SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

April 17, 2015

Re: Docket No. FD 30186, Tongue River Railroad Company, Inc.—Rail Construction and Operation—in Custer, Powder River and Rosebud Counties: **Issuance of Draft Environmental Impact Statement and Notice of Public Comment Period and Meetings**

Dear Reader:

The Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) is pleased to provide you with your copy of the Draft Environmental Impact Statement (Draft EIS) for the proposed construction and operation of the Tongue River Railroad.

This Draft EIS analyzes the potential environmental impacts of the Tongue River Railroad Company's (TRRC) October 2012 revised application to the Board requesting authority to construct and operate a rail line in southeast Montana. In TRRC's December 2012 supplemental application, TRRC identified its preferred route for the proposed Tongue River Railroad as the 42-mile Colstrip Alternative, which would travel between Colstrip, Montana, and the Ashland/Otter Creek areas of Montana. The Draft EIS analyzes the environmental impacts of the proposed rail line and alternatives, including the No-Action Alternative.

Four cooperating agencies assisted OEA in the preparation of the Draft EIS: the U.S. Department of Agriculture, Agricultural Research Service; the U.S. Department of the Interior, Bureau of Land Management; the U.S. Army Corps of Engineers; and the Montana Department of Natural Resources and Conservation, representing all Montana State agencies.

HOW TO COMMENT ON THE DRAFT EIS

OEA and the cooperating agencies invite public comment on all aspects of the Draft EIS and are providing a 60-day public comment period, which begins when the U.S. Environmental Protection Agency issues a notice of availability in the *Federal Register* on April 24, 2015. Comments on the Draft EIS must be received or postmarked by June 23, 2015.

We will be hosting ten public meetings to receive comments on the Draft EIS during which interested parties may make oral comments in a formal setting and/or submit written comments. We will hold two meetings per day in each of the Montana communities of Lame Deer, Ashland, Colstrip, Miles City, and Forsyth. **Instructions on how to submit comments and the specific locations, dates, and times of the public meetings are attached to this letter in a separate Fact Sheet.** After your review of the Draft EIS, we appreciate your comments on ways we may improve

our analyses and correct errors that you see, your compliments on what we have done well, and your requests to supplement what you feel needs further work. The more specific your comments are, the better we will be able to respond to them.

You may choose a number of different methods to submit comments on the Draft EIS. During the 60-day public comment period, you may submit written comments electronically or by mail. You may also attend one or all of the public meetings held in the project area. You may offer oral comments and submit written comments while you are at the meetings. In addition, OEA will hold two online public meetings intended for people who cannot attend the public meetings in the project area, the details of which can be found on the Fact Sheet that follows this letter. We will consider all comments submitted with care and attention, no matter how you decide to comment. It is not necessary to attend a meeting—written and electronically submitted comments are just as important as oral comments.

WHERE TO FIND THE DRAFT EIS

The Draft EIS is available for viewing and downloading via the Board's website at http://www.stb.dot.gov, under "E-Library," then under "Decisions & Notices," beneath the date "04/17/15." Project-specific information on the Board's website may be found by placing your cursor on the "Environmental Matters" button, then clicking on the "Key Cases" button in the dropdown menu. The Draft EIS is also available on the Board-sponsored project website at http://www.tonguerivereis.com.

OEA has distributed the Draft EIS through hard copy and CD-ROM mailings and has made the Draft EIS available to the public on the Board's website (www.stb.dot.gov) and the Board-sponsored project website (www.tonguerivereis.com). Printed copies of the Draft EIS are available for review in public libraries throughout the project area. The list of libraries where you may find the Draft EIS is on the Fact Sheet that follows this letter.

If you wish to receive a copy of the Draft EIS or have questions about where to find the Draft EIS, please call 1-866-622-4355 and leave your name, address, and phone number.

WHAT HAPPENS AFTER THE COMMENT PERIOD CLOSES

After the close of the public comment period on the Draft EIS, OEA and the cooperating agencies will prepare a Final EIS in response to comments on the Draft EIS. The Final EIS will also set forth OEA's final environmental mitigation recommendations. The issuance of the Final EIS completes the Board's environmental review process.

The Board will then issue a final decision on the proposed project based on the entire environmental record, including the record on the transportation merits, the Draft EIS, the Final EIS, and all public and agency comments received. In this final decision, the Board will decide whether to approve the proposed rail line, deny it, or approve it with mitigating conditions, including environmental conditions. The cooperating agencies may also issue separate decisions, approvals, or denials related to the proposed rail line. No project-related construction may begin until a Board decision granting rail line construction and operation has been issued and become effective.

OEA appreciates the efforts of all interested parties who have participated in this environmental review. We look forward to receiving your comments.

Sincerely,

Victoria Rutson
Director,
Office of Environmental Analysis

FACT SHEET

The Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) is implementing an outreach effort to ensure that the public, agencies, and communities have the opportunity to actively participate and comment on the Draft EIS and the Board's environmental review process. Comments on the Draft EIS must be received or postmarked by June 23, 2015.

Beginning on June 8, 2015, OEA and the cooperating agencies will host 10 public meetings in the project area to receive public comments on the Draft EIS during which interested parties may make oral comments in a formal setting and/or submit written comments. OEA will begin each meeting with a 30-minute open house followed by a brief overview of the proposed project and environmental review process. The overview will be followed by a formal comment period during which each interested individual will be given several minutes to convey his or her oral comments. The dates, locations, and times of the public meetings are shown below:

- June 8, 2015, 2:00–4:00 pm and 6:00–8:00 pm at St. Labre Indian School, 1000 Tongue River Road, Ashland, MT
- June 9, 2015, 2:00–4:00 pm and 6:00–8:00 pm at Miles Community College, Room 316, 2715 Dickinson Street, Miles City, MT
- June 10, 2015, 2:00–4:00 pm and 6:00-8:00 pm at Colstrip High School, 5000 Pinebutte Drive, Colstrip, MT
- June 11, 2015, 2:00–4:00 pm and 6:00–8:00 pm at the Northern Cheyenne Tribal Building, Council Chambers, 600 South Cheyenne Ave, Lame Deer, MT
- June 12, 2015, 2:00–4:00 pm and 6:00–8:00 pm at Forsyth High School, 917 Park Street, Forsyth, MT

In addition, OEA will hold two online public meetings intended for people who cannot attend the public meetings in the project area. All interested individuals must register to attend the online public meeting and preregister to provide formal comments. OEA will begin the online public meeting with a brief overview of the proposed project and environmental review process. The overview will be followed by a facilitated formal comment session during which individuals that have preregistered will be given several minutes to convey his or her oral comments. If time permits, the facilitator will allow other interested individuals who did not preregister to provide oral comments. Interested individuals can participate in the meetings via phone, computer, or both. The online public meetings will be held at the following date and times:

- June 17, 2015, 12:00–3:00 pm and 6:00–9:00 pm (Eastern Time).
- To register for the online public meeting, visit www.tonguerivereis.com. Additional meeting information and dial-in instructions will be provided at registration.

Recorded Comments: A court reporter will be present to record oral comments during the public meetings. If time permits, the court reporter will be available at the conclusion of the formal segment of the meeting to record oral comments from individuals not interested in addressing the meeting as a whole. All meeting transcripts will be available on the project website after the meetings.

Written Comments: Comment forms will be provided at the public meetings. Completed forms will be accepted at the meetings or the forms can be submitted later by mail. Any interested party may submit written comments on the Draft EIS regardless of whether they participate in any of the 10 public meetings and provide oral comments. Comment forms or written letters may be mailed to:

Ken Blodgett
Attention: Environmental filing, Docket No. 30186
Surface Transportation Board
395 E Street SW
Washington, DC 20423-0001

Electronic Comments: Comments may be submitted electronically on the Board-sponsored project website, www.tongueriverеis.com. It is not necessary to mail written comments that have been submitted electronically. Please refer to **Docket No. 30186** when submitting comments.

Library Distribution: OEA has distributed the Draft EIS to the libraries listed below and requested that the entire Draft EIS be made publicly available in their reference sections.

Bicentennial Library of Colstrip
417 Willow Ave
Colstrip, MT 59323

Big Horn County Public Library
419 North Custer Avenue
Hardin, MT 59034

Dr. John Woodenlegs Memorial Library
1 College Drive
Lame Deer, MT 59043

Henry Malley Memorial Library
102 S Lincoln
Broadus, MT 59317

Miles City Public Library
1 S 10th Street
Miles City, MT 59301

Judson H. Flower Jr. Library (Miles Community College)
2715 Dickinson Street
Miles City, MT 59301

Rosebud County Library
201 North 9th Avenue
Forsyth, MT 59327

Deadline: Written comments on the Draft EIS must be postmarked by June 23, 2015. Electronically filed comments must be received by June 23, 2015.

All comments received—written, submitted electronically, or transcribed—will carry equal weight in helping to complete the EIS process and guide the Board in making a decision on this matter.

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Docket No. 30186

Tongue River Railroad Company (TRRC) Construction and Operation of a New Rail Line in Southeast Montana

Lead Agency: Surface Transportation Board (Board). **Cooperating Agencies:** U.S. Department of Agriculture (USDA) Agricultural Research Service; U.S. Department of the Interior Bureau of Land Management (BLM); U.S. Army Corps of Engineers (USACE); and Montana Department of Natural Resources and Conservation, representing all Montana State agencies.

Proposed Action: Approval of TRRC's proposal to construct and operate a rail line to transport low-sulfur, subbituminous coal from mine sites that could be developed in Rosebud and Powder River Counties, Montana, including the proposed Otter Creek Mine. The build alternatives under consideration are located in Custer, Rosebud, Powder River, and Big Horn Counties, Montana. The final location would depend on the build alternative licensed. The cooperating agencies' federal actions would include BLM's decision and USDA's decision to issue linear right-of-way grants for the proposed rail line to pass through federally managed lands under the Federal Land Policy and Management Act, USACE's decision to issue a discharge permit under section 404 of the Clean Water Act of 1977, and a permit to perform work or place a structure in navigable waters under Section 10 of the Rivers and Harbors Act of 1899.

Abstract: TRRC proposes to construct and operate a 42-mile rail line (the Colstrip Alternative) between Colstrip, Montana and the Ashland and Otter Creek areas of Montana. The Board's Office of Environmental Analysis (OEA) and the cooperating agencies have prepared this Draft Environmental Impact Statement (EIS), which analyzes the environmental impacts that could occur if TRRC were to construct and operate the proposed rail line. This Draft EIS analyzes the environmental impacts of ten build alternatives and the No-Action Alternative. Any of the build alternatives could have minor to highly adverse impacts on the following resources: transportation, greenhouse gases and climate change, noise, biological resources, water resources, visual resources, cultural and historical resources, land resources, geology and soils, socioeconomics, and environmental justice. All other resources would experience negligible impacts. OEA has included draft recommended mitigation measures in this Draft EIS. These mitigation measures will be considered by the Board as potential conditions if the Board decides to grant TRRC authority to construct and operate the rail line.

Comment Period: The public and any interested parties are encouraged to make written comments on all aspects of this Draft EIS. All comments must be submitted within the comment period, which will close on June 23, 2015.

Contacts: Written comments on the Draft EIS may be submitted to:

Ken Blodgett
Surface Transportation Board
395 E Street, S.W.
ATTN: Office of Environmental Analysis
Docket No. 30186

Comments may also be submitted electronically on the project website, www.tonguerivereis.com. It is not necessary to mail written comments that have been submitted electronically. Please refer to Docket No. 30186 when submitting comments. Further information about this project can be obtained by calling OEA's toll-free number at 1-866-622-4355 (telecommunications device for the hearing impaired is 1-800-877-8339). This Draft EIS is available for viewing and downloading on the Board's website, www.stb.dot.gov, and on the Board-sponsored project website, www.tonguerivereis.com.

Public Meetings: In addition to receiving written comments, OEA will host 10 public meetings on this Draft EIS during which interested parties may make oral comments in a formal setting and/or submit written comments. OEA will begin each meeting with a 30 minute open house followed by a brief overview of the proposed project and environmental review process. The overview will be followed by a formal comment period. A court reporter will be present to record these oral comments. If time permits, the court reporter will be available at the conclusion of the formal segment of the meeting to record oral comments from individuals not interested in addressing the meeting as a whole. Meeting transcripts will be available on the project website after the meetings. Meetings will be held at the following locations, dates, and times.

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- June 17, 2015, 12:00–3:00 pm and 6:00–9:00 pm (Eastern Time).

Questions and Answers: Draft Environmental Impact Statement for the Tongue River Railroad

History of the Tongue River Railroad Cases

Is this the same proceeding that has been at the agency since the 1980s?

No. There have been four Tongue River Railroad Company (TRRC) projects—Tongue River I, II, III, then revised Tongue I —filed before the Surface Transportation Board (the Board) and the Board's predecessor agency, the Interstate Commerce Commission (ICC). The proceedings have similarities, but each one has involved distinct environmental reviews and decisions by the agency. Here is a summary:

In 1986, the ICC granted approval for TRRC to build and operate an 89-mile rail line between Miles City, MT and two endpoints near Ashland, MT. This proceeding is known as Tongue River I.

TRRC did not build the rail line that ICC approved in Tongue River I. TRRC later applied for authority to build an extension that would extend approximately 42 miles from Ashland, MT south to Decker, MT. That proceeding is known as Tongue River II. In 1996, ICC was abolished and authority for licensing rail constructions passed to the newly created Surface Transportation Board. Also in 1996, the Board approved one of the alternatives considered in Tongue River II.

