



## **FRIENDS OF THE COLUMBIA GORGE**

*SUBMITTED VIA WEB PORTAL*

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**Re: Friends of the Columbia Gorge Comments on Draft Environmental Impact Statement for the Millennium Bulk Terminals Longview DEIS**

Dear SEPA Responsible Officials:

Friends of the Columbia Gorge (Friends) submits the following comments on the Millennium Bulk Terminals Longview (MBTL) coal export terminal DEIS to supplement the coalition comments filed on our behalf by Earthjustice. Friends is a non-profit organization with approximately 6,000 members dedicated to protecting and enhancing the resources of the Columbia River Gorge. Friends' membership lives, works, and plays in the Columbia River Gorge and would be adversely affected by the direct, indirect, and cumulative impacts caused by MBTL coal export terminal.

The proposed MBTL coal export terminal would cause a significant increase in the number of unit trains of coal passing through the Columbia River Gorge. The direct, indirect, and cumulative impacts of the addition coal train traffic would cause significant adverse impacts to communities in the Gorge and the scenic, natural, cultural, and recreation resources of the Columbia River Gorge National Scenic Area. This ultimate conclusion is supported by the DEIS, which identifies a range of unavoidable significant adverse impacts. However, the DEIS fails to disclose the full extent of impacts, particularly impacts to the communities and resources in the

Columbia River Gorge. It also fails to provide mitigation for some of them. Friends recommends that the EIS be revised to fully disclose and mitigate the impacts to the Columbia River Gorge.

## **1. The Columbia River Gorge is a national treasure.**

The Columbia River Gorge is a national treasure. In 1986 Congress recognized the national significance of the Gorge and created the Columbia River Gorge National Scenic Area to protect and enhance the aesthetic, biological, ecological, historic, and recreational values in the Gorge. *See* Columbia River Gorge National Scenic Area Act, 16 U.S.C. §§ 544–544p.<sup>1</sup> The Gorge, under the protection of the Scenic Area Act, offers a stunning array of sensitive resources, including scenic and historic views along the Columbia River, site of the final portion of Lewis and Clark’s journey across the West. The Gorge has been occupied by Native American tribes for more than 10,000 years, and the scenic, natural, and cultural resources of the Gorge remain critical to sovereign Native American governments.

Additionally, the Gorge offers unique recreational opportunities with its many side-river canyons, ridgetops, and the Columbia River itself. Hiking, bicycling, longboarding, river rafting, kayaking, skiing, boating, fishing, camping, kiteboarding, windsurfing, paragliding, birdwatching, and wildflower viewing are all pursued actively by the public throughout the Gorge. The Columbia River itself is a world-renowned windsurfing and kiteboarding destination that is contingent on public access across rail lines to high-quality recreation sites on the Columbia River. The Gorge also has a growing agri-tourism industry centered on the local vineyards and wineries that form the Columbia Gorge American Viticultural Area (AVA). Many of the vineyards and wineries are in close proximity to the rail lines in the Gorge.

The Columbia River Gorge National Scenic Area is particularly rich in natural resources due to a diverse collection of ecosystems and micro-habitats. The Columbia River Gorge is home to 800 species of flowering plants, including 15 species of wildflowers that exist nowhere else in the world. The Gorge has 44 species of fish, including several species of salmon listed under the federal Endangered Species Act, and 200 species of birds.

The National Scenic Area is also a working landscape, sustained economically by agricultural and forest lands and 13 designated urban areas. The urban areas in the National Scenic Area are generally located along the Columbia River and straddle the highway and railroad transportation corridors that run the length of the Gorge in both Washington and Oregon.

In its November/December 2009 issue, *National Geographic Traveler* ranked the Columbia Gorge region sixth internationally, and second in the nation, among “iconic destinations.”<sup>2</sup> The Gorge was ranked higher than all of the county’s national parks that were surveyed, and higher than Tuscany, Italy; the Serengeti Plains; and Mount Kilimanjaro. A primary reason given by *National Geographic* for the Gorge’s high ranking was the Gorge’s international reputation for

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<sup>1</sup> A copy of the National Scenic Area Act and Management Plan have been attached for reference.

<sup>2</sup> See Council Order No. 868, Whistling Ridge Final Adjudicative Order, Concurring Opinion of Chairman James Luce at 45, fn iii (Luce references the National Geographic ranking and explains that “the Gorge is recognized as an environmental wonder.”).

“an incredible job of protecting the views.” Another stated reason was the Gorge’s “[g]reat potential for ‘agritourism and geotourism.’”

The Gorge has long been considered a special area. In 1915, the U.S. Forest Service (“USFS” or “Forest Service”) established the Columbia Gorge Park as the first Forest Service Recreation Area in the nation. The following year, the Gorge was proposed as a National Park. Continuing development pressures led to the establishment of the National Scenic Area in 1986. Congress created the Columbia River Gorge National Scenic Area to protect the scenic, natural, cultural, and recreational resources of the Columbia River Gorge. The Columbia River Gorge National Scenic Area extends approximately 85 miles along the Columbia River Gorge.

Today the Gorge contains hundreds of miles of hiking and biking trails through locales as diverse as misty river canyons and arid grassland plateaus. The Gorge also contains dozens of lakes, parks, campgrounds, and other recreational areas.

SEPA specifically requires analysis of impacts to designated sensitive areas. WAC 197-11-330(3)(e)(i).<sup>3</sup> In addition to the National Scenic Area being a sensitive area that must be addressed in the EIS, the Columbia River Gorge has a remarkable concentration of local, state, and federally designated parks, recreation areas, wild and scenic rivers, and historic trails. The following state and federally designated areas are located within or near the Scenic Area:

- The Lewis and Clark National Historic Trail
- The Oregon Pioneer National Historic Trail
- The Historic Columbia River Highway (designated as a National Historic District on the National Register of Historic Places, as well as a National Historic Landmark)
- The Ice Age Floods National Geological Trail
- The White Salmon and Klickitat Wild and Scenic Rivers in Washington
- The Deschutes, Hood, and Sandy Rivers in Oregon
- Numerous “in lieu” and treaty fishing access sites
- Numerous state and local parks
- Hundreds of miles of hiking trails on federal, state, local, and private lands
- Three National Wildlife Refuges (Steigerwald, Franz Lake, and Pierce).

The proposed MBTL coal export terminal would accept an average of eight unit coal trains per day. DEIS at 5.0-3. The facility would generate an additional 2,920 fully loaded coal trains through the Columbia River Gorge per year. The major increase in rail traffic would pass through multiple sensitive locations in the Gorge, including the following:

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<sup>3</sup> *Swift v. Island County*, 87 Wn. 2d 348, 552 P.2d 175 (1976) established the importance of addressing impacts to sensitive areas near a project proposal and the importance of taking expert agency comments into consideration during SEPA review. In *Swift* the court ruled that a county’s determination of non-significance violated SEPA because its findings conflicted with the comments of other agencies and experts regarding impacts to sensitive areas. The agencies and experts included the United States Department of the Interior, Fish and Wildlife Service; State Parks and Recreation Commission; State Department of Game; State Department of Ecology; the Central Whidbey Island Historic Preservation Advisory Committee, and an authority on birds. *Id.* at 355.

- Nine designated urban areas where populations are concentrated in proximity to the BNSF rail line: North Bonneville, Stevenson, Carson, Home Valley, White Salmon, Bingen, Lyle, Dallesport, and Wishram.
- If the Union Pacific line is utilized, four designated urban areas in Oregon: The Dalles, Mosier, Hood River, and Cascade Locks.
- Numerous popular recreation sites, including Columbia Hills State Park, Doug’s Beach State Park, Klickitat-Balfour Day Use Area, Spring Creek Hatchery State Park, Drano Lake Boat Launch, Home Valley Park, Wind River Boat Launch, and Beacon Rock State Park.
- Numerous sensitive riverine habitats, including the mainstem Columbia River and major tributaries such as the Klickitat River, the White Salmon River, the Little White Salmon River, and Wind River.
- Numerous sensitive wildlife sites, including three National Wildlife Refuges: Steigerwald NWF, Franz Lake NWF, and Pierce NWF.

The proposed facility would cause significant adverse impacts to these areas. First, the substantial increase in coal by rail would create a unacceptable risk of a major derailment and spill. Such an accident would be harmful to residents in the Gorge and to the scenic, natural, cultural, and recreation resources of the Gorge. Second, the substantial increase in rail traffic would cause significant adverse impacts from increased delays at railroad crossings, increased noise, and increased air pollution. The increased rail traffic would also likely contribute to the need for additional railroad construction in the Gorge.

