RECORD OF DECISION
for the Uinta Basin Railway Project, Ashley National Forest Portion of Decision

U.S. Department of Agriculture
Forest Service
Intermountain Region
Ashley National Forest
Duchesne, Carbon, and Utah Counties, Utah

July 2022

List of Acronyms

µeq/l micro-equivalents per liter

µg/m3 micrograms per cubic meter

AADT annual average daily traffic

AAQS Ambient Air Quality Standards

AAR American Association of Railroads

ACEC Area of Critical Environmental Concern

ACHP Advisory Council on Historic Preservation

AFY acre-feet per year

ANC acid neutralizing capacity

ANF Ashley National Forest

APE area of potential effects

AQCR Air Quality Control Region

AQRV air quality related value

AQS air quality standard

AREMA American Railway Engineering and Maintenance-of-Way Association

ARMPA Utah Greater sage-grouse Approved Resource Management Plan Amendment

ARMS Utah Air Resource Management Strategy

Ashely Forest Plan Ashley Forest Land and Resource Management Plan

AUM Animal Unit Month

BA Biological Assessment

Basin/the Basin Uinta Basin

BCC Birds of Conservation Concern

Berry Petroleum Berry Petroleum LLC

BIA U.S. Bureau of Indian Affairs

BLM U.S. Bureau of Land Management

BMP best management practice

BNSF BNSF Railway Company

Board Surface Transportation Board

bpd barrels per day

BRWL Blue-Rich White Light

Btu British thermal unit

C.F.R. Code of Federal Regulations

Cadna Computer-Aided Noise Abatement

CASTNET Clean Air Status and Trends Network

CDPHE Colorado Department of Public Health and Environment

CEQ Council on Environmental Quality

CH4 methane cm centimeters

CMAQ Community Multi-scale Air Quality

CMP corrugated metal pipe

CO 13 Colorado State Highway 13

CO 139 Colorado State Highway 139

CO 64 Colorado State Highway 64

CO carbon monoxide

CO2 carbon dioxide

CO2e carbon dioxide equivalent

Coalition Seven County Infrastructure Coalition

Corps U.S. Army Corps of Engineers

CPW Colorado Parks and Wildlife

CSGMA Carbon Sage-grouse Management Area

CSU controlled surface use

CWA Clean Water Act

CWMU Cooperative Wildlife Management Unit

DAT deposition analysis threshold

dBa A-weighted decibel

DDV delta-deciviews

DHV design hour volume

DNL day-night average noise level

DNM Dinosaur National Monument

DPM diesel particulate matter

DPR Deseret Power Railroad

Drexel Hamilton Drexel Hamilton Infrastructure Partners

DTM Digital Terrain Model

EI exposure index factor

EIA U.S. Energy Information Administration

EIS Environmental Impact Statement

EMU ecological management unit

EPA U.S. Environmental Protection Agency

EPCRA Emergency Planning and Community Right-to-Know Act

ERMA Extensive Recreation Management Area

ESA Endangered Species Act

ESRI Environmental Systems Research Institute

FEMA Federal Emergency Management Agency

FHWA Federal Highway Administration

FIRS Federal Information Relay Service

FLPMA Federal Land Policy and Management Act

Forest Service U.S. Forest Service

FR Federal Register

FRA Federal Railroad Administration

FTA Federal Transit Administration

FTE full-time equivalent

GGE gasoline gallon equivalent

GHG greenhouse gas

GIS geographic information system

GPS global positioning system

GRP gross regional product

GRSG greater sage-grouse

gSSURGO Gridded Soil Survey Geographic

GWP global warming potential

HAP hazardous air pollutant

HUC Hydrologic Unit Code

I-70 Interstate 70

IMPLAN IMpact analysis for PLANning

IMPROVE Interagency Monitoring of Protected Visual Environments

IPaC Information for Planning and Consultation

IRA Inventoried Roadless Area

ITA Indian Trust Asset

kg/ha-yr kilograms per hectare per year

KOP key observation point

kVa kilovolt-ampere

L&G Light and Glare

LAU Lynx Analysis Unit

LCAS Lynx Conservation Assessment Strategy

Leq equivalent sound level

LOS level of service

LRMP Land Resource Management Plan

LWCF Land and Water Conservation Fund

MA-LR Management Action - Lands and Realty

MA-SSS Management Action – Special Status Species

mg/l milligrams per liter

mi2 square miles

mm millimeters

Monument Butte FEIS Monument Butte Oil and Gas Development Project Final Environmental Impact Statement

mph or MPH miles per hour

MST Mountain Standard Time

MT/yr metric tons per year

MUTCD Federal Highway Administration Manual on Uniform Traffic Control Devices for Streets and Highways

