



January 11, 2013

Via Online Comment Form with the Surface Transportation Board
[at <http://www.stb.dot.gov/Ect1/ecorrespondence.nsf/incoming?OpenForm>]

Ken Blodgett
Surface Transportation Board
395 E Street, SW
Washington, D.C. 20423-001

Re: Comments on Tongue River Railroad *Draft Scope of Study for the Environmental Impact Statement*, Environmental Filing, Docket No. FD 30186

Dear Mr. Blodgett:

Montanans for Safe Wildlife Passage (MSWP) submits the following comments in response to the Draft Scope of Study (DSS) for the Environmental Impact Statement (EIS), Environmental Filing, Docket No. FD 30186, as set forth in the Notice of Intent (NOI) issued by the Surface Transportation Board (STB) on October 22, 2012.

In summary, we expect that the EIS prepared for this project will provide decision makers with the information necessary to ensure that the application would be granted *only* if it clearly establishes that (1) there is a valid purpose and need for the TRRR; (2) that viable alternatives, including the no-action alternative, have been thoroughly examined and considered; and that the benefits of the action outweigh the many adverse environmental consequences that will be associated with this project. We are concerned that the application by the Tongue River Railroad Company (TRRC) to build and operate a proposed Tongue River Railroad (TRRR), and its proximity to proposed upgrades to the Tongue River Road (S-332), will:

- Sever ecological connectivity along 20 to 80 “as the crow flies” miles of the Tongue River Watershed,¹ an important tributary of the Yellowstone River, the longest, undammed river within the lower 48 states; and
- Create substantial ecological impacts to what is one of the most pristine agricultural landscapes in eastern Montana, in turn, affecting wildlife populations and the overall ecological integrity and quality of life in this unique region.

¹ Use of an “as the crow flies” estimate, of course, significantly understates the actual “riverine” miles (including meanders) affected by the proposed construction.

I. Montanans for Safe Wildlife Passage

MSWP formed in 2011 to bring individuals and conservation groups together to advocate for innovative solutions to improve and/or maintain habitat connectivity across Montana roads and provide safe passage for Montana's people, fish, and wildlife. Our members include individuals who have been working on improving wildlife passage for wildlife and aquatic species for over 15 years, including research, mapping, monitoring, policy work, and on-the-ground projects.

II. The STB Appropriately Required a New, Comprehensive Environmental Analysis

MSWP commends the STB for recognizing the need to conduct a new environmental review of the proposed TRRR line, rather than rely upon the prior EIS (issued in 1985), which is almost 28 years old. In so doing, the STB effectively recognizes the impropriety of relying upon the former analysis to approve the current application (as the TRRC attempts to do in its application). In addition to ensuring that its analysis is informed by the latest facts and science, the STB's initiation of a new proceeding also allows for improved community involvement, thereby potentially ensuring a more meaningful and thorough environmental analysis.

III. Change in Alignment

As of December 17, 2012, TRRR Inc. changed its application to prefer a different rail route that, rather than traveling the length of the Tongue River to Miles City, cuts over to Colstrip and from there uses the existing line to Forsythe, called the "Colstrip Alignment." A full discussion of how the impacts will be different than the original proposed route should be included in the scope of the EIS. Further, given this last minute change by the TRRR proponents, we request additional time to submit scoping comments to research what resources might be impacted. We have made a good-faith effort to identify as many issues as possible for inclusion in the EIS by the January 11th deadline; however, given the short time to review this new proposal, additional issues may arise as we continue our review.

IV. Comments: Draft Scope of Study

MSWP requests that the STB carefully and seriously consider the undisputed and numerous harmful effects that the proposed rail line will have on wildlife in the Tongue River Watershed, a riparian area of critical importance in Eastern Montana, as well as its effect on ecological connectivity between the eastern and western portions of the riparian corridor.² At a minimum, it is critical that the scoping study be expanded to include the following individual, cumulative and related effects of the proposed rail line construction and operation:

- Loss of terrestrial and aquatic connectivity; with specific consideration to the impact of train traffic on pronghorn, mule deer, elk, and bear migration and populations;

² WildLands CPR, *The Impact of Railroads on Wildlife* (Nov. 1, 2001) (attached).