The Columbia River Gorge National Scenic Area (CRGNSA) was established for two purposes: “to protect and provide for the enhancement of the scenic, cultural, recreational, and natural resources” of the CRGNSA and, consistent with such resource protection, “[t]o protect and support the economy of the Columbia River Gorge area by encouraging growth to occur in existing urban areas. . . .” 16 USC § 544a. This is reflected in the Management Plan for the Columbia River Gorge National Scenic Area. It allows more intensive development in designated urban areas while strictly protecting the Gorge outside of urban areas. Development outside of urban areas must be met with higher scrutiny.

The CRGNSA outside of urban areas is further divided into the General Management Area (GMA) and the Special Management Areas (SMAs). The boundaries of the SMAs were defined by Congress and include many of the most critical areas for conservation. 16 USC § 544b(b). GMA lands have significant protections for scenic, cultural, recreational, and natural resources while SMA lands are given an even higher level of protection.

To protect the scenic resources of the NSA, Key Viewing Areas (“KVAs”) have been designated. Development visible from KVAs is highly regulated in both the GMA and the SMAs and can result in permit denial or require mitigation. KVAs are a bedrock principle of the CRGNSA Act and they have resulted in significant protection for the scenic resources of the Gorge. The Management Plan also includes detailed provisions for protecting the cultural, recreational, and natural resources of the CRGNSA.

RCW 43.97.025(1) also applies to the review of this project: “all state agencies and counties are hereby directed and provided authority to carry out their respective functions and responsibilities in accordance with the [Columbia River Gorge Compact], the Columbia River Gorge National Scenic Area Act, and the provisions of” the Gorge Management Plan and state implementation of the Act. As such, Ecology and the County are **required** to take into account all impacts to the National Scenic Area and to ensure that decisions are consistent with all National Scenic Area authorities.

**2. The DEIS is flawed, but nonetheless concludes that there would be significant, unavoidable impacts.**

The DEIS has many flaws. For example, the DEIS under-inclusively examined rail impacts stemming from transporting coal from the Washington border to Longview. The coal would originate in the Powder River Basin in Montana or Wyoming or in the Uinta Basin in Utah. DEIS at 5.1-7. Transporting the coal to the Washington border was not examined. Eliminating a large part of the trip does not provide the full disclosure required by SEPA. WAC 197-11-060(4)(b). Despite this omission and the significant errors identified below, the DEIS does provide the basis to deny the application. The DEIS identifies “unavoidable and significant adverse impacts” that would occur in the Gorge even after mitigation measures are applied. DEIS at S-53–S-58. Table S-2 summarizes the unavoidable and significant adverse impacts, including the following examples of impacts to the NSA:

- Adverse impacts to treaty fishing rights;
- Increased delay at railroad crossings;
- Rail traffic would cause tracks to exceed capacity (presumably resulting in new construction of railroad sidings, double-tracks, and overpasses); and
- Increased emissions of greenhouse gasses (which would further affect, for example, air quality, habitat, and recreation).

Based on these disclosures, the County and the Department of Ecology (Ecology) have the necessary basis to reject the proposal. Once the EIS is revised to include all of the omitted impacts, the project should be denied.

**3. The EIS should be revised to provide adequate disclosure of the risk of derailments and coal spills and the consequences of all types of train incidents on Gorge communities and resources.**

The EIS estimates 2.59 extra train accidents per year between Pasco and Vancouver on the Washington side of the border due to the proposed MBTL coal export terminal. DEIS at 5.2-8. Accident occurrence in the DEIS was not adjusted based upon increased coal dust emissions caused by the proposed project. DEIS at 5.2-4. However, “BNSF has determined that coal dust poses a serious threat to the stability of the track structure and the operational integrity of” its railroad network.<sup>4</sup> Coal dust emitted from train cars gets into the rock ballast that supports the railroad ties, making the track unstable and more susceptible to damage.

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<sup>4</sup> Available at <http://www.bnsf.com/customers/what-can-i-ship/coal/coal-dust.html>.



*Photo of coal dust fouling the air at Columbia Hills State Park in the Columbia River Gorge National Scenic Area. Photo taken on May 22, 2015. Provided by Friends of the Columbia Gorge.*

In fact, BNSF has attributed derailments to ballast contaminated with coal dust.<sup>5</sup> While the DEIS acknowledges that coal dust causes additional safety issues, it does not take this into account and simply calculates the additional number of accidents based upon the extra trains that would run on the tracks. DEIS at 5.7-15, DEIS at 5.2-4. The extra derailments due to damage to railroad ballast caused by fugitive coal dust emissions must be considered in the calculation of rail accidents caused by the proposed project. Additionally, as heavier trains result in more damage to tracks, the weight of coal trains must be considered in the rail accident calculations.

Some examples of recent incidents illustrate the risks of derailment. Each of these incidents involved a coal train, was caused by damage to rail infrastructure done by coal trains, occurred in the Gorge NSA, or threatened federally protected resources of the Columbia River Gorge NSA:

- In July 2012 a coal train transporting Powder River Basin coal derailed near Pasco, Washington, dumping an undetermined amount of coal.<sup>6</sup>

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<sup>5</sup> See Decision, March 3, 2011, Arkansas Electric Cooperative Association—Petition for Declaratory Order, Surface Transportation Board, Docket No. FD 35305, at 7.

<sup>6</sup> The Seattle Times, *Coal train derailed in Columbia River Gorge*, (July 2, 2012) (Attached). Available at [http://seattletimes.com/html/localnews/2018585778\\_apwacoaltrainderailment.html](http://seattletimes.com/html/localnews/2018585778_apwacoaltrainderailment.html) (last visited Jan. 14,

- In July 2012 a coal train derailed in Chicago because a bridge was not designed to carry the weight of coal cars.<sup>7</sup>
- On April 24, 2005, an Amtrak train traveling on the Washington side of the Columbia River derailed within the National Scenic Area.<sup>8</sup>
- In January 2003, a train containing hazardous waste derailed near The Dalles on the Oregon side of the Columbia River. That derailment occurred in a culturally significant area within the Columbia Gorge National Scenic Area, and threatened tribal cultural resources.<sup>9</sup>



*Large amounts of accumulated coal debris on the ground adjacent to the BNSF right-of-way at Columbia Hill State Park in the Columbia River Gorge National Scenic Area. Photo by Michael Lang, May 17, 2016, 16 months after the Pasco re-spray facility became operational.*

Additionally, the DEIS does not consider the adverse effects on Gorge resources of the contents of the cars that would be spilled. As discussed in Sections 5 and 6 below, coal dust and debris are dangerous substances. The effects of cargo spill on the Gorge environment needs to be fully

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2013).Tri City Herald, *Coal Train Derailment* (July 3, 2012) (downloaded Jan. 14, 2013). Available at <http://www.tri-cityherald.com/2012/07/03/2009115/coal-train-derailment.html#wgt=rcntmulti#storylink=cpy> (last checked Jan. 14, 2013).

<sup>7</sup> Chicago Tribune, *2 bodies inside car found in wreckage from train derailment*, (July 5, 2012) (Attached). Available at [http://articles.chicagotribune.com/2012-07-05/news/ct-met-train-derailment-overpass-20120705\\_1\\_train-derailment-coal-cars-bridge-collapse](http://articles.chicagotribune.com/2012-07-05/news/ct-met-train-derailment-overpass-20120705_1_train-derailment-coal-cars-bridge-collapse). (last visited Jan. 14, 2013).

<sup>8</sup> The Seattle Times, *26 Hurt When Amtrak Train Derails Along Columbia Gorge Route*, (April 4, 2005) (Attached). Available at [http://seattletimes.nwsourc.com/html/localnews/2002230033\\_derail04.html](http://seattletimes.nwsourc.com/html/localnews/2002230033_derail04.html) (last visited January 14, 2013).

<sup>9</sup> U.S. E.P.A., *Making Environmental Progress, Improving Local Communities Accomplishments of the EPA Region 10 Superfund Program* (Jan. 2004) (Excerpt attached).

taken into account. The final EIS should disclose the actual worst-case risks and provide adequate disclosure of the consequences on the people and the protected resources of the Gorge.



