Proposed Scope

Gateway Pacific Terminal Environmental Impact Study

Comments submitted by Friends of Chuckanut

January 18, 2013

Introduction: Friends of Chuckanut is a not-for-profit organization of concerned local citizens dedicated to preserving the scenic beauty of Chuckanut Drive, protecting the natural resources, and enhancing recreational opportunities in the Chuckanut area of Whatcom County. Within this scope of purpose we have significant concerns regarding the proposed Gateway Pacific Terminal (GPT) export terminal at Cherry Point. Members of Friends of Chuckanut generally live within one mile, and often within 200 yards, of the existing rail corridor as it passes between the Chuckanut Mountains and Chuckanut Bay and adjacent waters. As such, members would be directly and substantially affected, in both near and long-terms, by the proposed GPT project and associated changes in rail and marine traffic.

In general, our environmental concerns relate to the presence of Critical Areas as defined by the relevant Washington statute: RCW 36.70A.050 - Guidelines to classify agriculture, forest, and mineral lands and critical areas, and shorelines.

The Chuckanut area contains many such Critical areas; agricultural lands, forest lands, wetlands, shorelines, geologically hazardous areas, and fish and wildlife habitat conservation areas. Notwithstanding the proposed mitigation measures, all of these critical attributes of the Chuckanut area will undergo significant and reasonably foreseeable adverse impacts from this project. We urge that a complete review of rail traffic, coal cargo, and vessel traffic in Puget Sound and all adjoining waters must be included in the Environmental Impact Study (EIS).

Although our focus in this submission is on the Chuckanut area, we believe the scope of the environmental impact studies should <u>not</u> be limited to Whatcom and Skagit Counties. Rather, it should rigorously examine the potential effects of the proposed terminal and associated transport along the entire transportation route, land and sea, from coal extraction to the ultimate purchaser and user, including human communities, environment, and natural habitats.

Although the rail and marine movement of coal through the area is of highest concern, many of our concerns apply equally to other possible cargos proposed by the project sponsors.

Comments on scope of Environmental Impact Study: Accordingly, we request and strongly urge that the scope of the county, state, and federal environmental impact studies give careful and comprehensive attention to the following:

1. Chuckanut Drive as a State designated Scenic By-way

The scenic value of this extraordinary State Highway and surrounding areas is well documented. The 21 mile Chuckanut Drive passes through a variety of landforms In the south, the Samish farmlands, it passes through flat fields acting as a dike through this reclaimed estuarine land. In the central area, Chuckanut Mountainside, it closely hugs both the forested mountains to the east and the bay to the west with substantial changes in vertical alignment while providing grand vistas of the San Juan Islands. In the northern-most segment, Historic Fairhaven Parkway, the highway returns to level terrain. Highway SR 11 serves residents, farmers, businesses, recreational travelers, and commuters. (4) The review should consider the potential effects of the proposal on this designated Scenic By-Way.

The existing Burlington Northern Santa Fe (BNSF) rail corridor follows the same route but travels closely along the marine shoreline from where it leaves the Skagit Flats until it enters Bellingham at waters edge, thus making a large part of the project subject to review under the Shoreline Management Program SMP WCC Title 23. (3).

According to the 2004 Washington Coastal Zone Atlas maintained by the Washington Department of Ecology, coastal landslide hazard areas occur along the marine bluffs of Whatcom County. Areas of unstable slopes include portions of the coastline at Birch Point, Point Whitehorn, Cherry Point, the west side of Lummi Island, north of Neptune Beach, and other scattered areas, and including the Chuckanut Mountains.

We urge that the regulatory requirements of the existing code's Critical Areas Ordinance CAO WCC16 and Shoreline Management Program SMP WCC 23 must be thoroughly adhered to and all relevant factors carefully reviewed. The rail corridor paralleling Chuckanut Drive that travels along the edge of Samish, Chuckanut, and Bellingham Bays must be inventoried as to the presence of Critical Areas, including, but not limited to, steep slopes, the risk of erosion from the geologically unstable sandstone slopes, and the Critical fish and wildlife corridor that provides critical habitat. (2,3).

The introduction of more trains carrying coal with the resultant pollution, noise, vibrations, and rail crossing closures of varying lengths of time will lead to predictable and reasonably foreseeable adverse impacts on the scenic quality of Chuckanut Drive as well as its function as a viable and safe highway. These potential effects should be included in the scope of the EIS.

