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GPT/Custer Spur EIS
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I, Jeffrey S. Margolis am seeking answers pertaining to transportation impacts associated with the Gateway Pacific Terminal (GPT).

I own and operate, Everybody's Store, a small country store that sells groceries, deli foods including sandwiches, and gifts. I serve the local residents of Van Zandt, but in this part of the world rural businesses rely on regional travelers for a substantial part of our business.

My store is located very near where the BNSF tracks cross State Route 9. SR-9 is a major truck route. It is well documented that the main rail line running along the coast or parallel to I-5 is at or nearly at capacity at many sections along the route. If the coal terminal at Cherry Point is built, it is inevitable that additional rail traffic will use this secondary line that runs in front of my business. The traffic delays on SR 9 caused by these additional trains will, not only wreak havoc on the trucking industry, it will harm my business by interrupting the flow of customers to my store. In fact, with the portent of major highway reconstruction, it has the potential of destroying my business. All sophisticated industrial systems employ redundant back up systems. For the sake of discussion the rail line running parallel to SR-9 is a contingency to be known herein as, The Farmland Route. Would not a coal train route inevitably require massive reconstruction of SR-9?

Therefore, I am asking that all the transportation alternatives that will be required in Whatcom County if GPT is permitted be analyzed in the EIS. Specifically, I am asking that all the impacts of additional coal or "Unit Train" traffic on the BNSF rails running from Burlington to Sumas be part of the EIS scope, especially the economic impacts.

My argument proceeds accordingly. Could the entire Burlington Northern Santa Fe (BNSF) Railroad system in Whatcom County, coast route and farmland route, from Wickersham, to Sumas, for a number of reasons, be employed by GPT and hence trigger multiple adverse consequences? Are there intrinsic adverse and cumulative impacts to either the Coast or Farmland Routes? How might they be mitigated? Additionally, might attempts at mitigation be sufficiently difficult as to suggest that no action be taken because the financial and cumulative degradation to the environment overwhelm the benefit of approving the project? Additionally it is conceivable that transportation impacts similar to those found in Whatcom County, are shared beyond.

My family owns and manages a 5 acre spread in Van Zandt which includes; pasture, garden, a general store and the family home. The store is situated on SR-9, just north of mile marker 77, less than 75 ft. from the BNSF rail crossing. However difficult to measure, we know first hand, that people treasure the bucolic character of this location. We are concerned about the survivability of our enterprise and the milieu,

the bucolic nature of the Southfork Valley. In order to maintain the smooth flow of commercial and passenger traffic could Unit Train impacts on highway safety and mobility, command highway renewal? Would modernizing this corridor obliterate small towns, dislocate populations, alter land values and transform geography and threaten endangered species, throughout the Whatcom County and a renewed statewide corridor?

In addition to my personal attachment to this place, I have a long and extensive history of civic participation in transportation issues. Beginning in the early years of this century the "Foothills Steering Committee" of which I was a member, was coincidentally involved in monitoring the proposal for a Washington State Commerce Corridor* (See: Final Report Washington Commerce Corridor Feasibility Study Washington State Department of Transportation Prepared by: Wilbur Smith & Associates of Bellevue Washington.) This Commerce Corridor proposal was determined, by the consultant, WSA, to be infeasible. Many of the elements of the Commerce Corridor attempt, resemble potentialities inherent in the GPT project, namely a safe and mobile statewide transportation plan.

On May 9, 2011, the Bellingham Herald quoted BNSF spokesperson, Suann Lundberg, she stated, in regard to delays at grade crossings for emergency vehicles, "we could not know which line the coal trains would use...we can't tell you...what the market will bring on lines that are shared by all different commodities."