*Bakken crude oil train exploding after derailling in Mosier Oregon in the Columbia River Gorge on June 3, 2016. Photo by KGW Television.*

The DEIS also does not consider the adverse environmental effects of increased train accidents spilling other commodities besides coal. BNSF acknowledges that coal dust gets into the rail ballast and damages the track infrastructure and that this damage has eventually resulted in derailments.<sup>10</sup> BNSF and Union Pacific carry various hazardous materials over their rail networks, including Bakken crude oil. Of course, the elephant in the room is the June 3, 2016 derailment of a Union Pacific Bakken crude oil train in Mosier Oregon in the Columbia River Gorge. The weight of crude oil trains makes them more susceptible to derailment than are other trains when rail infrastructure is previously damaged.<sup>11</sup> Coal dust damages rail infrastructure. The increased coal dust emissions as a result of the proposed action would result in more incidents involving trains carrying Bakken crude oil. When Bakken crude oil trains derail they inevitably break open, leak, and explode. That is exactly what happened in Mosier. All of the

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<sup>10</sup> See <http://www.bnsf.com/customers/what-can-i-ship/coal/coal-dust.html>. See also Decision, March 3, 2011, Arkansas Electric Cooperative Association—Petition for Declaratory Order, Surface Transportation Board, Docket No. FD 35305, at 7.

<sup>11</sup> “Petroleum crude oil unit trains with heavily loaded tank cars will tend to impart higher-than-usual forces to the track infrastructure during their operation. These higher forces expose any weaknesses that may be present in the track structure, making the track more susceptible to failure.” Transportation Safety Board of Canada, RAIL SAFETY ADVISORY LETTER – 04/15, available at <http://www.tsb.gc.ca/eng/medias-media/sur-safe/letter/rail/2015/r15h0021/r15h0021-617-04-15.asp>

potential significant adverse effects that would occur from an oil train crashing in the Gorge due to fouled railroad ballast from coal dust emissions due to the MBTL coal terminal must be taken into account in the EIS.



*Explosive fire in Mosier caused by a Bakken crude oil train derailment. The large white building is the Mosier K-12 school that was filled with children at the time of the crash. The building would have been “incinerated” if the normally prevailing winds were blowing on that day according to Mosier Fire Chief Ron Appleton. Photo by Paloma Ayala.*

The increased chances of a Bakken crude oil spill and explosion due to the fouling of the railroad ballast by fugitive coal dust emissions must be disclosed, analyzed, and mitigated in the EIS. The effects on human lives as well as the effects on the scenic, cultural, recreational, and natural<sup>12</sup> resources of the Gorge NSA must be included.

The DEIS also ignores any possibility of train incidents occurring in the Gorge in Oregon due to the increased train traffic that the proposed action would bring. Union Pacific, which operates the tracks on the South side of the Columbia River, has an even worse safety record than BNSF. Impacts in Oregon cannot be lawfully ignored. WAC 197-11-060(4)(b). The increased incidence of accidents in Oregon that would result from building the coal terminal in Longview must also be disclosed and mitigated in the EIS.

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<sup>12</sup> This should include an analysis of the effects of spills of oil and any other hazardous materials carried by rail through the Gorge on the Columbia River.

#### **4. The EIS must be revised to fully disclose impacts of coal dust on air quality in the Gorge.**

Increased coal train traffic would cause an increase in air pollution in the Gorge, this includes fugitive emissions of coal dust and diesel emissions from trains. The DEIS does not appear to consider the impacts of the locomotive-related diesel emission that would be generated as a result of the proposed project. This major omission must be rectified in the final EIS. The DEIS does acknowledge air quality impacts from fugitive emissions of coal dust, but ultimately fails to provide adequate disclosure of the actual impacts. DEIS at 5.7-1. The EIS must be revised to disclose indirect and cumulative impacts of the proposal on Gorge air quality. All impacts on air quality in the Gorge must be disclosed, analyzed and mitigated in the final EIS. This analysis must be informed by the substantial amount of existing information about Gorge air quality.

The Columbia River Gorge National Scenic Area is already severely impaired by air pollution, especially nitrogen oxides (NOx) and particulate pollution. The Gorge now stands among the most polluted places in the country, including Pittsburgh and Los Angeles. A 2005 joint study by the U.S. Forest Service and National Park Service studied twelve federally managed areas around the West and found that the Columbia River Gorge National Scenic Area and Sequoia National Park had by far the worst “annual standard visual range[s]” of the twelve areas.<sup>13</sup> Similarly, a 2000 Forest Service study of air quality monitoring data from 39 federally managed “visibility protected” areas in the West found that the Scenic Area has “the highest levels of haze” and “the sixth worst visibility pollution of these areas.”<sup>14</sup> Gorge air quality has been monitored for the last twenty years. The Forest Service has documented that visibility impairment occurs on at least 95% of the days that have been monitored.<sup>15</sup>

Deposition of pollutants also has profound negative impacts on ecosystems. Studies demonstrate that in the Western United States, some aquatic and terrestrial plant and microbial communities are significantly altered by nitrogen deposition.<sup>16</sup> Metals, sulfur, and nitrogen concentrations in lichen tissue found in the Gorge are comparable to that found in lichen tissue sampled in urban areas. Nitrogen deposition rates in the Gorge are comparable to the most polluted areas in the United States.

Particulate matter pollution also threatens human health and welfare. In fact, when reviewing the National Ambient Air Quality Standards for PM<sub>2.5</sub>, the EPA found that there is no level of particulate matter pollution at which there are no human health effects. According to the EPA, fine particulate matter pollution causes a variety of adverse health effects, including premature

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<sup>13</sup> Mark Fenn, USDA Forest Service et al., *Why federal land managers in the Northwest are concerned about nitrogen emissions*, at 10 (Dec. 2004).

<sup>14</sup> Arthur Carroll, USDA Forest Service, Letter to Columbia River Gorge Commission, at 3 & attach. 3 (Feb. 7, 2000).

<sup>15</sup> Robert Bachman, USDA Forest Service, *A summary of recent information from several sources indicating significant increases in nitrogen in the form of ammonia and ammonium nitrate in the Eastern Columbia River Gorge and the Columbia Basin*, at 2 (June 24, 2005).

<sup>16</sup> See Mark E. Fenn, et al, *Ecological Effects of Nitrogen Deposition in the Western United States*, *BioScience* Vol. 53:4, Apr. 2003, available at <http://www.bioone.org/doi/abs/>

death, heart attacks, strokes, birth defects, and asthma attacks.<sup>17</sup> Even low levels of PM can cause low birth weights, damage lung function, and increase risks of heart attack and premature death. Studies reviewed by EPA revealed a linear or almost linear relationship between diseases like cancer and the amount of fine particulate matter in the ambient air.<sup>18</sup> Consequently, particulate matter contamination has adverse health effects at any concentration.

The Management Plan for the National Scenic Area requires that “air quality shall be protected and enhanced, consistent with the purposes of the Scenic Area Act.” NSA Management Plan at I-3-32–33. Pursuant to this requirement, the Gorge Commission approved the *Columbia River Gorge Air Study and Strategy* (Sept. 2011). It summarizes the existing science on air quality impacts, adopts thresholds for significant impacts to visibility, and adopts an overall goal of “continued improvement” in visibility in the National Scenic Area.<sup>19</sup> In addition, guidance documents prepared by Federal Land Managers provide methodologies and thresholds for evaluating air pollution impacts to sensitive federal lands in both Class I and Class II areas.<sup>20</sup> The Forest Service has been monitoring lichen and air quality monitoring throughout the National Scenic Area.<sup>21</sup> The EIS should be revised to incorporate this information on existing air quality and the potential impacts from additional contributors to nitrogen deposition. These resources provide a scientific and policy foundation for Ecology to evaluate air pollution impacts to the Columbia River Gorge.

Since thresholds for significant adverse impacts have already been exceeded for particulate matter and nitrogen deposition, any significant additional source of pollutants will likely contribute to cumulative significant adverse impacts to Gorge resources.

Open-top coal trains lose huge volumes of coal dust and debris during transportation. Even after the re-spray facility opened in Pasco, the picture below demonstrates the occurrence of a massive coal dust emission from a typical coal train in the Gorge. According to Burlington Northern Santa Fe (“BNSF”) studies, between 500 lbs. and 2000 lbs. of coal can be lost in the form of dust from each rail car.<sup>22</sup> In other studies, as much as three percent of the coal in each car (around 3600 pounds per car) can be lost in the form of dust. A study of a West Virginia rail line found that one pound of coal per car per mile is lost from coal trains.<sup>23</sup> At this rate, one coal train with 120 cars traveling 85 miles through the Columbia River Gorge National Scenic Area could lose

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<sup>17</sup> 71 Fed. Reg. 2620, 2627–36 (Jan. 17, 2006).