MW megawatts

MWh megawatt hours

N2O nitrous oxide

NAAQS National Ambient Air Quality Standards

NAICS North American Industry Classification System

National Register National Register of Historic Places

NEPA National Environmental Policy Act

NFS National Forest System

NHPA National Historic Preservation Act

NO nitric oxide

NO2 nitrogen dioxide

NOI Notice of Intent

NOX nitrogen oxide

NPDES National Pollutant Discharge Elimination System

NRA National Recreation Area

NRCS Natural Resources Conservation Service

NWI National Wetland Inventory

O&M operations and maintenance

OEA Office of Environmental Analysis

OHV off-highway vehicle

OHWM ordinary high-water mark

PA Programmatic Agreement

PAC priority areas for conservation

PADD Petroleum Administration for Defense District

PAH polycyclic aromatic hydrocarbon

PC&N public convenience and necessity

PEM palustrine emergent [wetland]

PFO palustrine forested [wetland]

PFYC Potential Fossil Yield Classification

PHMA Priority Habitat Management Area

PHMSA Pipeline and Hazardous Materials Safety Administration

PLPCO State of Utah Public Lands Policy Coordinating Office

PM10 particulate matter 10 microns or less in diameter

PM2.5 particulate matter 2.5 microns or less in diameter

POM polycyclic organic matter

PPV peak particle velocity

PSD Prevention of Significant Deterioration

PSS palustrine scrub-shrub [wetland]

PYFC Potential Fossil Yield Classification

R.L Banks Study Pre-Feasibility Study of a Prospective Railroad Connecting the Uinta Basin to the National Rail Network

RD1 Roosevelt/Duchesne Ranger District

RDF required design feature

RGCP Rio Grande Pacific Corporation

RIPRAP Recovery Implementation Program Recovery Plan

RKOP rendered key observation point

RMP Resource Management Plan

RMPA Utah Greater sage-grouse Resource Management Plan Amendment

RMS root-mean square

ROD Record of Decision

ROW right-of-way

RPI Railway Progress Institute

RTD Denver Regional Transportation District

RV recreational vehicle

SEL sound exposure level

SGMA Sage-Grouse Management Areas

SHPO Utah State Historic Preservation Officer

SITLA Utah School and Institutional Trust Lands Administration

SO2 sulfur dioxide

SRMA Special Recreation Management Area

SSS Special Status Species State

Plan Utah Conservation Plan for Greater sage-grouse

SWPPP stormwater pollution prevention plan
T&E Threatened and Endangered
TBtu trillion British thermal unit
TDS Total Dissolved Solids
the Project Uinta Basin Railway Project
THPO Tribal Historic Preservation Office
TMDL total maximum daily load
TRRC Tongue River Railroad Company
U.S.C. United States Code
UDEQ Utah Department of Environmental Quality
UDOGM Utah Division of Oil, Gas, and Mining
UDOT Utah Department of Transportation
UDWQ Utah Division of Water Quality
UDWR Utah Division of Wildlife Resources
UDWRi Utah Division of Water Rights
UIC Underground Injection Control
UP Union Pacific
UPAC Utah Professional Archaeological Council
URARA Utah Rock Art Research Association
US 191 U.S. Highway 191
US 40 U.S. Highway 40
US 6 U.S. Highway 6
USDOT U.S. Department of Transportation
USFWS U.S. Fish and Wildlife Service
USGS U.S. Geological Survey
Ute Indian Tribe Ute Indian Tribe of the Uintah and Ouray Reservation
VdB vibration decibels
VMT vehicle miles traveled
VOC volatile organic compound
VPH vehicles per hour
VQO Visual Quality Objective
VRI visual resource inventory
VRM Visual Resource Management
WHP Wildfire Hazard Potential
WY 789 Wyoming State Highway 789

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1.0 Decisions and Acknowledgements

1.1 Decision

I, Susan Eickhoff, Forest Supervisor for the Ashley National Forest, am the Responsible Official for the decisions to be made on the Ashley National Forest portion of the Uinta Basin Railway Project. As the Responsible Official for this portion of the decision, I have the authority to execute the decision resulting from the Uinta Basin Railway Project EIS for all potentially affected National Forest System lands covered by this decision.

