Submitter's Comments:

Mr. Blodgett - As we discussed on the telephone earlier today, Gary Bertellotti of my staff e-mailed comments on Monday, December 6, 2004. Those comments had not received a final edit and I would like to replace them with these final comments.
Thanks for your help. If there are any questions, please call me at 406-444-3183
Sincerely,
Chris Hunter

Attached file on following page.

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Ref: DO0503-04

Dear Mr. Blodgett:

With regards to the " ***Draft Supplemental Environmental Impact Statement – STB Finance Docket No. 30186 (Sub – No. 3) Tongue River Railroad Company, Inc. – Construction and Operation – Western Alignment*** " Montana Fish, Wildlife, & Parks (FWP) is submitting comment on the content and conclusions of this document.

Comments regarding the SEIS are broken out into four Specific topics: 1. General comments; 2. Wildlife; 3. Miles City Hatchery; and 4. Fisheries. It is FWP's intent through these comments to assure that FWP's and its constituents' concerns and interests are addressed prior to STB's final decision. If you have questions or need clarification regarding any statements of this document, fell free to contact my staff through FWP's Helena office.

Sincerely,

M. Jeff Hagener
Director

MONTANA FISH, WILDLIFE & PARKS
OFFICIAL COMMENTS TO
SEIS – PROPOSED TONGUE RIVER RAILROAD
STB FINANCE DOCKET NO. 30186 (SUB-NO.3)

GENERAL COMMENTS:

Montana has a great history and heritage with respect to ranching, hunting, fishing, and the uniqueness of wide-open spaces that are found nowhere else in the world. The Tongue River Valley, river, and surrounding countryside is a largely unspoiled natural ecosystem that will be altered forever by this proposed rail line.

The following comments are just a few examples that demonstrate the issues FWP would like to focus on. There are numerous other examples throughout the SEIS, but FWP's points can be made with these examples. The major areas of concern are the lack of supporting documentation, the use of outdated data and information, the lack of response and documentation to comments submitted in the past by FWP, and the failure to address multiple areas of concern that should be addressed in any EIS.

1) Page 2-1 lines 18 and 19; Based on the information and lack of information in the SEIS, the conclusions that SEA make that there will be "some environment impacts" is very conservative. When looking at the overall value of the Tongue River Valley, river and fisheries, and surrounding ecosystems and wildlife, any commercial venture of this magnitude will have ecological and environmental impacts.

2) Page 3-1 lines 12 – 18; SEA states the environmental impacts are addressed in the SEIS and that they are appropriate. However many environmental issues related to wildlife, fisheries, aquatic habitat, terrestrial habitat are not evaluated. The list of species of special concern is out dated along with many other forms of data and conclusions are made based on poor or old data.

3) Page 3-1 line 20 – 47; SEA relied on outdated information (20 years out of date) TRI and TRII, data that is erroneous and full of errors as documented in responses from FWP and sent to PAM in 1999 and 2003 (MCFH studies). TRI and TRII were identified as outdated and were to be updated through this process as agreed on in 1998 by STB, PAM, Montana DNRC and the represented agencies. This does not appear to be the case.

4) Page 3-2 lines 24 – 42; SEA used the Environmental Report that TRRC submitted. This report was never provided to FWP. All the participating agencies and the public have the right to provide public comment to TRRC's report. Without public review, SEA should not use this report to make any conclusions and therefore the SEIS is incomplete. The report should be included in the SEIS.

5) Page 3-6 lines 21 –31; Chapter 5 is referenced as where SEA thought TRI and TRII EIS needed updating. There is very cursory analysis that looks at a few things but nothing that 20 plus years of change has done for wildlife, fisheries, the change in the TR dam and water use and control on the TR river.

6) Page 3-6 line 35-40; Changes to the environment were determined by use of aerial photos 12 years apart and then people who never visited the site until 1998 made conclusions. A determination that there were no changes in the aerial photos and therefore, no changes to the environment is an extremely cursory analysis and the conclusions are not substantiated by other baseline data.

FISHERES and WILDLIFE:

1) What cumulative impacts do these actions have on the dynamics of this ecosystem? There is significant concern over impacts likely to be caused by activities of TRRC. There are also multiple references to documents, information, reports, and discussions with conclusions by TRRC that the SEIS take for fact. Where is the supporting documentation and the information supplied by TRRC? Without that information, how can comment be made to a document without appropriate documentation?