In her address to capacity challenges Lundberg is emphatically stating that BNSF will not reveal because they cannot guarantee how every part of the BNSF system will be employed in service to GPT. For the rest of us it becomes all the more logical and imperative to scrutinize all BNSF routes in Whatcom County, including the Farmland Route. Are there significant impacts upon eastern Whatcom County that the GPT application refuses to engage? BNSF does have track rights in lower British Columbia. Presently hundreds of millions of dollars are being spent on overpasses to specifically improve unit train mobility from Abbotsford, BC, just north of Sumas, to the Westshore coal port. This Canadian rail corridor can link with the Farmland route creating a connection through Whatcom County to the Powder River Basin. BNSF track along SR-9 in eastern Whatcom County is presently being reconditioned with wider and heavier "Ribbon Rail" that enables the rail bed to support the extraordinary weight of coal trains. Could this newly rehabilitated rail corridor in the eastern Whatcom County farmlands, paralleling much of the Nooksack River from Wickersham to Sumas be a *fait accompli*, a surreptitious coal route in the making? The same might also more or less hold true were BNSF to find a cross county route to Lynden and the Custer Spur.

This discussion gains further validity from perusing the: CROSS BORDER FREIGHT RAIL IMPROVEMENT STUDY, produced for the Whatcom County Council of Governments (COG) May 31, 2011, by the CASCADIA CENTER OF DISCOVERY INSTITUTE. This report concludes, cognizant of GPT, that the Burlington to Sumas to Westshore Rail corridor should, even at the cost of 100's of millions of dollars be considered. Early on the study forecasts on p.9 that random freight congestion is endemic. BNSF must accept adaptive regional strategies to handle GPT and Westshore coal traffic. See pp. 26-27.

The report continues, "Option B. Routing some BNSF traffic through Sumas to Thornton Yard. Several freight stake holders suggested a feasibility analysis should be conducted on routing some freight traffic to Thornton Yard along the Burlington Sumas line to the border with a connection to CPR and SRY to CN. The line is 44.7 miles and served by a daily BNSF run. The line has value because of the international crossing. BNSF interchanges with Canadian Pacific Railway and the Southern Railway of British Columbia at Sumas...In our interviews with BNSF and through a review of previous freight rail studies, the costs of upgrading the line from Burlington to Sumas would be in the hundreds of millions of dollars. Recommendation: The International Mobility Transportation Commission rail

committee explore the opportunity to enhance north- south capacity of the BNSF line through Whatcom County and into Vancouver, B.C. by reviewing operational and investment strategies with the Roberts Bank Rail Corridor.”

In an earlier report prepared for the Cascadia Project in 2000: The Cascadia Transportation Plan: Increased Higher Speed Passenger and Freight Rail Service. Table 14 on p.61 re: Expected increase in freight train traffic across the US-Canada Border on the BNSF Line on the Cascadia Corridor between Vancouver, B.C. and Everett, WA which are DIVERTABLE TO THE CASCADE FOOTHILLS CORRIDOR FROM SUMAS TO SNOHOMISH WASHINGTON. This report reveals the utility of a Farmland route.

To wit Richard Ford, Chairman of the Washington State Transportation Commission, in June of 2012 wrote to Matt Rose, BNSF CEO, suggesting that bottlenecks and adverse impacts echoing throughout the state, owing in part to “Unit” coal trains, were unacceptable. WSTC furthers our case to anticipate use of the Farmland route.

Returning to BNSF, spokesperson Lundberg’s equivocation aside, what is the case? Can the Coastal Route be the only possible route through Whatcom County? “YES” or “NO”, is there is “ANY” possibility for using of the Farmland Route? If so, then any and all impacts in eastern Whatcom as well as Skagit County must be must be identified and considered as an integral element of the GPT design.

