River System Cooperative on behalf of the Swinomish Indian Tribal Community and the Sauk-Suiattle Indian Tribe
Stillaguamish Tribe of Indians
Swinomish Indian Tribal Community
The Suquamish Tribe
The Tulalip Tribes

Federal

US Environmental Protection Agency

State

State of Washington Utilities and Transportation Commission
Washington Department of Fish and Wildlife
Washington State Department of Natural Resources
Washington State Department of Transportation

Local

City of Edmonds
Mount Vernon School District #320
Skamania County Fire District #4

Other

Safe Energy Leadership Alliance

- Adrienne Fraley-Monillas, Council President, City of Edmonds, WA
- Anne McEnerny-Ogle, Councilmember, City of Vancouver, WA
- Arlene Burns, Mayor, City of Mosier, OR
- Bart Hansen, Councilmember, City of Vancouver, WA
- Ben Stuckart, Council President, City of Spokane, WA
- Brenda Stonecipher, Councilmember, City of Everett, WA
- CaroleAnn Leishman, Councilor, City of Powell River, BC
- Chris Roberts, Councilmember, City of Shoreline, WA
- Christine Cook, Councilmember, City of Mukilteo, WA
- Chuck Puchmayr, Councilor, City of New Westminster, BC

- Don Stevens, Mayor, North Bonneville, WA
- Doris McConnell, Councilmember, City of Shoreline, WA
- Dow Constantine, Executive, King County, WA
- Ed Murray, Mayor, City of Seattle, WA
- Jack Burkman, Councilmember, City of Vancouver, WA
- Jamie Pedersen, State Senator, 43rd Legislative District, WA
- Jeanne Kohl-Welles, State Senator, 36th Legislative District, WA
- Jennifer Gregerson, Mayor, City of Mukilteo, WA
- Jesse Salomon, Councilmember, City of Shoreline, WA
- Jessyn Farrell, State Representative, 46th Legislative District, WA
- Joan Cathey, Councilmember, Tumwater, WA
- Joel Haugen, Councilmember, City of Scappoose, OR
- Jon Snyder, Councilmember, City of Spokane, WA
- Katherine Haque-Hausrath, Commissioner, City of Helena, MT
- Kelli Linville, Mayor, City of Bellingham, WA
- Kitty Piercy, Mayor, City of Eugene, OR
- Lisa Batey, Council President, City of Milwaukie, OR
- Liz Lovelett, Councilmember, City of Anacortes, WA
- Mark Gamba, Mayor, City of Milwaukie, OR
- Michael Lilliquist, Councilmember, City of Bellingham, WA
- Michael Stevens, Councilmember, City of Marysville, WA
- Mike O'Brien, Councilmember, City of Seattle, WA
- Nathaniel Jones, Mayor Pro Tem, City of Olympia, WA
- Paul Blackburn, Mayor, City of Hood River, OR
- Peter Corneilson, Councilmember, City of Hood River, OR
- Randy Lord, Councilmember, City of Mukilteo, WA
- Reuven Carlyle, State Representative, 36th Legislative District, WA
- Ryan Mello, Councilmember, City of Tacoma, WA
- Sally Bagshaw, Councilmember, City of Seattle, WA
- Shannon Williamson, Councilmember, City of Sandpoint, ID
- Stephen Buxbaum, Mayor, City of Olympia, WA
- Wayne Roth, Councilmember, City of Bainbridge Island, WA
- Will Hall, Councilmember, City of Shoreline, WA