1.1.1 Decisions to be Made

The decisions I must make for the U.S. Forest Service (USFS) include the following: 1) the choice of a Selected Alternative; 2) the need to amend the Land and Resource Management Plans (LRMP or Forest Plan) relying on the National Forest Management Act (NFMA) 3) whether to approve use of National Forest System (NFS) land by the applicant; and 4) what terms and conditions a Special Use Permit (SUP) should include if use of NFS land is approved. Detailed descriptions of these four parts of the Decision are provided in this section, followed by supporting information.

1.1.2 Selected Alternative

Based on my review of the impact analysis in the Draft Environmental Impact Statement (Draft EIS, Surface Transportation Board 2020) and the Final EIS (Surface Transportation Board 2021), including public comments received on the Draft EIS, I have decided to approve the Whitmore Park Alternative, which is also the Environmentally Preferred alternative. This alternative authorizes granting a special use permit (SUP) in response to the Coalition's request for the 100- to 2,100 (at tunnel locations)-foot wide rail line right-of-way (ROW) on NFS lands under USFS jurisdiction on the Ashley National Forest for the construction, operation, and maintenance of a rail line following the Whitmore Park Alternative, the portion of the Preferred Alternative that crosses NFS lands. The authorization of the SUP would be issued in accordance with agency standards utilizing the correct form, length of term, terms and conditions together with the special resource specific stipulations.

The Preferred Alternative will cross a portion of the Ashley National Forest for a total length of approximately 12 miles. The Agency Preferred Alternative is now referred to as the Selected Alternative.

This decision does not authorize creation of any new permanent or temporary access routes on NFS lands for construction, operation and maintenance of the Project.

Legal descriptions for the portion of the Ashley National Forest are provided in **Appendix D** of the FEIS. Maps of the Selected Alternative are provided in **Appendix B** of the FEIS, and in Figure 1 of this ROD.

This decision affects only those lands in the Project area administered by the USFS for the Ashley National Forest. Other cooperating agencies may issue separate decisions on whether to grant use or occupancy of the lands under their jurisdiction, based on analyses contained in the EIS.

The proposed rail line is not being proposed or sponsored by the federal government. Therefore, the purpose and need of the proposed rail line is informed by both the goals of the Coalition, as the project applicant, and the Board's enabling statute, specifically 49 U.S.C. § 10101 (the Rail Transportation Policy provision), § 10502 (the Board's exemption provision) and 10901 (the Board's rail construction

licensing provision).[1] Construction and operation of new rail lines require prior authorization by the Board either through a certificate under 49 U.S.C. § 10901, or an exemption from the formal application requirements of § 10901 under § 10502. Section 10901(c) directs the Board to grant construction proposals "unless" the Board finds the proposal "inconsistent with the public convenience and necessity.

The rationale for this decision is that proposed Project activities and facilities on NFS lands can be constructed and operated with minimal adverse impacts of concern to environmental resources and with minimal conflicts with LRMP standards and guidelines. Furthermore, the alternative selected in this decision provides for a route that is congruent with the lead agency's preferred alternative, allowing for a feasible Project that connects across all lands. The basis for this rationale is that the proposed Project would implement design features and follow best management practices (BMPs) and additional mitigation to avoid or reduce impacts to environmental resources. The protection measures or terms and conditions are summarized in Section 1.1.5.

This decision meets the USFS purpose of responding to the Coalition's application to construct, operate, and maintain, a railway on federal lands. The decision also supports the need for this action to fulfill the USFS responsibility under Federal Land Policy and Management Act (FLPMA), the NFMA, and USFS Special Use Authorization regulations 36 Code of Federal Regulations (CFR) 251 Subpart B – Land uses and its implementing policies in Forest Service Manual (FSM) 2700, and Forest Service Handbook (FSH) 2709.11, and related environmental policy direction in FSH 1900 and FSH 1900.

1.1.3 Project-specific Forest Plan Amendment

I have also decided to approve the project-specific amendment to the Ashley National Forest Land and Resource Management Plan (LRMP or the Forest Plan). The amendment to the Ashley National Forest LRMP will consist of a project-specific exception to exempt the Uinta Basin Railway from the standard and guideline in the Ashley LRMP for the management area where the rail line is proposed to be built. The Forest Plan Standard and Guideline for Objective 9 for Recreation under IV. Forest Management Direction, C. Goals, Objectives, Standards and Guidelines by Management Area (Forest Plan, page IV-19) describes the Visual quality Objective for this management area as retention. The approved amendment specifies this direction would not apply to the Uinta Basin Railway.

