EXHIBIT 5
DATE 2-16-09
HB 422

Testimony on House Bill 422
Federal Relations, Energy, and Telecommunications Committee

My name is Doug Day. I reside in Billings, Montana and I am here representing the Tongue River Railroad Company. The TRR is a project that will provide rail transportation to the compliance coal resources located in the vicinity of Ashland, Montana including the State of Montana coal assets in the Otter Creek Tracts totaling in excess of 630 million tons of compliance coal. The TRR is essential to the State of Montana in recognizing the economic opportunities provided by development of the Otter Creek Tracts. Without rail access, the value of these school trust lands is valueless. In addition, the existing producing coal mines in the Decker Spring Creek area and their customers will be denied the transportation efficiencies provided by a reduction of approximately 320 round trip miles

The TRR has filed 3 rail construction and operation applications with the Surface Transportation Board and its predecessor the Interstate Commerce Commission. The filings, each of which covered a distinct part of the TRR line, are generally referred to as TRR I, TRR II and TRR III. Each application included financial, operating, public need, public interest and environmental data. Under federal law the Surface Transportation Board has exclusive jurisdiction over the construction and operations of railroads in the United States, including railroads that are entirely in a single state.

Subsequent to the filing of each application with the STB or its predecessor the ICC, the agency's Section of Environmental Analysis undertook and concluded an environmental analysis in compliance with the National Environmental Policy Act, analyzing in depth the environmental impacts of the construction and operation of the rail project.

The environmental review process is extensive and ultimately results in the preparation of multi-volume Environmental Impact Statements in accord with NEPA. The environmental review addresses the impact to the following resources: land use; biological; soils & geology; hydrology & water quality; cultural & paleontology; transportation & safety; air quality; noise & vibration; socioeconomics; recreation; aesthetics; and energy.

In the case of TRR I, a draft, supplement to the draft and a final EIS were prepared over the course of approximately 5 years

In TRR II, a draft, supplement to the draft and a final EIS were prepared over the course of approximately 6 years.

In TRR III, a draft and a final EIS were prepared over the course of approximately 6 years.

Numerous State of Montana and federal agencies requested and were granted cooperating agency status to the STB's environmental review process and over the course of proceedings in excess of 20 public forums were established and available for interested parties to participate in the application review process. Montana state agencies participated in the process through the Montana Department of Natural Resources & Conservation. Thus, the interests of the State were considered during the environmental review process.

As a result of the environmental review process, the Section of Environmental Analysis recommended 92 mitigation measures, a copy of which are attached to my testimony. The mitigation conditions cover a broad spectrum of resources categorized as: land use mitigation measures; biological resource mitigation; soils & geology mitigation measures; hydrology & water quality mitigation; cultural resources mitigation; transportation & safety mitigation; air quality mitigation; noise & vibration mitigation; socioeconomic mitigation; Miles City Fish Hatchery mitigation; Fort Keogh Livestock & Range Research State mitigation; Spotted Eagle Lake mitigation; and, additional mitigation measures.

In the TRR proceedings, all of which are a matter of public record, the Surface Transportation Board and its predecessor the Interstate Commerce Commission found the construction and operation of the TRRC rail line to be consistent with the public convenience and necessity and approved its construction and operation. In the Board's decision in TRR III, the Board adopted the 92 mitigation measures recommended by its Section of Environmental Analysis as a result of the environmental review process.

The Surface Transportation Board regulatory process clearly addresses in detail the issue of rail construction and operation as well as the public need and necessity determination. As I noted, this is the Board's role and federal law makes it clear that the Board is to serve as the exclusive agency for making these public interest and environmental determinations, as it did in the Tongue River proceedings. The proposed legislation in House Bill 422 would establish a burdensome and expensive regulatory process which duplicates and conflicts with the approval and regulatory process administered by the Surface Transportation Board for seeking approval for construction and operation of a rail common carrier engaged in interstate commerce. Since the same environmental and other issues addressed by the House Bill have already been carefully studied and addressed through appropriate mitigation by the STB – with the active involvement of Montana State agencies - I urge you to vote no on House Bill 422.

Appendix B

Land Use Mitigation Measures

Mitigation Measure 1 (Direct and Indirect Land Loss) TRRC shall negotiate compensation for direct and indirect loss of agricultural land on an individual basis with each landowner whose property will be affected as a result of the construction and operation of the lines between Miles City and Decker. TRRC shall assist landowners in identifying and developing alternative agricultural uses for severed land, where appropriate. TRRC shall apply a combination of alternative land use assistance and compensation as necessary and agreed upon during right-of-way negotiations. *[Tongue River II, Land Use Condition (1), modified by minor edits]*

Mitigation Measure 2 (ROW Fencing). TRRC shall construct fencing along the entire railroad right-of-way (ROW) for these lines. Fence construction and type shall be used that allows movement of big game animals across the railroad ROW. The general fencing options to be used shall be developed by TRRC for approval by the Multi-agency/Railroad Task Force in accordance with the process set forth in Mitigation Measure 14. In the event that a land owner does not agree with the Task Force's general determinations about fencing, the Task Force shall be consulted to determine appropriate ROW fencing mitigation on a case-by-case basis. *[Tongue River I, Condition 10.1(5) and Land Use Condition (3), combined and modified to require the Task Force's involvement in the development of appropriate fencing types]*

Mitigation Measure 3 (Access Restrictions). TRRC shall install cattle passes (oval, corrugated metal structures, approximately 11 feet high and 12 feet wide at the base) along the railroad right-of-way to ensure passage of cattle under the rail line. TRRC shall work with landowners to identify appropriate locations for cattle passes and private grade crossings for equipment. TRRC shall also negotiate the placement of specific cattle passes and private and/or public crossings on state trust lands with the Montana Department of Natural Resources and Conservation. *[Tongue River II, Land Use Condition (4), modified at the request of MTDNR]*

Mitigation Measure 4 (Displacement of Capital Improvements). Where capital improvements are displaced as a result of construction or operation of these rail lines, TRRC shall relocate or replace these improvements or provide appropriate compensation based on the fair market value of the capital improvements being displaced. *[Tongue River II, Land Use Condition (2), modified to provide additional clarity regarding fair market value compensation]*

Mitigation Measure 5 (Impacts During Construction). During final engineering, TRRC shall consult with individual landowners to minimize conflict between construction activities and ranching operations. *[Tongue River II, Land Use Condition (5), modified by minor edits]*

Mitigation Measure 6 (Construction Areas). TRRC shall confine all construction activities to the railroad right-of-way and to the construction camps along the rail lines, at locations to be negotiated between individual landowners and TRRC *[Tongue River II, Land Use Condition (6), modified by minor edits]*

Mitigation Measure 7 (Construction Camps). TRRC shall require its construction contractors to assure that all construction camps are orderly. Upon completion of construction, TRRC shall return the camps to their previously existing use. *[Tongue River II, Land Use Condition (7)]*

Mitigation Measure 8 (Construction Liaison). TRRC shall appoint a representative, with direct access to management, to work with primary construction contractors, subcontractors, and affected landowners to address any problems that develop during construction. *[Tongue River II, Land Use Condition (8)]*

Mitigation Measure 9 (Wildfire Suppression and Control Plan). Prior to construction of these rail lines, TRRC shall develop a Wildfire Suppression and Control Plan for fires occurring on the right-of-way as a result of rail construction/operations or undetermined causes. TRRC shall observe the following measures in developing the plan:

(1) The plan shall be developed with the Montana Department of Natural Resources and Conservation's Eastern Land Office, as well as other appropriate governmental agencies and volunteer fire departments along the route.
(2) The plan shall be developed by TRRC after final engineering and overall operation plans are complete. This will afford planners the benefit of specific information regarding TRRC's operation, equipment, and personnel that might be of use in case a fire occurs.
(3) State-of-the-art techniques for fire prevention and suppression shall be evaluated and included in the plan, as appropriate.

[Tongue River II, Safety Condition (4), modified to clarify that the above measures are required for fire suppression]

Mitigation Measure 10 (Fire Prevention). To minimize the potential for railroad-caused fires, TRRC shall observe all general rail safety regulations promulgated by the Federal Railroad Administration regarding railroad operations. *[Tongue River II, Safety Condition (4), modified to clarify that this measure is to help prevent fire]*

Mitigation Measure 11 (Fire Suppression). Prior to construction of the rail lines, TRRC shall negotiate with local ranchers along the right-of-way the placement of fire suppression equipment so that it may be used to promptly extinguish fires during construction and operation of the lines. *[Tongue River II, Safety Condition (5), modified by minor edits]*

Mitigation Measure 12 (Fire Access Road). During construction and operation of these rail lines, TRRC shall maintain a serviceable access road within, and access points along, the right-of-way at locations determined in consultation with local fire officials, to permit entry to the railroad right-of-way of vehicles to aid in fire suppression. *[Tongue River II, Safety Condition (6), modified by minor edit]*

Mitigation Measure 13 (Mobile Communications). Prior to beginning construction of these rail lines, TRRC shall develop and install a mobile communications system between the local volunteer fire fighting units, train crews, and ranchers with property adjacent to the right-of-way to ensure adequate communication in emergency situations during construction and operation of the lines. *[Tongue River II, Safety Condition (7), modified by minor edits]*

Biological Resource Mitigation

Mitigation Measure 14 (Task Force). TRRC shall participate as a member of a Multi-agency/Railroad Task Force. The purpose of the Task Force shall be to approve the implementation and monitoring of biological (i.e., terrestrial and aquatic) mitigation measures for Tongue River I, Tongue River II, and Tongue River III, with the exception of the Miles City Fish Hatchery.