- Increased collisions between trains and wildlife³;
- Increased pollution runoff into 303d listed streams;
- Increased air and noise pollution;
- Degradation and loss of wetlands and riparian areas, scarce resources that represent a mere 2-4% of Montana's land base (and, in this area, it would be closer to 2%).
- Degradation and loss of agricultural lands that are also important lands for wildlife;
- Impact of fencing associated with the railroad right of way on wildlife movement;
- Impact of all associated access roads on wildlife;
- Impacts to locally threatened and endangered species;
- Increased encroachment into adjacent Tongue River floodplain areas;
- Increased subsurface failure along the alluvial terraces of the Tongue River;
- Loss of prime farmland and soils of statewide importance;
- Increased release of greenhouse gasses;
- Construction and operation timing restrictions that reduce impacts on wildlife;
- Connected and cumulative impacts, including, but not limited to: climate change, and an increase in greenhouse gas emissions from the connected action of the construction of Otter Creek Coal Mine, and the cumulative impact of shipping coal to the West coast, and exporting it for reasonably foreseeable consumption in Asia; and
- Connected and cumulative impacts of the construction of the TRRR in conjunction with other prospective activities along the Tongue River, including the recent Montana Department of Transportation's Tongue River Road (S-332) Corridor Planning Study, which contemplates a major upgrade to this secondary road, projecting a 17-fold increase in the traffic along the corridor, primarily as a result of trucks transporting coal from the Otter Creek mine.⁴

We further request that, in those instances in which it identifies an adverse impact, the STB expressly condition any decision approving construction on the implementation of specific wildlife mitigation measures. Such measures include, but are not limited to, overpasses, underpasses, culverts, span bridges, aquatic tunnels, animal detection systems, seasonal warning signs, exclusionary fencing, jump-outs, snow management that includes plowed escape routes, and reduced train speed through known wildlife movement areas.

Finally, the STB should consider all feasible route alternatives, including the BLM Alternative, and any other alternatives proposed by the local community.

³ In March 2011, several Montana newspapers reported on the tragic loss of over 800 antelope by train strikes, including one incident alone that killed approximately 270 in Eastern Montana. http://missoulian.com/news/state-and-regional/trains-kill-more-than-antelope-and-deer-on-montana-tracks/article_3d955d6a-4831-11e0-84f6-001cc4c03286.html

⁴ Table 12 – Future Projected Traffic Data, in *Tongue River Road Corridor Planning Study*, at 20 (Dec. 7, 2012), available at: http://www.mdt.mt.gov/pubinvolve/tongueriver/docs/final/final_study.pdf (compare Baseline (Average), with Scenario 2 (Average)).

V. Conclusion

MSWP respectfully requests that the environmental topics detailed above be included within the scope of study for the forthcoming draft EIS in this proceeding. We also ask that you add MSWP member Monique DiGiorgio to your contact list for all notifications related to this proceeding: Monique@commongroundconservation.com. If you have any questions or would like to schedule a meeting to discuss these issues further, please do not hesitate to contact us.

Respectfully submitted,

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The Impacts of Railroads on Wildlife

Posted on November 10, 2001, <http://www.wildlandscpr.org/road-riporter/impacts-railroads-wildlife>

The impacts of railroads on wildlife and wildlife habitats are not much different from those caused by roads. Loss of habitat, mortality due to collisions, barrier effect and reduction in habitat quality are the main impacts of habitat fragmentation by railroads. This may cause reduced population viability or threaten a species' survival. On a local scale, trains affect wildlife habitats through the introduction of exotic plant species (e.g. seeds), emission of toxic contaminants like heavy metals, or management (e.g. herbicides).