2) Although there is mention of impacts to fisheries and wildlife due to multiple factors (vibrations, game crossings, rip rap, wet lands, native species, ESA species etc.) there is no plan to mitigate for potential losses.. Mitigation Measure 14 page 4-69 & 70 may take authority away from agencies and does not allow experts to determine appropriate action and require appropriate cost to be assessed to TRR. Also the document does not address mitigation after SEA has certified TRRC has completed construction.

3) Recommend public access as a form of mitigation throughout this project.

4) The DSEIS discusses crossings of ephemeral streams in relationship to only surface flow and animal crossings. Some of these systems act as short-term refugia and potential spawning sites for fish, and wildlife areas of importance along the Tongue River.

5) Sloughing of grade material is described in the DSEIS as being expected to happen. This seems like poor planning. The amount of sediment added to the system, not to mention the impact of potential derailments at these points, is not acceptable. Planning to mitigate for poor engineering is irresponsible. Many of these sites are associated with the comments listed above in that culvert sizes need to be increased in order to avoid sloughing.

6) Pg. 4-20. Fishery Resources. The citation used on this page is very dated.

7) Pg. 4-91. Mitigation measure 34. This is baseline data collection, which is necessary for determining a change in the ecosystem due to railway impacts. Why are surveys listed as mitigation? Mitigation implies that a problem is corrected or compensation made for the loss caused by the problem.

8) There is no review of cumulative effect – rail road / coal bed methane / coal mining / increased development.

MILES CITY HATCHERY

1) Page 3-8 lines 36 – 41, appendix F, Appendix J page 10 –11, According to the TRI and TRII and the SEIS - MFWP "***is fully empowered to delineate the terms or conditions under which it will allow a railroad ROW across state property"*** FWP will assure its constituents that MCFH will be protected.

2) Page 3-8 lines 36 – 41, appendix F, Appendix J page 10 –11; The studies that TRRC has commissioned by Womack, did not address FWP concerns relating to MCFH. This has been expressed many times to SEA, PAM, TRRC, and STB. FWP has expressed that they will do the studies necessary to provide sound science to assure that zero impacts resulting from the construction and operations of TRR. The cost should be reimbursed to FWP from TRRC. All mitigation measures will be identified prior to granting an easement and an agreement between TRRC and FWP will be signed to assure TRRC is legally responsible (mitigation agreement) for all unforeseen impacts to MCFH infrastructure and to the ability to produce fish (biological impacts).

3) Since Wallop-Breaux federal funding has been and continues to be used at MCFH, FWP must maintain a zero impacts position, plus assurances that if there are impacts to MCFH due to unforeseen issues, TRRC will agree to mitigate up to the complete replacement of the MCFH in a new suitable location. The other option is that TRRC place an indemnity insurance policy in FWP's name in the amount of $25 million dollars to cover any and all impacts including the need to replace the facility if necessary, for a period of 20 years from the date of the initiation of construction.

4) A mitigation plan must be in place before any decision is made. MCFH provides economic value to the state year after year and the SEIS does no analysis on the impacts to the state fisheries if impacts occur at MCFH, and the cost to the state and local economies.

5) There are very detailed plans for the LARR and when LARR put forth information that a rail line would impact their operation, a change in alignment was shifted to MCFH and all mitigation requests for LARR were addressed for those sites still being crossed. SEA, STB, SEIS does not provide for MFWP to address mitigation in the SEIS for the MCFH but leaves it to later discussion and negotiation.

6) Mitigation Chapter 7. There needs to be a major overhaul of the mitigation section (Chapter 7) to provide for a detailed study for the hatchery. FWP is requesting new and very specific studies to be done under FWP control. If there is a result from that study that shows no impacts FWP will consider the application for an easement. If impacts are identified then FWP will assess its authority to deny an easement to TRRC or require mitigation up to complete replacement of the hatchery at TRRC expense.

7) Page 7-4 & 7-5 Miles City Hatchery – This section is inadequate to address the MCFH, which could be the most important and most costly mitigation measure for TRRC. SEA and this SEIS should have addressed this issue at a level commensurate with the value and importance it deserves.

8) The SEIS does not address human resources on the facility, health and human safety, and does not identify that there are residences along the proposed route that may require mitigation plans.

9) Pages 7-6 & 7-7 plus Mitigation measure 86 7-34; FWP reserves the right to only grant an easement when all FWP concerns and studies provide for adequate information to determine if an easement is appropriate.