1.1.4 Special Use Authorization

It is my decision to approve the proposed use and subsequently issue a Special Use Authorization for a railroad right of way for the Selected Alternative. As a requirement of the standard terms of the SUP authorization and the Record of Decision (ROD), the Seven County Infrastructure Coalition (the Coalition or applicant) will provide an environmental compliance inspection contractor (CIC), which will be approved by the USFS on their NFS land to represent the agency during the construction and reclamation phases of the Project. The CIC will report directly to the federal Project Manager and will be authorized to enforce the stipulations of the federal right of way and authorizations. The primary role and responsibility of the CIC is to ensure compliance with all terms, conditions, and regulatory requirements. The Coalition will be responsible for implementing the mitigation measures, as described in Appendix D, F, F.2, and F.3 of the ROD.

The right of way approved in this decision is approximately 12 miles long, crossing a portion of the Ashley National Forest through left Fork Indian Canyon, roughly paralleling US Highway 191. The right of way approved is approximately 100 feet wide along the single track, and up to 200 feet wide along sidings with temporary work areas needed for construction of typically 300 feet wide and up to 1000 feet wide in difficult terrain. This decision approves the ROW for construction of 3 tunnels on USFS-managed

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[1] See *Alaska Survival v. STB*, 705 F.3d 1073, 1084-85 (9th Cir. 2013); *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 199 (D.C. Cir. 1991).

lands, adjustments to stream channels where the railway crosses waterbodies, and installation of required facilities essential to the construction, maintenance and operation of the railway and implementation of all required mitigation measures. See map in Figure 1 for specific locations of rail line and facilities. Permits for activities regulated by other State and Federal agencies are not part of this decision and would be obtained using typical administrative procedures in place with each regulatory body.

1.1.5 Terms and Conditions of Special Use Permits

The Coalition is not authorized to undertake activities related to construction on NFS lands until they have obtained all Federal and State authorizations outstanding for the entire project. Environmental protection measures will be implemented to minimize effects to sensitive environmental resources. The terms and conditions of this decision include all applicable environmental protection measures considered in the Final EIS, including:

- The Surface Transportation Board's required mitigation measures,
- the Coalition's voluntary mitigation measures,
- the applicable USFS LRMP standards and guidelines,
- and all avoidance, minimization, and mitigation measures developed through the NEPA process.
- Design criteria and mitigation measures developed under the stipulations of the NHPA Programmatic Agreement (Appendix D of the ROD and Appendix O of the FEIS)
- Additional mitigation measures to reduce impacts to visuals.
- Mitigation Design Plans in Indian Canyon on Ashley National Forest Land
- Mitigation Fencing in Indian Canyon on Ashley National Forest Land Grazing Allotments

The federal land management agencies are responsible for ensuring compliance with all adopted mitigation measures applicable to lands under their jurisdiction, as described in 40 CFR 1505.2(c). During construction of the Project, the Coalition will engage a third-party Compliance Inspection Contractor (CIC) to act on behalf of the USFS to provide construction oversight and monitor compliance with the terms and conditions of the federal authorizations. The Coalition will provide funding for the CIC, with contractor approval and activity oversight by the USFS.

The Applicant has committed to measures that will avoid or minimize the environmental impacts. These measures are listed in Chapter 4 of the FEIS.

USFS standards and guidelines associated with the Ashley National Forest (Ashley LRMP, 1986) apply to the Selected Alternative, as amended by this and previous decisions. Some of these measures are specific to individual species and their habitats and vary across jurisdictions. The U.S. Department of Agriculture (USDA) National Best Management Practices for Water Quality Management on NFS Lands (USFS 2012) also would be applicable to the Ashley National Forest.

1.2 Background Information for Decision Process

The authority under which the USFS will issue a SUP for the rail line and associated facilities right of way is Title V of the FLPMA of October 2, 1976 (43 USC 1761-1771), as amended. The FLPMA provides the USFS with discretionary authority to grant ROWs on lands that they administer by considering impacts on natural and cultural resources (including historical resources). In making its decisions, the USFS must

endeavor "to minimize damage to scenic and aesthetic values and fish and wildlife habitat and otherwise protect the environment" through avoidance or mitigation (FLPMA Title V).

According to the NFMA (16 USC 1604(f)(4)) and its implementing regulations, all actions authorized subsequent to the plan must be consistent with the approved LRMP. To be consistent with LRMPs, a project must do the following: 1) contribute to the maintenance or attainment of one or more goals, desired conditions or objectives, or not foreclose the opportunity to maintain or achieve any goals, desired conditions or objectives over the long term; 2) comply with applicable standards; 3) comply with applicable guidelines, and be designed in a way that is as effective in achieving the purpose of the applicable guideline; 4) occur in an area that is identified as suitable for that type of project, or in an area for which the plan is silent with respect to suitability (36 CFR 219.15(d)).