TRRC did not build the rail line that the Board approved in Tongue River II and later applied for authority to build and operate the Western Alignment, a 17.3-mile alternate route for a portion of the route already approved in Tongue River II, in a proceeding known as Tongue River III. The Board approved Tongue River III in 2007.

In 2011, the U.S. Court of Appeals for the Ninth Circuit reviewed the Board's environmental analysis in Tongue River III and decided that the Board should revisit the environmental baseline data and the cumulative impacts analysis. Following this decision, TRRC informed the Board that it no longer intended to build the extension approved in Tongue River II or the revised route approved in Tongue River III.

In 2012, the Board dismissed Tongue River II and Tongue River III and reopened Tongue River I. The Board required TRRC to submit a revised application to explain its current proposal. The Board also decided to conduct a new environmental review of the proposed rail line.

The Board's Office of Environmental Analysis (OEA) is responsible for ensuring the Board's compliance with the National Environmental Policy Act (NEPA) and has prepared this Draft Environmental Impact Statement (EIS) for public review and comment.

TRRC's Proposed Action

What is the proposed project?

TRRC has submitted an application with the Board to construct an approximately 42-mile common carrier rail line in eastern Montana. The proposed rail line would extend between Ashland and Colstrip, Montana. It would be constructed primarily to move coal from the Otter Creek Mine, if that mine is permitted.

How many trains does TRRC propose to operate over its rail line?

TRRC proposes to provide rail service to the proposed Otter Creek Mine near Ashland, MT. TRRC estimates that traffic on the proposed line would consist of approximately 7.4 trains per day to and from the mine (3.7 trains in each direction).

Would any commodities other than coal move on the TRRC rail line?

It is possible that the proposed rail line could be used to transport commodities other than coal. Currently, however, the transportation of coal from the proposed Otter Creek Mine is the primary proposed use of the rail line. OEA also considered the possibility that other coal mines could be proposed and developed in the area. In this Draft EIS, OEA analyzed the potential environmental impacts of rail traffic from the proposed mine and other mines that could potentially be developed in the future.

The Role of the Surface Transportation Board

What is the Board's role in the project?

The Board is the federal agency with licensing authority over construction and operation of rail lines in the interstate rail network. In order to construct and operate the proposed rail line, TRRC would have to receive approval from the Board.

Does the Board consider environmental impacts when it makes its decision?

Yes. NEPA requires every federal agency to consider potential environmental impacts before making any major decision. The purpose of this Draft EIS is to inform the Board of the likely environmental impacts of its decision and to involve the public.

When will the Board makes its decision?

The Board cannot make its final decision on TRRC's application until the environmental review process is complete, which means that the Draft EIS is issued, the public review and comment period has closed, and the Final EIS is issued. After the environmental review process is complete, the Board can then decide whether to approve, deny, or approve with conditions (including environmental mitigating conditions) TRRC's application.

Alternatives

What alternatives are analyzed in this Draft EIS?

NEPA requires that federal agencies consider alternatives to a proposed project in their environmental review. In this Draft EIS, OEA analyzed the potential environmental impacts of 11 alternatives. Ten of the alternatives are different rail alignments that could be built (called the "build alternatives" in the EIS). OEA also considered the potential impacts of not constructing the proposed rail line (called the "no-action alternative" in the EIS). TRRC's preferred alternative is the Colstrip Alternative. OEA has not yet identified its preferred alternative. It will do so in the Final EIS.

Could the proposed rail line move more coal than the 20 million tons from the proposed Otter Creek Mine?

Yes. Right now, the proposed Otter Creek Mine is the only coal mine that has been planned in the area that the proposed rail line would serve. However, it is possible that additional coal mines could be developed in the area if the proposed rail line is constructed. In addition to the proposed Otter Creek Mine, the Draft EIS considers the environmental impacts of trains moving coal from new mines that could be developed in the future at the Poker Jim Creek–O'Dell Creek and Canyon Creek deposits, which are located near the project area.

How many trains could travel on the proposed rail line?

Future rail traffic would depend on many factors, including demand for coal, regulation of coal, coal export capacity, and which alternative, if any, is approved. Rail traffic would also vary over time. TRRC stated that the average rail traffic would be 7.4 trains per day (3.7 trains in each direction). If additional mines are developed in the project area and if new export terminals in the Pacific Northwest are constructed, then OEA predicted that rail traffic could be as high as 18.6 trains per day (for build alternatives going north) or 26.7 trains per day (for build alternatives going south) by the year 2030.

What about the number of project-related trains that would move over other rail lines--are you looking at the environmental impacts of those trains?

Yes. OEA used a computer model to predict where the trains from the proposed rail line would travel and to identify rail lines that would experience an increase in rail traffic. The model identified segments of rail where the volume of traffic could increase beyond the Board's thresholds for environmental analysis (an increase of eight trains per day or more for areas in compliance with national air quality standards and an increase of three trains per day or more for areas not in compliance with national air quality standards). OEA analyzed the potential environmental impacts that could occur on these rail segments due to increased rail traffic.

What is the construction schedule proposed by TRRC?

The precise construction schedule will depend upon which alternative, if any, is approved. Longer alternatives and alternatives requiring large changes to topography would generally take longer to construct than shorter alternatives and alternatives that would require less cut and fill. Assuming a construction season of 8 months per year, construction of any build alternative would range from 20 months over a period of 2.5 years to nearly 50 months over approximately 6 years, depending on the alternative. TRRC has indicated that a year-round schedule may be considered if project economics and conditions dictate. Assuming a year-round construction schedule, the construction duration would range from 16 to almost 40 consecutive months depending on the alternative. TRRC indicated that the proposed rail line could be constructed and operational by the time that coal production from the Otter Creek Mine would begin, which is estimated to be no earlier than 2018. The timing and sequence of rail line construction would depend on funding, final design, and permit conditions.

NEPA Process

How did OEA determine the scope of the EIS?

To assist in determining the scope of this Draft EIS, OEA involved the public, government agencies, tribal organizations, and other interested parties. OEA also revisited the alternatives proposed in Tongue River I.

How does the mitigation process work?

For certain potential environmental impacts, TRRC has proposed voluntary mitigation measures. OEA has recommended additional preliminary mitigation measures based on available information, consultations with appropriate agencies, and the environmental analysis presented in this Draft EIS. These preliminary mitigation measures could be imposed by the Board in addition to TRRC's voluntary mitigation measures. OEA invites

public and agency comments on these proposed mitigation measures and suggestions for any additional mitigation that might be reasonable to impose. OEA will make its final recommendations on mitigation to the Board in the Final EIS. The Board will then make its final decision regarding the proposed rail line and any conditions it might impose.

How would we know that the proposed mitigation would actually happen?

If the Board decides to approve an alternative for construction and determines that mitigation is necessary, the Board could require TRRC to report to OEA and other federal and state agencies on the progress of, implementation of, and compliance with the mitigation measures.

Noise and Vibration

If the Board approved a build alternative, would people living near the proposed rail line hear the trains?

Yes. Several factors affect the distance at which noise can be heard: location, hearing sensitivity, wind, temperature, topography, and intervening buildings. To assess the potential impacts of noise from the proposed rail line, OEA identified the locations of residences, schools, hospitals, churches, retirement homes, and other places along the line that could be sensitive to noise. These places are called "sensitive noise receptors." OEA used a computer model to predict the locations along the proposed rail line where noise from the trains would exceed OEA's thresholds for analysis and identified the sensitive noise receptors in these locations. OEA found that operation of any alternative, except for the Decker East Alternative, would have adverse impacts for at least one sensitive noise receptor. The Colstrip Alternative would have the most noise impacts because there are a large number of residents along the existing Colstrip Subdivision. Project-related trains operating on existing rail lines (downline rail traffic) could cause adverse noise impacts between Fargo, ND and Willmar, MN.

Air Quality

Would construction and operation of the proposed rail line affect air quality?

OEA modeled the potential effects of the proposed rail line on air quality in the project area. OEA found that construction and operation of the proposed rail line would not cause the concentrations of nitrogen dioxide, carbon monoxide, lead, particulate matter, or sulfur dioxide in the air to exceed the national standards for air quality. The addition of the project-

related trains to existing rail traffic could adversely affect air quality along some existing rail lines outside of the project area, but would not cause concentrations of pollutants in the air to exceed national standards.

Would construction and operation of the proposed rail line contribute to climate change?

To assess the impact of the proposed rail line on climate change, OEA calculated how much carbon dioxide would be emitted by construction equipment and the locomotives on the rail line and how much carbon dioxide could be emitted by burning the coal that would be transported on the rail line. OEA found that the direct greenhouse gas emissions from construction and operation of the proposed rail line would be equivalent to between 80,000 and 185,000 metric tons of carbon dioxide per year, depending on which alternative, if any, is approved and on the future traffic levels.

The indirect impact of adding new coal to the international coal market could result in a change in global greenhouse gas emissions ranging from a decrease of 1.7 million metric tons of carbon dioxide equivalent per year to an increase of 81 million metric tons of carbon dioxide equivalent per year. OEA's model predicted that a decrease in greenhouse gas emissions could occur because the coal from the Tongue River area would replace some of the coal and other fossil fuels already being consumed. The decrease would occur if no new mines other than the proposed Otter Creek Mine are developed in the project area and if no new coal export terminals are approved and constructed on the west coast. OEA's model predicted that the maximum increase in greenhouse gas emissions of 81 million metric tons per year would occur if new mines were to develop in the future in the Tongue River area and if new export terminals were to be approved and constructed on the west coast.

Coal Dust

Would the coal dust from rail cars affect human health?

OEA analyzed the risks of airborne coal dust and determined that exposure would be within applicable standards and guidelines. The aggregate concentration of all types of particulate matter, including airborne coal dust, would be below air quality standards for particulate matter. OEA also analyzed how coal dust could affect human health if it were to be ingested by humans or to make its way into soil or water. OEA found that the concentrations of all of the chemical components of coal dust would be below the screening levels for human exposure in soil, dust, water, and fish. OEA concluded that coal dust from rail cars on the proposed rail line would not affect human health.

How would the transport of coal affect water quality?

OEA analyzed the potential effect of coal dust from rail cars on the proposed rail line that could make its way into surface waters. OEA found that coal dust constituents in surface water would be below screening levels for ecological exposure, except for barium. The conservative analysis assumptions overestimate the amount of barium that would actually be found in surface waters such that actual barium concentrations would be lower and below screening levels.

Biology

What federally listed threatened and endangered species are in the study area?

Four federally listed endangered species could use habitats near the proposed rail line: black-footed ferret, interior least tern, whooping crane, and pallid sturgeon. Two candidate species for listing—the greater sage-grouse and Sprague's pipit—could use habitats near the proposed rail line. Among these species, only the greater sage-grouse was documented in the project area during the biological surveys that OEA conducted in 2013. Overall, OEA concluded that the proposed rail line could have minor impacts on endangered and candidate species, but that these impacts would not adversely affect the species or cause the populations of these species to decline.

How would the proposed rail line affect the greater sage-grouse?

The areas that support the highest sage-grouse densities are known as "core habitat areas" for sage-grouse and are a high priority for conservation in Montana. Although OEA documented a small population of greater sage-grouse in the study area, the proposed rail line would not affect any core habitat areas. OEA concluded that the proposed rail line would not cause a decline in greater sage-grouse.

How would the proposed rail line affect big game in southeastern Montana?

Big game species are common in the study area and the populations are not vulnerable to decline. Although construction of the proposed rail line would change or degrade some big game habitat, habitat would remain abundant. Big game species would adapt to changes in the landscape and to operation of the proposed rail line.

Would fencing and rail operation limit wildlife movement?

Yes. Rail operation and fencing could constrain wildlife movement. Small animals might not cross the rail line, which could limit their ability to breed or to find food and water.

Fences along the right-of-way could impede the movement of larger species, especially antelope. However, Montana law requires large right-of-way fence openings along grazing lands and wildlife would be able to make use of these openings. In addition, TRRC would design the right-of-way fence to allow movement of wildlife, including big game, across the right-of-way.

How would the spread of noxious weeds be managed?

If the Board were to approve the proposed rail line, TRRC would consult with the county weed districts for Rosebud, Big Horn, Custer, and Powder River Counties to develop a program to minimize the introduction and spread of noxious weeds. This program could include construction measures such as the use of sterile ballast, weed-free seed straw, mulching, and hydroseeding materials.

Water

How would the proposed rail line affect the Tongue River floodplains?

The proposed rail line would cross the floodplain of the Tongue River and other bodies of water. TRRC would design the proposed rail line to maintain floodplain connectivity. TRRC would consult with county floodplain administrators when designing bridge crossings of streams and the Tongue River.

How would the proposed rail line affect fish passage in streams and rivers?

None of the alternatives that the Board is considering would change the connectivity of any fish-bearing stream or river. The build alternatives would cross fish-bearing streams with either bridges or culverts. Most of the alternatives would cross fish-bearing streams and rivers with free-span bridges. These bridges would not require permanent structures in the channel. The Decker Alternative and the Decker East Alternative would cross the Tongue River and may require support structures in the river channel. OEA expects that these structures, if required, would not affect the connectivity of the Tongue River. The build alternatives would also cross fish-bearing streams with culverts designed to allow fish passage. TRRC would comply with Montana state laws that require protecting streams and rivers and maintaining connectivity.

How would the proposed rail line affect water quality?