Attachment A:
Vibration and Impact Studies

Suggested Study Plan to Evaluate Potential Biological Impacts
Of Tongue River Railroad to the Miles City Fish Hatchery

Background

Tongue River Railroad Company (TRRC) is proposing to construct and operate a 120-mile railroad (TRR) that links into the existing Burlington Northern (BN) railroad at Miles City and extends in a southerly direction along the Tongue River to Decker, Montana. The primary purpose of the link is to transport coal from three surface mines near Ashland, Montana to electric power plants in the Midwest (Davis 1997). By the year 2000, TRRC proposes to carry 23 million tons of low sulfur coal; and it plans to increase this to 43 million tons by the year 2015 (Davis 1997). This will result in at least 14 train movements per day on the rail line (7 round trip coal trains). Every train will have approximately 113 coal cars that each carries 117 tons of coal (13,200 tons per train).

The proposed railroad will pass along the east side of the Miles City Fish Hatchery (MCFH). This hatchery is owned and operated by Montana Department of Fish, Wildlife and Parks (FWP); hence the state of Montana must grant TRRC an easement to cross state lands. Before an easement will be granted, FWP needs to fully identify impacts of the project, and require full mitigation of these impacts.

TRRC developed a study to assess the potential vibration effects of the TRR on hatchery operations (Womack and Associates- WAI - 1998). This study called for geotechnical analysis of soil types, movement and analysis of vibration, soil chemistry analysis, and evaluation of the potential effects of these factors on fish production. WAI conducted a literature review and consulted with fisheries experts regarding expected impacts. WAI also predicted vibration levels on-site and compared these with "threshold values" associated with adverse effects to fish. This report was received by the state in March of 1999.

FWP does not believe this study addressed all the potential project-related impacts (Bertellotti 1998, Peterson 1999). For example, WAI's literature review contained studies that address avoidance responses of fish to vibrations, rather than the physiological effects on sensitive life stages and spawning and feeding behavior (Popper and Carlson 1998). This is because there is little, if any, existing information on vibration effects to fish in captive (closed system culture) situations where the fish are unable to avoid these conditions. In addition, studies from this review were not being predictive of impacts to MCFH because of differences in species, physical environment, and processes associated with hatchery operations. WAI's study did not address vibration effects to egg/fry survival, forage species (plankton), feeding behavior, fish physiology, cumulative effects of elevated train traffic (Popper, pers. comm. 1999); or other potential impacts resulting from herbicide use, coal dust, interruption of water supplies, derailments, or other

detrimental conditions that may occur. The lack of biological information beyond anecdotal references weakens the WAI study's applicability to the MCFH situation, and was the impetus for the inclusion of this study request.

Before FWP can consider granting TRRC an easement, considerable additional information must be provided. This information is outlined in the study design below.

Justification

This scope of work suggests more detailed studies to determine potential acute, chronic, and sub-lethal effects of TRR operations on MCFH. Vibration studies pose the greatest challenge because of: 1) a lack of data in the literature, 2) logistics and specialized equipment needed to simulate vibrations in situ similar to that experienced by the TRR diversion, and 3) the complexities involving behavioral studies of fish. By comparison, quantifying the effects of herbicides, incidental coal dust, water shortages, and catastrophic events is straightforward because they draw on a more extensive body of existing data has direct implications for fish health and survival, and involves calculations of risk assessment using established formulas.

FWP proposes that an independent third party, such as one or more graduate student projects through a local university or college or other researchers, conduct these studies. The final study plan and data analysis would take place under the supervision of a committee including, one or more fisheries professors with expertise in hatchery management and mitigation requirements, fisheries professionals with comparable hatchery background, and a statistician who could evaluate the study design and aid in the data analysis. By subjecting the study design process to outside scrutiny, FWP hopes to ensure that it will be statistically sound, and will provide much-needed information for other fisheries professionals.

Studies

We have provided general descriptions and preliminary objectives for each aspect of the proposed studies below. The independent researchers will develop the final study design and scope. These studies should cover impacts due to:

- Vibration and sound effects,
- Herbicide applications – ***agreement reached***
- Incidental exposure to coal dust – ***agreement reached***
- Derailment events and subsequent spills.

Vibration / Sound Effects.

Most fish species have well-developed sensory systems for detecting vibration signals (Parker 1976; Tavolga 1976). The octavolateralis system (ear and lateral line) uses mechanosensory hair cells as the transducing structure for signal detection (Popper and Carlson 1998). Some species possess ears that detect sound frequencies from below 50 Hz to over 2,000 Hz.