2. Impacts of increased rail traffic through the Chuckanut Area:

The GPT project proponents have forecast a significant and sustained increase in freight rail traffic through the area. The risks and benefits, to the general public and local residents, should be carefully studied in the EIS. Among other foreseeable effects will be increased congestion on the rail lines, decreasing the availability of the lines for passenger rail and other uses. The resulting unpredictability and inconvenience for passengers is likely to encourage greater use of automobiles for inter-city travel, with the consequent environmental effects. These consequences should be included in the scope of the EIS.

The EIS should study measures proposed by the project sponsor and BSNF to mitigate the entirely foreseeable increased risk of mud and landslides along this fragile coastal rail line. The study should rigorously evaluate the effects of the projected increase in traffic and the increased vibrations of heavy coal trains on slope stability near the tracks and the highway, especially where the rail lines run directly below the highway. Please include in the EIS a study of the costs

to clean up the probable resultant landslides and the impacts of such events caused by interruption of use of these transportation corridors for other, non-coal related uses. Gunite has been used to stop erosion on steep slopes on Chuckanut Drive in the past. It is unsightly, of limited long-term effectiveness, and decreases the value of the aesthetics along this scenic drive. The study should consider all options available to mitigate mud and rockslides on highway and rail lines.

Train derailments and predictable landslides all must be studied. Please include a toxicology study of the fish in these Bays. As one example, a train derailed in 1981 along Samish Bay, with rail cars in the water. Neither project proponents nor BNSF can rule out recurrence. As the project sponsors have projected an increased frequency and volume of rail traffic in the area, and as each train movement is associated with a small, but non-zero, finite probability of accident, the increased frequency will necessarily lead to an increased frequency of accidents. The study should carefully assess the probable frequency of derailment, collision, and/or accidental cargo discharges, along with the severity of the consequences of such events. We note also that such hazards cannot be limited only to rail movement, but should be applied equally to transport by ship through all adjoining waters.

As noted in the Whatcom County Shoreline Management Program, "Whatcom County's shorelines are among the most valuable of this state's natural resources. Shoreline ecosystems are diverse, dynamic, fragile and sensitive environments. Protection and management of these areas is important to the preservation of ecological functions and values of our natural environment, as well as the protection of the public health, safety and welfare of our community. Unregulated or *inappropriate development* on or near shorelines can result in impacts that threaten the public welfare and shoreline resources, including: pollution, erosion and sedimentation, habitat loss, flooding, or loss of property" (3) [Emphasis added]. The EIS should rigorously assess the potential consequences of the proposed project according to all these criteria.

As the railroad right of way through most of Whatcom County, and specifically the Chuckanut area, is clearly within the jurisdiction of the state Shoreline Management Act (SMA), please critically evaluate the effects of this project according to the policy guidelines of the SMA. Please include all reasonably foreseeable effects on clean water, fish, (including federally listed endangered Chinook Salmon and other threatened species of fish that inhabit this area), including, but not limited to toxicology studies. The EIS should also assess the risk of local lowland flooding caused by increases in sea level caused by burning of coal associated with this project and its contributions to general global warming.

As noted in the Whatcom County Critical Areas Ordinance, Best Available Science Review and Recommendations for Code Update, 2.4, Hazard Management and Protection Tools (1):

> "One way to address geologic hazard risk management is to acknowledge that our knowledge and ability to predict some risks are often limited, and to use the best available information and apply a factor of safety.
>
> This is a common approach in engineering, where the factor of safety is greater for less well-investigated problems or factors that are more difficult to predict. Safety factors vary with the development type, with more caution taken for critical structures where failure could be more serious. With geologic hazards the factor of safety <u>often involves excluding some development</u> types in some areas and defining buffers or areas where development is restricted or allowed pursuant to special engineering or other intensive and often more costly approaches.
>
> Fundamental physical geologic processes need to be identified, and numerous secondary impacts may also need to be considered. Failure to consider the entire

physical and social environment that relates to a project often results in significant public costs." (1) p.34 [Emphasis added]

Whatcom County is a geologically active area and some areas within the County are considered to be geologically hazardous. According to WAC 365-190-080 (4)(a), geologically hazardous areas include areas susceptible to erosion, landslides, earthquakes, volcanic eruptions, or other geological events.