The proposed rail line could cross or approach several surface waters that are considered impaired by Montana Department of Environmental Quality. Construction and operation could transport fine sediments and other pollutants to surface waters. Construction impacts

would be short-term and temporary. TRRC would obtain a Montana Pollutant Discharge System permit and a 401 water quality certification.

Would construction and operation of the proposed rail line consume water?

Construction of the proposed rail line would use some groundwater and/or surface water. The withdrawals would be small compared to available water sources. TRRC would make all withdrawals under state-authorized water right allocations and would not reduce the amount of available water beyond what is already authorized by the Montana Department of Natural Resources and Conservation.

Visual

How did OEA evaluate the impacts on the visual landscape?

OEA assessed the landscape's visual features relative to the region's visual character and determined the importance of these features to sensitive viewers. OEA prepared conceptual illustrations of the visual impacts of the proposed rail line at key observation points.

How would the proposed rail line affect the visual landscape?

Construction and operation of the proposed rail line would affect the visual landscape because it would affect existing features and introduce new features into the viewshed. During construction, equipment and workers would be visible. After construction, changes to the landscape, the rail line itself, and trains travelling on it would be visible. The project area is largely rural and undeveloped, so the addition of new features would be noticeable. The extent of the visual impacts would depend on the build alternative and on the vantage point of the viewer in relation to the rail line. OEA found that the Tongue River Alternative, the Tongue River Road Alternative, and the Moon Creek Alternative would have the greatest visual impacts because they are the longest alternatives that the Board is considering.

Cultural Resources and Tribal Consultation

Is OEA consulting with tribes?

Yes. OEA consulted with 21 federally recognized tribes through the scoping process, consultation and under Section 106 of the National Historic Preservation Act. OEA consulted with one tribe under government-to-government consultation. OEA held two meetings and monthly conference calls with tribal representatives and other consulting parties under the Section 106 process, which included updates on the Draft EIS process.

Numerous tribes participated in cultural resource field surveys and provided input on tribal resources in the field.

How was the cultural survey work done?

For tribal and archaeological resources surveys, OEA organized seven eight-member survey teams to conduct field surveys. Each survey team included four tribal members and four OEA archaeologists. Participants from 15 different tribes rotated their participation among the seven field survey teams.

In order to identify built historic resources, OEA's federally qualified architectural historians reviewed maps and previously recorded site forms, interviewed landowners or managers, conducted a windshield survey along public roads, and conducted a pedestrian or all-terrain vehicle field survey along private roads, trails, or cow paths.

Safety

What are the fire hazards and how would they be mitigated?

Although exhaust sparks and hot brake shoe fragments can cause wildfires, rail-induced wildfires rarely occur in Montana. The risk of wildfires along all build alternatives would be low, with slightly higher risks in some small areas of the northern alternatives. TRRC would have to comply with Montana laws to reduce risks by clearing tracks, plowing fireguards, burning vegetation within the fireguards, and developing a wildfire management plan.

Would the increased train traffic cause delay and affect safety on roadways?

OEA predicted that rail traffic on the proposed rail line would have a small impact on grade-crossing delay. The Decker Alternative and the Decker Easter Alternative would have the greatest impact on traffic and safety at crossings. These two alternatives would cross Highway 314, where OEA predicted that train traffic could result in as much as one accident every 11 years under the scenario with the highest number of trains per day.

Recreation

How would rail construction and operation affect hunting?

Rail construction activities could temporarily disturb wildlife near the rail line but OEA does not expect a long-term impact on hunting. The proposed rail line would create a barrier that would restrict access across the right-of-way. Hunters would have to use road crossings to obtain access to the other side of the right-of-way.

Land Use

How would cattle get to water and grazing lands where the rail line crosses property?

TRRC would install cattle passes and private at-grade crossings to help cattle move across the right-of-way where properties have been divided. TRRC would work with landowners to identify appropriate locations for these crossings.

Socioeconomics

How many construction workers would move into the project area?

Project-related construction would draw workers to the area, increasing demand for local housing and public services but also increasing state and local tax revenues. OEA estimates that up to 238 construction workers could move to the four-county area during the peak construction period. The new construction workers would increase the total population of Custer, Rosebud, Powder River, and Big Horn Counties by about 0.6 percent. The long-term population and economic trends would not be affected.

Downline Impacts

How did OEA determine the destination of the trains?

Because there were so many variables that needed to be considered to determine where the trains would move, OEA used a computer model called the Integrated Planning Model (IPM). The model determines the least overall cost for meeting U.S. electric demand. In determining the least cost solution, IPM identifies where each coal plant obtains the coal that it consumes and how much it will consume. The model determines the amount of coal and thus the number of trains needed to transport the coal. Inputs to the model included coal production and transportation costs, national and international coal distribution patterns, and economic and regulatory uncertainties such as low natural gas prices and carbon dioxide emission regulations that could affect coal markets in the future. OEA developed three coal production scenarios (low, medium, and high) based on its projections of which mines could be developed under different conditions and how much coal they would produce. OEA then developed 21 different scenarios for future coal production in the project area. Each of the 21 scenarios would result in a different level of rail traffic and different routings of trains.

What did OEA learn about coal destinations and volumes from its modeling?

OEA's modeling predicted that under most scenarios most of the coal from the Tongue River area would go to power plants in the Midwestern United States. OEA found that approximately the same number of coal trains would travel from the Powder River Basin to the Pacific Northwest with or without the proposed rail line. The amount of coal exported to overseas markets would depend on construction of new export ports, not on construction of the proposed rail line.

Did OEA assess all the impacts on every rail line that project-related trains might operate?

No. OEA used a model to predict where trains from the proposed rail line would operate. The model found that most of the traffic from the proposed rail line would displace coal trains from other places. The model identified some rail lines that would experience a net increase in traffic due to the addition of project-related trains. OEA assessed the potential environmental impacts that could occur because of increased rail traffic on rail lines that would experience an increase beyond the Board's thresholds for environmental analysis. This Draft EIS does not consider impacts on rail lines that would not experience a net increase in rail traffic because of construction and operation of the proposed rail line or that would experience an increase less than the Board's thresholds for environmental analysis.

Would the coal carried over TRRC go to China?

The proposed rail line would carry coal from the proposed Otter Creek Mine near Ashland, MT to a connection with the interstate rail network. OEA's model predicted that this coal would then be transported primarily to power plants in the Midwest. OEA predicted that it generally would not be economical to export coal from the proposed Otter Creek Mine because this coal has a lower energy content than coal available from other mines in the Powder River Basin. OEA also considered the possibility that additional coal mines could be developed in the Tongue River area. If new mines were developed, some of this coal could be transported to the west coast for export to China or other countries in Asia. OEA found, however, that the total volume of coal trains that would move to ports in the Pacific Northwest from the Powder River Basin would be the same regardless of whether or not the proposed railroad is approved and constructed.

If project-related trains would not move west to the proposed new ports, does that mean that railroads other than project-related could haul coal west?

Yes. OEA's model predicted that because the current export terminals are at capacity, the total volume of coal train traffic that would move to the Pacific Northwest would depend on the approval and construction of one or more export ports in that region. If one or more new

ports are approved and constructed, OEA predicted that coal from the Powder River Basin in Wyoming and Montana would be transported by rail to these ports for export. The amount of coal that would be transported to the ports would depend on the port capacity.

Does this Draft EIS consider the environmental impacts of railroads other than project-related trains hauling coal west?

No. This Draft EIS considers the potential impacts that could occur if the Board were to grant approval for construction and operation of the proposed rail line. The Draft EIS considers the direct impacts that could occur within the project area and the indirect impacts that could occur due to increased train traffic outside of the project area. OEA used the IPM to predict where train traffic could increase if the proposed rail line were approved and constructed. The model predicted that rail traffic would not increase on rail lines to the west of the project area because of construction and operation of the proposed rail line. Traffic on rail lines west of the project area could increase in the future, but this increase would occur whether or not the proposed rail line is approved and constructed.

Would communities in the west still see additional coal trains even if the Board should deny TRRC's proposal?

OEA's model predicted that the volume of coal train traffic that would operate over rail lines to the west of the project area in the future would be the same whether or not the proposed rail line is approved and constructed. If one or more of the proposed export terminals in the Pacific Northwest is approved and constructed, then OEA predicted that rail traffic would increase over these rail lines. This would occur even if the Board were to deny TRRC's application.

Why didn't OEA decide to hold public meetings on the Draft EIS in Missoula, Montana and other communities that requested meetings?

OEA decided to hold public meetings on the Draft EIS in several communities in the project area that could experience environmental impacts because of construction and operation of the proposed rail line. OEA's analysis indicates that communities to the west of the project area would not experience a net increase in rail traffic because of construction and operation of the proposed rail line. Therefore, these communities would not experience environmental impacts because of TRRC's proposal. OEA determined that it would be infeasible to hold public meetings in every community through which project-related trains could travel and that the environmental analysis would not benefit from holding meetings in areas that would not experience any environmental impacts from the proposed project.

What routes would the project-related trains take to move east?

The specific routes that project-related trains would take would depend on which, if any, alternative the Board approves. It would also depend on which coal mines, if any, are

developed in the future and on the international coal market. OEA predicted that, if a northern route were to be approved, most of the new net rail traffic would travel east from Nichols, MT and Miles City, MT through Glendive, MT, Mandan ND, Fargo, ND, and Wilmar, MN. Some of these trains would continue on to Chicago, IL by way of St. Paul, MN, La Crosse, WI, and Aurora, IL. If a southern route were approved, OEA predicted that most of the new net rail traffic would move from Spring Creek, MT, through Dutch, WY, Donkey Creek, WY, Edgemont, SD, Crawford, NE, and Alliance, NE. These trains would continue to move east toward Chicago.

How many project-related trains would move east?

OEA identified 13 existing rail segments that could experience an increase in rail traffic of eight trains per day or more if the proposed rail line were approved and if new coal mines are developed in the future in addition to the proposed Otter Creek Mine. These segments are located in Montana, Wyoming, North Dakota, Minnesota, and Nebraska. If no new coal mines are developed in the project area aside from the proposed Otter Creek Mine, then none of the segments downline of the proposed rail line would experience an increase of eight trains per day or more.

Does this EIS consider the environmental impacts of the project-related trains moving east?

Yes. OEA predicted where trains from the proposed rail line would travel and where train traffic could increase because of these new trains. OEA identified rail line segments that could experience an increase in rail traffic that could exceed the Board's thresholds for analysis. OEA then analyzed the potential environmental impact that could occur from the increased rail traffic on these rail lines.

Cumulative Impacts

How did OEA decide which projects to analyze?

OEA determined that 18 projects could contribute to cumulative impacts. These projects could occur in the same timeframe as the proposed rail line. These projects include existing coal mines, proposed and potentially induced coal mines, other energy development projects, land management projects, and construction projects. The impacts of these projects could overlap with the impacts of the proposed rail line.

What would be the cumulative impacts of the proposed rail line and other projects?

OEA determined that the cumulative impacts of the proposed rail line and the other projects that OEA identified could affect grade-crossing safety, grade-crossing delay, air quality,

greenhouse gases and climate change, biological resources, water resources, visual resources, cultural resources, geology and soils, paleontological resources, land use and recreation, energy resources, and socioeconomics.

S.1 Introduction

This summary addresses the key elements of the development of this Draft Environmental Impact Statement (EIS), the project history and setting, the build alternatives, the no-action alternative, and major conclusions regarding environmental impacts.

S.1.1 Purpose and Need

The Tongue River Railroad Company (TRRC) states that the main purpose of the proposed project is to construct and operate a common carrier rail line primarily to transport coal from mine sites that could be developed in Rosebud and Powder River Counties, Montana, including the proposed Otter Creek Mine. Rail access to these mines would make it possible to transport coal from the area, which is among the largest remaining undeveloped reserves of low sulfur, subbituminous coal in the United States.

The proposed rail line involves an application by TRRC for a license or approval from the Surface Transportation Board (Board) to construct a common carrier rail line as part of the interstate rail network. The proposed rail line is not a federal government-proposed or sponsored project. Thus, the purpose and need is informed by both TRRC's goals and the Board's enabling statute.[1] Construction and operation of new rail lines requires prior authorization by the Board under 49 United States Code (U.S.C) § 10901(c). Section 10901(c) is a permissive licensing standard. It now directs the Board to grant construction proposals *unless* the Board finds the proposal "inconsistent with the public convenience and necessity (PC&N)."[2] Thus, Congress presumes that rail construction projects are in the public interest unless shown otherwise.[3]

[1] See Alaska Survival v. STB, 705 F.3d 1073, 1084-85 (9th Cir. 2013).

[2] Although the statute does not define the term *public convenience and necessity*, historically, a three-part test has been used to evaluate that term: whether an applicant is financially fit to undertake proposed construction and provide the proposed service; whether there is public demand or need for the proposed service; and whether the proposal is in the public interest and will not unduly harm existing services.