If a proposed project would not be consistent with the applicable LRMP, the responsible official shall modify the proposed project to make it consistent with the applicable plan, reject the proposal, or amend the LRMP so that the project will be consistent with the plan as amended (36 CFR 219.15(c)). When a plan amendment is approved in a decision document approving a project or activity and the amendment applies only to the project or activity, the administrative review process for the project applies, in this case 36 CFR part 218, subparts A and B (36 CFR 219.59(b)). Such an amendment would become effective on the date the project may be implemented in accordance with the administrative review regulations at 36 CFR 218 (36 CFR 219.17(a)(3)).

Environmental documents that were considered in making this decision included the Draft and Final EISs, Biological Evaluation (BE), Biological Assessment (BA), Biological Opinion (BO), and Inventoried Roadless Area Specialist Report.

2.0 Project Information

2.1 Project Background

The Coalition applied to the Surface Transportation Board to construct, operate and maintain the Uinta Basin Railway (UBR). The UBR is proposed as an approximately 88-mile single-track rail line to connect the Uinta Basin (the Basin) to the existing interstate rail network. The proposed rail line would extend from two terminus points in the Basin near Myton, Utah and Leland Bench, Utah to a proposed connection with the existing Union Pacific (UP) Provo Subdivision near Kyune, Utah.

The Surface Transportation Board (STB, or the Board) is an independent federal agency. Their role is to authorize, deny, or authorize with conditions the Coalition's application. The proposed rail line is not being proposed or sponsored by the federal government. Therefore, the purpose and need of the proposed rail line is informed by both the goals of the Coalition, as the project applicant, and the Board's enabling statute, specifically 49 U.S.C. § 10101 (the Rail Transportation Policy provision), § 10502 (the Board's exemption provision) and 10901 (the Board's rail construction licensing provision).[2] Construction and operation of new rail lines require prior authorization by the Board either through a certificate under 49 U.S.C. § 10901, or an exemption from the formal application requirements of § 10901 under § 10502. Section 10901(c) directs the Board to grant construction proposals "unless" the Board finds the proposal "inconsistent with the public convenience and necessity." This is a permissive licensing standard that presumes that rail construction projects are in the public interest unless shown otherwise.

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[2] See *Alaska Survival v. STB*, 705 F.3d 1073, 1084-85 (9th Cir. 2013); *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 199 (D.C. Cir. 1991).

The Coalition anticipates that rail traffic on the proposed rail line would primarily consist of trains transporting crude oil from the Basin to markets across the United States. The Coalition also expects that trains would transport fracturing sand (frac sand) into the Basin for use in the oil and gas extraction industry. The total volume of rail traffic would depend on future markets for crude oil, which is driven by global demand and capacity at oil refineries. Depending on those future market conditions, the Coalition estimates that as few as 3.68 or as many as 10.52 trains could operate on the proposed rail line each day, on average.[3] That estimate includes between 3.68 and 9.92 crude oil trains, including both unloaded trains entering the Basin and loaded trains leaving the Basin, and between 0 and 0.6 frac sand trains, including both loaded trains entering the Basin and unloaded trains leaving the Basin. The Coalition expects that the majority of crude oil transported on the proposed rail line would originate from new extraction projects in the Uinta Basin or increased production at existing oil wells. The Coalition does not expect that the proposed rail line would divert existing oil truck traffic to rail transportation for the purposes of serving existing oil refineries in Salt Lake City in the short term.

The Coalition expects that shippers could also use the proposed rail line to transport various heavy and bulk commodities found in the Basin, such as soda ash, phosphate, natural gas, oil shale, gilsonite, natural asphalt, limestone, bentonite, heavy clay, aggregate materials, bauxite, low-sulfur coal, and agricultural products. These products would be transported in cars added to crude oil trains or frac sand trains. The Coalition does not anticipate that the volume of other commodities would be large enough to warrant dedicated trains.

