

## MEMORANDUM

From: Earthjustice, ForestEthics, Riverkeeper, Sierra Club

To: OMB, DOT, and CEQ

Date: Friday, March 13, 2015

**RE: The Regulatory Impact Analysis performed by DOT underestimates frequency and severity of oil train disasters and their impacts on critical waterways, human health, and iconic places**

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The recent spate of train derailments and disasters highlight very real and severely underestimated risks associated with oil train traffic in North America. In its Regulatory Impacts Analysis of the 8/1/2014 draft rules for High Hazard Flammable Trains (including tank car design and operational controls), DOT estimated 15 mainline derailments would occur in the early years of the rule which would each involve spilling a substantial amount of oil. These 15 accidents would be expected to occur before the rules are fully implemented (including the lengthy phase-in of whichever new tank car design is chosen) and would be similar to the magnitude of the spill in Lynchburg, Virginia. The Lynchburg derailment spilled 30,000 gallons of oil into the James River, led to the evacuation of 350 residents, and may have long-term impacts on drinking water.

DOT also projected 10 more rail accidents would occur in the next 20 years of the rule, each as catastrophic as or worse than (if they were to occur in population centers) the accident in Lac Mégantic, Quebec in 2013. In Lac Mégantic, a small town on the shores of the Chaudiere River and Lake Mégantic, the runaway derailment of a 72 car train of Bakken crude killed 47 people and devastated the town center. In DOT's analysis, they estimated that expected cleanup and damage of anticipated catastrophic accidents similar to Lac Mégantic would be \$1.15 billion, with more severe disasters in populated areas monetized at \$5.75 billion and accompanied by contaminated drinking water supplies and devastated natural wonders.

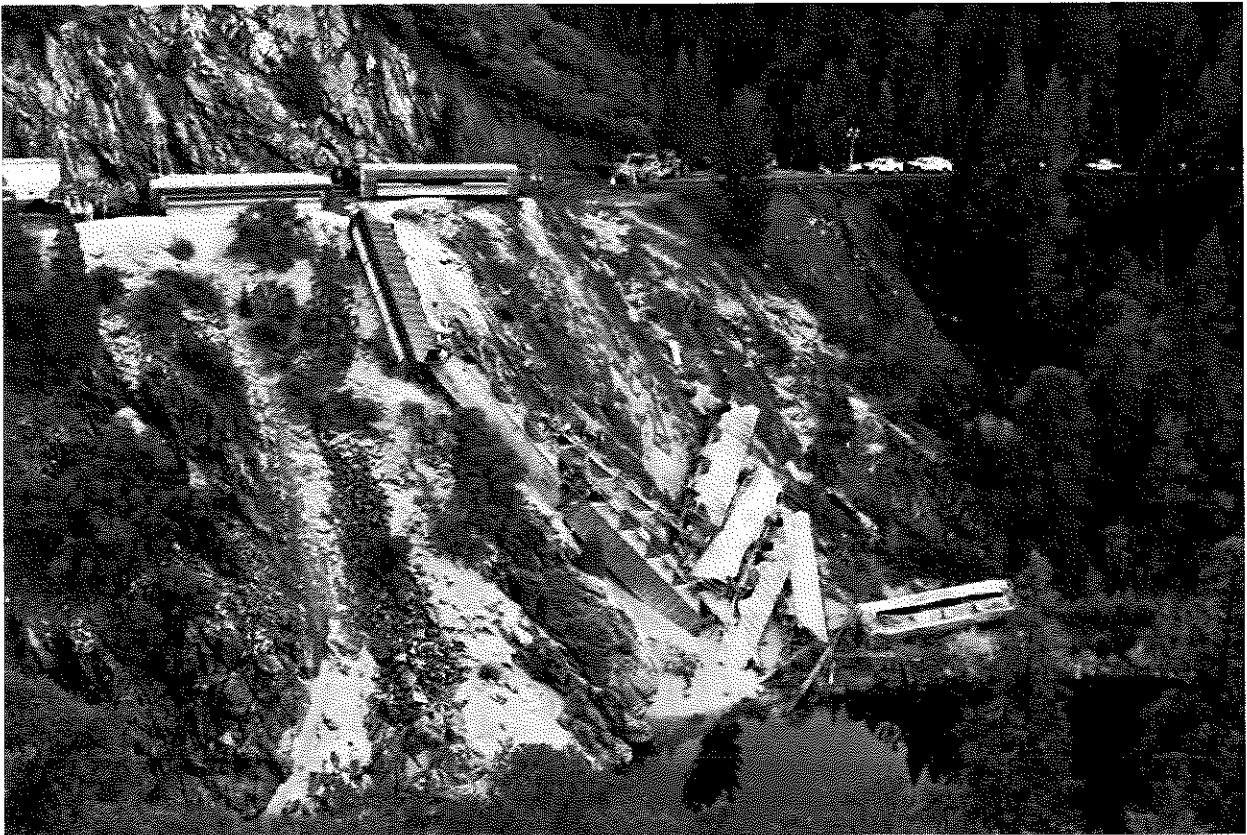
The trends and track record of the oil train industry over the past 3 years demonstrate that DOT has underestimated both the incidence of crude-by-rail disasters and the hardships they would bring. In predicting how many disasters will occur, DOT focused on unit trains carrying crude oil in defective tank cars, downplayed the most representative years since 2012, and assumed the CPC-1232 tank cars would dramatically reduce the accident rate.