Unless otherwise indicated in the Board's mitigation conditions, TRRC is responsible for compliance with all biological mitigation conditions set forth below. As specified in the mitigation conditions themselves, TRRC shall prepare various surveys, plans and documents for review and approval by the Task Force. It will be the responsibility of the Board representative on the Task Force to convene the Task Force when an appropriate issue involving terrestrial and aquatic matters arises. The Task Force, in conducting its review of any survey, plan or document related to terrestrial and aquatic issues, shall attempt to reach agreement and approval through consensus within 15 working days of receipt by all Task Force members of each survey, plan or document. If a consensus cannot be reached by the Task Force members within 15 working days, a vote shall be taken on the 15th working day and approval shall be determined by a majority of the Task Force members present (at least one half of the members present plus one vote). If the Task Force is unable to reach a decision, either through consensus or by a majority vote, the Board representative on the Task Force shall bring a recommended resolution back to the Board within 10 working days of the vote, at which time the Board will make a final decision within 10 working days.

Task Force Members shall participate in the Task Force at their own discretion and expense and to the extent that their resources permit. Further, Task Force members may use additional resources available to them to implement mitigation. Other parties may be invited to consult on specific issues, as appropriate; however the actual membership of the Task Force will be limited to the agencies specified in this condition.

Those agencies who have agreed to participate on the Task Force include the Board, Montana Department of Fish, Wildlife and Parks, Montana Department of Natural Resources and Conservation, United States Fish and Wildlife Service, Bureau of Land Management, and United States Army Corps of Engineers. TRRC has also agreed to participate. The Board will act as the lead agency to coordinate the Task Force. Each participating agency, as well as TRRC, shall designate a representative(s) to work with the Task Force. The United States Environmental Protection Agency (EPA) shall be included on the mailing list for written reports and findings circulated by the Task Force to assure that EPA has the opportunity to raise any concerns it might have. The Task Force shall inform EPA of critical issues related to its jurisdiction if the Task Force is unable to address such issues itself.

The Task Force will remain active until TRRC certifies to SEA that the rail line construction has been completed and that all construction mitigation measures have been implemented, and for a period of two years of rail operations. *[Tongue River II, Aquatic Condition A.9.1 General, modified to provide additional clarity, duration, and responsibilities to the Task Force]*

Mitigation Measure 15 (Material Changes). If there is a material change in the facts or circumstances upon which the Board relied in imposing specific environmental mitigation conditions, and upon petition by any party who demonstrates such material change, the Board may review the continuing applicability of its final mitigation, if warranted. *[Tongue River III, new]*

Mitigation Measure 16 (Third-party Contractor). TRRC shall retain a third-party contractor to assist SEA in the monitoring and enforcement of mitigation measures on an as-needed basis until TRRC has completed project-related construction and for a period covering the first two years of railroad operations. TRRC shall be consulted to determine if the matter can be resolved without the need for any action on the part of the contractor, and, if any action by the third-party contractor is deemed warranted by SEA following such consultation, the third-party contractor shall submit for TRRC's approval a budget for the requested work. *[Tongue River III, new]*

Mitigation Measure 17 (Reporting). TRRC shall submit to SEA no less than every 4 months, beginning with the effective date of the Board's final decision in Tongue River III and continuing for the first 2 years of railroad operations, reports documenting the status of implementation of the Board's environmental mitigation conditions. *[Tongue River III, new]*

Mitigation Measure 18 (Plant Species of Concern). TRRC shall conduct a field search of the alignment during final-phase engineering of these lines to identify plant species of concern (Federal and state) and to implement appropriate mitigation measures during construction activities if such species are found. This field search shall be conducted during the appropriate time of year to identify any potential rare plant species. (The survey schedule shall be approved by the Multi-agency/Railroad Task Force in accordance with the process set forth in Mitigation Measure 14.) TRRC shall prepare and implement a formal mitigation plan approved by the Task Force for minimizing impacts on species of concern. *[Tongue River III, new]*

Mitigation Measure 19 (Reclamation). During construction of these lines, TRRC shall implement reclamation and revegetation of the right-of-way (ROW) at the earliest possible time after clearing has been completed. Revegetation shall be implemented only in those ROW areas with adequate substrate and grade. Wherever possible, construction and attendant revegetation shall be expedited. The following generally accepted practices shall be employed in the reclamation process. *[Tongue River II, Vegetation Condition A.9.3.2(1), modified to clarify where reclamation activities shall take place]*

(1) **Preconstruction Planning** – TRRC shall include the following elements in its reclamation planning:
   (a) Designation of sensitive areas.
   (b) Proposed time schedule of construction activities.
   (c) Right-of-way clearing and site preparation plans.
   (d) Preconstruction evaluation of soils to be disturbed. The soils' A horizon (the A horizon is the topmost soil layer that is commonly made up of unconsolidated organic matter, e.g., leaf litter, and is not saturated with water) shall be identified, removed, stored, and replaced prior to revegetation.
   (e) Erosion and sediment control plans.

(f) Waste disposal plan.
(g) Restoration, reclamation, and revegetation plan. *[Tongue River I, Condition 10.3(1)(a); Tongue River II, Vegetation Condition A.9.3.2.(1)(a), modified to include soils evaluation]*

(2) **Restoration/Reclamation Plan** – TRRC shall follow the following procedures in its restoration and reclamation plan:
(a) Commencement of reclamation as soon as practicable after construction ends, with the goal of rapidly reestablishing ground cover on disturbed soils that could support vegetation, with all cut and fill slopes mulched and seeded as they are completed. Twine used to hold bales of mulch together shall be of biodegradable material.
(b) Avoidance of reclamation when soil moisture is high or ground is frozen.
(c) Use of straw mats in the revegetation process to reduce erosion and to add carbon back into the soil system to promote the accumulation of soil organic matter.
(d) Ripping and disking of soils prior to revegetation to prevent compaction of soils and to increase the ability of plant roots and water to penetrate the soil.
(e) Analysis of site soil requirements and seasonal precipitation patterns to identify planting dates for optimal revegetation success.
(f) Use of rapidly establishing plant species for thorough and rapid ground surface protection.
(g) Retention of a reclamation specialist to determine specific procedures for reclamation on steep slopes or locations near waterways.
(h) Revegetation shall not be implemented uniformly along these rail lines, but rather revegetation criteria shall be based on the circumstances present in specific construction areas to assure that habitat and functionality are maintained within each ecosystem. *[Tongue River II, Vegetation Condition A.9.3.2(1)(b), modified to clarify where reclamation efforts would be successful and include additional measures]*

(3) **Revegetation Success Assurances** – To ensure revegetation success, TRRC shall implement the following measures:
(a) Development of an inventory and documentation of pre-existing conditions.
(b) The type and quantity of seed, fertilizer, and other soil amendments to be used shall be determined based on soil chemical and physical properties. TRRC shall use native species for revegetation, where possible, unless alternatives are approved, in advance of application, by the Multi-agency/Railroad Task Force in accordance with the process set forth in Mitigation Measure 14. On Bureau of Land Management tracts, all seeds shall be from native species.
Species to be used for revegetation may include, but are not limited to:
- Western wheatgrass (*Pascopyrun smithii (Agropyron s.)*)
- Green needlegrass (*Nasella viridula (Stipa v.)*)
- Little bluestem (*Schizachyrium scoparium*)
- Slender Wheatgrass (*Elymus trachycaulus*)
- Blue flax (*Linum perenne*-forb)
- Purple prairie clover (*Dalea lasiathera*-forb)
- Bluebunch wheatgrass (*Pseudoroegneria spicata*)

- Thickspike wheatgrass may be substituted **only** when western wheatgrass is unavailable

(c) Segregation of topsoil from subsoil and topsoil stockpiled for later application on the reclaimed ROW.
(d) Use of only seed of registered quality and germination success that has been certified as weed-free.
(e) Use of appropriate seeding techniques, such as drill seeding on level terrain and broadcast seeding or hydroseeding on slopes, to ensure distribution of seed mixture on individual microenvironments.
(f) Use of mulch material that has been certified as weed free, such as straw and woodchips, as a temporary erosion measure and to minimize soil temperature fluctuations and soil moisture loss. Mulch shall be applied more heavily on slopes than on level terrain, and nitrogen levels shall be adjusted to reflect the increased demand during mulch decomposition.
(g) Cover and compaction of seeded area following seeding.
(h) Use of a minimum of 20 pounds per acre of pure live seed throughout, where applicable.
(i) For slopes and construction areas near waterways, employment of a variety of Best Management Practices, including the use of sediment traps/basins, berms, contour furrows, silt fencing, straw bale barriers, rock checkdams, slope drains, toe-slope ditches, diversion channels, sodding, and erosion control blankets and/or mulching.
(j) Monitoring of reclamation. Regrading shall be undertaken for revegetating areas not successfully reclaimed.
(k) Development of success criteria.
(l) Development of a timeline for completion of the revegetation plan as well as follow-up monitoring and enforcement of the revegetation plan and success criteria. *[Tongue River I, Condition 10.3(1)(c); Tongue River II, Vegetation Condition A.9.3.2(1)(c), modified to include examples of BMPs and Task Force approval]*

(4) **Provisions for Areas of Special Concern**

(a) On all slopes less than 3:1 (a slope of 3:1 signifies 1 vertical unit for every 3 horizontal units), Best Management Practices (BMPs) shall be utilized to effectively and efficiently revegetate the surfaces. Specific BMPs have been identified by the National Resource Conservation Service for Montana, and these BMPs will be the primary guidance for all revegetation on slopes less than 3:1. Each cut and fill slope to be used shall be evaluated individually, and the practices shall be modified to meet the needs of each individual slope and conditions. In general, however, the BMPs will be utilized unless site-specific conditions warrant different management practices. Below is a list of general BMPs that should be utilized by TRRC for revegetation of slopes less than 3:1, unless the site-specific conditions at each individual cut/fill slope warrant modifying the BMPs.