<sup>18</sup> *Id.*

<sup>19</sup> The *Columbia River Gorge Air Study and Strategy* and appendices are available at <http://www.deq.state.or.us/aq/gorgeair/>.

<sup>20</sup> The Federal Land Managers have adopted the following guidance documents that can be used to evaluate air pollution impacts to the Columbia River Gorge: *Federal Land Managers' Air Quality Related Values Work Group (FLAG) Phase 1 Report—Revised* (2010) and *Federal Land Managers' Interagency Guidance for Nitrogen and Sulfur Deposition Analyses* (2011). These reports are available at <http://www.nature.nps.gov/air/permits/flag/>.

<sup>21</sup> The Forest Service maintains a database of all lichen/air quality monitoring sites at <http://gis.nacse.org/lichenair/index.php?page=query&type=community>.

<sup>22</sup> See Hearing, July 29, 2010, Arkansas Electric Cooperative Association—Petition for Declaratory Order, Surface Transportation Board, Docket No. FD 35305, at 42: 5-13.

<sup>23</sup> Simpson Weather Associates 1993. Norfolk southern rail emission study: consulting report prepared for Norfolk Southern Corporation. Charlottesville, VA.

just over 10,000 pounds of coal in the Gorge. One coal train per day for 365 days is 3,650,000 lbs. per year deposited on Gorge lands and in Gorge waterways.



*Photo of an open-top coal train emitting large quantities of coal dust at Columbia Hills State Park in the Columbia River Gorge National Scenic Area. Photo taken on May 22, 2015 five months after the Pasco re-spray facility became operational. Provided by Friends of the Columbia Gorge.*

Section 5.7 of the DEIS analyzes the effects of fugitive coal dust emissions from the proposed new coal trains. Much of the analysis in Section 5.7 is lifted directly from another DEIS prepared for the Tongue River Railroad Company. That DEIS never went through a complete review because the proponents abandoned the project before the EIS process was finished. The Tongue River DEIS was incomplete and inaccurate on coal dust issues and those problems have infected the MBTL DEIS. Copying large parts of a DEIS that was never completed, but that had received a significant amount of critical comments, was a mistake. We have enclosed one set of comments on the Tongue River DEIS as an example of expert comments that refute its draft findings. Section 5.7 needs to be reworked from scratch by the responsible officials to eliminate the bias and inaccuracies found in the Tongue River DEIS.

Section 5.7 appears to rely too much on industry assertions that topper agents, like those applied at the Pasco re-spray facility, are 85% effective in controlling coal dust emissions from open-top coal train cars. However, the analysis does not take into account the safe harbor to the 85% rule that allows unlimited emissions as long as certain practices are followed. Evidence from the field

indicates that shippers routinely take advantage of the safe harbor. Please see the attached *Coal Dust Pollution in the Columbia River Gorge National Scenic Area* for photographic evidence of the ineffectiveness of topper agents and load shaping in controlling coal dust emissions.

Section 5.7 also relies on a coal dust study that is inadequate for estimating the fugitive coal dust emissions that would come from new coal trains in the Gorge. The fact that the original study design was abandoned part way through calls the results into question. *Particulate Matter Measurements in Support of Assessing Coal Dust From Coal Hauling Trains* [henceforth Study] at 5-1. It is not clear from the study whether the errant data points were discarded or included as part of the study. Either the conclusions reached by the study were based partially upon data points that the party doing the study acknowledged were collected sub-optimally or the questionable data was discarded resulting in a study that had far fewer data points than designed. Either way, the study is simply inadequate.

Furthermore, during data collection for the study only one sample was taken when the wind was blowing at greater than 5 MPH. Study at 5-7. All other samples were taken when winds were below 5 MPH. *Id.* In the one sample that was taken when winds were greater than 5 MPH (the wind speed was 2.5 m/s or 5.6 MPH) the downwind concentration of coal-related PM 2.5 at 15 m was 26.09  $\mu\text{g}/\text{m}^3$  after netting out the upwind sample as an approximation of background conditions. *Id.* Samples taken when wind speeds were below 5 MPH typically showed much lower concentrations of coal-related PM 2.5. Study at A-2. Unfortunately, the study simply does not shed light on what the PM 2.5 concentrations would be in the Gorge when, as is typical, a strong wind is blowing. It does, however, raise a red flag that higher wind speeds result in higher coal-related concentrations of PM 2.5 being emitted from trains. The study, based entirely on low wind speed conditions of 5.6 MPH and below, simply does not provide a basis to conclude that the NAAQS levels will not be exceeded due to the additional eight coal trains that would traverse the Gorge per day if this proposal went forward.

The study itself acknowledges that it failed to adequately measure coal-related emissions in crosswind conditions.<sup>24</sup> Study at 5-1. Trains make sweeping turns in many locations in the Gorge – turns that expose the sides of the train cars to very high winds. More testing, at realistic Gorge wind speeds and aspects, needs to take place for the EIS to provide full disclosure of the potential effects of the proposal on air quality in the Gorge.

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<sup>24</sup> “The chosen location was picked for several reasons as described in Section 2, including that it appeared to offer the best possibility of cross-track winds, which review of available local meteorological data showed to consist of westerly winds (flowing west to east) for this time of the season. The samplers and deposition plates were laid out in a grid based on this assumption, with the majority of the measurements located on the east side of the tracks. However, winds with an easterly component were much more common during the study than anticipated based on available data, with only four of the 25 trains monitored occurring during winds with the expected westerly component. This impacted the goals in identifying gradients in deposition rates, and limited the usefulness of the DustTrak and MiniVol PM10 and PM2.5 data.” Study at 5-1.

There are also other problems with Section 5.7 and the Study as identified by Dr. Dan Jaffe, Professor of Atmospheric Chemistry at the University of Washington Bothell and an expert on particulate matter emissions from trains.<sup>25</sup> These include:

- The railroad knew when the tests would be conducted so it could go above and beyond normal practice to skew the results of the study;
- The DEIS is based on the conclusion that the surfactant is always applied, is always applied correctly, and actually works when the test data show that coal dust is still emitted at a higher rate than would be supported by these assumptions;
- The DEIS assumes that any level of PM 2.5 below the NAAQS is acceptable when studies show that it is dangerous at levels below the NAAQS; and
- The modeling in the DEIS undercounts the amount of PM 2.5 from fugitive coal dust emissions by four-fold even if it were relying solely on the conclusions of the flawed study.

Consequently, Dr. Jaffe calls for the modeling to be redone assuming that the fugitive coal dust emissions will be 4 times higher than previously modeled to be consistent with the study. He also calls for an assumption in the modeling that the surfactant is misapplied or not applied 5% of the time to conform the model to observed conditions. We adopt these two recommendations and ask for updated modeling to be done.

The conclusions in Section 5.7 of the DEIS are also hard to square with the conclusions in Section 6.3.3.7. In the latter section, the air quality impacts of the project show an alarming 52.1% increase in 24-hour PM 2.5 and a 52.5% increase in annual PM 2.5 in the Gorge – bringing both levels dangerously close to their NAAQS thresholds. *Id.* Section 5.7 must be updated to reflect the cumulative effects of the proposed project or reworked so that it does not contain conclusions based erroneously on viewing one aspect of the project in isolation. If the modeling relied on an adequate study of the fugitive coal dust emissions of coal trains in realistic wind conditions in the Gorge, it is highly likely the modeling would show exceedance of NAAQS thresholds due to the cumulative effects of the extra proposed trains. This must be disclosed in the EIS.

The DEIS also fails to adequately consider the amount of coal dust spilled between the coal mine and the proposed terminal, the amount of coal dust spilled between the state border and the second surfactant spraying operation in Pasco and onward along the Columbia River to the proposed terminal. The DEIS assumes that the re-spray facility in Pasco, which became operational in early 2015, has deeply reduced coal dust emissions from rail transport, but this assumption is not backed by anecdote or by the coal dust study.

As discussed above, coal trains spill large amounts of dust. As seen in the photographs above, some of that coal dust is deposited adjacent to the tracks. Coal dust that has settled next to the tracks is disturbed by passing trains – whether unit coal trains or trains carrying other commodities. The effect on air quality in the Gorge due to the disturbance of coal dust is not

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<sup>25</sup> See <http://www.atmos.washington.edu/jaffegroup/modules/APOLLO/Comments%20on%20Longview%20DEIS.pdf>

even addressed in Section 5.7 of the DEIS. This is a fatal omission that must be corrected in the EIS.