The prospect of using the Farmland Route also proceeds from an evaluation of supply, demand and storage capacity. The design of the port itself allows for inferences as to how much can be stored, shipped and sold. Does the coal delivery and rail network match up to the port’s design? The calculus or interaction of these variables needs to be examined for their consequences:

Consider the wharf. The proposed 3000 ft. wharf might berth four coal ships: three Cape class and one Panamax. GPT forecasts handling 49 mt. annually. Is it feasible to move more than 49 million tons from a wharf of this dimension? If so, then that might actually provide further necessity to recognize that an expanded transportation system might make sense. Perhaps the Kooragang Coal Port in Waratagh, Australia, (which berths 4 cape size coal ships and handles 105 million tons per year) provides a sufficiently analogous example. Is there enough similarity to allow for a valid inference that capacity at GPT could increase beyond the stated amount and thus put additional pressure upon GPT to utilize an expanded rail delivery system? (See: attachment GPT Capacity <http://www.australiancoal.com.au/the-australian-coal-industry-coal-loading-ports.aspx>.)

GPT is a complex operating system. Port and rail are interdependent, synergistic and realistically compose a single entity. Parts of a machine must be synchronized with each other. One part cannot function without the other balanced to it. It is simply impossible to detach the transportation component and concomitant impacts from the existence or construction of GPT. For the sake of its own intrinsic reliability all impacts need to be regarded and simultaneously understood in order to engineer and maintain the functionality of the system. When actual possibilities are acknowledged then the downstream nodes for environmental assessment become evident. When details are studied operational feasibility or infeasibility reveals itself.

Logically, the SSA permit application, absent items pertaining to offsite transportation could be considered incomplete. Does it need to be resubmitted with attention to transportation impacts?

Does not the excision of fundamental elements of a plan necessarily lead to an end product predicament? Generally speaking the etiology of genetic fallacy is: Circumstance ignored, adverse consequence, damage multiplies. This is why major industrial systems employ redundant safeguards.

Is not GPT putting the cart before the horse? Will granting a permit to GPT as this juncture be equivalent to approving a permit for a new rail corridor through eastern Whatcom County without environmental review? Is this not the sort of circumstance that the Ninth Circuit Court of Appeals ruled against in its attention to disputes pertaining to the Tongue River Railroad?

The challenge of freight rail growth, the possibility of increased demand for coal in Asia and competition for space and bottlenecks in the BNSF network, compel the SSA–BNSF partnership to establish additional track and broader routes. See: CROSS--- BORDER FREIGHT RAIL IMPROVEMENT STUDY Produced for the Whatcom Council of Governments May 31, 2011 CASCADIA CENTER OF DISCOVERY INSTITUTE. Can it not be said that there must be a need to utilize, amend or provide for an alternate transportation route to the coastal route intermittently, temporarily or permanently between Mt. Vernon and the Custer Spur in the future? Will not the Farmland route, far from being an unspoken component, actually be part and parcel of the established web of functional segments that serve GPT from mine head to portside? If so mustn't its cumulative impacts be considered in the EIS?

The truth of the matter must be set out at the inception. Evasion of facts at the outset compromises the functionality of the system downstream. In: Northern Plains Resource Council v. The Surface Transportation Board, the Ninth Circuit Court of Appeals remanded and stated in response to the preemptive decision of the Surface Transportation Board,

... “in evaluating the new TRRC III (Tongue River Railroad) application, the Board still did not review the new evidence of operational and safety concerns, and instead considered the Four Mile Creek Alternative as “currently authorized,” and the “no-build” alternative considered in TRRC III. By the time the Board prepared the DSEIS in October 2004, the Board was well aware of the concerns that the TRRC and BNSF had raised about the viability of the Four Mile Creek Alternative from a safety and operational perspective. Moreover, in 2004, the Board was aware that the TRRC had asked to suspend proceedings due to financial problems in 2000, after which review was suspended for almost three years. The Board also did not revisit the financial viability of the Four Mile Creek Alternative when it considered it the “no-build” alternative in TRRC III in light of the changed financial circumstances. Thus, we conclude that the Board’s decision in TRRC III was arbitrary and capricious in light of the evidence it had before it regarding the TRRC and BNSF safety concerns that arose subsequent to the Board’s approval of TRRC II.