1. Construction of furrows parallel to the slope contour to minimize erosion and stabilize seed beds by effectively reducing the length of the slope, which in turn will reduce the erosive properties of water by decreasing the water's kinetic energy.

2. Minimization of foot traffic and grazing of domesticated animals so that the emerging vegetation at the site will establish more quickly.
3. Weed control either by clipping or applying labeled herbicides so that decreased competition from invasive species will enable the intended species to maximize the use of limited soil, water, and nutrients.
4. Preparation of the site seed bed utilizing standard agricultural techniques (e.g., disking, ripping) to facilitate plant emergence. If the site has limited topsoil, additional salvaged soil shall be placed on the surface to facilitate the preparation of the seed bed and provide a minimum of 4 inches of soil for revegetation activities.
5. Practice of fertilization rates, species selection, and seeding rates on a site-specific basis by a range management specialist. All seeds utilized in the revegetation program shall comply with Montana State seed laws and regulations.
6. Use of varying seeding methods at the cut/fill sites, including broadcast seeding, hydroseeding, or traditional agricultural drilling methods. If the site is planted by broadcast or hydroseeding, the seeding rates shall be doubled to ensure adequate plant emergence.
7. Mulching on all slopes less than 3:1 to minimize erosion using mulches such as straw woven fabric or artificial mulches based on site-specific conditions.
8. Additional temporary measures to reduce run-on onto the revegetated site. On sites where run-on could be a significant contributor to erosion, temporary diversion devices may be warranted to route water around the revegetated area. These diversion devices shall be removed once the site has been successfully revegetated. Additionally, the diversion devices shall be constructed to minimize concentration of water that could cause excessive erosion on non-disturbed sites.
9. If the cut/fill slope material is primarily clinker or bedrock, the slope shall not be revegetated. *[Tongue River II, Vegetation Condition A.9.3.2(1)(d)3, modified to include additional specifics regarding slopes] [Tongue River II, Vegetation Condition A.9.3.2(1)(d)1; deleted here, inserted as modified as HYD-5]; Tongue River II, Vegetation Condition A.9.3.2(1)(d)2; deleted here, inserted as modified as SAF-10]*

Mitigation Measure 20 (Task Force Oversight of Revegetation Plan). TRRC's revegetation plans shall be subject to review and approval by the Multi-agency/Railroad Task Force in accordance with the process set forth in Mitigation Measure 14. If it becomes clear that the success criteria of the revegetation plans are not feasible, the Task Force shall approve appropriate alternate mitigation. Yearly monitoring schedules and funds shall be arranged prior to construction of each rail segment, and work plans shall be approved by the Task Force in accordance with the process set forth in Mitigation Measure 14 before final engineering of these lines is complete. *[Tongue River III, new]*

Mitigation Measure 21 (Noxious Weed Control). TRRC shall construct these rail lines in compliance with county weed control plans for Rosebud and Big Horn counties, Montana. Except for the portion of the right-of-way described in Mitigation Measure 85 in and near the Miles City Fish Hatchery, TRRC, in consultation with local ranchers, the county extension agents, and the Multi-agency/Railroad Task Force, shall develop a reasonable written Noxious

Weed Control Program, which will include a Noxious Weed Survey, prior to commencing any construction of the rail lines. The program shall include requiring construction methods that minimize the introduction and spread of noxious weeds, including the use of sterile ballast, washing of construction equipment prior to use to remove weed seed sources, and the use of weed-free seed straw, mulching, and hydroseeding materials. TRRC shall also minimize digging in areas where the rhizomes of rhizomatous weed species such as leafy spurge might be cut and spread throughout the site.

(1) The Noxious Weed Control Program shall include a combination of mechanical and herbicide spray methods to control noxious weeds. TRRC shall focus on non-chemical treatments first and shall use mechanical removal of weeds near watercourses wherever feasible, depending upon time of year. Spray sequences shall be utilized to ensure that weed plants do not reach maturity.

(2) For riparian corridors, if the Noxious Weed Control Program proves unsuccessful in eradicating certain weed species, specific methods shall be identified by the Task Force to target individual noxious weed plants.

(3) TRRC shall keep and reference records of herbicide application dates to ensure that the Noxious Weed Control Program goals are achieved. TRRC shall submit a report of weed control activities to the Multi-agency/Railroad Task Force annually during construction. In all cases, only trained, licensed personnel shall be involved in noxious weed control applications and shall apply herbicides according to the label specifications. The appropriate protective equipment shall be supplied to the personnel responsible for application. *[Tongue River II, Vegetation Condition A.9.3.2(2), modified to provide additional clarity regarding the noxious weed control requirements]*

Mitigation Measure 22 (Wetland Permit). TRRC shall prepare a Detailed Habitat Mitigation Plan (Plan)—a document prepared to determine the appropriate habitat mitigation. TRRC shall adhere to all mitigation measures suggested in the Plan, as well as any measures imposed by the U.S. Army Corps of Engineers (Corps) in any Section 404 permit(s) issued by the Corps for construction of these lines. The Plan shall be prepared during the Section 404 permitting process and shall assure that adequate replacement of lost wetland functions and values occurs. The Plan, which shall be approved by the appropriate agencies before project implementation, shall contain a statement of goals, a monitoring plan, long-term management/protection objectives and a commitment to conduct additional work, if required, to meet the goals of the Plan. *[Tongue River III, new]*

Mitigation Measure 23 (Stream Survey). Prior to construction of each rail segment and once site access is granted, TRRC shall, in consultation with the Montana Department of Natural Resources Conservation, conduct surveys of ephemeral streams that would be crossed by the railroad to determine the potential impacts of erosion and sedimentation on state species of concern, and consult with the Montana Department of Natural Resources Conservation on appropriate mitigation. *[Tongue River III, new]*

Mitigation Measure 24 (Biological Opinion). TRRC shall adhere to the terms and conditions of incidental take statements set forth by the U.S. Fish and Wildlife Service in a Biological Opinion, issued on July 12, 2006. *[Tongue River III, new]*

Mitigation Measure 25 (Aerial Survey). TRRC shall conduct an updated biological aerial survey during the winter before construction of each rail line segment begins. This aerial survey shall attempt to identify specific locations for ground surveys and any new winter ranges of species of concern. It shall also attempt to locate potentially active raptor nests especially in deciduous tree areas, while leaves are down. In addition, the aerial survey shall attempt to locate new prairie dog colonies along the route. Using the results of the surveys, TRRC will develop appropriate mitigation measures to minimize harm to species of concern, as needed, for approval by the Multi-agency/Railroad Task Force in accordance with the process set forth in Mitigation Measure 14. *[Tongue River II, Wildlife Condition A.9.3.1(1), modified to clarify that aerial surveys shall be required for species of concern and to involve Task Force in developing any needed new conditions]*

Mitigation Measure 26 (Data Reconnaissance). Prior to the beginning of construction of each segment of these lines, and once full access to the site of the railroad right-of-way is obtained, TRRC shall conduct aerial and ground-level surveys, as appropriate. Black-tailed prairie dog surveys shall be conducted to determine if construction of the lines will traverse any additional prairie dog colonies. The surveys shall also determine the existence of black-footed ferrets. If black-footed ferrets are discovered, the Montana Department of Fish, Wildlife, and Parks shall be notified. Based on the surveys, TRRC shall develop appropriate means to mitigate the effects of construction and operation of these lines on the black-tailed prairie dog and the black-footed ferrets for approval by the Multi-agency/Railroad Task Force, in accordance with the process set forth in Mitigation Measure 14. Regardless of the timing of construction, once full access to the site of the railroad right-of-way is obtained, TRRC shall survey the three black-tailed prairie dog colonies that will be traversed by the railroad but are located on private properties and were not accessible due to landowner issues at the time the Biological Assessment was prepared, for black-footed ferret occupancy. If a black-footed ferret or its sign is found during this survey, Section 7 consultation shall be re-initiated with the United States Fish and Wildlife Service.