Another issue missed by the DEIS is the effect of unloaded coal train on air quality. Unloaded coal trains may emit even more coal dust than loaded coal trains. For example, the Coal Train Pollution Signature Study that was conducted in Australia in 2013 concluded that there was “an average [ambient air particulate matter] increase of 18.8µg/m<sup>3</sup> for full trains and 33.9µg/m<sup>3</sup> for empty trains.” This is not addressed in any way in the DEIS. The EIS must include an analysis of the air quality impacts of empty coal train cars and proper mitigation measures (e.g. cleaning empty train cars before they exit the project area) should be required.

The attached sworn declarations of Polly Wood, David Berger, Peter Cornelison, Michael Lang, Matthew Ryan, and Jeremy Bechtel document coal found along the BNSF railroad tracks in the Columbia River Gorge NSA and of at least two fugitive emission incidents that affected declarants. According to Dr. Jaffe, “some peer-reviewed published scientific papers have documented significant health effects from short-term exposure to PM<sub>2.5</sub>.” Jaffe Comments at 1. These dusting incidents are sure to grow more common if there is an increase in open-top rail cars carrying coal through the Gorge as proposed by MBTL. This is a significant hazard to public health and should be mitigated in the EIS.

In fact, the DEIS itself shows that the average and maximum monthly deposition of coal dust within 100 feet of the tracks would be double the nuisance level set by the DEIS. DEIS at 6-69. The DEIS estimates that the average deposition would exceed the nuisance level at 200 feet from the tracks and that the level would be equal to the threshold at a full 250 feet in the instance of maximum monthly deposition. *Id.* This is troubling given that the flawed study likely underestimated average and maximum deposition of coal dust. Further study and modeling is necessary to adequately disclose the effects of fugitive coal dust emissions on the air quality in the Gorge. Proper mitigation measures – e.g. covering full coal cars and cleaning empty coal cars – should also be adopted as part of the EIS.

##### **5. The DEIS fails to adequately disclose the amount of coal deposited in the aquatic environment through rail transport.**

Coal spills from BNSF coal trains are currently polluting waters of the United States. Currently, three to four coal trains per day travel through Washington on the BNSF tracks. Each coal car spills an average of one pound of coal per mile.<sup>26</sup> Each coal train carries about 120 cars. Each train travels more than 1000 miles from the Powder River Basin to the proposed terminal in Longview. Therefore, each coal train spills about 120,000 pounds of coal between the source and the proposed terminal.

The project’s direct impacts from the transportation of coal would result in discharge of coal onto lands and waters all along the rail route by every coal train servicing the terminal. The proposed terminal would transport eight loaded trains per day along the rail route. Eight loaded

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<sup>26</sup> Simpson Weather Associates 1993. Norfolk southern rail emission study: consulting report prepared for Norfolk Southern Corporation. Charlottesville, VA.

coal trains would spill about 960,000 pounds of coal per day between the PRB and the proposed terminal.

There are approximately 300 miles of rail between Pasco and Longview. Most of this route is adjacent to the Columbia River. It is reasonable to estimate that 36,000 pounds of coal would spill between Pasco and Longview from each coal train. With eight trains per day, 288,000 pounds of coal would be spilled between Pasco and Longview per day.

The distance between the Washington state line and Pasco, the site of the second coal train spraying station, is approximately 160 miles. Each coal train would be expected to spill an average of 19,200 pounds of coal between the Washington border with Idaho and Pasco. The DEIS fails to consider the impacts of the amount of coal dust spilled between the coal mine and the proposed terminal, the amount of coal dust spilled throughout Washington State, the amount of coal dust spilled between the state border and the second surfactant spraying operation in Pasco and onward along the Columbia River to the proposed terminal.

Coal dust and debris discharged from every coal train is deposited in waterways adjacent to or near the BNSF tracks. The list of Washington rivers that would be impacted by coal spills from the project include, but are not limited to, the following: Alder Creek, Ashes Lake, Catherine Creek, Chamberlain Lake, Columbia River, Cowlitz River, Drano Lake, Duncan Creek, Franz Lake, Gibbons Creek, Horsethief Lake, Kalama River, Klickitat River, Lawton Creek, Lewis River, Little White Salmon River, Little Spearfish Lake, Major Creek, Nelson Creek, Rock Creek, Rowland Lake, Snake River, Spokane River, Wind River, White Salmon River, and Woodard Creek.

The Clean Water Act (CWA) prohibits discharge of pollutants from point sources into the waters of the United States. The CWA also prohibits discharges of pollutants from point sources onto land adjacent and in proximity to waterways where those pollutants are added to waters by forces such as, for example, gravity, wave wash, fluctuations of water levels, vibration, wind, and precipitation.

The CWA specifies a number of materials and wastes that, if discharged into water, renders them pollutants, including, but not limited to, solid waste, chemical waste, industrial waste, biological materials, sand and rock. CWA § 502(6), 33 U.S.C. § 1362(6). Under the CWA, the term "point source" means "any discernible, confined and discrete conveyance, including but not limited to any . . . container [or] rolling stock . . . from which pollutants are or may be discharged." CWA § 502(14), 33 U.S.C. § 1362(14). Rail cars are considered rolling stock and, therefore are a point source under the CWA.

To advance its goals, Congress established in the CWA that all discharges of pollutants are prohibited "except in compliance" with specified provisions of the CWA including, most importantly, the National Pollutant Discharge Elimination System (NPDES) permitting program. CWA § 301(a), 33 U.S.C. § 1311(a); CWA § 402(a), 33 U.S.C. § 1342(a); 40 CFR §§122.1 *et seq.*

The NPDES program requires a potential discharger of pollutants to first obtain a NPDES permit that limits the type and quantity of pollutants to be released so as to maintain water quality

standards, among other objectives. CWA § 402(a), 33 U.S.C. §1342(a); 40 CFR §122.1. No NPDES permit may be issued where discharges pursuant to it would cause receiving waterbodies to fail to meet water quality standards. *Id.* and 40 CFR §122.4 (prohibitions on permit issuance). Unless done pursuant to a NPDES permit, any coal pollutant discharge from a rail car or train into waters of the U.S. is prohibited under the CWA. BNSF has never obtained an NPDES permit allowing their discharges of coal pollutants into State of Washington waterbodies from rail cars and trains. BNSF has violated, is violating, and will continue to violate the CWA through unpermitted discharges of pollutants from its point sources onto land adjacent and in proximity to waterways where those pollutants are added to waters by forces such as, for example, gravity, wave wash, fluctuation of water levels, vibration, wind, and precipitation.

If this project is approved and built, BNSF would increase the number of CWA violations. The EIS must consider whether the proposed project is compatible with the CWA. WAC 197-11-330(3)(e)(iii). However, the DEIS fails to identify, analyze, and propose mitigation measures for the project's direct or indirect impacts caused by coal spilled from every coal car that would transport coal to the proposed terminal. Further, the DEIS fails to identify the need for an NPDES permit for the transportation of coal to the terminal and the fact that it is likely impossible for an NPDES permit to be issued for the transportation component of the project. These elements must be added to the EIS to fully disclose the slate of impacts that the proposed action would have.

## **6. Increased coal train traffic will cause adverse impacts to local transportation in the Gorge.**

The major increase in rail traffic created by the proposed facility would cause significant adverse impacts to local transportation by increasing delays at railroad crossings. The DEIS confirms this conclusion. At full buildout, total accumulated wait times at rail crossings in Skamania County would range from one hour and fifty-two minutes per day at Skamania Landing to four hours and twenty-six minutes per day at Russell Avenue. DEIS at 5.3-38, 5.3-39. In Stevenson, traffic, including first responders, would encounter gate-down conditions over 18% of the time. Each wait there, assuming train traffic is going exactly the speed limit, would be up to 8.5 minutes with an average of 4.25 minutes. DEIS at 5.3-21, 5.3-39. The increase in vehicle delays would constitute a substantial and unavoidable impact to traffic – including to first responders.

While the EIS does identify impacts to first responders in Cowlitz County, it does not analyze the proximity of fire stations to the railroad through the Gorge nor does it analyze the potential areas impacted by waiting first responders. The analysis also does not address the cumulative impacts of all currently active coal and oil transport proposals. The analysis in the EIS should also discuss the businesses and recreation sites that could be affected by the increased delays at crossings. Importantly, the BNSF railroad lies between Washington State Route 14 and numerous recreation sites and local port districts. As such, any increase in delays at at-grade crossings would directly impact the response time for first-responders serving these areas. These impacts must be adequately documented in the EIS.