[35] To summarize our holdings for Section II, we find that the Board’s decision not to review new evidence of oper-21480 NORTHERN PLAINS RESOURCE v. TONGUE RIVER RR operational and safety concerns for the Four Mile Creek Alternative in TRRC III to be arbitrary and capricious, and we reverse and remand on that ground. We affirm the Board on Petitioners’ other railroad claims.”

Once again our claim that an enhanced Farmland Route must be acknowledged stems from the 9th Circuits reasoning that reflects upon environmental consideration for new, or in our case profound construction prior to rather than after the fact.

On behalf of the Washington State Department of Ecology, Director Ted Sturdevant, on January 4, 2013 in a letter to Ray LaHood, US. Secretary of Transportation and Ken Blodgett, Chair of the Surface Transportation Board, urged them to review all “direct indirect and cumulative impacts” of transporting coal from the Powder River Basin through the State of Washington.

To take this matter a step further: Absent this piece of the puzzle in planning for the future, the Farmland Route might as well be called, “Tongue River IV”. This is not merely a problem for BNSF. This gap in planning indicates the incompleteness of the basic application for construction of GPT. Although this subject is fitting for an EIS, transportation beyond the Custer Spur does not arise directly in the application. Some might consider this absurd, illegal or immoral but that is not the issue. Must not this fundamental flaw

be rectified and evaluated for the sake of the functionality of the system itself?

We assume at this juncture that rail capacity issues and transportation impacts are inescapably justified in being considered a fullfledged issue for the EIS. Standard operating procedure points to SSA-BNSF: needing, in the near and distant future to avoid a bottleneck south of Bellingham; employing the Farmland route either partially or incrementally for trains either empty or full, from Mt, Vernon through Burlington and proceed at 10 mph around Sedro Woolley and continue then traveling north through eastern Whatcom County, eventually to GPT?

Having both documented and logically established that transportation impacts are inherently part of the GPT plan, it is fitting to examine: Geographical, Agricultural, Environmental, Social and Economic impacts along the Farmland route.

GEOGRAPHY:

The geography of the Farmland Route through the Skagit County's Samish River Watershed and Whatcom County's Southfork Nooksack River Watershed is characterized by extensive wetlands. Rainfall is in the range of 65 inches per year. The rail line runs up a narrow valley and is flanked by mountains on the east and west and the tracks more or less intermittently straddle one waterway or another. Suffice to say that the earth, characterized by a thin veneer of topsoil overlaying impervious clay, becoming sufficiently saturated during September through April storms, that BNSF trains often travel at 10 mph to avoid damaging the rail bed and skidding off the tracks. Were the Farmland route to be employed then it is compulsory to ask the extent to which the coal train would impede traffic at seven strategic grade crossings in Whatcom county where the tracks intersect with SR-9?

Simply put, the amount of time it takes a mile and a half length train to cross a point at a given speed is the same as the amount of time it would take someone traveling at that speed to go a mile and a half. At the normal coal train speed of 35 miles per hour, this is slightly over two and a half minutes, at 20 miles per hour it's four and a half minutes, and at 10 miles per hour it is nine minutes.

Now let us consider two hypothetical worse case scenarios wherein all of the coal bound for GPT comes through the Farmland Route at the rates of either 49mt or the extreme 105mt per year. From <http://www.wsgs.uwyo.edu/coalweb/trains/loading.aspx>, we know that there are approximately 100 cars per mile, and 100 tons of coal per car. So a mile and a half train would be 150 cars, and 15,000 tons of coal. For the 48 million ton case, we take the 48 million tons of coal and divide by 15,000 to get 3,200 trains per year. We then divide by 365 to get approximately 8.7 trains per day. Divide 24 hours by 8.7 and we have a result of about one train every 2.8 hours. This assumes a loop; if the trains return on the same route, trains will be twice as frequent, for one train every 1.4 hours. Repeating this process for 105 million tons of coal, we get results of approximately one train every 1.3 hours if on a loop, or one train every .7 hours or every 42 minutes if returning.