The surveys shall also locate habitat areas and nesting sites for the following species on these rail lines. The surveys shall be conducted during the following time periods:

Big game (winter range)	December 1 to February 28
Sage/Sharp-tailed Grouse	March 15 to June 15
Raptors/Migratory Birds	May 15 to June 15
Bats	July 1 to July 31
Breeding Birds	May 15 to June 15
Reptiles/Amphibians	July 1 to August 31

TRRC shall identify big game winter range and active nests of sage grouse, sharp-tailed grouse leks (mating grounds) and raptors, particularly golden eagles and prairie falcons, prior to the construction of any rail segments on a map as part of the aerial and ground surveys. In each subsequent year of construction, additional surveys shall be conducted annually for the section

(distance) of line that is to be built in that year. Due to the potential for nest initiation in the years after the initial survey, surveys shall be conducted according to standard survey procedures during summer to determine the presence of nests or of reptile and amphibian species. Pedestrian surveys shall be done to locate habitat areas as well as indicate recent activity. Using the results of the surveys, TRRC shall develop appropriate mitigation measures, as needed, for approval by the Task Force in accordance with the process set forth in Mitigation Measure 14. *[Tongue River II, Wildlife Condition A.9.3.1(2), modified to better explain reason for distance-specific annual surveys and involvement of Task Force if new conditions are needed]*

(1) The purpose of the reconnaissance shall be to locate (a) big game winter range based on evidence, such as animal remains, hair, pellet groups, etc.; (b) sage grouse and sharp-tailed grouse leks; and (c) raptor nests, particularly golden eagles and prairie falcons. Any evidence of state or Federal threatened, endangered, or sensitive species shall also be documented during the reconnaissance. *[Tongue River II, Wildlife Condition A.9.3.1(2)(a), modified to include Federally threatened, endangered or sensitive species]*

(2) Any specific-use sites that are identified during the reconnaissance shall be mapped, described in field notes, photographed and evaluated for significance. Nesting species of concern shall not be disturbed during reconnaissance. Nests shall be described as active or inactive. Results of the ground reconnaissance shall be presented and used by TRRC for developing mitigation measures to minimize impacts to sensitive wildlife and wildlife-use areas for approval by the Task Force in accordance with the process set forth in Mitigation Measure 14. This could include, but would not be limited to, restricting construction activities near nests during the nesting period; employing nest site monitors to gauge the level of disturbance and halt construction if disturbance is great; and requiring off-site habitat enhancement or replacement for unavoidable losses of sensitive wildlife resources. *[Tongue River II, Wildlife Condition A.9.3.1(2)(b), modified to provide additional clarity and involvement of the Task Force and include other possible mitigation measures]*

(3) Surveys for sage and sharp-tailed grouse leks shall be conducted following the Montana Sage Grouse Conservation Plan of the Montana Sage Grouse Work Group. If a possible lek site is identified, observations shall be made between March 15 and June 15 to verify activity at each site. Surveys shall be conducted at dawn to listen for male activity at each lek and shall be completed at least 5 days apart.

The extent of each lek shall be mapped. Vegetative cover suitable for nesting and brooding habitat adjacent to each active lek shall also be mapped within a one-mile radius of the lek. Active leks shall not be destroyed by construction of the railroad lines. If impacts to active leks as a result of construction activities are unavoidable, TRRC shall seek approval from the Task Force in accordance with the process set forth in Mitigation Measure 14, as to whether avoidance of the lek site during the mating season (March and April) is adequate mitigation. If the Task Force determines that the permanent loss of the lek would be a significant and unavoidable impact, TRRC shall develop appropriate replacement compensation for potential loss of grouse habitat for approval by the Task Force in accordance with the process set forth in Mitigation Measure 14. If the success

of lek site mitigation, as determined by the Task Force in accordance with the process set forth in Mitigation Measure 14, has not been resolved during the construction period, TRRC shall continue monitoring into the operational period and shall advise SEA of its progress, in accordance with the reporting requirements of Mitigation Measure 17. *[Tongue River II, Wildlife Condition A.9.3.1(2)(c), modified to clarify possible mitigation options]*

(4) To reduce impacts on prairie dog colonies, prior to construction, TRRC shall develop appropriate means to mitigate the effects of construction and operation of these lines on the black-tailed prairie dog for approval by the Task Force in accordance with the process set forth in Mitigation Measure 14. *[Tongue River II, Wildlife Condition A.9.3.1(2)(d, e and f), modified to clarify]*

Mitigation Measure 27 (Night Survey). TRRC shall conduct nighttime surveys in conjunction with the ground reconnaissance required by Mitigation Measure 26 between July 1 and July 31, prior to construction of each segment of these rail lines, for the purpose of identifying the location of any bat species of concern. *[Tongue River III, new]*

Mitigation Measure 28 (Construction Surveys). TRRC shall utilize monitors during construction to identify and clearly mark areas containing sensitive biological resources for avoidance and to educate construction contractors and the employees that will be involved in rail construction activities about sensitive resources and the areas to be avoided during the rail construction activities. *[Tongue River III, new]*

Mitigation Measure 29 (Destruction of Habitat). Active habitats for state species of concern such as nests, brooding locations, and migratory corridors, etc., shall not be destroyed during construction of these lines. If impacts to these areas (short of destroying them) are unavoidable, TRRC shall seek approval from the Multi-agency/Railroad Task Force in accordance with the process set forth in Mitigation Measure 14 as to whether avoidance during a species' active season would be adequate mitigation. If the Task Force determines that the permanent loss of habitat is a significant and unavoidable impact, TRRC shall develop appropriate replacement compensation for this potential loss of habitat in accordance with the process set forth in Mitigation Measure 91. In addition, if the Task Force determines that there has been significant habitat alteration after construction, TRRC shall develop appropriate habitat compensation for alteration of habitat in accordance with the process set forth in Mitigation Measure 91. *[Tongue River III, new]*

Mitigation Measure 30 (Construction Activity Coordination). Rail construction activities shall be coordinated and timed to protect wildlife to the maximum extent possible. As part of these efforts, all reasonable attempts shall be made to minimize construction at big game wintering sites from December through March. *[Tongue River II, Wildlife Condition A.9.3.1.1(1) clarified]*

Mitigation Measure 31 (Compensation Program). TRRC shall include the following mitigation measures as part of final right-of-way negotiations with private landowners along the right-of-way for these lines:

(1) If the landowner agrees and where practicable, TRRC shall construct ponds adjacent to the railroad grade, or use the railroad grade as a dam. These ponds could include "dugout" type ponds and "bypass" ponds designed to be filled during high flows where appropriate. *[Tongue River II, Terrestrial Condition A.9.3(2)]*. For the construction of ponds, the railroad embankment (berm) shall form one (high) side of a depression. In its development of options for wildlife passage across the railroad right-of-way, TRRC shall consider ponds as a possible obstruction passage. Ponds shall also include erosion control features where appropriate. *[Tongue River III, new]*

(2) If adjacent landowners agree, TRRC shall provide public access, in appropriate locations, if any, along the rail lines' right-of-way. *[Tongue River II, Terrestrial Condition A.9.3(3), modified to clarify that access would only be provided if the adjacent landowners agreed]*

(3) TRRC shall grant conservation easements along these rail lines where appropriate. *[Tongue River I, Condition 10.1(4); Tongue River II, Terrestrial Condition A.9.3(4), modified by minor edits]*

Mitigation Measure 32 (Pronghorn Antelope). TRRC shall prepare surveys that identify locations of pronghorn concentration, distributions, and movement for approval by the Multi-agency/Railroad Task Force in accordance with the process set forth in Mitigation Measure 14. This survey program shall be conducted prior to the beginning of construction of each segment of the rail lines. TRRC shall present the results of the study to the Task Force for its review and shall consider conducting a radio telemetry study (funded by TRRC) if preliminary surveys indicate heavy pronghorn use within the project area.

Once potential impacts have been fully determined following the above mentioned studies, TRRC shall work with the Task Force to develop appropriate measures, as needed, to minimize impacts from the railroad. The following measures shall be considered and implemented, as appropriate:

(1) establishment and enforcement of fencing standards along the railroad right-of-way that will allow movement of pronghorn while excluding livestock, as needed;

(2) identification of optimal passage-site locations for pronghorn movement across the railroad;

(3) use of grillwork as needed to exclude livestock while allowing movement of pronghorn across railroad at optimal locations; and

(4) follow-up monitoring on an annual basis to evaluate effectiveness of passage.

Monitoring shall continue through the reporting period previously identified in Mitigation Measure 17. In the unlikely event that this follow-up monitoring shows that the above mentioned mitigation measures are inadequate and the Task Force concludes that impacts to the

wildlife's ability to migrate are resulting in a decline in species population, TRRC shall develop additional mitigation options for approval by the Task Force in accordance with the process set forth in Mitigation Measure 14. *[Tongue River II, Wildlife Conditions (1) and (2), modified to provide additional clarity regarding survey requirements and specify potential mitigation measures that are appropriate for species]*

Mitigation Measure 33 (Speed Limits). Prior to construction of each rail segment, TRRC shall post and strictly enforce speed limits on all construction access roads to minimize roadkills of wildlife due to increased traffic from construction workers temporarily living in the area. TRRC shall also advise all rail construction personnel that the purpose of these speed limits is to protect wildlife. *[Tongue River III, new]*

Mitigation Measure 34 (Aquatic Resource Sampling). Prior to beginning construction activities in locations where the railroad would cross the Tongue River, or where extensive riprapping would occur, TRRC shall conduct a three-part study plan to identify aquatic resources. The results of this study shall be utilized in the development of mitigation plans for the river crossing and riprap areas for approval by the Multi-agency/Railroad Task Force in accordance with the process set forth in Mitigation Measure 14. This study shall include (1) a stream habitat survey to identify existing habitat features and values; (2) benthic macroinvertebrate sampling to identify community composition and numbers; and (3) a fish spawning survey to determine the importance of the area to spawning of fish. TRRC shall undertake the three-part study methods outlined below. *[Tongue River I, Condition 9.1(1); Tongue River II, Aquatic Condition A.9.2(1), modified to provide clarity regarding the timing and location of the study]*

(1) **Stream Habitat Survey.** The stream habitat survey shall utilize methods described in Methods for Evaluating Stream, Riparian, and Biotic Conditions by William S. Platts, Walter F. Megahan, and G. Wayne Minshall. Stream transects shall be established and impact zones shall be identified in appropriate locations to evaluate existing conditions and to monitor changes during construction. Along each transect, the following variables shall be measured:

(a) Stream width.
(b) Stream shore depth.
(c) Stream average depth.
(d) Pool quality and forming feature (in feet).
(e) Riffle (a ripple in a stream or a current of water) (in feet).
(f) Run (in feet).
(g) Substrate (mineral or organic material that forms the bed of a stream).
(h) Stream bank soil alteration rating.
(i) Stream vegetative stability rating.
(j) Stream bank undercut and angle.
(k) Vegetation overhang.
(l) Embeddedness. *[Tongue River II, Aquatic Condition A.9.2(1)(a), modified to include identification of impact zones]*

(2) **Benthic Macroinvertebrates**. TRRC shall collect quantitative samples of benthic macroinvertebrates immediately upstream and downstream of each proposed location of disturbance during rail construction activities. The collected specimens shall then be counted and identified following the Montana Department of Environmental Quality's Rapid Bioassessment Protocols for Sampling and Sample Analysis Standard Operating Procedures. *[Tongue River I, Condition 9.1(1)(b); Tongue River II, Aquatic Condition A.9.2(1)(b), modified to clarify the most useful techniques for sampling benthic macroinvertebrates]*

(3) **Fish Survey**. Prior to construction of each rail segment, TRRC shall conduct a fish survey and fish habitat survey. The fish survey shall be conducted to estimate population and to monitor potential mortality or emigration due to construction impacts. Mark-recapture methods shall be incorporated in each survey.