[3] See N. Plains Res. Council v. STB, 668 F,3d 1067, 1091-92 (9th cir.2011); Mid States Coalition for Progress v. STB, 345 F.3d 520, 552 (8th Cir. 2003); Alaska R.R. - Constr. and Operation Exemption – Rail line Between North Pole and Delta Junction, Alaska, FD 34658, slip op. at 5 (STB served January 5, 2010). Congress first relaxed the section 10901 standard in the Staggers Rail Act of 1980, Pub. L. No. 96-448, 96 Stat. 1895. Before 1980, Congress directed ICC, the Board's predecessor agency, to scrutinize rail construction proposals closely to prevent excess rail capacity. ICC was to issue a license only if it found that the PC&N "require" the construction. See former 49 U.S.C. § 10901(a) (1978); see, e.g., Chesapeake & Ohio Ry. v. United States, 283 U.S. 35, 42 (1931). In the Staggers Act, Congress made it easier to obtain agency authorization for a new line by providing that ICC need only find that the PC&N "permit," as opposed to "require," the proposed new line. See former 49 U.S.C. § 10901(a) (1995); H.R. Rep. No. 1430, 96th Cong., 2d Sess. 115-16 (1980), reprinted in 1980 *U.S.C.C.A.N.* 4147-48. With ICCTA, Congress completed its policy shift, directing that the Board "shall" issue construction licenses "unless" the agency finds a proposal "inconsistent" with the PC&N. See 49 U.S.C. § 10901(c).

S.1.2 Project History and Setting

On October 16, 2012, TRRC filed an application with the Board requesting authority to construct and operate an approximately 83-mile common carrier rail line between Miles City, Montana, and two terminus points near Ashland, Montana: one near the previously planned Montco Mine and another at the proposed Otter Creek Mine.

On December 17, 2012, TRRC filed a supplemental application to supersede its October 16, 2012 application. In this application, TRRC identified its preferred route for the Tongue River Railroad as the 42-mile Colstrip Alternative between Colstrip, Montana, and the Ashland/Otter Creek areas of Montana.

The proposed rail line would be located in Custer, Rosebud, Powder River, and Big Horn Counties, Montana, depending on the build alternative licensed. This four-county area is primarily rural with a few populated areas. Most of the land in the project area is privately owned and used for grazing. Interspersed throughout the area are lands administered by the U.S. Department of the Interior, Bureau of Land Management; U.S. Department of Agriculture; U.S. Forest Service; and State of Montana, as well as locally administered recreational facilities. The Northern Cheyenne Indian Reservation borders the west side of the Tongue River in the project area near Ashland.

S.2 Draft EIS and Final EIS Process

This Draft EIS was prepared by the Board's Office of Environmental Analysis (OEA)—the office responsible for conducting the environmental review process, independently analyzing environmental data, and making environmental recommendations to the Board as part of the Board's licensing process. OEA will consider all comments received on this Draft EIS and respond to substantive comments in the Final EIS, which will include OEA's final recommended environmental mitigation. OEA will identify its preferred alternative in the Final EIS. The Board will consider the entire environmental record, the Draft and Final EISs, all comments received, and OEA's environmental recommendations in making its final decision on TRRC's application.

S.2.1 Scoping and Consultation

S.2.1.1 Scoping

To help determine the scope of the EIS, OEA involved the public, government agencies, tribal organizations, and other interested organizations. On October 22, 2012, OEA published the following items in the *Federal Register* (Fed. Reg.) (77 Fed. Reg. 64592).

- Notice of Intent to Prepare an EIS
- Notice of Availability of the Draft Scope of Study for the EIS

- Notice of Scoping Meetings
- Request for Comments on the Draft Scope of Study for the EIS

OEA distributed a postcard that introduced TRRC's proposed rail line, announced OEA's intent to prepare an EIS, and advertised scoping meetings to the residents of Powder River, Custer, and Rosebud Counties. OEA sent letters providing similar information to elected officials; federal, state, and local agencies; tribal organizations; and other potentially interested organizations. OEA published notice of scoping meetings in several newspapers, including the *Miles City Star Newspaper* and *Billings Gazette*.

In November 2012, OEA held 10 public scoping meetings in Lame Deer, Forsyth, Ashland, and Miles City, Montana. About 525 people attended, including citizens; tribal members; representatives of organizations; elected officials; and officials from federal, state, and local agencies. OEA also met with federal and state cooperating and consulting agencies to discuss the scope of this EIS. The scoping comment period, initially scheduled to close on December 6, 2012, was extended until January 11, 2013, in response to a number of requests. OEA considered all input received during the scoping process. On March 22, 2013, OEA published the Final Scope of Study for the EIS (78 Fed. Reg.17752) on the Board's website and on the Tongue River Railroad EIS website. Additionally, OEA mailed the notice of the availability of the Final Scope of Study to about 2,940 individuals, agencies, and other interested parties. The Final Scope of Study directed OEA's analysis for this Draft EIS.

S.2.1.2 Cooperating Agencies

Four cooperating agencies provided input into the development of this Draft EIS and will continue to work with OEA throughout the public comment period and issuance of the Final EIS.

- U.S. Army Corps of Engineers
- U.S. Department of the Interior, Bureau of Land Management
- U.S. Department of Agriculture, Agricultural Research Service
- Montana Department of Natural Resources and Conservation, representing all Montana State agencies.

S.2.1.3 Agency Consultation

OEA consulted with appropriate federal, state, and local agencies during the preparation of this Draft EIS. For example, OEA held meetings with Montana Fish, Wildlife & Parks, U.S. Fish and Wildlife Service, Montana Department of Natural Resources and Conservation, U.S. Department of Agriculture, Bureau of Land Management, and the Montana Natural Heritage Program to discuss wildlife fieldwork methods in December 2012 and throughout 2013. OEA held numerous meetings and teleconferences with the State Historic Preservation Office and the Advisory Council on Historic Preservation regarding cultural and historic

resources. OEA also solicited input from the U.S. Environmental Protection Agency on several resource areas. OEA has met with agencies in person and through teleconferences throughout the development of this Draft EIS.

S.2.1.4 Tribal Consultation

OEA consulted with tribal organizations throughout the development of this Draft EIS. Executive Order 13175 requires that federal agencies conduct government-to-government consultations with federally recognized Indian tribes in the development of federal policies, as does Section 106 of the National Historic Preservation Act. In December 2012, OEA initiated government-to-government consultations with 20 federally recognized tribes having current and ancestral connections to the region. The Northern Cheyenne and Oglala Sioux Tribes indicated that they wanted to consult on the broader range of impacts considered under the National Environmental Policy Act as part of the environmental review process. The Oglala Sioux did not enter into government-to-government consultation but continued to participate in Section 106 consultation. In April 2013, OEA held a consulting party meeting on the Northern Cheyenne Reservation in Lame Deer, Montana. The meeting included representatives from the tribes, as well as nontribal consulting parties. In February 2014, OEA held a second meeting with Section 106 consulting parties, tribal representatives, federal and state agency representatives, and other interested parties in Billings, Montana.

In addition to face-to-face Section 106 meetings, OEA has held monthly conference calls with tribal representatives and other consulting parties. These conference calls addressed the Section 106 process and provided updates on the EIS process. OEA also consulted with the tribes on field surveys and ensured that tribal members were represented on each archaeological field survey team. OEA provided relevant information, including survey results, directly to the tribes. OEA provided meeting transcripts and summaries of monthly calls on the Board's website and TRRC's EIS website.

S.3 Alternatives

After revisiting the alternatives previously considered by the Board in its earlier Tongue River proceedings and the alternatives proposed in scoping comments, OEA identified 10 build alternatives for detailed study in this Draft EIS. OEA also analyzed the No-Action Alternative under which no rail line would be built. Five of the build alternatives are primary routes, and five offer an eastern variation of the primary routes that shifts the route to the east in the Ashland area (Figure 1 and Table 1).[4]

[4] OEA developed the eastern variations in response to a scoping comment from the Northern Cheyenne Tribe requesting a route as far as possible from the eastern boundary of the Northern Cheyenne Indian Reservation and the Tongue River.

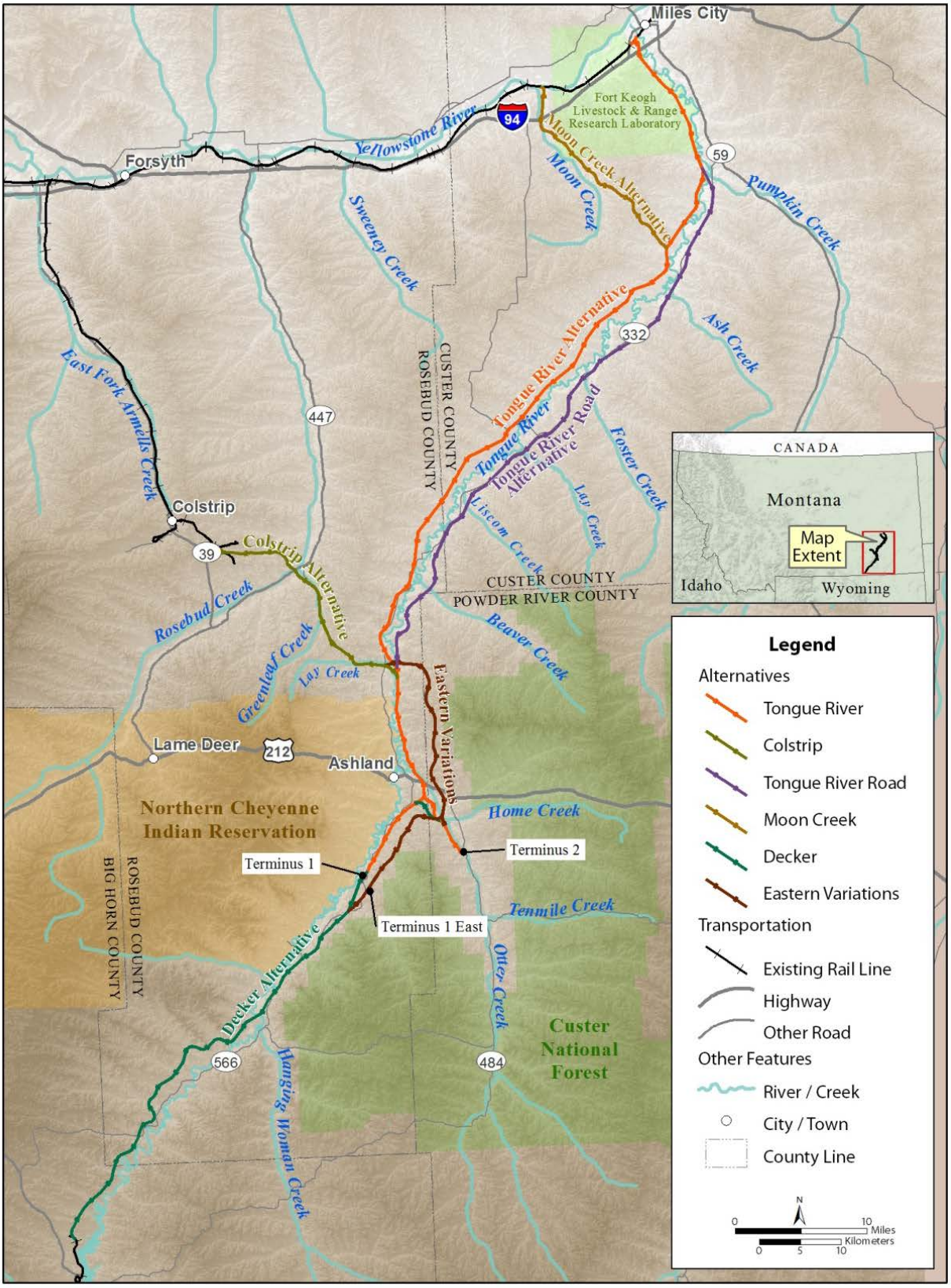

Figure 1. Project Area

Table 1. Build Alternatives: Routes, Variations, and Length

Build Alternative	Primary Route and Variation Combinations	Length (miles)[a]
Tongue River	Tongue River Alternative	83.7
Tongue River East	Tongue River Alternative + Eastern Variation [b]	86.3
Colstrip	Colstrip Alternative[c]	42.3
Colstrip East	Colstrip Alternative + Eastern Variation[c]	45.4
Tongue River Road	Tongue River Road Alternative	83.7
Tongue River Road East	Tongue River Road Alternative + Eastern Variation	85.9
Moon Creek	Moon Creek Alternative	82.1
Moon Creek East	Moon Creek Alternative + Eastern Variation	84.7
Decker	Decker Alternative	51.1
Decker East	Decker Alternative + Eastern Variation (partial)[d]	49.6

Notes:

[a] Total track length, including Terminus Points 1 and 2

[b] The eastern variation includes the Ashland East Variation segment and the Terminus 1 Variation segment

[c] Length does not include 29.7 miles of the existing Colstrip Subdivision

[d] All build alternatives would approach from the north, with the exception of the Decker Alternatives, which would approach from the south. Because of this, only a portion of the eastern variation can be used for Decker East Alternative.

Each of the build alternatives would connect an existing BNSF Railway Company (BNSF) main line to two terminus points.

- Terminus 1 would serve the primary routes at the site of the previously proposed Montco Mine, about 8 miles south of Ashland. Terminus 1 East would serve the eastern variations and would be located southeast of Terminus 1.
- Terminus 2 would serve any build alternatives and be located at the site of the proposed Otter Creek Mine, about 7 miles southeast of Ashland.

The Tongue River Alternatives, Colstrip Alternatives, Tongue River Road Alternatives, and Moon Creek Alternatives would approach their terminus points from the north. These build alternatives are collectively referred to as the *northern alternatives*. The Decker Alternatives would approach both terminus points from the south but would access Terminus 2 from the north. These build alternatives are collectively referred to as the *southern alternatives.*

The Colstrip Alternatives would travel north along the existing Colstrip Subdivision to reach the BNSF main line. The Colstrip Subdivision is an approximately 30-mile BNSF rail line that runs north from Colstrip and connects to the BNSF main line along the Forsyth Subdivision near Nichols, Montana. Although the Colstrip Subdivision is capable of supporting coal trains in its existing condition, TRRC would likely upgrade all sections of the Colstrip Subdivision track. All work is anticipated to be contained within the existing BNSF right-of-way. TRRC would conduct routine inspections of the Colstrip Subdivision track and structures to determine the need for the proposed upgrades, which could be incrementally implemented and might or might not be concurrent with construction of one of the Colstrip Alternatives, assuming that one of these build alternatives is licensed.