The study should carefully follow the guidelines in State and County Codes for weighing the risks and the benefits of this project for the general public. The regulatory requirements of the existing codes WCC16.16 and WCC 23 must be thoroughly applied to this proposal, and the rail corridor along Chuckanut Drive, Samish, Chuckanut, and Bellingham Bays must be reviewed as to the presence of steep slopes, risk of erosion and the geologic hazard of unstable sandstone mountains.

3. The Chuckanut Wildlife Corridor:

Whatcom County's critical area ordinance designates the Chuckanut Wildlife Corridor as a habitat conservation area, which is identified as being of critical importance to the maintenance of certain fish, wildlife, and/or plant species. As defined by the County, this area — which extends eastward from Chuckanut Mountain, including Lookout Mountain, Stewart Mountain, and the northern portions of Anderson Mountain and westward to Chuckanut Bay and the adjacent marine waters -- represents the last remaining place in the Puget Sound Trough where the natural land cover of the Cascades continues to the shore of Puget Sound.

Designation of fish and wildlife habitat conservation areas means the land must be managed to maintain the integrity of species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created (WAC365-190-080).

In a recent Compliance Order the Western Washington Growth Management Hearings Board, reaffirmed;

> "Measures to Protect Critical Areas - Chuckanut Wildlife Area
> The County is required to apply Best Available Science processes as outlined in the County's Critical Areas Ordinance and is required to assess the ecological functions and value of the wildlife area to determine the appropriate development density for wildlife. Whatcom County's Comprehensive Plan policies 11G-10 require the County to —develop and administer regulations and incentives for no net loss of ecological functions and values of wildlife habitats." - WCC 16.16.710(a). (5). [Emphasis added]

The foreseeable risks to fish and wildlife are many, and will likely result from the different components of this project. These include increased rail traffic, types of loads in the rail cars, proximity to the water of rail lines, building of the terminal at Cherry Point, filling of wetlands, and the increase in large cargo ships in Puget Sound, the Salish Sea, Strait of Juan de Fuca, Strait of Georgia, and adjoining waters.

The study must rigorously and systematically review and describe the different toxins that already enter the air, the farmlands of Whatcom and Skagit Counties, and the water and shoreline along the railroad right of way, along with the likely increased releases associated with increased rail traffic along the corridor. Factors to be considered include copper from train brakes, metal from wear on the rails, diesel emissions from the 5-6 locomotive engines per train required to move the heavy coal trains, hydraulic oil from lines, other lubricants used to keep trains running, the loss of coal particles from coal cars, both loaded and empty, and the creosote from current and replaced railroad ties that leach into the ground and water (fresh and marine). Please include a toxicology

study, including a baseline study, of the wildlife that depends on this area for habitat, and assess the likely effects of an increase in the heavy metal load birds, fish, and animals are subjected to as they graze and forage for food.

Migrant Trumpeter Swans, Snowy Owls, and geese are well known to winter in the Skagit Valley in large numbers. They forage for corn and potatoes in the fields along the railroad tracks. Many birdwatchers come to this area for the pleasure of viewing the variety of bird species attracted to this area. The EIS should study the likely effects these pollutants on the waterfowl, both resident and transitory, that depend on this region as part of the Pacific Flyway for winter habitat and food.

In the north end of Chuckanut Bay the train trestle crosses the Bay and obstructs the mouth of Chuckanut Creek, home to migrating Chum and Coho Salmon. Please study the effects on these salmon of the increased introduction of copper, diesel particulates, coal dust, grease, metals from the rails, creosote, and the noise, lights, and vibrations from the trains as the salmon migrate under this trestle. Local residents report that BNSF uses this North Chuckanut Bay trestle from time to time as a site to hold trains delayed by traffic elsewhere on the single line. This would unavoidably lead to the introduction of more toxic and harmful wastes into the Bay. The EIS should carefully assess this further potential hazard.

More generally, that trestle has altered the natural flushing functions in the north end of Chuckanut Bay (Mud Bay). Over the years, this has caused sediment deposition altering forever this area of the Bay, eliminating important eelgrass and estuarine areas. The study should assess whether the better alternative route would be to avoid the Chuckanut Bay crossing altogether.