TRRC's fish habitat survey shall be conducted to determine habitat value, quantity, and utilization. In general, methods shall follow the methods used in recent work on the Tongue River for comparative purposes. Methods used in the comparative analysis may include those from Community Structure and Habitat Associations of Fishes in the Lower Tongue and Powder Rivers (R. Trenka 2000). Sampling shall occur before and after construction in impacted areas to allow quantification of effects, if any. The establishment of reference sites in areas outside of immediate impact zones, identified in the Stream Habitat Survey described above in Section 1, shall be used as a control to which impacted area surveys may be compared. All major habitat types shall be represented, and the total number of sites shall depend upon how many habitat types are identified by the Stream Habitat Survey. For each major habitat type at each bridge location, at least three affected sites and one reference site shall be surveyed. Sampling gear shall be adapted to each habitat type and standardized for both before and after construction surveys to allow for meaningful data comparisons. At each fish habitat survey site, the following shall be recorded:

(a) Habitat type.
(b) Sampling gear used (hoop net, fyke net, electrofishing, seines, etc.).
(c) Species present (number, age class, length, and weight).
(d) Relative abundance by species.
(e) Catch per unit effort (before and after construction).

If determined to be necessary by the Task Force, a spawning habitat potential survey shall be conducted at each proposed bridge location as well as in areas of proposed riprapping and other perennial, intermittent, and ephemeral draws that the railroad crosses. Sampling periods for the spawning survey shall be early spring after ice breakup, after peak runoff, and in the fall. *[Tongue River II, Aquatic Condition A.9.2(1)(c), modified to broaden the purpose of the surveys]*

Mitigation Measure 35 (Aquatic Mitigation Techniques). With the exception of construction of the portion of the rail line described in Mitigation Measure 87 (the Miles City Fish Hatchery), prior to construction of each rail segment and once aquatic resource sampling is completed and

detailed data on the aquatic resources to be affected has been obtained, TRRC shall develop appropriate mitigation measures for approval by the Multi-agency/Railroad Task Force in accordance with the process set forth in Mitigation Measure 14. These mitigation measures may include the following, as appropriate:

(1) Preparation of a construction schedule which, if possible and practical, provides for instream work at those times that are (a) least critical to the specific fishery or aquatic resource occurring at a site, and (b) least conducive to sediment transport. These periods may differ by stream and species affected.

(2) Development of special procedures for the handling of displaced materials and petroleum products during construction in order to prevent introduction of such materials into the aquatic system.

(3) Filtering of silty water, which would result from dewatering for footing construction, through settling pond systems.

(4) Assuring that riprap is washed and essentially silt free.

(5) Double-shifting of work crews at river crossing sites to minimize the duration of construction activities in or near river or stream banks. *[Tongue River II, Aquatic Condition A.9.2(2), modified by minor edits]*

Soils and Geology Mitigation Measures

Mitigation Measure 36 (Stormwater Pollution Prevention Plan). TRRC shall prepare a Stormwater Pollution Prevention Plan (SWPPP) and an Erosion Control Plan using Montana Department of Environmental Quality Guidelines Best Management Practices (BMPs) and shall obtain coverage under the Montana Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity. Prior to construction of each rail segment, TRRC shall determine which BMPs shall be employed at different locations in the project area.

The SWPPP shall identify areas that have a high potential for soil erosion due to topography, slope characteristics, facility activities, and/or other factors. (Generally, areas with little or no vegetative cover, 0-25 percent on slopes greater than or equal to 15 percent, have a high potential for soil erosion.) To determine areas of high erosion potential, TRRC shall consult with the County Natural Resource Conservation Service, research, as appropriate, published soil survey reports, and/or conduct soil/geologic studies.

The SWPPP may include the use of sediment basins, berms, filter strips, covers, diversion structures, sediment control fences, straw bale dikes, seeding, sodding, and/or other control structures or BMPs. The SWPPP shall identify and locate the BMPs to be used during and after construction to control sediment discharges to surface waters. The SWPPP shall include a description of appropriate storm water BMPs, which TRRC shall implement. The SWPPP shall also include a schedule for implementation and address the following:

(1) Individual(s) responsible for preventing pollution and for implementing storm water management BMPs.
(2) Risk identification and assessment/material inventory.
(3) Spill prevention and response procedures.
(4) Storm water management.
(5) Sediment and erosion prevention.
(6) Visual inspections.
(7) Record keeping and internal reporting.
(8) Non-storm water discharges. *[Tongue River III, new]*

Mitigation Measure 37 (Saline and Sodic Soils). TRRC shall, to the maximum extent feasible, avoid saline and sodic soils in its construction of these rail lines. Where possible, saline or sodic soils shall be buried, and topsoil more conducive for revegetation left on the finished surface to aid in revegetation efforts and reduce erosion. *[Tongue River III, new]*

Mitigation Measure 38 (Geotechnical Investigations). Prior to beginning construction of these lines, TRRC shall conduct geotechnical investigations to identify soils/bedrock in cut areas with the potential for slumping to occur following construction. In areas with a potential for slumping, TRRC shall include, as appropriate, engineering controls such as flattened slopes, adequate drainage, retaining structures, geotechnically designed stabilization techniques, terracing and surface water-runoff control. *[Tongue River III, new]*

Mitigation Measure 39 (Slumping). If slumping occurs during construction of these lines, TRRC shall institute remedial actions immediately following a slope failure. These actions shall include, as appropriate, implementation of emergency sediment control structures such as furrows, removal of slumped material to a location that will not allow erosion and transport of this material to any waterways, implementation of measures to promote revegetation, and a geotechnical evaluation, if feasible, to determine the best way to prevent additional slumping. Remedial action also may involve, as appropriate, the installation of drains or adding material to the toe of the slump to stabilize it. *[Tongue River III, new]*

Mitigation Measure 40 (Erosion). Prior to beginning construction of these lines, TRRC shall perform an analysis to determine the potential for erosion (wind and water) at proposed cut and fill locations. The analysis shall compare slope lengths and gradients to determine the optimum gradients and mitigation measures for minimizing erosion at each proposed cut and fill location. *[Tongue River III, new]*

Mitigation Measure 41 (Sediment Delivery). Prior to beginning construction, TRRC shall assess the potential for construction and operation of these rail lines to generate, transport and deliver sediments to a given body of water. Contributions of sediments shall be measured as "bedload," or material that is transported along the bed of a stream rather than in suspension. "Woman pebble" counts (woman pebble is a methodology for sampling and categorizing substrate) may be used for sediment data. TRRC shall also conduct a pre-construction assessment that includes an evaluation of the potential in-stream effects of sediment delivery to a

given water body and conformance with pending or completed Total Maximum Daily Loads and associated water quality restoration plans. *[Tongue River III, new]*.

Mitigation Measure 42 (Soil Survey). Prior to any construction of these lines, TRRC shall conduct a soil survey along the alignment, including a review of soil survey data from Big Horn and Rosebud counties and local conservation districts. As part of this survey, TRRC shall obtain, query, review, and interpret digital soil survey maps for the area within 300 meters of the rail alignment. Soils with similar characteristics along the route shall be grouped, and detailed descriptions of each grouping shall be prepared. The descriptions shall include information regarding the soil group's distribution, structure, permeability, and erodibility. After completing its survey, TRRC shall prepare a series of reports to be made available to SEA depicting the soils for the entire alignment of these lines. *[Tongue River III, new]*

Hydrology and Water Quality Mitigation

Mitigation Measure 43 (Water Quantity and Quality). To assure that overall water quantity and quality are not unnecessarily altered or diminished by the construction of these lines, TRRC shall submit detailed information about its plans for construction, for review and approval, to applicable agencies, including the U.S. Army Corps of Engineers, local conservation districts, and the Water Protection Bureau of the Montana Department of Environmental Quality prior to construction. *[Tongue River II, Hydrology and Water Quality Condition (1), modified to reflect current state agency and make minor additional changes]*

Mitigation Measure 44 (Streambed Crossings). During design, TRRC shall consult with and meet the reasonable requests of Montana Department of Natural Resources and Conservation, Montana Department of Environmental Quality, the U.S. Army Corps of Engineers, and the local conservation districts for bridge crossings over the streambed of the Tongue River. *[Tongue River II, Hydrology and Water Quality Condition (2), modified to reflect current state agency]*

Mitigation Measure 45 (Permitting and Bank Stabilization). TRRC shall consult with the U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) to implement the Corps' permit requirements under Section 404 of the Clean Water Act and EPA's riverbank stabilization methods at bridge crossings and riprap areas in order to prevent or reduce the impacts of soil erosion and sedimentation loading to area streams and the Tongue River. Appropriate methods may include placing or planting logs, trees, and other vegetative plantings with rock riprap along bridge sites and stream-encroachment areas. To prevent unnecessary degradation of water quality due to erosion, revegetation efforts shall begin as soon as possible after construction is completed in a given area. *[Tongue River II, Hydrology and Water Quality Condition (3), modified to provide additional clarity regarding riverbank stabilization methods]*