Notably, one possible mitigation measure that could reduce delays at at-grade crossings would be to construct grade-separation structures (overpasses or underpasses). The need and cost of such

mitigation can only be disclosed if sufficiently detailed analysis of impacts is disclosed in the EIS. Absent adequate disclosures, the burden of installing grade separation would be transferred to local communities and other businesses instead of the applicant. The full effects of increased wait times at crossings constitutes a significant adverse impact that must be disclosed and mitigated in the EIS.

**7. The EIS must be revised to adequately disclose impacts to cultural and historic resources in the Columbia River Gorge.**

The Columbia River Gorge has been inhabited since time immemorial by Native Americans. Carbon dating has documented human settlements dating back over 10,000 years. This continuous human presence has left countless cultural resource sites throughout the Gorge. Native American governments' treaties with the United States retained rights protecting cultural resources and hunting, fishing, and gathering sites. The EIS must disclose whether all required intergovernmental consultation with affected tribes has been completed in order to ensure that Native American cultural resources are protected.

In addition to its tribal cultural resources, the Columbia Gorge contains numerous other significant cultural and historic resources and sites. The Gorge is the final portion of Lewis and Clark's journey across the West. This seminal event in the history of the United States and the cultural landscape of the Gorge has been recognized via the designation of the Lewis and Clark National Historic Trail.

The Lewis and Clark National Historic Trail was created to "stimulate Federal, State, and local agencies and individuals to identify, mark, and preserve for public inspiration and enjoyment the routes traveled by the Lewis and Clark Expedition." Lewis and Clark Trail Management Plan at 1. The Management Plan for the trail recognizes that many of the historic and cultural resources have been altered or lost and the Expedition left scant traces of their passing. However, "[i]n a very real sense, many of the historic resources are the landmarks, vistas, flora, and fauna that make up the Trail's natural resources. It is virtually impossible to find either historic or natural resources along the Expedition route, which have not been altered in some way by man or nature." Lewis and Clark Trail Management Plan at 4 & 13. Thus, the scenery and natural resources of the Expedition's route are critical to appreciating the trail. Locations where those vistas and natural resources are intact are exceedingly rare, and warrant the greatest attention during SEPA review.

The Columbia River segment of the Lewis and Clark Trail was designated for three types of trail development: a water trail, a land trail, and a motor route. The Columbia River, Interstate 84, and Washington State Route 14 are all designated routes. The Management Plan notes that there is a "nearly continuous string of recreation sites along this segment." Lewis and Clark Trail Management Plan at 70. The National Park Service identified the following sites in the Gorge as providing interpretive opportunities:

- Maryhill State Park
- Celilo Park
- Horsethief Lake State Park
- Spearfish Lake Recreation Area

- The Dalles Dam
- Seufert Visitor Center
- Mayer State Park
- Bingen Boat Basin
- Viento State Park
- Starvation Creek State Park
- Lyndsey State Park
- Cascade Locks Marine Park
- Pacific Crest National Scenic Trail and Trailhead
- Bonneville Dam
- Beacon Rock State Park
- Rooster Rock State Park
- Lewis and Clark State Park

Lewis and Clark Trail Management Plan at 72–75. Many of these locations are historic sites where the Lewis and Clark Expedition camped on their way through the Gorge.

The designated Lewis and Clark Trail routes—State Route 14, the Columbia River, and Interstate 84—all travel parallel and adjacent to the likely transportation route for the proposed coal export facility. A significant increase in rail traffic and new rail sidings has the potential to cause significant adverse impacts to these resources.

The EIS should be revised to provide adequate disclosure of impacts to these cultural and historic resources. Notably, Native American cultural resource sites are already suffering from adverse impacts from air pollution. Increase nitrogen emissions and impacts from a coal spill could permanently destroy irreplaceable Native American sites. These impacts must be addressed in the final EIS.

**7. The EIS must address degradation of the protected resources in the Columbia River Gorge from increased rail traffic and the improvements necessary to accommodate it.**

The EIS acknowledges that there would be a significant increase in rail traffic if the proposal is approved and concludes that there would be significant impacts on rail transportation if rail improvements are not made. DEIS at S-41. However, the DEIS does not take into account the permanent degradation of the recreation resources of the NSA that would occur. The additional train traffic would wake campers and detract from the recreational experiences at the recreation areas in the NSA. In fact, The Oregonian reported that “When camping in the Gorge, it pays to be a little deaf” and singled out excessive train noise as a cause.<sup>27</sup> Cumulative adverse impacts of increased train traffic to the recreation resources of the NSA must be considered and impacts caused by past actions must be included.

The DEIS also does not analyze the significant environmental impacts that would occur if rail improvements were made to facilitate the increased traffic. According to the DEIS, there would be a 64.7% increase in rail traffic over the Fallbridge Subdivision of the BNSF line through the

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<sup>27</sup> Available at [http://blog.oregonlive.com/terryrichard/2008/05/when\\_camping\\_columbia\\_gorge\\_it.html](http://blog.oregonlive.com/terryrichard/2008/05/when_camping_columbia_gorge_it.html).

Columbia River Gorge National Scenic Area at full operation which would put the tracks at 16 trains over capacity per day.<sup>28</sup> DEIS at 5.1-11, 5.1-13. The DEIS acknowledges that selecting “[t]he Proposed Action would add 8 trains [per day] to a segment that would exceed capacity under 2028 baseline conditions.” DEIS at 5.1-17. The DEIS then concludes that “[i]t is expected that BNSF and UP would make the necessary investments or operating changes to accommodate the growth in rail traffic, but it is unknown when these actions would be taken or permitted.”<sup>29</sup> DEIS at 5.1-17. This significant foreseeable indirect adverse effect must be disclosed, analyzed, and mitigated in the EIS.

SEPA requires analysis of potential conflicts with other environmental laws to determine whether “[a] proposal may to a significant degree . . . [c]onflict with local, state, or federal laws or requirements for the protection of the environment.” WAC 197-11-330(3)(e)(iii). The Columbia River Gorge National Scenic Area Act establishes land use development standards for all land within the National Scenic Area, excluding certain designated Urban Areas. Independent of the Scenic Area Act’s mandates, SEPA requires that the EIS must include analysis of the likely increase in rail traffic and any accompanying expansions of railroad facilities within the National Scenic Area. Since the project would require extra rail capacity through the Gorge, the EIS must identify where new construction would be likely to occur in the National Scenic Area and the impacts that would occur to resources protected by the Gorge Act, the Gorge Management Plan, and local implementing ordinances. Deferring this analysis to later study does not satisfy SEPA requirements.

Furthermore, railroads benefit from sweeping preemption of local laws and they will likely assert that the preemption applies to local laws that implement the Gorge Act. In fact, Union Pacific already has asserted that the laws that protect the NSA are preempted.<sup>30</sup> While we believe the

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<sup>28</sup> There is an inconsistency between Table 5.1-3 and Table 5.1-5 on the resulting number of trains over capacity this subdivision would be if the proposal moves forward.

<sup>29</sup> The DEIS attempts to have it both ways. If rail infrastructure would not be built, the extra congestion of the rails caused by the proposed action would have significant adverse impacts on rail transportation, rail safety, traffic, air quality, etc. If the extra infrastructure necessitated by the proposed action were built, it would have significant adverse effects on the scenic, cultural, recreational, and natural resources of the Gorge NSA. A conservative document would take both sets of impacts into account while an adequate document would take the most likely scenario – that the extra infrastructure would be built – into account. The DEIS does neither and is thus insufficient.

<sup>30</sup> Union Pacific recently wrote the following in a cover letter to Wasco County Oregon regarding permits it is seeking to build new track within the Columbia River Gorge NSA: “Ordinarily, an interstate railroad is not required to obtain state or local construction permits to build any facility that is integrally related to the railroad’s transportation operations. Under the ICC Termination Act of 1995 (ICCTA), the federal Surface Transportation Board (STB) is vested with exclusive jurisdiction over interstate rail transportation (49 U.S.C. § 10501[b]). The ICCTA categorically preempts – regardless of context or rationale for the action – any form of state or local permitting that (1) could be used to deny the railroad the ability to conduct some part of its operations or (2) purports to regulate matters already regulated by the STB such as the construction of rail lines (Village of Big Lake v. BNSF Ry. Co., 382 S.W.3d 125, 129 [Mo. App. 2012]). . . . Nevertheless, as a policy matter, UPRR routinely applies for state and local construction permits and does not invoke ICCTA preemption unless the permitting becomes unduly prolonged or conditions are imposed that are incompatible with UPRR’s operating needs. Accordingly, the enclosed application is provided for your review.” Available at <http://co.wasco.or.us/planning>

federal nature of the Gorge Act negates the preemption that Union Pacific asserts, this issue would require litigation and it could conceivably fall in the favor of the railroads. In that instance, this SEPA review is the only place to address railroad construction impacts to the Gorge NSA. As such, the EIS must address these impacts to the protected resources of the NSA and identify where the construction will be inconsistent with the Gorge Act, the Gorge Management Plan, and local ordinances.