The study should also carefully assess to what extent the proposed increase in train transits will contribute to more collisions between native animals and trains, and the resulting mortality along the length of the rail corridor.

Fish and wildlife habitat conservation areas contribute to the state's biodiversity and exist on both publicly and privately owned lands. With reference to the inventory of fish and wildlife living in the Chuckanut Wildlife corridor cited in Footnote #1, the EIS should study the likely effects of the proposed project on biodiversity resulting from limited or divided habitats, added noise and light disturbances, and toxins introduced into the environment and food sources. The study should evaluate whether this proposed project would meet the standard of 'no net loss of ecological functions' required by the Compliance Order of the Western Washington Growth Management Hearings Board cited above.

4. Recreational Opportunities:

The rail lines already limit, significantly degrade, and, in some areas, prohibit the public's right of access to many of our local State, County and City Parks (which the public pays for). In the Chuckanut area these include; Clayton Beach, Larrabee State Park Boat launching facility, and Teddy Bear Cove. The increased noise, light and vibrations inevitably diminish the experience visitors have at these parks as well as Woodstock Park and Inspiration Point further north along Chuckanut Drive. Visitors to Larrabee State Park number over I million persons per year. The trains disrupt the quality of solitude and wilderness experience that attract visitors and overnight campers.

Small boats and kayaks are frequently launched from Larrabee State Park. Collection of local shellfish is already prohibited at many of the nearby beaches due to current contamination levels. The study should assess whether the proposed increase in ship and rail traffic would increase contamination levels and possibly spread it to crustaceans and fish as well.

The number of people who use our Parks is very large and they should not be denied the value of that recreation. Please include in the EIS the effect on the general public of decreasing their access to use of Parks along our shoreline, and the feasibility of requiring project sponsors to provide pedestrian overpasses and other mitigation measures. Similarly, the effects of increased numbers of moored and anchored ships in Samish Bay on public rights of navigation and sport fisheries should be assessed. The EIS should also consider whether the proposed increase in private industrial uses of navigable waters would be compatible with the Public Trust Doctrine covering those common resources.

5. Marine Environment:

Please study the reasonably foreseeable effects -- on public health, the environment, and wildlife -- of fugitive coal dust emanating from the moving coal cars as they pass through the Chuckanut area. This assessment should include coal losses from both the full cars heading north to the proposed GPT site and the returning empty cars heading south. Through this area, the train tracks hug the shoreline, from northern Skagit County to the southern part of Whatcom County.

Coal dust is toxic and contains known carcinogens and neurotoxins. Larger fugitive coal particles sink to the sea floor where they accumulate, while the smaller particles travel farther until they either sink or wash up on shore. Creosote from railroad ties is absorbed into soil and water in the surrounding areas and goes into the ditches and through culverts into the Bay. Bottom feeders such as Dungeness crabs and shellfish will ingest the coal dust particles and the toxins would become concentrated in whatever eats them, such as seabirds and humans. Local fisheries – both sport and commercial -- will therefore be negatively affected. We believe these adverse impacts to be foreseeable and significant. They should be thoroughly covered by the EIS.

As there are already a few coal trains traveling through the Chuckanut area to the Westshore coal export terminal in British Columbia, please study the cumulative impacts of the fugitive coal dust at current levels of transport as a baseline.

Please analyze the risks (both probability and severity of consequences) and study the reasonably foreseeable impacts of a significant oil spill from ship collisions and from ships running aground in the entire sea and inland water route to and from the proposed GPT site. According to Fred Felleman, formerly of Ocean Advocates, large coal carriers are single hulled, can hold more than 2 million gallons of bunker fuel, and are difficult to maneuver, especially in areas of strong tidal currents and often strong winds.

From the Chuckanut area, many oil tankers can be seen travelling to and from the two refineries at Cherry Point and the two refineries near Anacortes. Also visible from the Chuckanut area are the usual one to five oil tankers anchored/moored South/Southwest of Vendovi Island while they wait to moor at one of the four nearby refineries. Needless to say, a significant oil/fuel spill will be devastating to the shoreline and all marine creatures. The EIS should rigorously assess the probability and severity of such events, along with likely costs of clean up. The study should critically evaluate all proposed mitigation measures and whether the project proponents would be liable for all associated costs.