Mitigation Measure 46 (Streambed Crossing Construction). Rail construction activities involving stream crossings, including bridges and culverts and activities requiring stream-bank encroachments (riprap, for example), shall occur during periods of low or no flow in the streams affected. *[Tongue River II, Hydrology and Water Quality Condition (6)]*

Mitigation Measure 47 (Bank Stabilization). In constructing these lines, TRRC shall stabilize banks with naturally occurring trees, shrubs, and grass. Riprap or gabions shall be used only as a supplement where such methods would improve fish habitat, or in cases where engineering requirements so dictate, such as downstream from culverts. *[Tongue River II, Vegetation Condition A.9.3.2(1)(d)1, modified for minor edit]*

Mitigation Measure 48 (Tongue River Crossing). TRRC shall design the crossing of the Tongue River so that it does not require a center abutment, and so that the side abutments are placed outside of the riparian zone. The side abutments shall be located to provide adequate passage for wildlife (10 feet above the ordinary high-water mark). *[Tongue River III, new]*

Mitigation Measure 49 (Culverts). TRRC shall ensure that all culverts and other drainage structures installed at non-perennial stream crossings during construction of these lines comply with the design criteria guidelines of the American Railway Engineering and Maintenance of Way Association, established in the year 2000. This means that at a minimum, culverts shall be designed to discharge a 25-year flood without static head at entrance and a 100-year flood using the available head at entrance, the head to two feet below base of rail, or the head depth of 1.5 times the culvert diameter/rise, whichever is less. Additionally, TRRC shall incorporate the culverts into the existing grade of the streambed to avoid, to the maximum extent possible, changing the character of the streambed and impacting migrating amphibians and reptiles. Open bottom culverts shall be used to the extent feasible. The final design of culvert sizing should be determined by the project engineer based on the best available on-site information [*Tongue River II, Hydrology and Water Quality Condition (4), modified to reflect current industry practice and include migrating species]*

Mitigation Measure 50 (Perennial Streams). Where possible, TRRC's final alignment for these lines shall be designed to avoid the floodplain of perennial streams. Where the railroad grade infringes upon the floodplain, TRRC shall install drainage structures to assure that the grade does not restrict or reroute the 25-year flood. *[Tongue River II, Hydrology and Water Quality Condition (5), modified to reflect current Montana Floodplain and Floodway Protection Act (MCA 76-5-401 through 406) requirements]*

Mitigation Measure 51 (Bridge Design). Prior to beginning construction of these lines, TRRC shall prepare an analysis for the Montana Department of Natural Resources and Conservation, documenting that the final design for any bridges constructed over rivers and perennial streams located in a designated 100-year floodplain shall not increase the upstream elevation of the 100-year flood by more than 0.5 feet or significantly increase flood velocities. If TRRC's analysis concludes that any bridge would increase the upstream elevation of the 100-year flood by more than 0.5 feet or significantly increase flood velocities, TRRC shall redesign the bridge to reduce these impacts to a less than 0.5 foot increase in the 100-year flood elevation. *[Tongue River III, new]*

Cultural Resources Mitigation

Mitigation Measure 52 (Programmatic Agreement). To protect cultural and historic resources, TRRC shall comply with the provisions of the revised Programmatic Agreement for

these lines, which has been executed. *[Tongue River II, Cultural Resources Condition (1), modified to reflect that SEA has prepared a revised Programmatic Agreement]*

Transportation and Safety Mitigation

Mitigation Measure 53 (Construction-worker Transportation). During construction, TRRC shall encourage its contractors to provide laborers with daily transportation to the work site from a central location. *[Tongue River II, Transportation Condition (1)]*

Mitigation Measure 54 (Access Road). To the extent possible, TRRC shall confine all construction-related traffic to a temporary access road within the right-of-way (ROW). Where traffic cannot be confined to this access road, TRRC shall ensure that contractors make necessary arrangements with landowners or affected agencies to gain access from private or public roadways. The access road shall be used only during construction of the railroad grade, after which construction shall be confined to the ROW. *[Tongue River II, Transportation Condition (2)]*

Mitigation Measure 55 (Memorandum of Agreement). As agreed to by TRRC and the Montana Department of Transportation (MDT), TRRC shall enter into a memorandum of agreement (MOA) with MDT evaluating project-related safety needs. The MOA shall establish duties and responsibilities of the parties relative to construction of these rail lines, including sidings, and possible encroachment on interstate and non interstate facilities maintained by MDT. The MOA shall also include the evaluation of each crossing for safety needs and potential traffic problems during construction and operation, including passage of emergency vehicles. Based on these evaluations, the MOA will set forth specific safety measures, such as warning signal devices, and appropriate measures to alleviate any traffic problems, such as grade separations. A construction traffic plan will also be prepared by TRRC for review and approval by MDT. *[Tongue River I, Condition 4.3(2) and Tongue River II, Transportation Conditions (3 and 5), combined and modified to reflect current state agency and MOA]*

Mitigation Measure 56 (Tongue River Reservoir Dam). During construction of these rail lines, TRRC shall provide 24-hour-a-day access to the Montana Department of Natural Resources and Conservation for the maintenance of the Tongue River Reservoir Dam either via the construction of temporary roads and/or flagging devices or by other reasonable alternatives. *[Tongue River II, Tongue River Dam Reconstruction Condition (1), modified to reflect completion of dam reconstruction]*

Mitigation Measure 57 (Speed Limits). All TRRC vehicles and equipment, and vehicles and equipment owned and operated by TRRC contractors working on the project, shall strictly adhere to speed limits and other applicable laws and regulations when operating such vehicles and equipment on public roadways. *[Tongue River I, Condition 4.2 (3), modified by minor edits]*

Mitigation Measure 58 (Traffic Control Devices). TRRC shall comply with the Montana Department of Transportation's Manual of Uniform Traffic Control Devices for work zone safety. *[Tongue River II, Transportation Condition (4), modified to reflect current agency requirement]*

Mitigation Measure 59 (Safety Meetings). TRRC shall adhere to applicable Federal and state construction safety regulations and Best Management Practices to minimize the potential for construction-related accidents. TRRC shall require its construction contractors to conduct safety meetings for their workers to ensure that each person understands safety measures and procedures. *[Tongue River II, Safety Condition (1), modified to clarify that TRRC shall use Best Management Practices]*

Mitigation Measure 60 (Emergency Response Plan). Prior to beginning construction of these rail lines, TRRC shall develop an internal Emergency Response Plan consistent with Montana State plans required under Title 10, Montana Code Annotated. This plan shall include a roster of agencies and specific persons to be contacted for specific types of emergencies during rail construction, operations and maintenance activities, procedures to be followed by particular rail employees, emergency routes for vehicles, and location of emergency equipment. *[Tongue River II, Safety Condition (2), modified with minor edits]*

Mitigation Measure 61 (Emergency Response Coordination). TRRC shall establish cooperative relationships with the Federal, state, and local agencies with responsibility for disaster/emergency response in the area. TRRC shall provide operational plans and copies of the Emergency Response Plan identified in Mitigation Measure 60, when it is available in draft form, to all such agencies and incorporate their comments as appropriate in its final Emergency Response Plan. The agencies to be contacted shall include, at a minimum, Disaster and Emergency Services Division of the Department of Military Affairs, Helena; rural fire departments along the entire route of the lines; local ambulance and emergency medical services and air evacuation services in Billings and Sheridan; the Montana Department of Environmental Quality, specifically including the Remediation Division; Montana Department of Fish, Wildlife and Parks; Montana Department of Natural Resources and Conservation; the Northern Cheyenne Tribe; the Bureau of Land Management; U.S. Fish and Wildlife Service; and other local agencies or other groups identified by these agencies and entities as key to disaster response. *[Tongue River II, Safety Condition (3), modified to clarify that all such agencies shall receive a copy of the plan and make minor edits]*

Mitigation Measure 62 (Spill Prevention). TRRC shall develop, in cooperation with appropriate Federal, state, and local agencies, a plan to prevent spills of oil or other petroleum products (gasoline, diesel fuel, solvents), during construction, operation, and maintenance of these rail lines.

TRRC's Spill Prevention Plan shall include measures pertaining to oil spills set forth in the mitigation plan in the Tongue River II DEIS. The plan developed by TRRC shall include conditions that shall be imposed on companies and contractors involved in construction of these lines. The plan shall provide emergency notification procedures, including a priority list of specific names and phone numbers of designated contacts (government and private) that are to be notified in case of events such as a fuel spill, range fire, or medical emergency during construction, operation and maintenance of the rail lines. The following items shall be included in the plan:

(1) Procedures for reporting a spill.
(2) Definition of what constitutes a spill.
(3) Methods of containing, recovering, and cleaning up a spill.
(4) Preventive measures that will be employed to prevent ground water and surface water contamination.
(5) Best Management Practices that would apply to areas in and around rail yards to reduce the potential of ground water and surface water contamination.
(6) A list of equipment needed to remediate a spill and its location.
(7) A list of all governmental agencies and management personnel to be contacted and coordinated with, including but not limited to the following:
  (a) Disaster and Emergency Services Division of the Department of Military Affairs, Helena. (This is the most important contact to develop a coordinated response.)
  (b) Rural fire departments along the route.
  (c) Local ambulance and emergency medical services, as well as air evacuation services in Billings and Sheridan.
  (d) Montana Department of Environmental Quality, especially the Remediation Division.
  (e) Montana Department of Fish, Wildlife, and Parks.
  (f) Montana Department of Natural Resources and Conservation.
  (g) Northern Cheyenne Tribe.
  (h) Bureau of Land Management (BLM) or U.S. Fish and Wildlife Service. BLM would have fire suppression responsibilities on public land for fires handled by Type I Interagency Management Teams and Type II Geographic Area Teams.
  (i) Other local agencies or groups that are identified by the agencies and entities above as key to disaster remediation.
(8) Assurances that techniques and procedures to be employed in cleanup are the best practicable technology currently available.