In addition, the DEIS does not include the impacts on the Gorge resources due to more Union Pacific trains running on the South side of the Columbia River. These trains will also have significant scenic and air quality impacts on the Gorge on both the Washington and Oregon sides of the state line. For example, in windy conditions like those often experienced in the Gorge, PM 2.5 can travel long distances and coal dust emitted on the Oregon side of the Columbia River due to the proposed project could cumulatively raise PM 2.5 levels in Washington over the NAAQS thresholds. Adverse effects of the project should not be ignored simply because they originate out of state. The increased rail traffic would also require the construction of new rail capacity on the Oregon side of the Columbia River, degrading the aesthetic resources of the Gorge in Washington. These adverse effects must be disclosed in the EIS.

Either rail capacity would be increased due to the proposed project – resulting in significant adverse impacts to the protected resources of the Gorge – or rail capacity would not be increased and rail transportation would be negatively affected – resulting in a significant adverse impact to rail traffic in the Gorge. The conclusion that it is uncertain that the increase in rail will cause significant adverse effects on the environment is simply not supported by the DEIS. The EIS must disclose, analyze, and mitigate these significant adverse effects.

The DEIS also excluded the impacts of the new construction of railroad infrastructure in the Gorge by restricting the environmental resource area study areas in Chapters 3 and 4. The entire point of an EIS is to disclose all of the direct and indirect impacts of a proposed project. Excluding the foreseeable indirect impacts on the protected resources of the Gorge is impermissible and baffling. WAC 197-11-060(4)(b). Some of the environmental resource areas that have under-inclusive study areas and/or exclude the foreseeable railroad construction activities that would take place in the Gorge and would negatively impact the scenic, cultural, recreational, and natural resources protected by the Gorge Act, the Gorge management Plan, and local ordinances include:

- Section 3.1 Land and Shoreline Use
  - Land and Shoreline Use, including Zoning and Consistency with Comprehensive Plans
  - Parks and Recreation Facilities
  - Agricultural Land
- Section 3.2 Social and Community Resources
  - Social and Community Cohesion and Public Services
  - Local Economy

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/landuse\_actions/UPRR\_PLASAR-15-01-0004/00\_Cover-Letter.pdf. The explicit threat in the cover letter – approve our project quickly with minimal conditions of approval or we will invoke federal preemption – does not provide much confidence that the railroad will comply with scenic area permitting requirements if they become inconvenient.

- Minority and Low-Income Populations
- Section 3.3 Aesthetics, Light, and Glare
- Section 3.4 Cultural Resources
- Section 3.5 Tribal Resources
- Section 4.2 Surface Water and Floodplains
- Section 4.3 Wetlands
- Section 4.5 Water Quality
- Section 4.6 Vegetation
- Section 4.7 Fish
- Section 4.8 Wildlife

The EIS must disclose and analyze the adverse effects of the rail construction on these resources areas in the Gorge. Where there will be significant adverse effects, the EIS should propose mitigation measures to comply with the Gorge Act, the Gorge Management Plan, and with local ordinances implementing the Plan.

**8. The cumulative impacts analysis does not adequately take into account the effects of past actions.**

The cumulative impacts analysis is inadequate. While acknowledging that “impacts from past, present, and reasonably foreseeable future actions” must be considered, the DEIS instead discounts the effects of the proposed action and the significance of the cumulative effects of past and proposed actions. The cumulative impacts section functionally sets an environmental baseline as the environment exists today and concludes that the camel’s back is already broken – so what’s one more straw? This is not the intent of a cumulative impacts assessment. Instead, if there are already significant unavoidable cumulative adverse impacts no more should be added to the mix. The EIS should be reworked to reflect this reality and then the project should be denied.

**9. Conclusion**

The EIS must disclose the direct, indirect, and cumulative impacts of the proposal. The DEIS, despite its flaws, documents that the MBTL coal export terminal would cause unavoidable significant adverse impacts to the Columbia River Gorge and that there are no feasible mitigation measures that would reduce those impacts to acceptable levels. Based on this information, Ecology and the County have sufficient information to reject the proposal. To clarify the basis for denying the application, the EIS should be revised to provide adequate disclosure of the full extent of impacts to the Columbia River Gorge.

Sincerely,



Steven D. McCoy  
Staff Attorney

Enclosures: Coal Dust Pollution in the Columbia River Gorge National Scenic Area, Friends of the Columbia Gorge  
Columbia River Gorge National Scenic Area Act  
Management Plan for the Columbia River Gorge NSA  
Comments on Tongue River RR DEIS, Dr. Ranajit Sahu  
Coal Train Pollution Signature Study, Nick Higginbotham, et. al.  
Comments on Longview DEIS- Chapter 5.7: Coal Dust, Dr. Daniel Jaffe  
Declaration of Matthew Ryan in Support of Plaintiffs' Opposition to Defendant's Motion to Dismiss  
Declaration of Jeremy Bechtel in Support of Plaintiffs' Opposition to Defendant's Motion to Dismiss  
Exhibit 1 to Declaration of Jeremy Bechtel in Support of Plaintiffs' Opposition to Defendant's Motion to Dismiss  
Declaration of Polly Wood in Support of Plaintiffs' Opposition to Defendant's Motion to Dismiss  
Declaration of David Berger in Support of Plaintiffs' Opposition to Defendant's Motion to Dismiss  
Declaration of Peter Cornelison in Support of Plaintiffs' Opposition to Defendant's Motion to Dismiss  
Declaration of Michael Lang in Support of Plaintiffs' Opposition to Defendant's Motion to Dismiss

cc: Lynn Burditt, Area Manager, USDA Forest Service, CRGNSA Office  
Krystyna U. Wolniakowski, Executive Director, Columbia River Gorge Commission  
Dan Wiley, Chief, National Park Service, Lewis and Clark National Historic Trail  
Matthew R. Kernutt, AAG, Counsel for the Environment, Office of the Attorney General

## **Coal Dust Pollution in the Columbia River Gorge National Scenic Area**

Prepared by Michael Lang, Conservation Director, Friends of the Columbia Gorge

June 9, 2016

Burlington Northern Santa Fe Railway (BNSF) transports coal by rail through the Columbia River Gorge National Scenic Area in open-topped coal cars. Three to four trains, each more than one mile-long, travel from the Powder River Basin (PRB) in Wyoming and Montana through the Columbia River Gorge every day. Coal discharged from nearly every coal train from the PRB pollutes lands and waters in the Columbia River Gorge. In some places, like Columbia Hills State Park in Klickitat County, coal accumulations is several inches deep on the shoreline of the Columbia River. If the Millennium Bulk Terminal proposed in Longview, Washington is built, an additional eight loaded coal trains with open coal cars would travel through the Gorge, further polluting the National Scenic Area, the Columbia River and its tributaries with toxic coal. The photos below focus on Columbia Hills State park, just one of many sites in the Columbia River Gorge that is continuously polluted with dust and debris from passing BNSF coal trains. These photos demonstrate that the transport of coal in open rails cars has polluted and will continue to pollute the Columbia River Gorge despite the application of surfactant at the PRB mines and the installation of a surfactant re-spray facility in Pasco, Washington.



**July, 2012** - Coal dust flies off a BNSF coal train into the Columbia River at Columbia Hills State Park.

Photo: Julie Coop



**Early 2013** – A thick layer of coal debris covered the soil in an area east of the boat launch at Columbia Hills State Park. Photo: Friends of the Columbia Gorge



**March 25, 2013** - Coal debris deposited from passing coal trains on the BNSF rail line is several inches thick along Columbia River at Columbia Hills State Park. Photo: Friends of the Columbia Gorge



**March 25, 2013** - Coal debris adjacent to BNSF's railroad track along the banks of the Columbia River at Columbia Hills State Park. The U.S. Surface Transportation Board declared that coal is a "pernicious ballast foulant" that destabilizes railroad tracks and leads to more accidents.