The EIS should evaluate where the massive bulk coal carriers will anchor/moor while waiting for their turn at the proposed GPT pier, and the associated risks of grounding or collision. It should also evaluate the environmental effects of stationary and transiting coal carriers, oil tankers and other large ships burning heavy and polluting bunker fuel. What will be the foreseeable cumulative adverse impact of the toxins and particulates which result from the continual burning of bunker fuel by all of these ships? How will the resulting air pollution affect marine life and humans?

The EIS should critically review the potential introduction of non-native invasive plants and animals on ship hulls, in ballast water tanks, and bilges of vessels – both foreign and US-

registered. The GPT project's proposed mitigation of chemical sterilization of such water before discharge in inshore waters should be rigorously evaluated for effectiveness and potential environmental harms.

6. Noise:

There are currently more than 350 homes in the Chuckanut area. They are located at varying distances from the train tracks, but a high percentage are located very close (within 200 yards) to the tracks. This includes northern Skagit County, southern Whatcom County, and a few in Bellingham just north of the city limits. Of concern, is the decibel measurement of horn blasts, squealing wheels, and rail transit noise in general. The EIS should rigorously assess the effects on human and animal health and quality of life caused by the foreseen massive increase in train traffic due to the proposed GPT terminal.

A recent study of the Eastman Company [7] found that transportation noise has been ranked among the most significant causes of community dissatisfaction. The threshold of high annoyance is 70 percent at around 85 decibels. A rail transit horn at 50 feet away is 90 decibels, more than a jack hammer at 50 feet away. At-grade rail transit at 50 mph is 80 decibels, more than an air compressor, and both at 50 feet away.

Whatcom Docs, a group of 160 Whatcom County physicians, conducted a careful review of the data published in peer-reviewed medical journals, which show that noise exposure causes

* cardiovascular disease, including increased blood pressure, arrhythmia, stroke, and ischemic heart disease;
* cognitive impairment in children;
* sleep disturbance and resultant fatigue, hypertension, arrhythmia, and increased rate of accidents and injuries;
* exacerbation of mental health disorders such as depression, stress and anxiety, and psychosis.

We support Whatcom Docs' call for a comprehensive Health Impact Assessment which includes noise exposure as well as diesel particulate matter and coal dust. As they do, we feel that the risk of negative effects on individual and public health is significant from the additional mile-and-a-half long heavy trains projected for the proposed GPT project. Please conduct a comprehensive Health Assessment as requested by Whatcom Docs.
http://www.coaltrainfacts.org/whatcom-docs-press-release

As noted above, beyond the effects on health of audible noise, we urge that the EIS evaluate the effects of sub-audible vibrations caused by increased rail traffic on health as well as adjacent landforms, house foundations, road structures, drainage culverts, and other sub-ground structures. The study should fully evaluate the effectiveness of any proposed mitigation measures, on public and private lands and structures, and determine that the costs should be borne by the project sponsors.

7. Geology and landforms:

Chuckanut's unique geology and terrain is characterized by steep, forested sandstone slopes descending to a largely isolated marine shoreline. The proposed longer and more frequent coal trains would add to the current physical barrier created where these steep slopes meet the shoreline at the railroad tracks. The current coal trains are the heaviest and longest of today's rail users in the area. They cause the most vibration, far exceeding that from other general freight and passenger trains.

Chuckanut Drive, US State Highway 11, has a long history of closures almost yearly due to landslides. The geology and repair history from 1974 to the present is outlined by local expert

Dave Tucker (at: nwgeology.wordpress.com/the-fieldtrips/the-chuckanut-formation/chuckanut-drive-landslides/). Vehicle weight restrictions are often in effect, especially during heavy rains and post freeze-thaw weather cycles. The EIS should thoroughly evaluate how the mass, speed, vibration, and duration of the proposed coal rains will increase landslides and ground subsidence along Chuckanut Drive and generate the same landslide pattern on the shoreline railroad tracks below Chuckanut Drive.