[Tongue River II, Safety Condition (8), which incorporates by reference Sections A.7.3.(1) a, A.7.3(2) a-i, and A.7.3(4), modified (1) to incorporate language of sections referred to and to clarify that the above measures apply to the three rail lines, and (2) to clarify roles of BLM and USFS]

Mitigation Measure 63 (Construction Sites). TRRC shall remove all litter, debris, and soils associated with petroleum spills prior to reclamation of construction sites. A state-approved landfill shall be used. *[Tongue River II, Vegetation Condition, A.9.3.2(1)(d)2, modified by minor edits]*

Mitigation Measure 64 (Oil and Fuel). Prior to construction of these lines, TRRC shall develop appropriate guidelines to be used by individual rail construction contractors, including (1) steps to use during refueling to guard against overflows, (2) storage of fuel in metal storage tanks surrounded by impervious dikes that are capable of containing greater than the capacity of the tank, (3) removal of waste oil to appropriate sites, and (4) maintenance of equipment in good running order during performance of construction and routine maintenance activities. *[Tongue River II, Safety Condition (9), modified by minor edits]*

Mitigation Measure 65 (Herbicide Spills). If an herbicide spill occurs, TRRC shall respond by immediately containing the spill, notifying the appropriate Federal, state, and local agencies, and

implementing appropriate clean-up procedures. *[Tongue River II, Safety Condition (10), modified to provide additional clarity regarding TRRC's actions]*

Mitigation Measure 66 (Train Operations). TRRC shall adhere to all reasonable Federal, state, and local requirements regarding train operations, including requirements that relate to maximum durations of crossing blockage, speed limits within and outside of incorporated areas, and candlepower for train lighting. *[Tongue River I, Condition 4.3(3), modified to clarify the intent and responsible parties]*

Mitigation Measure 67 (Descending Grades). If a train's speed reaches 5 mph more than the train's maximum authorized speed on descending grades of 2 percent or more, TRRC's trains shall come to a complete stop as quickly as possible, using an emergency application of the train's air brakes.

(1) After the train has stopped, the train shall be secured by applying additional hand brakes, and once secured, the train shall be inspected and no further train movement shall be made until authorized by a designated railroad employee.
(2) TRRC shall conduct an immediate investigation into the cause of any incident in which the train's speed reaches 5 mph more than the train's authorized maximum speed and shall initiate appropriate corrective action.
(3) Event recorder data shall be routinely inspected to ensure full compliance with these requirements. *[Tongue River III, new]*

Mitigation Measure 68 (Hazardous Materials Transport). In the event that TRRC should transport hazardous materials, TRRC shall comply with the requirements of the Hazardous Materials Transportation Act (49 U.S.C. 1080 et seq.) and its governing regulations. TRRC shall also comply with the Federal Railroad Administration (FRA) hazardous materials regulations for rail transport (including 49 CFR 174), along with FRA's general rail safety regulations (49 CFR 209 to 236). *[Tongue River III, new]*

Air Quality Mitigation

Mitigation Measure 69 (Fugitive Dust). When vegetation is removed from the right-of-way, TRRC shall clear the smallest possible amount of cover to minimize impacts of wind erosion and fugitive dust. *[Tongue River II, Air Quality Condition (2), modified to clarify the intent of the measure]*

Mitigation Measure 70 (Revegetation). Where devegetation has taken place, TRRC shall begin revegetation as soon as possible. Where immediate revegetation is not possible, TRRC shall implement alternative stabilization measures, such as matting and mulching. *[Tongue River II, Air Quality Condition (3)]*

Mitigation Measure 71 (Site Watering). TRRC shall suppress dust at all work areas by using water trucks, and shall make water available to local landowners, governmental agencies, or associations for the purposes of dust suppression. TRRC shall conduct dust suppression activities regularly and frequently during dry periods. *[Tongue River II, Air Quality Condition (4)]*

Mitigation Measure 72 (Open Burning). TRRC shall conduct any open burning in strict accordance with local or other applicable regulations, and shall obtain all necessary permits and observe all necessary safety precautions. *[Tongue River II, Air Quality Condition (5)]*

Mitigation Measure 73 (Inspection and Maintenance). TRRC shall subject all heavy equipment and vehicles used in the construction, operation, and maintenance of these railroad lines to a regular inspection and maintenance schedule to ensure that operation complies with manufacturer's specifications and that equipment is running as cleanly and efficiently as possible. *[Tongue River II, Air Quality Condition (1)]*

Noise and Vibration Mitigation

Mitigation Measure 74 (Construction Timing). To the extent practicable, TRRC shall schedule major noise-producing construction activities during the weekday and daylight hours to limit disturbances during more sensitive times of day. *[Tongue River II, Noise Condition (1)]*

Mitigation Measure 75 (Construction Equipment). All equipment used for construction shall comply with all reasonable Federal, state, and local noise regulations and ordinances. *[Tongue River R I, Condition 6.1(3), modified to clarify that all equipment used in construction shall comply with reasonable noise regulations]*

Mitigation Measure 76 (Dam Vibration). Prior to construction of the Western Alignment, TRRC shall conduct a seismic analysis based on local geology and specific blasting plans to quantify the risk of construction-related activities to the Tongue River Reservoir Dam. TRRC shall consult with Montana Department of Natural Resources and Conservation during the development of the geotechnical-drilling/blasting plans for construction of those portions of the Western Alignment located within two miles of the dam, to limit peak particle velocity and minimize vibration impacts that may occur. *[Tongue River III, new]*

Mitigation Measure 77 (Speed Limits). During railroad operations, TRRC shall minimize the speed of trains in incorporated areas and in the unincorporated community of Ashland, to minimize noise. *[Tongue River I, Condition 6.1(4), modified to provide additional clarity]*

Mitigation Measure 78 (Quiet Zone). TRRC shall consider establishing a quiet zone for one or more communities along these rail lines, if appropriate, under the Federal Railroad Administration's *Use of Locomotive Horns at Highway-RailGrade Crossings; Final Rule* (April 27, 2005), which became effective June 24, 2005. *[Tongue River III, new]*

Mitigation Measure 79 (Schools). In the case of schools in the Ashland area, including the St. Labre school, where activities during the normal school day could be interrupted by noise related to rail construction or maintenance, TRRC shall make every attempt to consult with school officials to schedule its construction and maintenance activities in a manner most acceptable to those who would be impacted. This could include scheduling weekend or evening rail construction or maintenance work in some cases. *[Tongue River I, Condition 6.1(2), modified by minor edits]*

Mitigation Measure 80 (Recordation of Noise Contours). In order to prevent unintentional development within the 65 dBA noise contour, TRRC shall provide a copy of a map to each county and city planning department along the rail lines, depicting the 65 dBA noise contour. The planning departments can make this information available to landowners so that they can make informed decisions about future development. *[Tongue River III, new with minor edits]*

Socioeconomic Mitigation

Mitigation Measure 81 (Community Issues). TRRC shall appoint a representative to consult with the affected county and local governments for the purpose of assisting impacted communities in addressing potential social and economic problems related to the construction and operation of these lines. To accomplish this, TRRC shall provide all practical assistance to the government planning agencies involved. *[Tongue River I, Condition 3.1, modified to clarify TRRC as the party responsible for this measure, and to make minor editorial changes]*

Mitigation Measure 82 (Northern Cheyenne Tribe). TRRC shall appoint a liaison between TRRC management and the Northern Cheyenne Tribe to ensure that tribal members receive an equal opportunity to apply for and secure temporary construction and full-time operational jobs with the railroad. *[Tongue River II, Social and Economic Condition (2)]*

Mitigation Measure 83 (Mine Development). TRRC shall make available to local governments and to the Northern Cheyenne Tribe all public data and studies that it is aware of concerning the facilities and services that may be required as a result of mine development in the area of these lines. *[Tongue River II, Social and Economic Condition (1)]*

Miles City Fish Hatchery Mitigation

Mitigation Measure 84 (Protection of MCFH Water Supply Pipelines). As agreed to by TRRC and the Montana Department of Fish, Wildlife and Parks (MTDFWP), TRRC shall relocate, as necessary, portions of the water supply pipelines from the Yellowstone River and Tongue River so that each pipeline crosses the rail right-of-way at a right angle or perpendicular to the rail alignment. To ensure structural integrity of the water supply pipelines, the portion of each pipeline lying perpendicular beneath the rail alignment shall be encased in a reinforced concrete pipe (RCP). The RCP shall be of sufficient size to allow for inspection and maintenance of the water supply pipelines. Access to the pipelines beneath the rail alignment shall be provided by installation of reinforced concrete manholes, located on each side of the rail alignment. The RCP manholes shall meet or exceed the American Railway Engineering and Maintenance of Way Association's standard specifications for installation of utilities underneath railway embankments. The design plans for the relocated section of the water pipelines and all associated elements shall be prepared by TRRC and provided to the MTDFWP for review and approval prior to being constructed. TRRC shall locate and protect (and replace if harmed) outgoing water pipelines that would impact operations if affected by rail construction or operation. *[Tongue River III, new]*