S.4 Major Conclusions

OEA has conducted an extensive review of the environmental impacts that could result from construction and operation of the proposed rail line. Based on consultation with federal, state, and local agencies; input provided by organizations, citizens and tribes; and its own independent environmental analysis, OEA has reached the following conclusions about the impacts of the build alternatives.

In general, the longer build alternatives would have more impacts across more resource areas, and the shorter build alternatives would have fewer impacts. Longer build alternatives would require construction of a longer right-of-way. The total right-of-way area of the build alternatives would range from 2,040 to 4,234 acres. The Tongue River Alternatives, Tongue River Road Alternatives, and Moon Creek Alternatives would be on the upper end of this range. The Decker Alternatives and Colstrip Alternatives would be on the lower end of the range. The average width of the right-of-way would range from 367 to 455 feet. The Decker Alternative would be on the upper end of the range and the Tongue River East Alternative would be on the low end of the range.

Aside from the impacts associated with length and total acreage, the build alternatives would have similar impacts with the exception of noise and environmental justice impacts.

- **Noise**. The Colstrip Alternatives would have the most noise impacts (94 sensitive receptors would be adversely affected under the high coal production scenario in the year 2030). This is because a large number of residents live along the existing Colstrip Subdivision (89 under the high coal production scenario in the year 2030). By comparison, between one and five sensitive receptors would be adversely affected by other build alternatives. OEA is recommending that the Board impose operation-related mitigation measures where receptors along the new line would experience adverse noise impacts. These measures would require TRRC to employ mitigation at receptors along the new line where noise would exceed the Board's regulatory threshold for analyzing noise impacts. TRRC would also be required to identify measures to reduce sounding of the train horns on the existing Colstrip Subdivision.
- **Environmental justice.** Noise impacts described above would lead to high and adverse noise impacts on minority and low-income populations along the Colstrip Subdivision. Either of the Colstrip Alternatives would have the most impacts on environmental justice populations. OEA is recommending that the Board impose operation-related mitigation measures specific to these noise impacts. These measures would require TRRC to employ mitigation at receptors where noise thresholds would be exceeded and to identify measures to reduce horn sounding.

OEA also reached conclusions on the following resources.

S.4.1 Coal Production and Markets

Numerous public comments asked whether there is demand for Tongue River coal[5] and how the proposed rail line would contribute to the development of new coal mines and to the transport of that coal out of the Powder River Basin. To address those issues and support the impact analyses, OEA modeled marketable coal production, rail traffic, and national and international coal distribution patterns. OEA's analysis also examined the impacts on coal markets from economic and regulatory uncertainties with a focus on low natural gas prices and carbon dioxide emission regulations.

OEA developed three coal production scenarios to determine impacts on rail transportation. The lowest scenario included only the proposed coal production tonnage as described in TRRC's supplemental application. The medium and high production scenarios are based on the available coal resources in the Tongue River region; the current and projected coal market demand in the United States and internationally; and associated transportation costs, routes, and export terminals.

OEA modeled 21 primary sensitivity scenarios based on three sets of variables across four analysis years (2018, 2023, 2030, and 2037), including three sensitivity analysis scenarios for carbon dioxide (CO_2) regulations and natural gas production and six No-Action Alternative scenarios based on the three sets of variables and sensitivity analysis scenarios.

- Either a northern alternative or southern alternative.
- Three coal production scenarios (low, medium, and high).
- Three levels of coal export capacity in the Pacific Northwest (zero, medium, and high).
- Three sensitivity scenarios to analyze market conditions with new CO_2 regulations and fluctuating natural gas prices.

The modeled volume of rail traffic that would result from the proposed rail line, including transport to mines that would be stimulated by the proposed rail line, ranges from 7.4 to 18.6 trains per day for the northern alternatives and 7.4 to 26.7 trains per day for the southern alternatives, including outgoing trains loaded with coal and empty returning trains. OEA concluded that the northern alternatives would be more economically viable in general because they would have shorter distances to key markets.

Production of Tongue River coal would increase total U.S. coal production, on average, by 1.4 million tons per year (2018 to 2037). If Pacific Northwest coal export capacity does not

[5] The term *Tongue River coal* in this context refers to coal from the proposed Otter Creek Mine and coal from other mine sites that could be induced by the development of the proposed rail line. Although the Tongue River is part of the Powder River Basin, for purposes of this analysis, OEA uses the term Tongue River coal to refer specifically to coal from the proposed Otter Creek Mine and areas where construction of the proposed rail line could induce new mining. Tongue River coal is geographically distinct from coal mined elsewhere in the Powder River Basin, most of which is extracted south of the Tongue River in Wyoming. The term *Powder River Basin coal*, in this context, refers to all coal produced in the Powder River Basin, including Tongue River coal.

expand, Tongue River coal, with its lower transportation and production costs, would primarily displace other Powder River Basin coal destined for markets in the Upper Midwest. While rail traffic would increase locally near the mines, traffic on downline routes would not change considerably. The incremental addition of train traffic from the proposed rail line would be small compared to the total train traffic along the BNSF main line.

OEA considered an expansion in Pacific Northwest coal export capacity as reasonably foreseeable because of proposed terminal construction and expansion. On an annual basis, exports between 0 and 53 percent of annual coal produced from the proposed Otter Creek Mine and the Poker Jim Creek–O'Dell Creek and Canyon Creek Mines, which could be induced by the development of the proposed rail line, would be expected (Figure 2). Exports would occur under six of the 21 primary sensitivity scenarios; no exports would occur under 15 of these scenarios. The maximum export (53 percent) would occur if the southern alternatives are developed with high coal production rates and high terminal capacity growth. Tongue River coal exports would be low across all scenarios because other Powder River Basin coals with higher heat content would be more competitive for export. In other words, the same amount of rail traffic would flow from the Powder River Basin to the Pacific Northwest if coal export capacity is expanded, with or without the proposed rail line.

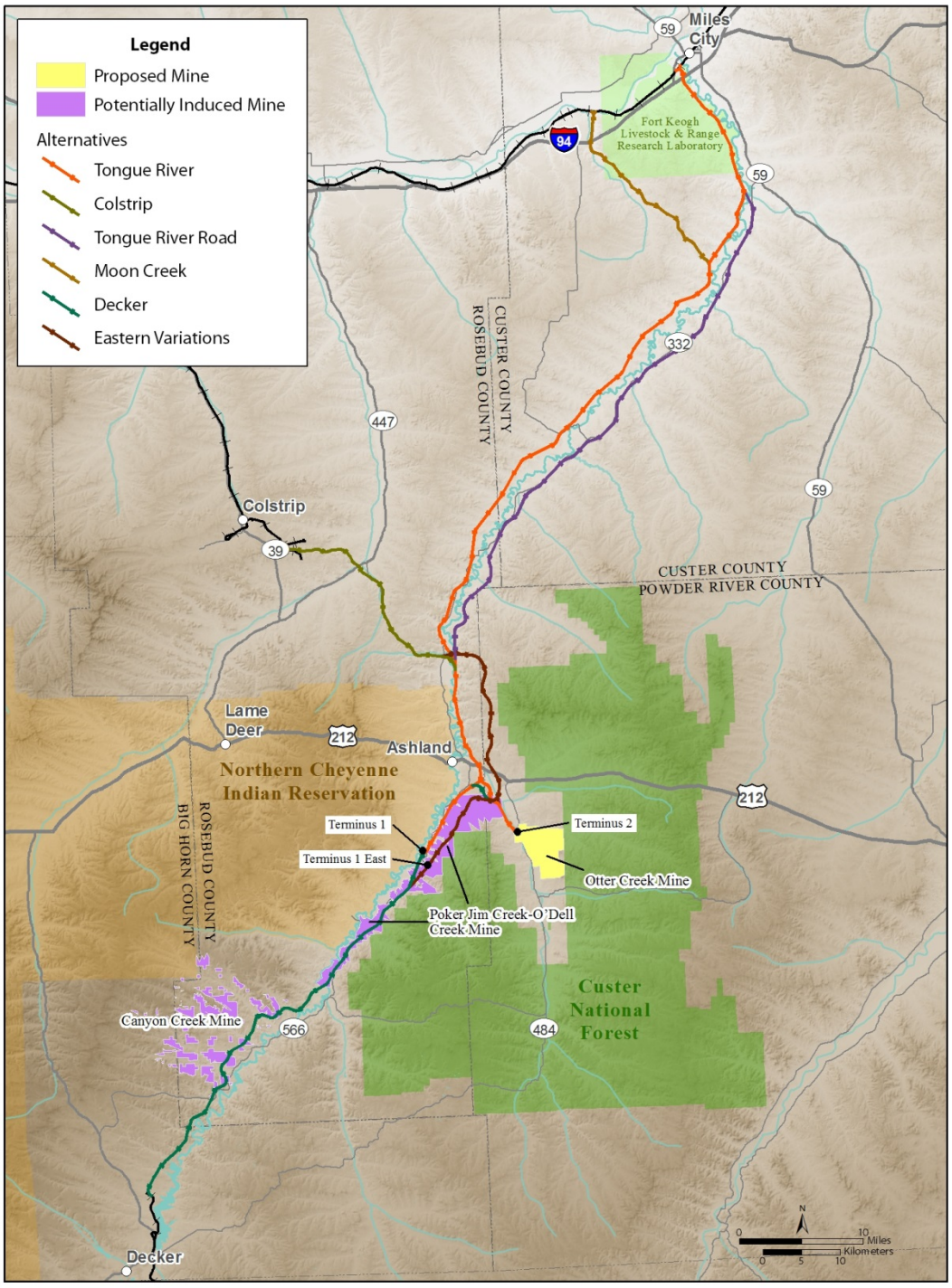

Figure 2. Proposed and Potentially Induced Mines

S.4.2 Greenhouse Gases

OEA analyzed the accumulated net contribution of each build alternative to greenhouse gas (GHG) emissions that would result from direct impacts related to construction and operation of the proposed rail line. OEA determined that accumulated direct emissions would range from 1.6 to 3.7 million metric tons of carbon dioxide equivalent ($MMTCO_2e$). Accumulated direct emissions (2018 to 2037) from the northern alternatives would range from 2.4 to 3.7 $MMTCO_2e$ and from the southern alternatives would range from 1.6 to 2.9 $MMTCO_2e$, depending on the level of production.

OEA also analyzed indirect impacts related to downline rail traffic and international shipping, cumulative GHG contributions of the proposed and potentially induced mines, and coal combustion (i.e., life-cycle emissions). OEA determined that the northern alternatives, high coal production, high terminal capacity growth scenarios would result in the highest net GHG emissions (Scenario 11). The northern alternatives, low coal production, zero terminal capacity growth scenario would result in the lowest GHG emissions (Scenario 3). Accumulated net GHG emissions (2018 to 2037) would range from a reduction of 1.7 $MMTCO_2e$ to an increase of 81 $MMTCO_2e$ across all build alternatives.

To put these emissions in context, accumulated direct GHG emissions from the proposed rail line would be equivalent to the annual GHG emissions from approximately 16,800 to 39,000 passenger vehicles over 20 years. Indirect accumulated GHG estimates would range from a small net reduction in emissions—equivalent to removing 17,600 passenger vehicles from the road for 20 years—to adding 855,000 vehicles for 20 years.

OEA concludes that direct GHG emissions from the proposed rail line would be negligible. OEA also concludes that net annual life-cycle emission impacts would range from a negligible positive impact to a minor adverse impact.

OEA is recommending that the Board impose mitigation measures to avoid or minimize emissions of GHGs from construction of the proposed rail line. OEA is not recommending additional measures because the Board generally does not impose operating limitations and OEA determined that there are no other reasonable mitigation measures for operation over a relatively short rail line. OEA is not recommending mitigation measures for indirect or cumulative life-cycle GHG emissions impacts, construction and operation of the proposed and potentially induced mines, or coal combustion. These impacts are not direct impacts of the proposed rail line and the Board has no jurisdiction or authority over the proposed and potentially induced mines or the combustion of coal by power plants.

S.4.3 Access for Field Surveys

In order to conduct field surveys for wetlands, wildlife, fish, cultural resources, visual resources, and noise, OEA made a substantial effort to gain access to all private property along the rights-of-way. OEA developed a protocol for contacting and coordinating with

landowners using U.S. Environmental Protection Agency guidelines. OEA contacted approximately 400 property owners along the rights-of-ways, including businesses, individuals, ranches, various organizations (e.g., schools, the voluntary fire department, and lands that were put into trusts), and federal, state, and local agencies.

In 2013, OEA was granted land access by 132 landowners and denied access by 90 landowners. OEA did not receive any response from 182 landowners. As a result, OEA gained access to 280,165 acres, or approximately 46 percent of the total area requested. OEA did not receive access to approximately 333,642 acres, or approximately 54 percent of the total area requested. OEA conducted an additional season of field surveys for cultural resources in 2014 because some landowners, who had not provided access in 2013, offered OEA access in 2014. OEA subsequently sent letters to all landowners in the project area and received land access from 160 landowners to conduct cultural resources surveys, was denied access from 81 landowners, and did not receive any response from 163 landowners. As a result, OEA gained access to 335,569 acres, or approximately 55 percent of the total area requested for purposes of cultural resources surveys. OEA did not receive access to 278,311 acres, or approximately 45 percent of the total area requested. Because the additional access was specifically for cultural resources surveys, OEA focused on properties within the cultural resources study area. OEA received access to approximately 51 percent of the archaeological and tribal resources area of potential effects and approximately 50 percent of the built resources area of potential effects.