Death between the tracks

Wildlife mortality due to collisions with trains can be significant. Mammals and birds seem particularly vulnerable, as shown by studies in Spain, The Netherlands and Czech Republic (Havlín 1986; SCV 1996; Van der Grift 1999; Brandjes & Smit 1999; Van der Grift & Graafland, unpublished data). Differences in mortality between species groups are well portrayed by a survey of animal carcasses at the railroad Madrid-Sevilla (Spain). Along this railroad the annual kill was estimated at 36.5 kills/km (SCV 1996). About 57% of the casualties were birds, 40% were mammals while only 3% were reptiles and amphibians.

European and North American studies indicate that many wildlife species are victims of collisions with trains. Mammalian victims range from small rodents to large ungulates and carnivores (Van Tighem 1981; Child & Stuart 1987; Havlín 1987; Belant 1995; Gibeau & Heuer 1996; Groot Bruinderink & Hazebroek 1996; Paquet & Callaghan 1996; SCV 1996; Wells 1996; Serrouya 1997; Gibeau & Herrero 1998; see also review Van der Grift 1999). Size of avian victims varies (Havlín 1987; SCV 1996; Brandjes & Smit 1999), though owls and birds of prey seem especially vulnerable (Spencer 1965; L'sekrug 1982). Snakes (SCV 1996; Wieman et al. 2000) and amphibians, mainly toads and frogs, also are victims Barandun 1991).

Railroad fatalities can have a severe impact on animal populations. Moose fatalities in the lower Susitna Valley (Alaska) revealed an astonishing annual mortality of 5.5/km (Modafferi 1991). Train-moose collisions were largely responsible for population reduction in this area. In some years the reduction was as high as 35% (Becker & Grauvogel 1991). Studies in Canada and Norway indicate similar losses (Child et al. 1991; Muzzi & Bisset 1990; Anderson et al. 1991; Jaren et al. 1991; Groot Bruinderink & Hazebroek 1996).

Small numbers of victims also may cause negative impacts on population levels and have severe implications for population survival probability if a species is endangered, has a large home range, low population density or low reproduction rate. Between 1994 and 1996 13 black bears were killed along 15 kilometer of railroad in Glacier National Park in British Columbia, Canada (Wells 1996; Munro 1997), while four more bear-kills occurred on a nearby highway. Although black bear population numbers are not well known, the railroad (and highway) is a "population sink." Similar conclusions can be drawn in the Bow Valley of Banff National Park. Between 1985 and 1995 an average of 9-11% of the black bear population was killed by trains and cars each year (Gibeau &

Heuer 1996). In 1996 one animal was hit by a train and four by cars, while the total population in the valley was estimated at no more than 20 adults (Serrouya 1997).

Why so many collisions?

High mortality rates are primarily found at the intersection of railroads with important wildlife habitats and migration routes. Animal behaviour, snow depth, temperature, railroad characteristics, and railroad use (e.g. train speed) are important factors that affect the number of train-kills (L'sekruug 1982; Child 1983; Child & Stuart 1987; Child et al. 1991; Andersen et al. 1991; Jaren et al. 1991; Modafferi 1991; Modafferi & Becker 1997). Animals are also killed because they are attracted to railroads. Ungulates and carnivores use plowed rail beds as substitute travel corridors during winter (Child 1983; Andersen et al. 1991; Paquet & Callaghen 1996; Wells 1996). For many reptiles the sun-exposed, sandy embankments form suitable habitat and corridors for seasonal migrations or the colonization of new habitats (Kornacker 1993; Hedeem & Hedeem 1999).

Railroad kills attract predators or carrion eaters (SCV 1996). On average, two grizzly bears per year are killed along the railroad that separates Glacier National Park to the north from the Bob Marshall Wilderness complex to the south (Montana, US). Main reasons for grizzly bear mortality along this railroad segment are grain spills during derailments and during normal operations (Waller & Servheen 1999). In Canada, most collisions with wolves and coyotes took place near train-killed ungulates (Wells 1996; Gibeau & Heuer 1996).