According to WSDOT there are 52 "PUBLIC" at grade crossings in Whatcom County. Seven of these crossings on SR-9 may be considered strategic: Acme, North of Acme, Van Zandt, Mt. Baker Hwy SR-542, George Road SR-9, City of Nooksack, and Sumas. Either WSDOT or BNSF should have a list of scores of non-public grade crossings. Suffice to say, that under a worse case, in a medical emergency an ambulance could be detained by as much as 18 minutes in administering to an emergency response. On SR-9 this could even be multiplied due to the coincidence of multiple crossings at, let us say, disturbing intervals. Keep in mind that we are only acknowledging state route grade crossings while there are scores of county road and private crossings.

In May of 2011 Washington State Patrol Officer, Tom Pillow, president of WSP Trooper's Association, wrote in a Bellingham Herald OpEd piece about the known tendency of truckers to try to "beat" crossing gates/trains across the tracks to avoid the delay and attendant expense in waiting for trains to pass by. By my computations a truck on its way from Sumas to Sedro Woolley traveling at an average rate of 45 mph, that became caught behind a unit train traveling at an average rate of 30 mph in Sumas would be delayed, coincidentally eight times at each grade crossing between these two cities. No doubt motorists as well as truckers might often race to beat the train. Safety issues aside, one has to estimate the annual expense of increased wage and fuel costs. Business ordinarily looks at wage and fuel cost in terms of it share the overall cost of production. In this case there is no expansion of production. The cost, whatever it is brings about zero increase in production. It is a 100 percent loss to the gross product. The loss has to be recouped through increasing the price to the buyer. One can surely capture the drift of this argument, ie., that enormous impacts on the Gross Domestic Product, by virtue of increased cost of production and inflationary pressure must be offset or mitigated by dismantling obstacles to truck freight (not to mention passenger vehicles) mobility. Is the solution to removing obstacles to freight mobility and emergency management the reconstruction of the SR-9 highway and rail corridor? How does this play out when looking at the total mine head to GPT Custer Spur? Is the Farmland Route feasible? Can GPT be served exclusively by the Coastal Route?

Chapter 6 of the Whatcom County Comprehensive plan attends to transportation and the implicit mandate of the County is to ensure transportation safety and mobility. There are engineering standards for assessing mobility and we request a complete transportation analysis which takes into consideration the types and volume of traffic that could possibly be impeded throughout Whatcom County under any and all circumstances.

AGRICULTURE:

Sales of Whatcom County agricultural products average \$325M annually. To what extent will the BNSF/GPT network impact Whatcom Farmlands?

With regard to agricultural impacts: According to [G. Naidoo](#) and [Y. Naidoo](#) published in ['Biomedical and Life Sciences Volume 13, Number 5,](#)

Coal Dust Pollution Effects on Wetland Tree Species in Richards Bay, South Africa

"in this study, the effects of coal dust on four, sympatric, wetland tree species in Richards Bay Harbour were investigated. We tested the hypothesis that leaf micromorphology influenced dust accumulation and that coal dust occluded stomata and reduced photosynthetic performance of three mangroves, *Avicennia marina*, *Bruguiera gymnorrhiza* and *Rhizophora mucronata*, and a mangrove associate, *Hibiscus tiliaceus*. To investigate leaf micromorphology, leaf blade material of the four species was prepared following standard procedures and viewed under scanning electron microscopy. Gas exchange and chlorophyll fluorescence measurements were made at saturating light ($>1000 \mu\text{mol m}^{-2} \text{s}^{-1}$) and high temperature ($>25 \text{ }^\circ\text{C}$) on leaves that were either covered or uncovered with coal dust. There was no evidence of occlusion of stomata by dust. Dust accumulation in *A. marina* and *H. tiliaceus* was exacerbated by the presence of a dense mat of trichomes on the undersurface of the leaves, as well as by the sticky brine secreted by salt glands in the former species. Coal dust significantly reduced CO_2 exchange, Photosystem II (PS II) quantum yield and electron transport rate (ETR) through PS II in *A. marina* and *H. tiliaceus* but not in the other two mangroves. Reduction in photosynthetic performance was attributed to reduction in light energy incident on the photosynthetic tissues.