Early 2015 has proven DOT's assumptions about accident rate and severity to be wrong. Two derailments of oil trains in Ontario in the last 5 weeks showed that heavy crude (diluted bitumen) and syncrude in CPC-1232s may well be as explosive and problematic as the higher profile Bakken crude. Recent derailments in Mount Carbon, West Virginia and Galena, IL once again demonstrated the remarkable explosive power of Bakken crude, and also highlighted the severe threat to first responders and waterways posed by oil train disasters in remote locations. Lynchburg, used as a baseline estimate for the many accidents anticipated in the RIA, is clearly a low end approximation of the kind of damage we can expect from regular derailments. It is unfortunate the last few weeks have shown that large spills, fireballs, and catastrophic failure of the CPC-1232 tank cars may represent the new norm.

The case studies described below show how disastrous crude by rail accidents in accident-prone and sensitive areas could be. Potential revisions to the DOT final regulations should acknowledge not only the dramatically higher rate of accidents than the current projections anticipate, but also the much higher severity of accidents including CPC-1232s than DOT acknowledges. Incorporating this new information should inform decisions with respect to tank car design, liability mandates, community notification, emergency response, improved braking, and operational restrictions including speed limits and train routing.

**Case Studies: A small sample of potentially catastrophic sites**

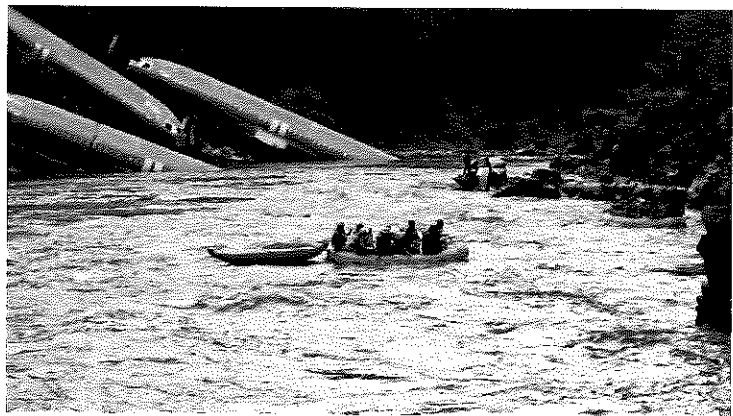
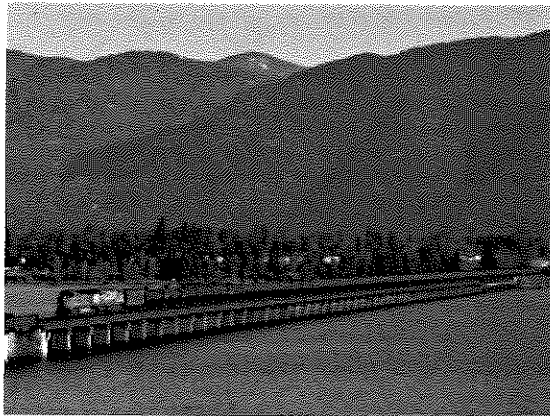
*Feather River Canyon, California*



**Image:** Corn train derailment just upstream from Lake Oroville, 11/2014

**Facts:** Feather River feeds directly into Lake Oroville, which is 60+% of the California State Water Project's source for drinking water to 23 million Californians. 70% of CSWP water goes to drinking water, and the remaining 30% to agriculture. One oil train derailment in Feather River Canyon could devastate California's economy and access to clean water.