Residents along this forested highway, with no secondary access for emergency evacuation or aid, already experience one or more closures north, south, or in both north and south-bound directions for a day to months during excavation and repairs. One-way lanes are common during reconstruction. Please study the reasonably foreseeable significant unavoidable adverse impacts of closures on Chuckanut Drive to health and safety of the public, preservation of homes and Larrabee State Park, work loss and school absences, tourism, and economic losses to businesses and restaurants if such closures become more frequent.

The history of landslides and closures on Chuckanut Drive is echoed by the escalation of railroad closures to freight, Sounder, and Amtrak passenger service since coal trains began hauling to Westshore coal export in B.C. Please study the rate of closures before and after this recent increase in coal train traffic and the reasonably foreseeable, significant, unavoidable adverse impact the proposed eighteen additional coal trains per day will likely cause.

Without any freeze-thaw cycles in the winter of 2012-2013 to date, 73 slides have affected rail traffic between Seattle and Everett. BNSF "officials say this is the worst season for mudslides they have seen in a generation" reported KOMO News 1/9/13 with 130 scheduled Sounder trips north of Seattle cancelled since mid-December. Only 7 days of full passenger service were available on this northward route between 12/1/12 and 1/8/13. BNSF is logging trees, fully aware that their roots stabilize the land, because slides pushed trees to precarious angles adjacent to tracks. Please study if this is sustainable long term mitigation for existing train traffic, as well as the projected increase due to the proposed GPT project.

8. Economic Impacts:

The EIS should carefully assess questions arising from the proposed increases in rail and ship traffic such as:

- What mitigations will be in place for the significant, foreseeable unavoidable adverse impacts if coal train traffic increases in mass, velocity, vibration, length and duration to GPT project levels?
- What is the economic impact of the current loss of passenger service and commercial/agriculture freight service?
- What will be the economic impact if landslides proportionately escalate with coal train traffic at project estimates?
- Will ongoing excessive vibration from massive coal loads trigger more landslides and land subsidence?
- Will this route be irreparably damaged for any and all rail traffic?
- What will be the economic impact to all other commercial/agriculture freight, tourism, and passenger service?
- Will it cause additional structural damage to the current infrastructure of existing businesses, local and state parks and private residences with damage to roads, foundations, wells, water lines, septic systems, utility poles, and culverts?
- Will a similar fate extend to other areas such as the Eldridge neighborhood and Boulevard Park?
- Will accumulated damage cause failure of the rail connection between Seattle and Bellingham, as well as the ultimate failure of parks, homes, and businesses along the Chuckanut corridor?

- What assurance is there that any proposed mitigation measures will be effective over the long-term?

As one example of potential effects, both on local businesses and human health and the environment, the EIS should assess the consequences of a derailment and cargo spill (including arsenic and heavy metals) on the commercial shellfish operations of Taylors Shellfish Farms along Chuckanut Drive on the Samish Flats.

9. Safety:

Train derailment is a natural consequence of many landslides. For 12/19/12 video of landslide derailing freight train south of Everett, WA see www.katu.com/news/local/Caught-on-Video-Landslide-derails-Wash-freight-train. US train derailment has increased from 2 in 2008, 14 in 2009, 12 in 2010, 16 in 2011, and to 17 in 2012. Please study the causes of this rapid escalation in derailments. To what degree are derailments caused by damage to tracks and track substructures via mass, weight, speed, vibration, duration and accumulated effects of vastly increased coal train traffic? To what extent does particulate matter contribute to derailments due to coal dust, oils, copper and other metals deposited by the train engines, braking, and other systems? What are the economic impacts on the communities where landslides occur? What are the health and safety risks to humans, wildlife, wetlands, marine ecology and species, parks, homes, and businesses when coal cars spew their contents across steep forested slopes and sensitive shorelines? Bear in mind in this study that GPT coal trains at full capacity are projected to haul 70+% more than all current rail freight to this area and that there would be a 200% increase in all current freight via the five proposed projects.