<http://www.troutmansandersenergyreport.com/wp-content/uploads/2011/03/Coal-Dust.pdf>

Photo: Friends of the Columbia Gorge



**August 21, 2013** - Coal several inches deep from passing coal trains on the banks of the Columbia River has replaced the soil at Columbia Hills State Park. Nothing grows here but a few invasive weeds. Coal blows directly into the Columbia River in violation of the Clean Water Act. Friends of the Columbia Gorge and its allies are currently suing BNSF for unpermitted discharge of coal into the Columbia River and other water bodies in Washington State. Photo: Friends of the Columbia Gorge

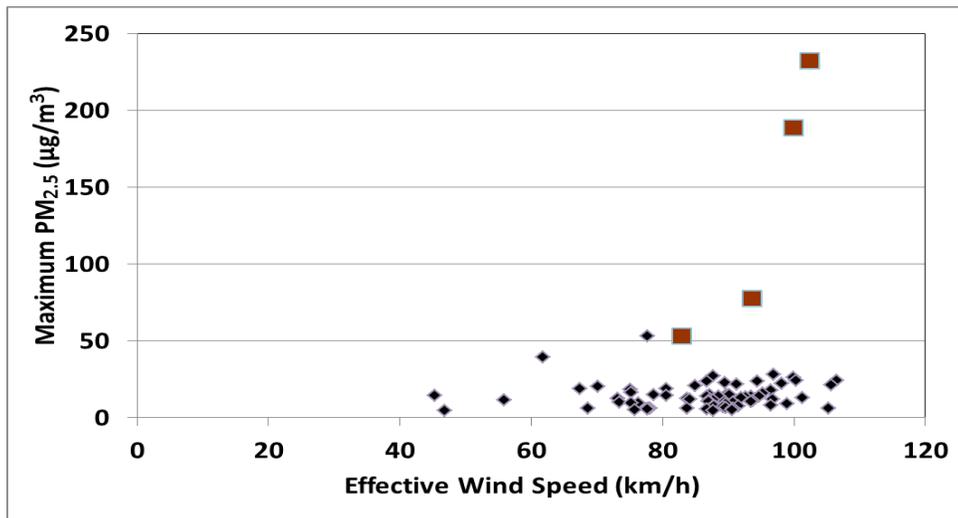
**November 2015** – Dr. Dan Jaffe published a report titled “Diesel particulate matter and coal dust from trains in the Columbia River Gorge, Washington State, USA” in the Atmospheric Pollution Journal. This report monitored coal dust in the Columbia River Gorge on the BNSF rail line during the summer of 2014. The report found that nearly every coal train emits coal dust; coal trains emit double the PM 2.5 concentrations compared to other freight trains; 5.4% of coal trains emit thick clouds of coal dust; and 10.3% emit visible clouds of coal dust when the effective wind speed (the sum of the wind speed and the speed of the train) exceeds 90 kph (56 mph).

[http://www.atmos.washington.edu/jaffegroup/modules/APOLLO/Jaffe\\_DPM\\_coal\\_dust\\_trains\\_ColumbiaRivGorge\\_2015.pdf](http://www.atmos.washington.edu/jaffegroup/modules/APOLLO/Jaffe_DPM_coal_dust_trains_ColumbiaRivGorge_2015.pdf)



Summer 2014 - Thick plume of coal dust blows off a BNSF coal train in the Columbia River Gorge.

[http://www.atmos.washington.edu/jaffegroup/modules/APOLLO/Jaffe\\_Video\\_Coal\\_train\\_Aug7\\_2014.mp4](http://www.atmos.washington.edu/jaffegroup/modules/APOLLO/Jaffe_Video_Coal_train_Aug7_2014.mp4)



One in ten coal trains emits visible plumes of coal dust at effective speeds of 90 kph (56 mph) or more.



**January, 2015** - BNSF began operating a re-spray facility in Pasco due to the failure of the surfactant sprayed on coal cars at the mines in the Powder River Basin to control coal dust and debris. The Tri-City Herald Newspaper also reports that BNSF treats coke trains at the facility.

<https://www.youtube.com/watch?v=EYpYOfMFBAI>



**May 22, 2015** – Hikers at Columbia Hills State Park on the trail to the iconic petroglyph “Tsagaglala” (She Who Watches) witnessed and photographed this passing train with black clouds of coal or coke blowing on to the state park and the Columbia River. According to the Tri-City Herald, BNSF sprays both coal and coke trains in Pasco. <http://www.tri-cityherald.com/news/local/article80608512.html>



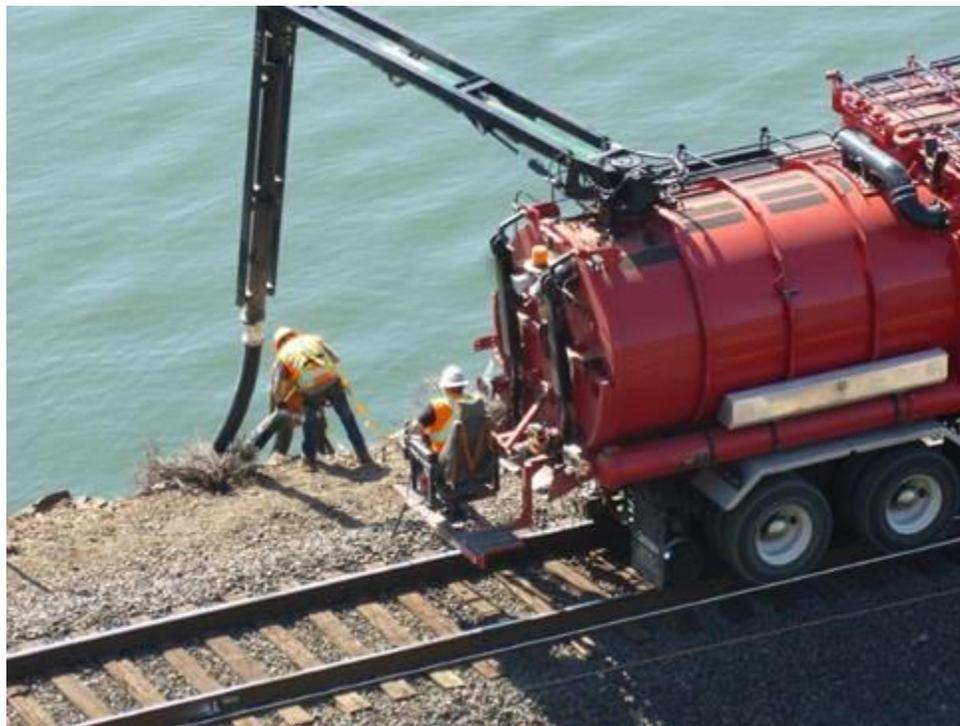
**May 22, 2015** – These photos of a BNSF train with what appears to be coal blowing off of coal hoppers into the Columbia River at Columbia Hills State Park several months *after* the Pasco re-spray facility became operational. Photo: Laura Foster



**April 2016** – Coal dust vacuum truck at Columbia Hills State Park.



**April 25, 2016** - BNSF vacuum truck removing coal debris from the banks of the Columbia River at Columbia Hills State Park. Photo: Mary Ann Teague



**April 25, 2016** - BNSF contractors use a vacuum truck to attempt to remove coal debris along the BNSF track and the shoreline of the Columbia River near Horsethief Butte at Columbia Hills State Park in the Columbia River Gorge. Photo: Mary Ann Teague



**April, 2016** –Photo: Friends of the Columbia Gorge



**April, 2016** - The two photos above show the area directly east of the boat launch site at Columbia Hills State Park that had been recently vacuumed of coal dust and debris that routinely blows off of passing coal trains. There is still some coal dust visible in the photo. Photo: Friends of the Columbia Gorge



**May 17, 2016** - BNSF vacuum truck prepares to transfer coal that was removed from the shoreline of the Columbia River to a truck for transport to the Roosevelt Regional Landfill. This site is located adjacent to the boat launch at Columbia Hills State Park. Photo: Friends of the Columbia Gorge



**May 17, 2016** – Area adjacent to the boat launch, Columbia Hills State Park. Photo: Friends of the Columbia Gorge



**May 17, 2016** – The three photos above show coal dust and debris accumulation in an area previously vacuumed by BNSF at Columbia Hills State Park, adjacent to the public boat launch. Coal continues to be discharged from BNSF coal trains despite the re-spray facility in Pasco, Washington that has been in operation since January 2015. Photo: Friends of the Columbia Gorge