S.4.4 Impacts in the Study Area

Although OEA assessed impacts on the full range of relevant resources, the public raised concerns about specific resource areas. Impacts and conclusions for these resource areas of interest are summarized in the following sections. The impacts and conclusions for all resources are summarized in Table 2, provided at the end of this summary.

S.4.4.1 Air Quality

Construction of any build alternative would not generate air pollutant concentrations that would violate the National Ambient Air Quality Standards (NAAQS) or the Montana Ambient Air Quality Standards (Montana AAQS). Operation is not expected to generate air pollutant concentrations that would violate federal and state air quality standards. OEA concludes that these impacts would be negligible. OEA is not recommending that the Board impose mitigation measures for air quality. However, TRRC has proposed voluntary mitigation measures to reduce air emissions.

S.4.4.2 Coal Dust from Rail Cars

In response to concerns expressed by the public, OEA analyzed the potential human health and environmental impacts of coal dust blowing off rail cars. OEA concluded that coal dust from trains on the proposed rail line would not harm human health or the environment. OEA

predicted the potential concentration of coal dust in the air and found that it would be below the standards for particulate matter in the NAAQS and the Montana AAQS to protect human health.[6] OEA also analyzed the movement of potentially harmful trace elements in coal (such as mercury, lead, and arsenic) in the environment to determine if these chemicals could pose a risk to people or the environment in the project area. OEA found that concentrations of the constituents of coal dust estimated in soil, dust, water, and fish would be below screening levels[7] for human exposure for all pathways. OEA also found that estimated concentrations of coal dust in soil, sediment, and surface water would be below screening levels for ecological exposure, with the exception of barium in surface water. OEA's analysis, however, overestimated the amount of barium that would actually be found in surface waters so that actual barium concentrations resulting from the proposed rail line would be lower and below screening levels.

OEA concludes that the impacts of coal dust would be negligible, although there could be minor nuisance impacts in some locations. OEA is not recommending that the Board impose mitigation measures for coal dust.

S.4.4.3 Noise and Vibration

Construction of any build alternative is not expected to generate adverse noise impacts except at one receptor located on the Ashland East Variation if pile driving were to occur at night. OEA considers impacts at this one location to be moderately adverse. Operation of any build alternative, except for the Decker East Alternative, would result in adverse noise impacts under the high production scenario. For any build alternative except the Colstrip Alternatives, one to five sensitive receptors would be affected by additional train traffic. Either of the Colstrip Alternatives would affect the most sensitive receptors (from 70 to 75), most of which are on the existing Colstrip Subdivision. OEA is recommending that the Board impose operation-related mitigation measures where receptors would experience adverse noise impacts in order to reduce impacts.

Vibration levels would not exceed regulatory thresholds during construction and operation of any build alternative. Vibration is not expected to cause damage to buildings. Therefore, vibration impacts associated with construction and operation of the proposed rail line would be negligible.

S.4.4.4 Biological Resources

Construction and operation impacts on wildlife and vegetation would generally be greater under the longer build alternatives and less under the shorter build alternatives. Construction

[6] The National Ambient Air Quality Standards (NAAQS) are set by the U.S. Environmental Protection Agency as authorized by the Clean Air Act, amended in 1990. The Montana Ambient Air Quality Standards (Montana AAQS) are enforced by the Montana Department of Environmental Quality.

[7] Screening levels are established by the U.S. Environmental Protection Agency and other federal agencies to determine whether additional assessment is required to determine health and ecological impacts.

of any build alternative would involve clearing the right-of-way and removing large areas of habitat. Any build alternative would cross fish-bearing streams and affect fish passage.

The number of rail-caused wildfire occurrences and burn areas in Montana is low, according to fire start data from the Montana Department of Natural Resources. Based on a wildfire risk assessment, OEA concluded that wildfire risk along any build alternative would be low. However, small areas along any build alternative except the Decker Alternatives could have higher wildfire risks.

The black-footed ferret, interior least tern, whooping crane, and pallid sturgeon are the federally listed threatened and endangered species that could be affected by the proposed rail line. In addition, the red knot and northern long-eared bat are currently proposed to be listed as threatened. The greater sage-grouse and Sprague's pipit are candidate species that could be affected. However, with the exception of the greater sage-grouse, none of these species was documented during the 2013 baseline surveys.

OEA concludes that construction and operation of the proposed rail line would result in minor adverse impacts on special-status species. Additionally, OEA concludes that there would be minor adverse impacts on common species of fish, vegetation, and wildlife whose populations are secure. OEA is recommending that the Board impose mitigation measures to reduce these impacts.

S.4.4.5 Wetlands

Construction of any build alternative would affect wetlands. Construction of the Tongue River Road East Alternative would affect the most wetland acres (33.3), and the Colstrip Alternative, Decker Alternative, and Decker East Alternative would affect the fewest wetland acres (8.1, 9.5, and 8.6 acres, respectively). OEA concludes that the filling of these wetlands would be an adverse impact and is recommending that the Board impose mitigation measures to reduce impacts.

S.4.4.6 Land Use

The longer build alternatives would require more right-of-way acreage than the shorter build alternatives and would have greater impacts on land use and recreation. Construction and operation of any build alternative would affect land use mainly by converting land to railroad use, displacing capital improvements (e.g., moving or demolishing residences and other buildings that are in the right-of-way, closing water wells, relocating roads), and separating contiguous properties. Even with the implementation of OEA's recommended mitigation measures, OEA concluded that these adverse impacts would range from moderate to high and is recommending that the Board impose mitigation measures to reduce impacts.

Construction and operation would also affect recreational resources by introducing visual and noise disturbances. Additionally, acquiring and converting recreational land to right-of-way could limit access to recreational land on either side of the right-of-way. Even with the

implementation of OEA's recommended mitigation measures, OEA concluded that these impacts would range from minor to moderately adverse and is recommending that the Board impose mitigation measures to address impacts.

S.4.4.7 Cultural Resources

All of the build alternatives would result in similar types of cultural resource impacts because each would require clearing railroad footprint within the rights-of-way.

- **Archaeological resources.** The Tongue River Road Alternatives and Moon Creek Alternatives would affect the most archaeological resources based on the sensitivity of archaeological sites and the total acreage (both surveyed and unsurveyed). The Decker Alternatives would affect the fewest archaeological resources.
- **Tribal resources.** OEA acknowledges that tribes possess special expertise in identifying cultural resources with religious and cultural significance. OEA invited 21 federally recognized tribes with ancestral ties to the area to join the field surveys and identify tribal resources. Fifteen tribes participated in the surveys during two field seasons. In these surveyed areas, which covered portions of all build alternatives, OEA determined that each build alternative would affect from three to eight sites. Tribal members found the most tribal resources on the Decker Alternatives and the fewest on the Colstrip Alternative and Moon Creek Alternative. OEA did not estimate tribal resources in unsurveyed areas because tribal resources are not necessarily based on factors such as topography, soils, or distance from water.
- **Built resources.** The Tongue River Road Alternative and Colstrip Alternative would affect the most built resources in the right-of-way (including intact buildings, such as ranch houses, and constructed features on the landscape, such as irrigation ditches) and the Moon Creek East Alternative and Decker Alternatives would affect the fewest built resources.

OEA concludes that adverse impacts from construction and operation of the proposed rail line would be moderate and is recommending that the Board impose measures to mitigate these impacts.

S.4.4.8 Environmental Justice

Operation of the proposed rail line would result in high and adverse noise impacts on minority and low-income populations. Either of the Colstrip Alternatives would have high and adverse noise impacts on both minority and low-income populations under all coal production scenarios. Under the high production scenario, either of the Colstrip Alternatives would affect 70 to 75 sensitive receptors in populated census blocks, of which more than 83 percent are located in minority populations. OEA is recommending that the Board impose mitigation measures to reduce these impacts.

OEA concludes that the Tongue River Alternative, Tongue River Road Alternative, Moon Creek Alternative, and Decker Alternative would have disproportionately high and adverse noise impacts on minority populations under the high coal production scenarios with zero, medium, and high coal terminal capacity, although not on low-income populations. These build alternatives would affect five or fewer sensitive receptors. OEA is recommending that the Board impose mitigation measures to reduce these impacts. The Tongue River East Alternative, Tongue River Road East Alternative, Moon Creek East Alternative, and Decker East Alternative would have no environmental justice impacts.

S.4.5 Downline Impacts

Rail traffic from the proposed rail line for either the northern or southern alternatives would merge on to main lines running east and west to final destinations. The additional traffic on these main lines could have impacts that extend beyond the study area. OEA determined that the high production scenario, which is estimated to occur in 2030 or subsequent years, is the only production scenario that could cause the estimated increase in rail traffic to exceed OEA's analysis thresholds. OEA analyzed 15 downline rail segments and reached the impact conclusions described in the following subsections.

S.4.5.1 Transportation

The maximum estimated increase in downline project-related rail traffic on the northern or southern alternatives, which is estimated to occur in 2030 or subsequent years, would have a minor adverse impact on estimated accident frequency on downline segments, on the free flow of vehicle traffic across downline at-grade crossings, and on the average predicted accident interval for grade crossings. OEA concludes that the adverse impacts on rail safety and grade-crossing delay and safety would be negligible to minor and does not recommend that the Board impose mitigation measures.

S.4.5.2 Air Quality

Downline emissions would not lead to a violation of the NAAQS in attainment areas or increase the severity of conditions in nonattainment areas. OEA concludes that these impacts would be negligible and does not recommend that the Board impose mitigation measures.

S.4.5.3 Noise and Vibration Impacts

Operation of the proposed rail line would result in downline adverse noise impacts at numerous receptors between Fargo, North Dakota and Willmar, Minnesota (Segment 20) for any northern alternative in the year 2030. OEA is recommending one mitigation measure for downline noise impacts on Segment 20 to reduce impacts.

S.4.5.4 Environmental Justice

OEA determined that downline high and adverse impacts on minority and low-income populations would be limited to noise impacts between Fargo, North Dakota, and Willmar, Minnesota (Segment 20). Of the affected receptors located along this segment, a disproportionate number are minority and low-income populations. OEA is recommending one mitigation measure to reduce downline noise impacts on minority and low-income populations on Segment.

S.5 Cumulative Impacts

OEA reviewed information on relevant past, present, and reasonably foreseeable projects and actions that could have impacts that coincide in time and space with the potential impacts of the proposed rail line. OEA identified 13 relevant projects, including three existing coal mines, three proposed or potentially induced mines, four land management projects, energy development projects on Bureau of Land Management-administered lands and private lands, and two construction projects. The impacts of these projects in combination with the impacts of the build alternatives could result in cumulative adverse impacts on grade-crossing delay, grade-crossing safety, air quality, greenhouse gases, biological resources, water resources, cultural and historic resources, visual resources, land resources, and socioeconomics.

S.6 Public Involvement

S.6.1 Public Meetings

OEA is holding 10 public meetings on the Draft EIS during which interested parties may make oral comments in a formal setting and/or submit written comments. OEA will begin each meeting with a 30-minute open house followed by a brief overview of the proposed project and environmental review process. During a formal comment period, each interested individual will be given several minutes to convey his or her oral comments. A court reporter will be present to record these oral comments. If time permits, the court reporter will be available at the conclusion of the formal segment of the meeting to record oral comments from individuals not interested in addressing the meeting as a whole. Meeting transcripts will be available on the project web site after the meetings. Meetings will be held at the following dates, times, and locations.

- June 8, 2015, 2:00 to 4:00 pm and 6:00 to 8:00 pm at St. Labre Indian School, 1000 Tongue River Road, Ashland, MT
- June 9, 2015, 2:00 to 4:00 pm and 6:00 to 8:00 pm at Miles Community College, Room 316, 2715 Dickinson Street, Miles City, MT

- June 10, 2015, 2:00 to 4:00 pm and 6:00-8:00 pm at Colstrip High School, 5000 Pinebutte Drive, Colstrip, MT
- June 11, 2015, 2:00 to 4:00 pm and 6:00 to 8:00 pm at the Northern Cheyenne Tribal Building, Council Chambers, 600 South Cheyenne Ave, Lame Deer, MT
- June 12, 2015, 2:00 to 4:00 pm and 6:00 to 8:00 pm at Forsyth High School, 917 Park Street, Forsyth, MT

In addition, OEA will hold two online public meetings intended for people who cannot attend the public meetings in the project area. All interested individuals must register to attend the online public meeting and preregister to provide formal comments. OEA will begin the online public meeting with a brief overview of the proposed project and environmental review process. The overview will be followed by a facilitated formal comment session during which individuals that have preregistered will be given several minutes to convey his or her oral comments. If time permits, the facilitator will allow other interested individuals who did not preregister to provide oral comments. Interested individuals can participate in the meeting by phone, computer, or both. The meeting transcripts will be available on the project website after the meetings. The online public meetings will be held at the following date and times:

- June 17, 2015, 12:00 to 3:00 pm and 6:00 to 9:00 pm (Eastern Time).
- To register for the online public meeting, visit www.tonguerivereis.com. Additional meeting information and dial-in instructions will be provided at registration.