Fires occur with derailments due to sparks, combustible loads, and the torches used to untangle and clean up derailed debris. Forested steep slopes, inaccessible marine shorelines, and brisk winds make the Chuckanut corridor highly vulnerable to uncontrollable wild fires. Risk increases with each additional rail trip. Frequent 1.5 mile long trains loaded with combustible coal and coal dust radically increase the threat of devastating fire in the area, especially during dry summer months (as occurred in summer 2011 due to BNSF's negligent right of way maintenance and a passing train). The Chuckanut area fire department is minimal, requires reinforcement from city fire departments 8 miles north, and can access only small portions of shoreline railroad tracks to fight fire due to the steep slopes. The EIS should evaluate mitigations by BNSF and the project sponsors provide to protect public and private property. For example, will GPT station fire boats along these inaccessible tracks to protect passengers on Chuckanut Drive, residents and homes, restaurants, and Larrabee State Park and tourists? What protection and restitution from project sponsors, BNSF, and governing and permitting agencies are available to citizens especially if they suffer predictable losses?

Trains blocking grade level crossings throughout Chuckanut residential areas, Larrabee State Park, and Larrabee Park Boat Launch present significant foreseeable adverse impacts. Tourism study [8] shows 1/4 of all 1st time visitors to Bellingham tour Larabee State Park, which is bisected by the railroad track. These ground level crossings had 4 unannounced blockage closures for 4+ hours, 2 hours, 45 minutes, and 20 minutes, respectively, during a four month period in 2012. With no secondary access, these events denied 52 homes of all paramedic/fire/police response, emergency evacuation, school bus, or employment commute – all without compensation. During the same four month period, one resident suffered a heart attack requiring the paramedic ambulance. In the same period, local residents rescued 3 boating accident victims, one of whom required emergency paramedic ambulance for lifesaving hypothermia treatment.

Blocked rail crossings caused by increased train traffic are increasing, threatening health and safety of residents and tourists. Please study the cause of the rapid increase in blockages and all contributing factors to the blockages, including but not limited to earthquakes, landslides, fires, derailment from accumulated damage to rails and surrounding fragile geology, and resultant

maintenance and repair. The EIS should carefully consider the economic impacts to tourism, residents' work losses, and school absences.

Please include a review of Whatcom County Codes 20.88.010, 20.88.130, and 20.88.140 and apply them to the EIS and permit process regarding overpass infrastructures along the Chuckanut corridor. Consider also how the applicant will be required to address off-site infrastructure for all environmental and uncompensated costs before issuing the Final Scoping Document. The study should specifically evaluate the question of whether ground level crossing infrastructure overpasses should be required mitigation and whether all related costs will be borne by the applicant, rather than the public, as specified in the relevant codes.

As concerned citizens, likely to be directly affected by the proposed GPT project, we expect a thorough, systematic and scientific review of the risks posed to the local, state, national, and global environment. We look forward to public answers to the questions posed here.

Respectfully submitted,

Laura Leigh Brakke

Laura Leigh Brakke, President
For the Board of Directors of Friends of Chuckanut

By reference we cite the following documents:

1.Whatcom County Critical Areas Ordinance
Best Available Science Review and Recommendations for Code Update
http://www.co.whatcom.wa.us/pds/naturalresources/criticalareas/pdf/bas_final_20050520.pdf

2. Whatcom County Title 16 Environment - Chapter 16 CRITICAL AREAS
http://www.codepublishing.com/wa/whatcomcounty/

3. Whatcom County Shoreline Management Program Title 23
http://www.codepublishing.com/wa/whatcomcounty/

4. Chuckanut Drive State Route 11 Corridor Management Plan
http://www.wsdot.wa.gov/NR/rdonlyres/1024829C-9D40-442C-8EFC-1B4CE3A273AA/0/ChuckanuatDriveCMP.pdf

5. Compliance Order and Order Following Remand on Issue of LAMIRDS Case Nos. 11-2-0010c and 05-2-0013 January 4, 2013
http://blogs.bellinghamherald.com/politics/wp-content/uploads//2013/01/11-2-0010c-05-2-0013-compliance-order-and-order-following-remand.pdf

6. Washington State GMA Critical areas - Designation and protection - Best available science to be used.
http://apps.leg.wa.gov/rcw/default.aspx?cite=36.70A.172

7. Paul Zemtseff; The Eastman Company, 925 North 130th St, Seattle, WA 98133; Tel.: 206-363-6611; File No. 2036.1; October 30, 2012

8. Michael Lilliquist, City Council Member, City of Bellingham; January 8, 2013 Community Wise Bellingham Economic Impacts Forum

9. BNSF at: http://domino.bnsf.com/website/updates.nsf/service-coal?OpenView&Count=999