Mitigation Measure 85 (Weed Control on MCFH). As agreed to by TRRC and the Montana Department of Fish, Wildlife and Parks (MTDFWP), TRRC shall use only mechanical means of weed control in its right-of-way adjacent to the Miles City Fish Hatchery between the points where the rail line crosses Interstate 94 to the connection with the BNSF Railway Company main line. If it becomes necessary to utilize herbicides to control noxious weeds along the right-of-way in this area, herbicides will only be used with prior approval from the MTDFWP, as to the type of herbicide, application rate, means of application, wind speed and direction. *[Tongue River III, new]*

Mitigation Measure 86 (MCFH Continuing Consultation). TRRC shall continue to make itself available to consult with Montana Department of Fish, Wildlife and Parks (MTDFWP) to reach consensus on any remaining issues concerning the environmental effects on the Miles City Fish Hatchery from railroad construction and operations, for a period of up to six months after the effective date of the Board's final decision in Tongue River III. TRRC shall use its best efforts to achieve resolution of any outstanding issues during that period. If no resolution is achieved during that period, the requirement for continued consultation shall cease unless both TRRC and the hatchery agree that the period should be extended and so advise the Board in writing. At the end of the consultation period (whether extended by mutual agreement or not), TRRC shall advise the Board of its positions in writing. MTDFWP also shall be invited to provide its position, and either TRRC or MTDFWP (or both) may request that the Board develop a condition designed to mitigate any remaining concerns of MTDFWP related to the environmental effects on the hatchery that the Board determines warrant mitigation. *[Tongue River III, new]*

Mitigation Measure 87 (MCFH). TRRC shall adhere to the reasonable mitigation conditions imposed by the Montana Department of Fish, Wildlife and Parks in any easement granted by the State allowing TRRC to cross the Miles City Fish Hatchery. *[Tongue River III, new]*

Fort Keogh Livestock and Range Research Station (LARRS) Mitigation

Mitigation Measure 88 (Department of Agriculture). TRRC shall adhere to the reasonable mitigation conditions imposed by the U.S. Department of Agriculture (USDA) in any easement granted by USDA allowing TRRC to cross the LARRS property line. *[Tongue River III, new, to avoid any inconsistency between the USDA's own mitigation conditions, and Tongue River I Condition 2.2.2]*

Spotted Eagle Lake Mitigation

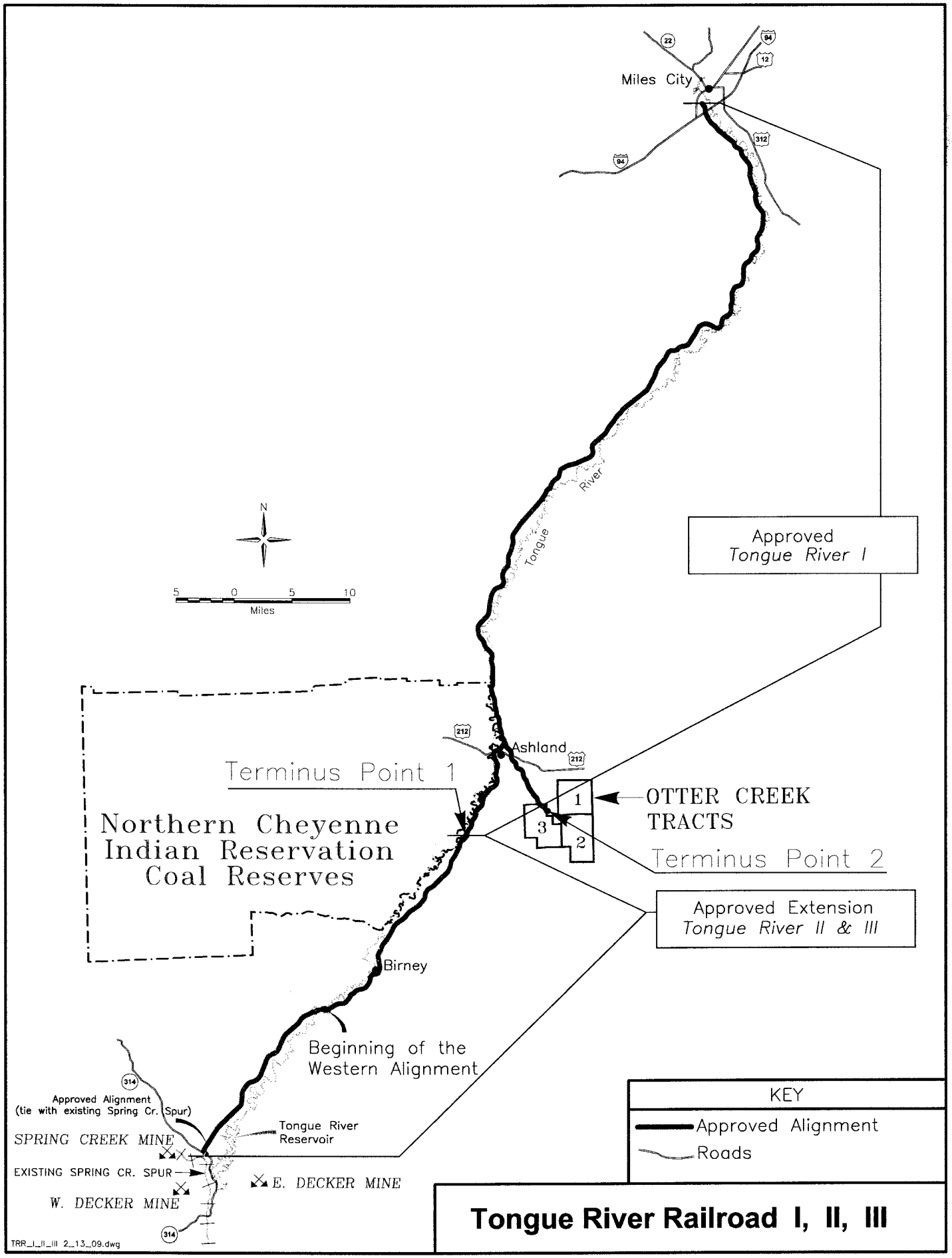
Mitigation Measure 89 (Tree Buffers). As agreed to by TRRC, TRRC shall provide a tree buffer between the Spotted Eagle Lake recreation area and the railroad right-of-way in order to reduce the impact of train noise upon those pursuing recreational activities and to moderate the visual impact to that area. *[Tongue River I, Condition 6.1(6), modified to clarify the tree buffer requirement at the Spotted Eagle Lake recreation area]*

Additional Mitigation Measures

Mitigation Measure 90 (Paleontological Resources). If significant paleontological resources are discovered during surface disturbing activities related to construction of any part of these lines, all work that potentially would damage the resource shall cease, the area of concern shall be protected, and the Board notified as soon as possible. Appropriate mitigation measures then shall be developed by SEA and implemented as soon as possible. These mitigation measures could include, as appropriate, collection and curation of scientifically significant fossils, additional sampling, and/or monitoring of excavation. *[Tongue River III, new]*

Mitigation Measure 91 (Compensation Program). TRRC shall participate in the development of a reasonable compensation program for lost wildlife habitat along these rail lines prior to beginning construction on any portion of the lines. The goal of the compensation program shall be to ensure that there is no net decrease in wildlife-habitat values resulting from the project. Habitat values of acreage lost shall be assessed using the U.S. Fish and Wildlife Service's Habitat Evaluation Procedure. TRRC shall be responsible for acquiring land (through purchase, conservation easements or other measures) and enhancing the wildlife-habitat value on that land to achieve the no-net-loss goal, and developing and implementing a monitoring plan to evaluate success of enhancement measures. Monitoring shall continue through the reporting period described in Mitigation Measure 17. The process of valuing habitat loss, acquiring and enhancing new lands, and implementing the monitoring plan shall be done by TRRC with prior approval of the Multi-agency/Railroad Task Force in accordance with the process set forth in Mitigation Measure 14. The process of valuing habitat loss for individual species or habitat types shall include an as needed analysis of potential "habitat fragmentation," i.e., assessment of the direct loss of wildlife habitat, reduction in the size of existing habitat patches, creation of more edge-type habitat, and creation of barriers that block movement of wildlife between patches. An example of appropriate habitat compensation could include the purchase by TRRC of "cutoff" land parcels containing good wildlife habitat, and the donation of these lands to the Montana Department of Fish, Wildlife, and Parks for beneficial wildlife management. *[Tongue River I, Condition 10.1(1); Tongue River II, Terrestrial Condition A.9.3(1), modified to clarify the goal of the compensation program]*

Mitigation Measure 92 (Miles City Fish Hatchery). As agreed to by TRRC, TRRC shall implement the work plan entitled, "Revised Work Plan for High Resolution Vibration Monitoring, Evaluation of Potential Effects of Tongue River Railroad Construction and Operation, and Potential Mitigation at Miles City Fish Hatchery" prepared by Womack & Associates, dated April 13, 2006. *[Tongue River III, new]*


Miles City
22
94
12
312
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Miles
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Tongue River I
212
Ashland
212
Terminus Point 1
Northern Cheyenne
Indian Reservation
Coal Reserves
1
3
2
OTTER CREEK
TRACTS
Terminus Point 2
Approved Extension
Tongue River II & III
Birney
Beginning of the
Western Alignment
314
Approved Alignment
(tie with existing Spring Cr. Spur)
SPRING CREEK MINE
Tongue River
Reservoir
EXISTING SPRING CR. SPUR
E. DECKER MINE
W. DECKER MINE
314
KEY
Approved Alignment
Roads
Tongue River Railroad I, II, III
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