Following the close of the comment period on the Draft EIS (June 23, 2015), OEA will issue a Final EIS that considers and responds to all substantive comments received on the Draft EIS. The Board will then issue a final decision based on the Draft and Final EISs and all public and agency comments in the public record for this proceeding. The final decision will address the transportation merits of the proposed project and the entire environmental record. That final decision will take one of three actions: approve the proposed project, deny it, or approve it with mitigation conditions, including environmental conditions.

S.6.2 Request for Comments on Draft EIS

In addition to holding public meetings, OEA is requesting written comments on the Draft EIS. The public and any interested parties are encouraged to submit written comments on all aspects of this Draft EIS. OEA will consider all timely comments in preparing the Final EIS, which will include responses to all substantive comments, OEA's final conclusions on potential impacts, and OEA's final recommendations on a preferred alternative and mitigation. The deadline for comments is June 23, 2015. When submitting comments on this Draft EIS, the Board encourages commenters to be as specific as possible and substantiate concerns and recommendations.

Recorded Comments. A court reporter will be present to record oral comments during the public meetings. If time permits, the court reporter will be available at the conclusion of the formal segment of the meeting to record oral comments from individuals not interested in addressing the meeting as a whole. All meeting transcripts will be available on the project website after the meetings.

Written Comments. Comment forms will be provided at the public meetings. Completed forms will be accepted at the meetings or the forms can be submitted later by mail. Any interested party may submit written comments on this Draft EIS regardless of whether they participate in any of the 10 public meetings and provide oral comments. Comment forms or written letters may be mailed to the following contact and address.

Ken Blodgett
Docket No. 30186
Office of Environmental Analysis
Surface Transportation Board
395 E Street SW
Washington, D.C. 20423

Electronic Comments. Comments may be submitted electronically on the Board-sponsored website, www.tonguerivereis.com. It is not necessary to mail written comments that have been filed electronically. Please refer to Docket No. 30186 when submitting comments.

Library Distribution. OEA has distributed this Draft EIS to the libraries listed below and requested that the entire Draft EIS be made publicly available in their reference sections.

Bicentennial Library of Colstrip
419 Willow Ave
Colstrip, MT 59323

Dr. John Woodenlegs Memorial Library
1 College Drive
Lame Deer, MT 59043

Henry Malley Memorial Library
101 S Lincoln
Broadus, MT 59317

Miles City Public Library
1 S 10th Street
Miles City, MT 59301

Judson H. Flower Jr. Library (Miles Community College)
2715 Dickinson Street
Miles City, MT 59301

Deadline. Written comments on this Draft EIS must be postmarked by June 23, 2015. Electronically filed comments must be received by June 23, 2015.

All comments received—written, e-filed, or transcribed—will carry equal weight in helping to complete the EIS process and guide the Board in making a decision on this matter.

Further information about the project can be obtained by calling OEA's toll-free number at 1-866-622-4355 (telecommunications device [TDD] for the hearing impaired is 1-800-877-8339.

This Draft EIS is available for viewing or downloading on the Board's website at www.stb.dot.gov or on the Board-sponsored project website at www.tonguerivereis.com.

Table 2 summarizes and compares potential impacts for each resource area as well as downline and cumulative impacts. The table does not include the No-Action Alternative because, under that alternative, existing conditions would remain the same and there would be no impacts.

Table 2. Summary of Impacts

Resource and Impact	Build Alternative									
	Tongue River	Tongue River East	Colstrip	Colstrip East	Tongue River Road	Tongue River Road East	Moon Creek	Moon Creek East	Decker	Decker East
Right-of-Way Acreage	3,783	3,803	2,040	2,094	4,234	4,218	4,026	4,047	2,826	2,695
Total Miles	83.7	86.3	42.3	45.4	83.7	85.9	82.1	84.7	51.1	49.6
Transportation										
Rail Operations and Rail Safety										
Train accidents per year (high production scenario)	2.1	2.2	1.8	1.9	2.1	2.2	2.1	2.2	1.1	1.1
Impact conclusion: Operation would result in an increase in accidents and a minor adverse impact.										
Grade-Crossing Delay										
Number of new and existing grade crossings	4	3	9	8	5	4	4	3	3	3
Delay per 24-hour period (minutes) (high production scenario)	3.45	3.78	18.26	20.30	5.74	6.56	3.45	3.78	19.80	16.08
Impact conclusion: Operation would result in negligible impacts.										
Grade-Crossing Safety										
Average predicted intervals between accidents, new crossings (years) (high production scenario)	58	56	52	49	51	48	49	56	26	28
Impact conclusion: Construction and operation would result in a minor adverse impact except at the crossing of Highway 314, (Decker Alternatives), which would be a moderate adverse impact.										
Navigation										
Permanent impacts?	No	No	No	No	No	No	No	No	No	No
Impact conclusion: Construction and operation would result in negligible impacts.										

Resource and Impact		Build Alternative									
		Tongue River	Tongue River East	Colstrip	Colstrip East	Tongue River Road	Tongue River Road East	Moon Creek	Moon Creek East	Decker	Decker East
Air Quality											
Exceedance of NAAQS or Montana AAQS		No	No	No	No	No	No	No	No	No	No
Impact conclusion: Construction and operation would result in a negligible impact for all air quality standards.											
Air Quality notes: NAAQS = National Ambient Air Quality Standards; Montana AAQS = Montana Ambient Air Quality Standards											
Greenhouse Gases and Climate Change											
Greenhouse Gases[a]											
Direct emissions	Railroad construction[a] ($MMTCO_2e$)	1.2									1.1
	Net land use change releases from railroad construction ($MMTCO_2e$)[a]	0.3 – 0.5									0.2 – 0.4
	Operation of rail line segment, 2018-2037[a], ($MMTCO_2e$)	0.9 – 2.0									0.3 – 1.4
Total direct emissions ($MMTCO_2e$)		2.4 – 3.7									1.6 – 2.9
Net change in indirect life-cycle emissions, 2018-2037 [a], ($MMTCO_2e$)		-1.7 – 81									8.6 – 75
Impact conclusion: Direct GHG emissions from the proposed rail line would be negligible. Net annual life-cycle emissions would range from a negligible positive impact to a minor adverse impact.											
Greenhouse Gas notes: [a] For purposes of modeling accumulated net greenhouse gases, the Tongue River Alternative and Decker East Alternative were selected as proxies representative of the northern and southern alternatives, respectively $MMTCO_2e$ = million metric tons of carbon dioxide equivalent											
Climate Change											
All build alternatives would have a low susceptibility to flooding, soil erosion, and increased wildfires caused by climate change.											
Impact conclusion: Adverse impacts both on the proposed rail line and on affected resources would range from minor to moderate.											

Resource and Impact	Build Alternative									
	Tongue River	Tongue River East	Colstrip	Colstrip East	Tongue River Road	Tongue River Road East	Moon Creek	Moon Creek East	Decker	Decker East
Coal Dust										
Coal dust from trains on any build alternative would not harm human health or the environment.										
Impact conclusion: Operation would result in a negligible impact with minor nuisance impacts.										
Noise and Vibration										
Number of receptors adversely affected by construction	0	1[a]	0	1[a]	0	1[a]	0	1[a]	0	0
Number of receptors adversely affected by operation (low production)	1	0	1 + 34[b]	0 + 34[b]	1	0	1	0	0	0
Number of receptors adversely affected by operation (medium production)	1	0	1 + 65[b]	0 + 63[b]	2	1	1	0	0	0
Number of receptors adversely affected by operation (high production)	5	1	5 + 89[b]	0 + 84[b]	5	1	5	1	1	0
Impact conclusion: Construction would result in moderately adverse impacts at one location. Operation would result in adverse noise impacts.										

Noise notes:

[a] Assumes pile-driving occurs at night

[b] Larger number are receptors on the Colstrip Subdivision

Resource and Impact	Build Alternative									
	Tongue River	Tongue River East	Colstrip	Colstrip East	Tongue River Road	Tongue River Road East	Moon Creek	Moon Creek East	Decker	Decker East
Biological Resources										
Vegetation										
Total acres affected	3,700	3,744	1,899	1,978	4,100	4,111	3,953	3,998	2,753	2,634
High fire risk area	98	0	98	0	98	0	98	0	0	0
Impact conclusion: Construction and operation would result in minor adverse impacts on vegetation populations and minor adverse impacts on wildfire risk with areas of moderately adverse impacts along the northern alternatives.										
Wildlife										
Total wildlife habitat affected (acres)[a]	3,813	3,824	2,079	2,122	4,263	4,238	4,061	4,072	2,842	2,711
Mule deer habitat (acres)[a]	1,270	936	1,138	805	3,150	2,816	1,896	1,563	1,476	1,483
White-tailed deer habitat (acres)[a]	3,813	3,344	1,356	919	4,081	3,576	3,122	2,653	2,617	2,463
Antelope habitat (acres)[a]	224	244	211	231	535	555	224	244	328	263
Mule deer winter densities	1.17	1.19	0.67	0.63	1.35	1.35	1.22	1.25	0.97	1.00
White-tailed deer winter densities	1.02	1.03	0.13	0.12	1.07	1.08	0.83	0.84	0.58	0.60
Antelope winter densities	0.54	0.53	0.66	0.62	0.73	0.72	0.59	0.57	0.85	0.87
Raptor nest in right-of-way	1	1	0	0	0	0	1	1	1	1
Raptor nests within 2 miles	49	48	17	16	53	52	57	56	42	41
Active grouse lek within 4 miles	11	11	19	19	13	13	9	9	6	6
Peak male count in active lek	51	51	95	95	52	52	38	38	20	20
Daytime bird richness[b]	79	74	51	40	82	77	77	72	61	53
Daytime bird abundance[c]	11.72	10.26	13.18	9.37	12.01	10.28	11.40	9.74	11.63	10.00
Nighttime bird richness[b]	31	23	25	17	28	20	29	21	27	27
Nighttime bird abundance[c]	3.60	4.07	4.39	7.58	3.06	3.21	3.15	3.25	3.43	3.88
Reptile and amphibian richness	9	9	6	5	7	7	10	10	6	6
Impact conclusion: Construction and operation would result in some minor adverse impacts.										

Wildlife notes:

[a] Impacts include road relocations unless otherwise specified

Resource and Impact	Build Alternative									
	Tongue River	Tongue River East	Colstrip	Colstrip East	Tongue River Road	Tongue River Road East	Moon Creek	Moon Creek East	Decker	Decker East
[b] Total number of species recorded during point count surveys										
[c] Total number of birds divided by the number of times surveyed, which varied according to alternative length and land access permission										
Fish										
Number of fish-bearing streams crossed	2	3	3	4	5	6	4	5	1	1
Track within 985 of fish-bearing stream (miles)	12.6	6.1	8.4	2.6	13.5	7.2	17.6	11.1	1.7	0.9
Impact conclusion: Construction and operation would result in some minor adverse impacts.										
Special-Status Species										
Greater Sage-Grouse										
Habitat (acres)	1,656	1,871	760	974	2,169	2,384	2,386	2,600	1,458	1,626
Leks within 4 miles of right-of-way	12	13	4	5	12	13	10	11	4	4
Active leks within 4 miles	1	1	0	0	2	2	2	2	0	0
Prairie Dogs										
Colonies in right-of-way	10	10	1	1	5	5	11	11	1	2
Colonies > 80 acres in right-of-way	1	1	0	0	3	3	0	0	0	0
Colonies within 0.5 mile	26	26	2	2	16	16	23	23	3	3
Habitat in right-of-way (acres)	51	51	1.5	1.5	50	50	45	45	1.5	1.6
Special-Status Raptors										
Nests in right-of-way	0	1	0	0	0	0	0	1	0	0
Nests within 2 miles of right-of-way	17	17	2	2	17	17	13	13	7	7
Wintering Bald Eagles										
Roosts within 1 mile of right-of-way	18	16	3	0	16	13	13	11	9	7
Concentration area within 1 mile	0	0	0	0	0	0	0	0	1	1
Species count within 1 mile	23	21	3	0	20	17	16	14	16	14

Resource and Impact	Build Alternative									
	Tongue River	Tongue River East	Colstrip	Colstrip East	Tongue River Road	Tongue River Road East	Moon Creek	Moon Creek East	Decker	Decker East
Special-Status Birds										
Daytime bird richness [b]	4	4	1	1	6	6	4	4	2	2
Daytime bird abundance [c]	0.17	0.19	0.06	0.11	0.17	0.21	0.11	0.13	0.13	0.15
Nighttime bird richness [b]	5	3	4	2	4	2	4	2	3	3
Nighttime bird abundance [c]	0.12	0.11	0.19	0.33	0.11	0.10	0.10	0.08	0.12	0.14
Special-Status Vegetation										
Number of species with suitable habitat	8	8	7	7	7	7	7	7	7	7
Special-Status Fish										
Number of fish species potentially affected	6	6	1	1	6	6	1	1	1	1
Federally Listed Species Conclusions [d]										
Pallid sturgeon	NE	NE	NP	NP	NE	NE	NP	NP	NP	NP
Whooping crane	NLAE	NLAE	NP	NP	NLAE	NLAE	NLAE	NLAE	NP	NP
Interior least tern	NLAE	NLAE	NLAE	NLAE	NLAE	NLAE	NLAE	NLAE	NLAE	NLAE
Black-footed ferret	NLAE	NLAE	NP	NP	NLAE	NLAE	NP	NP	NP	NP
Impact conclusion: Construction and operation would result in some minor adverse impacts.										