*Lake Pend Oreille, Idaho*



**Images:** Oil train on trestle across Lake Pend Oreille and Boeing fuselages dumped into the Clark Fork a few river miles upstream from Lake Pend Oreille

**Facts:** Sandpoint, ID is dependent on the health and welfare of Lake Pend Oreille for drinking water and tourism. Sandpoint is one of the “funnels” where high proportions of the total oil train traffic converge, with each train crossing a two mile trestle across the lake. Allowing the growth of this dangerous industry, or its existence at all, imperils the very survival of Sandpoint. Existential risks like this for a small town are not accounted for in the Cost Benefit Analysis.

Bakken trains through Sandpoint are forecast to grow from 3 daily in 2014 to as many as 20 per day by 2020, while coal trains on the same tracks are projected to grow from 28 daily in 2017 to 63 in 2022.

University of Illinois studies show the number one cause of derailments is broken tracks, while the number one cause of broken tracks is heavy trains. Bringing through a vastly increased number of giant, heavy trains dramatically compounds the concerns, with coal and oil among the longest and heaviest trains on the tracks.

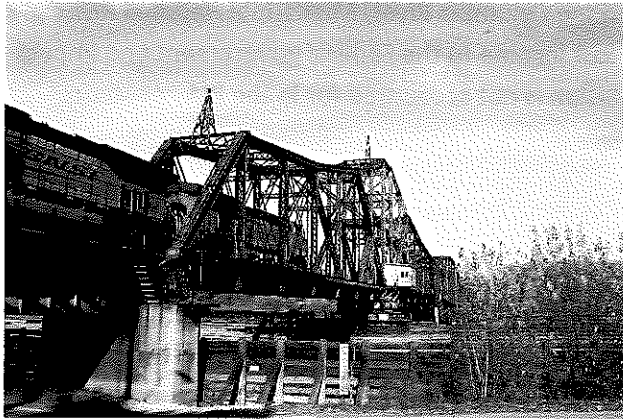
*Puget Sound, WA*



**Image:** Orca spy hopping in Puget Sound

**Fact:** In 2015, approximately three full oil trains on average make a daily transit of Puget Sound's eastern shore, en route from the Columbia River rail routes to refineries in northwest Washington, threatening water quality and marine environments, and iconic species like orcas. The endangered Southern Resident killer whale is the lifeblood of Puget Sound's tourist economy, while in turn the orcas are utterly dependent on the salmon runs of the Columbia and Skagit rivers. Orca watching alone contributes 65 to 70 million dollars annually to Washington's 430 million dollar wildlife watching industry. A single ill-timed spill during salmon spawning season could wipe out the Southern Resident orcas. Endangered species impacts like those to orcas or to endangered salmon runs are not accounted for in the Cost Benefit Analysis. Of further concern, non-treaty commercial and recreational fishing combined to over 16,000 jobs and \$540 million in 2006—with large portions of that put at risk from potential oil train disasters.

*La Crosse, WI*



**Images:** La Crosse swing bridge and Galena, Illinois derailment

**Facts:** La Crosse is seeing a deluge of oil trains headed to the east and south from the Bakken and Alberta regions, with aging infrastructure and a single swing bridge funneling oil trains through downtown. A 20,000 gallon spill over 12 miles was deemed “too difficult to clean up” just upstream from La Crosse (a similar event occurred in Washington State in November 2014, when thousands of gallons of crude oil went missing from a car in transit). Constant spills, seepage, and increasing levels of oil pollution are a daily threat to communities facing oil trains, in addition to high levels of diesel particulates and fugitive vapors from pressure relief valves. Chronic impacts to public health and accumulation of smaller, non-accident-related oil spills are not accounted for in the Cost Benefit Analysis.

*National Parks at Risk*



**Image:** Oil trains in Glacier National Park

**Facts:** Many of America's most important national parks are put at risk by oil train traffic, posing real danger to iconic tourist destinations and critical parts of our national heritage such as Glacier National Park, Fort Vancouver National Historic Site on the Columbia River, Mississippi National River and Scenic Area, and Harpers Ferry. The potential for lost income to the Federal government and impact on local economies, human health, and regional reputation is not accounted for in the RIA.