Studies that determine acoustic effects on fish have focused on behavioral responses that affect behavior and movement to help fish avoid potentially dangerous environments such as hydroelectric dams (Popper and Carlson 1998). However, there is little information on

immediate and long-term effects where fish are unable to escape from low frequency vibrations such as those from a railroad (A. Popper, pers. comm., 1999).

A comprehensive study is needed to determine vibration effects of the TRR to MCFH fish. Species of primary concern to hatchery operations include walleye, largemouth bass, smallmouth bass, and northern pike. All life stages of these species will need to be assessed (egg, larval fish, fry, fingerling, and adult). In addition, vibration effects on production of natural forage are desired because plankton is the sole food source for most hatchery fish.

Questions to be addressed in vibration studies should include:

- What is the effect of increased exposure due to TRR on MCFH fish?
- Are there species-specific differences in response (behavior, feeding, spawning, egg survival, fry survival)?
- What will be the effect to hatchery production due to increased railroad traffic?
- What are cumulative effects to spawning success of brood stock (where applicable)?
- How does vibration affect egg hatching success, feeding, growth, behavior, and health?
- How will production of plankton communities be affected?

Objective

The objective of the vibration/sound studies is to determine how increased vibration due to TRR will affect the productivity and quality of fish produced at MCFH. Emphasis will be placed on quantifying the cumulative effects to: 1) spawning behavior of brood stock, 2) survival of egg and fry, 3) feeding behavior of fry & fingerlings, and 4) survival and availability of forage (phytoplankton, zooplankton, and macro invertebrate communities).

Description.

We propose conducting laboratory experiments on-site that simulate vibration frequencies and duration of TRRC proposed operations. These tests would evaluate impacts to critical life stages (egg development, egg and fry) of target fish species as well as phytoplankton and zooplankton populations. The design of the experiments and number of replicates are directly related to the amount of changes that MCFH finds acceptable. For example, detection levels for small differences (e.g., 10%) require a larger number of replicates than that for large differences (e.g., 30%).

Replicates and controls should be included for each species and life stage. The density, water supply, feed ration, and other regular MCFH conditions would need to be mimicked as closely as possible. If there is large variation in the amount of vibration transmitted to various parts of the hatchery, expanding the study to a blocked design, where levels of vibration will define the blocks, may be necessary.

Data should be analyzed to determine the pattern of survival, production (adult fertility/fecundity), and growth data and whether there are statistically significant differences due to the vibration exposure. Experts in fish physiology and statistics should be consulted as part of the data analysis.

Derailment events

Catastrophic events of concern to FWP include train derailments within the vicinity of MCFH and anywhere upstream where the hatchery's secondary water supply from the Tongue River may be contaminated with potentially hazardous chemicals and materials. Although the risk of derailment associated with a single trip may be minuscule, over the course of a year there can be as many as 4,400 train trips that increase the likelihood. This risk also increases as the number of trains and the loads increase throughout the life span of the railroad.

Derailment may result in a spill of petrochemicals, such as diesel fuel and lubricants, which are harmful to aquatic life and pose a threat to the hatchery operations. Current estimates have been provided for defined sections of the railroad that are of interest to TRRC (Davis 1997). However, should be an assessment of this event as it may affect MCFH. This may result in recommendations for emergency spill response either on-site or at MCFH's intake on the Tongue River.

Questions that should be addressed in derailment studies include:

- What is the risk of derailment, spillage, and contamination associated with TRR operations as it affects MCFH?
- What specific petrochemicals does the railroad carry?
- Are there specific actions that can contain spills and reduce the risk to the hatchery?

Information needed for this study include:

- Estimate of derailments per train miles for TRR from MCFH and upstream,
- Bioassay results for target species and life stages for TRR petrochemicals, and
- Review of containment procedures.

<u>Objective</u>

The objective of an assessment of derailment events should be to determine the probability, extent of spill, and biological effects associated with TRR operations as it affects MCFH.

<u>Description</u>

A review of the literature would provide supporting materials for assessing the biological risk to hatchery fish. Also, the EPA's Oil and Hazardous Materials Technical Assistance Data System (OHMTADS) database would provide concentrations that are detrimental to the four-targeted species for the major petrochemicals associated with the TRR. If a particular hatchery species is not listed, a surrogate species will be used instead.

<u>Suggested Tasks</u>

Literature review on biological effects of petrochemicals & containment techniques
OHMTADS database
Risk assessment