Given a 3% loss of coal per trip it behooves adjudicators to identify and compute likely impacts of coal dust that is dispersed on farmland along the rail lines. Inasmuch as we have reports that coal dust wafting off piles at Westshore lands on Point Roberts it is equally important to do an analysis of the possible dispersion of dust from storage piles on site at GPT upon farmlands within a 5 mile radius.

WATER & ENDANGERED SPECIES:

The Southfork of the Nooksack River is home to endangered Chinook Salmon. Both Nooksack and Lummi Tribes have a fiduciary interest in preserving water quality for the sake of the salmon. The tribes must be consulted if the Farmland Route is to be used. What are the ramifications of water seeping from coal cars affecting aquifers and waterways.

The Endangered Oregon Spotted Frog is only found in eight locations in Washington including one located at the headwaters of the Samish River.

SOCIETY:

The Farmland Route is a necessary contingency and the social and economic impacts of compensating for and mitigating adverse effects should be examined for their transformative and monumental consequences. We have explained the challenges to transportation safety and mobility. Emergency vehicles could be stopped in their tracks, passenger traffic would be delayed and commercial traffic would suffer continuous expenses for additional labor and fuel. Surely the need for highway reconstruction from the northern to the southern limits of SR-9 in Whatcom County is obvious. This contingency received investigation in: The Final Report Washington Commerce Corridor Feasibility Study Washington State Department of Transportation Prepared by: Wilbur Smith & Associates. The WCC study provides graphic possibilities including the reconstruction of SR-9. Highway redevelopment complete with multiple lanes and at least seven strategic overpasses soaring above the BNSF tracks. This scenario needs to be examined for its cumulative impacts. This enhanced corridor would pave over towns such as; Acme, Van Zandt and Nooksack. Would not property have to be acquired, businesses and family lives be disrupted and need to be relocated? In what way might property values; owing to the constant noise and perpetual nuisance of coal trains blocking passage across county roads and private crossings, shift?

HEALTH:

To wit, in eastern Whatcom County the tracks come within close proximity to the Acme Elementary School, the Mt. Baker High School, Nooksack Elementary School and Nooksack High School. Noise will interfere with student's attention and learning. Every intersection calls for 4 horn blasts from a locomotive. Round the clock noise will disrupt sleep patterns of everyone residing in the narrow and constrained Southfork Valley. Such events lead to reduced productivity and in some cases, personality disorder. Are we willing to pay this price?

ECONOMIC:

Needless to say, what happens on the Farmland Route in Whatcom County is a harbinger of what may transpire across the coal transportation network. In addition to the insurmountable environmental challenges that Wilbur Smith & Assoc. unveiled, what ultimately led them to conclude that the Commerce Corridor was infeasible, was the astronomical service on the debt for undertaking such a massive project. Compounding their ominous prognosis further was the portent of cavalier foreign ownership. Foreign ownership of highways in other parts of the globe is often characterized by exploitive management practices that neglect proper maintenance while imposing and siphoning off toll income. Smith and Associates forecasted that the imposition of tolls would then promote overuse of I-5 and drive up maintenance expenses

there. In the end either our ability to repair I-5 could be impaired or fresh sources of revenue would have to be derived, all owing to the drain on transportation funds to pay for a new SR-9 Commerce Corridor.

It is up to the Whatcom County Council, the State of Washington and the United States Army Corp of Engineers to evaluate all of the queries submitted above and decide whether the cumulative impacts are sufficiently significant to overshadow the cost if not the ability to mitigate them.

Yours very truly,

Jeffrey S. Margolis