Biological Resources notes:

[a] Impacts include road relocations unless otherwise specified

[b] Total number of species recorded during point count surveys

[c] Total number of birds divided by the number of times surveyed, which varied according to alternative length and land access permission

[d] NE = no effect; NP = not present; NLAE = not likely to adversely affect

Water Resources										
Surface Water										
Number of surface waters crossed	145	167	62	82	169	189	157	179	113	113
Number of bridges	2	2	4	3	7	7	4	4	1	1
Number of culverts	127	147	54	73	111	130	127	147	100	100
Number of drainage structures	16	18	4	6	51	52	26	28	12	12

Resource and Impact	Build Alternative									
	Tongue River	Tongue River East	Colstrip	Colstrip East	Tongue River Road	Tongue River Road East	Moon Creek	Moon Creek East	Decker	Decker East
Require an in-water support structure?	No	No	No	No	No	No	No	No	Yes	Yes
Impact conclusion: Construction and operation would result in adverse impacts.										
Groundwater										
Water wells in the right-of-way	7	5	9	7	10	8	7	5	1	1
Estimated water use for construction (million gallons)	396	591	297	390	592	677	587	783	726	737
Impact conclusion: Construction and operation would result in negligible impacts.										
Floodplains										
FEMA-designated floodplains (acres)	14	14	13	13	14	14	0	0	0	0
NRCS floodplains (acres)	112	64	88	42	113	65	105	57	13	9
Impact conclusion: Construction and operation would result in negligible impacts.										
Wetlands										
Total wetlands affected (acres)	28.8	32.3	8.1	18.4	31.4	33.3	26.3	29.8	9.5	8.6
Water Resources notes: FEMA = Federal Emergency Management Agency; NRCS = Natural Resources Conservation Service										
Impact conclusion: Construction would result in adverse impacts.										
Visual Resources										
All build alternatives would result in similar types of visual impacts and all would affect sensitive viewers. The longer build alternatives would have more impacts; the shorter would have fewer impacts.										
Impact conclusion: Construction would result in minor to moderate adverse impacts.										
Cultural and Historical Resources										
Areas highly likely to have archaeological sites in the right-of-way (acres)	2,164	2,220	1,028	1,106	2,532	2,547	2,366	2,422	1,150	1,097
Impact conclusion: Construction would result in moderate adverse impacts.										

Resource and Impact	Build Alternative									
	Tongue River	Tongue River East	Colstrip	Colstrip East	Tongue River Road	Tongue River Road East	Moon Creek	Moon Creek East	Decker	Decker East
Land Resources										
Land Use										
Private land in right-of-way (acres)	2,969	2,856	1,949	1,870	3,680	3,582	3,177	3,065	2,237	2,026
Grazing land in right-of-way (acres)	3,443	3,477	1,670	1,767	3,807	3,805	3,575	3,610	2,170	2,011
Severed land in right-of-way (acres)	1,147	2,719	147	1,539	1,120	1,559	1,115	2,687	2,695	3,390
Special farmland in right-of-way (acres)	1,026	1,062	480	503	1,175	1,189	1,026	1,062	369	381
Conservation easement in right-of-way (acres)	422	422	0	0	2	2	422	422	0	0
DNRC-leased land in right-of-way (acres)	84	137	0	53	57	110	206	259	86	86
Private properties in right-of-way	42	32	36	25	49	39	45	35	21	20
Residences in right-of-way	1	1	1	1	1	1	2	2	0	0
Structures in right-of-way	5	19	5	19	5	19	13	27	0	0
Impact conclusion: Construction would result in moderate to highly adverse impacts.										
Recreation										
Number of affected recreational resources	6	6	2	2	6	6	4	4	4	4
Block Management Areas (acres)	1,177	1,177	273	302	349	349	1,122	1,122	0	0
Tongue River Ranch (acres)	229	229	0	0	0	0	229	229	0	0
Pumpkin Creek Ranch (acres)	0	0	0	0	53	53	0	0	0	0
Impact conclusion: Construction and operation would result in minor to moderate adverse impacts.										
Section 4(f) Resources										
Area of impact on Section 4(f) resource (Spotted Eagle Rec Area) (acres)	11	11	0	0	11	11	0	0	0	0

Resource and Impact	Build Alternative									
	Tongue River	Tongue River East	Colstrip	Colstrip East	Tongue River Road	Tongue River Road East	Moon Creek	Moon Creek East	Decker	Decker East
Hazardous Waste Sites										
Proximate to a hazardous waste site	No	No	No	No	No	No	No	No	No	No
Impact conclusion: Construction and operation would result in negligible impacts.										
Land Resources notes: DNRC = Montana Department of Natural Resources and Conservation										
Geology and Soils										
Slopes steeper than 5% (percent of total)	37%	38%	37%	40%	35%	37%	35%	37%	50%	50%
Average earth moved per mile of track (million cubic yards)	0.58	0.92	0.82	1.44	0.88	1.21	0.84	1.18	1.61	1.92
Suitability of majority soil type for construction	Excellent	Excellent	Fair to poor	Fair to poor	Excellent	Excellent	Excellent	Excellent	Fair to poor	Fair to poor
Cut requirements (million cubic yards)	25.30	41.59	18.20	34.48	38.80	55.09	36.20	52.49	42.77	49.76
High sensitivity for paleo resources	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	No
Impact conclusion: Construction and operation would result in negligible to minor adverse impacts.										
Energy Resources										
Diesel fuel for construction (million gallons)	12.41	18.47	10.01	13.56	18.37	22.00	18.13	24.20	21.46	21.47
Diesel fuel for operation, high production scenario (million gallons/year)	7.11	7.35	6.02	6.31	7.11	7.31	6.96	7.20	5.47	5.43
Transmission lines and pipelines crossed	4	4	1	1	3	3	5	5	1	1
Impact conclusion: Construction and operation would result in negligible impacts.										
Socioeconomics										
Loss of farm output in right-of-way	$267,430	$162,350	$188,960	$67,849	$359,336	$253,092	$281,299	$176,187	$70,824	$65,617

Resource and Impact	Build Alternative									
	Tongue River	Tongue River East	Colstrip	Colstrip East	Tongue River Road	Tongue River Road East	Moon Creek	Moon Creek East	Decker	Decker East
Direct employment, total construction period	496	602	320	429	612	720	596	703	604	578
Total construction costs (million $)	$602	$731	$388	$520	$743	$874	$724	$853	$733	$702
Impact conclusion: Construction and operation would result in both beneficial and moderately adverse impacts.										
Environmental Justice										
High and adverse impact on minority population?	Yes[a]	No	Yes[b]	Yes[b]	Yes[a]	No	Yes[a]	No	Yes[a]	No
High and adverse impact on low-income population? [a]	No	No	Yes[b]	Yes[b]	No	No	No	No	No	No
Environmental Justice notes: [a] Noise impact under the high rail traffic scenario [b] Noise impact under low, medium, and high coal production scenarios, with associated increases in rail traffic										
Downline Impacts										
Transportation										
Rail Operations and Rail Safety										
Little overall change in predicted accident frequency, although the locations of predicted accidents would be redistributed. Maximum increase in accident frequency would be 1.7 accidents, Segment 17 (Glendive, MT to Mandan, ND), northern alternative, high productions scenario. This increase in accidents would have a minor adverse impact.										
Grade-Crossing Delay										
Maximum increase in average delay time per crossing would be 7.44 seconds per vehicle, which is a negligible impact. Segment 6, southern alternative, high production scenario would result in a minor adverse impact.										
Grade-Crossing Safety										
Largest reduction in average predicted accident interval would be 30 years (from 123 years to 93 years between crossing accidents), Segment 6, (Spring Creek, MT to Dutch, WY) southern alternative, high production scenario. This would result in minor adverse impacts.										
Air Quality										
Locomotive exhaust emissions increases would not exceed conformity thresholds for carbon monoxide or nitrogen oxide for 15 segments. These impacts would be negligible.										
Emissions from motor vehicles delayed at crossings would be far below general conformity thresholds and these impacts would be negligible.										
Coal dust emissions would not violate ambient air quality standards. The impacts of coal dust would be negligible, but could result in minor nuisance impacts.										

Resource and Impact	Build Alternative									
	Tongue River	Tongue River East	Colstrip	Colstrip East	Tongue River Road	Tongue River Road East	Moon Creek	Moon Creek East	Decker	Decker East
Noise and Vibration										
Noise would exceed analysis thresholds on Segment 20 (Fargo, ND to Willmar, MN), northern alternatives, high production scenario, adversely affecting 2,934 receptors (1,205 for the No-Action Alternative).										
Environmental Justice										
Of the 2,934 noise-sensitive receptors in Segment 20 (Fargo, ND to Willmar, MN), 28% are in minority populations and 44% are in low-income populations.										

Contents

Tables

Figures

Abbreviations and Acronyms

°C	degrees Celsius
°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
µS/cm	microsiemens per centimeter
AADT	annual average daily traffic
AASHTO	American Association of State Highway and Transportation Officials
ACHP	Advisory Council on Historic Preservation
AD	Anno Domini
AMSL	above mean sea level
APE	area of potential effects
AQRV	air quality related values
AREMA	American Railway Engineering and Maintenance-of-Way Association
ARM	Administrative Rule of Montana
ARTC	Australian Rail Track Corporation
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BMA	block management area
BMP	best management practice
BNSF	BNSF Railway Company
Board	Surface Transportation Board
BP	years before present
C.F.R	Code of Federal Regulations
ca.	circa
CAFE EIS	Final EIS for Corporate Average Fuel Economy (CAFE) Standards, 2017(2025)
CASTNET	Clean Air Status and Trends Network
CCC	Civilian Conservation Corps
CDP	census-designated place
CEQ	Council on Environmental Quality

C.F.R.	Code of Federal Regulations
cfs	cubic feet per second
CMIP5	5th Coupled Model Intercomparison Project
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CRIS	Cultural Resource Information System
CWA	Clean Water Act
dBA	A-weighted decibels
DEM	digital elevation model
DNL	day-night average noise level
DNRC	Montana Department of Natural Resources and Conservation
DSITIA	Queensland, Australia Department of Science, Information Technology, Innovation and the Arts
Eco-SSLs	ecological soil screening levels
EDR	Environmental Data Resources
EIS	Environmental Impact Statement
ESA	Endangered Species Act
Fed. Reg	Federal Register
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FINDS	Facility Index Data System
FIRM	Flood Insurance Rate Map
FIRS	Federal Information Relay Service
Fort Keogh	Fort Keogh Livestock and Range Research Laboratory
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FTI	fire threat index
FY	fiscal year
g	peak horizontal acceleration
g/m^2-mo	grams per square meter per month
gCO2e/kWh	grams of carbon dioxide equivalent per kilowatt-hour
GHG	greenhouse gas

GIS	geographic information system
GPS	global positioning system
HAP	hazardous air pollutant
HGM	hydrogeomorphic
I-94	Interstate 94
ICC	Interstate Commerce Commission
IMPLAN	IMpact analysis for PLANning
IMPROVE	Interagency Monitoring of Protected Visual Environments
IPM®	Integrated Planning Model
kg/ha	kilograms per hectare
KOP	key observation point
kV	kilovolt
LCA	life-cycle assessment
L_{eq}	equivalent sound level
LOS	level of service
LUST	leaking underground storage tank
MAGICC	Model for the Assessment of Greenhouse Gas-Induced Climate Change
MCA	Montana Code Annotated
MCL	maximum contaminant level
MDT	Montana Department of Transportation
MEPA	Montana Environmental Policy Act
meq/l	milliequivalents per liter
$mg/m^2/day$	milligrams per square meter per day
MHS	Montana Historical Society
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
MNHP	Montana Natural Heritage Program
Montana AAQS	Montana Ambient Air Quality Standards
Montana DEQ	Montana Department of Environmental Quality
Montana FWP	Montana Fish, Wildlife & Parks
Moss-Bennett Act	Archaeological and Historic Preservation Act of 1974
MOVES	Motor Vehicle Emissions Simulator
mph	miles per hour

MSHA	Mine Safety and Health Administration
$MTCO_2e$	metric tons of carbon dioxide equivalent
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NASA	National Aeronautics and Space Administration
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NONROAD	nonroad engines, equipment, and vehicles
NO_x	nitrogen oxides
NRCS	National Resource Conservation Service
OEA	Office of Environmental Analysis
OSHA	Occupational Health and Safety Administration
PAH	polycyclic aromatic hydrocarbon
PC&N	public convenience and necessity
PM10	particulate matter 10 microns or less in diameter
PM2.5	particulate matter 2.5 microns or less in diameter
PPV	peak particle velocity
project	Tongue River Railroad Rail Construction and Operation Project
RfD	reference dose
RKOP	rendered key observation point
SAR	sodium absorption ratio
SFHA	special flood hazard area
SHPO	State Historic Preservation Officer
SO_2	sulfur dioxide
SO_x	sulfur oxides
SR	State Route
SRMA	Special Recreation Management Area

SSL	soil screening level
SSUGRO	Soil Survey Geographic Database
SWOT	Strengths, Weaknesses, Opportunities and Threats
TMDL	total maximum daily load
TRDR	Tongue River Dam and Reservoir
TRECO	Tongue River Electric Cooperative
TRRC	Tongue River Railroad Company, Inc.
TSP	total suspended particulate
U.S.C.	United States Code
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFS	U.S. Department of Agriculture, Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
VdB	root-mean square velocity
VOC	volatile organic compound
VRM	Visual Resource Management
WIA	Wilson, Ihrig & Associates, Inc.
WSA	wilderness study area