Birds are affected in a similar way (Havlⁿ 1987; Wells 1996). Other food attractants are: anthropogenic-induced alterations of the vegetation (Gibeau & Herrero 1998; Jaren et al. 1991; Wells 1996; Woods & Munro 1996; Munro 1997); food spills (Wells 1996; Gibeau & Herrero 1998); and abundance of prey in railroad verges (Wells 1996). Possible den sites (e.g. red fox and badger dens in railroad embankments) or dormitories (e.g. bats and bears in railroad tunnels) (Boscagli 1985; SCV 1996; Trehwella & Harris 1990) or suitable places for wintering or maintaining (high) body temperature (e.g. reptiles), also attract wildlife to railroads (Van de Bund 1991).

Railroads as barriers

Railroads are barriers that may decrease survival probability of wildlife populations when the animals cannot cross them. In Arizona, fenced railroads fragmented pronghorn habitat, isolated populations and prevented seasonal migration (Ockenfels et al. 1997). High-speed railroads in Europe usually have high fences, which if unmitigated, fragment habitat. In Spain red deer were observed trying to jump over a fence along a high-speed railroad. No wildlife crossings had been created when the fences were constructed, and non-wildlife passages across the railroad were not used by wild ungulates (Rodr^guez et al. 1996). Toads and salamanders are often not able to climb over railroad tracks (Igelmann 1994) and usually follow them for hundreds of meters to find an opening (Barandun 1991; Wolf 1993), making them more susceptible to predation and bad weather conditions. This can result in a reduced genetic kinship between amphibian populations on both sides of the railroad (Reh & Seitz 1990; Vos 1999). Railroads may also form linear barriers to arthropods such as carabid beetles and lycosid spiders (Mader et al. 1990).

A more indirect barrier effect occurs when animals are unwilling to cross or avoid the railroad, even if wildlife passages are present. This avoidance is often related to disturbance factors (e.g. noise, light, and pollution) caused by railroad traffic, and other human activities (e.g. construction, maintenance, and management of the right-of-ways). Flight reactions to trains have been recorded for moose, deer, bears, caribou and hedgehogs (Muzzi & Bisset 1990; Bontadina et al. 1993). While roe deer and red fox seem to cross railroads easily, observations suggest that badgers tend to see the

railway line as a border of its home range (Miri & Stambach 1991) as do hedgehogs (Huijser et al. 2000).

What to do?

Constructing new railroads within important wildlife habitats should always be avoided, while railroads within important wildlife habitats could be closed or rerouted. Various measures to reduce wildlife mortality on railroads include audible or ultrasonic wildlife warning devices (Child 1983; Boscagli 1985; Muzzi & Bisset 1990), train speed reduction (Child 1983; Becker & Grauvogel 1991), snow management that includes plowed escape routes (Child 1983; Child et al. 1991), habitat management (Child 1983; Jaren et al. 1991; Modafferi 1991; Schwartz & Bartley 1991), population management with harvest quotas for game species determined relative to the number of train-kills (Child 1983; Modafferi 1991), removal of carcasses (Gibeau & Heuer 1996), clean-up of spilled grains and other human related food sources (Gibeau & Heuer 1996), and constructing fences (Boscagli 1985; Miri & Stambach 1991; SCV 1996).

Wildlife passages such as wildlife overpasses and underpasses, and adaptations in non-wildlife passages can reduce collisions and barrier effect (Hunt et al. 1987; Yanes et al. 1995; Keller & Pfister 1997; Van der Grift & Kuijsters 1998; Van der Grift 1999). Passage effectiveness depends primarily on its proximity to suitable habitat and migration routes, passage dimensions, sufficient cover/vegetation at the entrances, human co-use and the animal species concerned (e.g., Groot Bruinderink & Hazebroek 1996; Rodr quez et al. 1997; Clevenger & Waltho 2000). Wildlife passages and collision mitigation tactics should be monitored to help gauge how effective adaptations of existing passages and development of new measures are. Measures to reduce habitat fragmentation should be an integral part of any construction plan, and monitoring should be an integral part of railroad management.

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