The Coalition anticipates that shippers of crude oil or other third parties would construct terminals at the two terminus points of the proposed rail line near Myton and Leland Bench to facilitate the transportation of crude oil. The Coalition is not proposing to construct terminals at the two terminus points as part of its petition filed with the Board, and the Board would not have a role in permitting those facilities if another non-railroad party were to construct them, and those activities are not part of this decision. However, because the potential terminals are not part of the proposed action being evaluated in this EIS but their construction is reasonably foreseeable, those facilities are discussed separately in the FEIS, Chapter 3, Section 3.15, *Cumulative Impacts.*

The three Action Alternatives examined in the EIS were developed over the course of several years of analysis by the Utah Department of Transportation (UDOT) and the Coalition, and later STB's Office of Environmental Analysis (OEA). Because the Basin is surrounded by high mountains and plateaus, there are very few feasible routes that a rail line could follow that would allow for freight trains to operate within modern standards of safety and efficiency.

The STB is the lead agency for the NEPA process and has overseen the preparation of the EIS. The USDA Forest Service (USFS, Ashley National Forest, or the Forest) is one of five cooperating agencies who assisted in the preparation of the EIS. USFS participation has included assisting in identification of environmental issues, providing relevant data and analysis requirements, and providing input on preliminary draft documents. A necessary component of the approval for construction of the rail line is for the Coalition to obtain a special use permit from the USFS to construct and operate the rail line on NFS lands managed by the Ashley National Forest.

2.2 Proposed Action

[3] In its petition, the Coalition has stated that projections of future rail traffic are based on conditions existing before the ongoing COVID-19 pandemic, and that it anticipates these conditions caused by the pandemic will be temporary in nature.

2.2.1 Description

The Applicant's proposed action considered by the USFS and which the decision outlined in Section 1.0 is based upon consists of the following facilities and improvements. Specific locations of some of the following facilities and improvements will be determined in the final plan of development. All locations and sites would conform with the terms of the decision:

- An 88-mile rail line, extending across public (state and federal) and private lands in Uintah, Duchesne, Carbon and Utah Counties. The proposed rail line would consist mostly of a single track across the proposed approximately 12-mile length on USFS lands managed by the Ashley National Forest, with approximately 3.7 miles of siding (where a second track parallels the primary track, and is used for passing trains, service, or emergencies) in that segment. (**Figure ROD-1**). The railway line ROW would be 100 feet wide on average, and up to 200 feet wide in areas where sidings would be constructed.
- The rail line footprint. This permanently disturbed area includes the area of the railbed, as well as the full width of the area cleared and cut or filled. The rail line length crossing Forest Service land would be approximately 12 miles, with a footprint of approximately 167 acres. The rail line footprint would include other physical structures installed as part of the proposed rail line, such as fence lines, siding tracks, bridges, retaining walls, facilities to manage air flow and water in tunnels and power distribution lines. All anticipated facilities would be constructed within the rail line footprint, and the rail line footprint is the area where rail line operations and maintenance would occur. The Applicant does not anticipate constructing or operating support facilities along the rail line on USFS land. The rail line through the USFS land does not connect to a common carrier railroad and is not in a location to receive bulk commodities. The Applicant expects that Union Pacific (UP) and Burlington-Northern Santa Fe (BNSF) would conduct run-through operations on the proposed rail line and does not intend to construct locomotive repair shops, rail car repair shops, marshalling yards, or storage yards as part of the proposed rail line. Shippers could conduct mechanical inspections and repairs at potential shipper-owned facilities.
- The temporary footprint. This is the area that would be temporarily disturbed during construction, including areas for temporary material laydown, staging, and logistics. This area on Forest Service land would comprise an additional approximately 235 acres and would be reclaimed and revegetated following construction.
- Five tunnels of various length on the route, three of which would be constructed on lands managed by the USFS. Total tunnel length on USFS lands is 2.6 miles. Tunnel length and locations are specified in Appendix A of this ROD.
- Ventilation shafts, fans, and exit points at various points along the length of the longest tunnel (no such facilities needed on tunnels less than 1 mile long). Approximate number and locations of these structures are described in Appendix A of this ROD.
- Power distribution lines will be needed for some signals, communications, and safety equipment. The exact locations of power distribution lines will be determined during detailed design and described in the construction plan of development. It is anticipated that any needed power distribution lines would be constructed within the rail line footprint and would connect to existing lines where there are connections adjacent to the rail line footprint. The terms of use of these facilities would be specified in the special use permit.
- Five bridges are proposed on NFS lands. The exact design and placement of the bridges will be determined during detailed design and described in the construction plan of development.
- Construction staging points from existing access points and new overland access where required. No overland access routes would be improved or lead to creation of temporary routes.

Figure ROD-1 Selected Alternative Route on Ashley National Forest

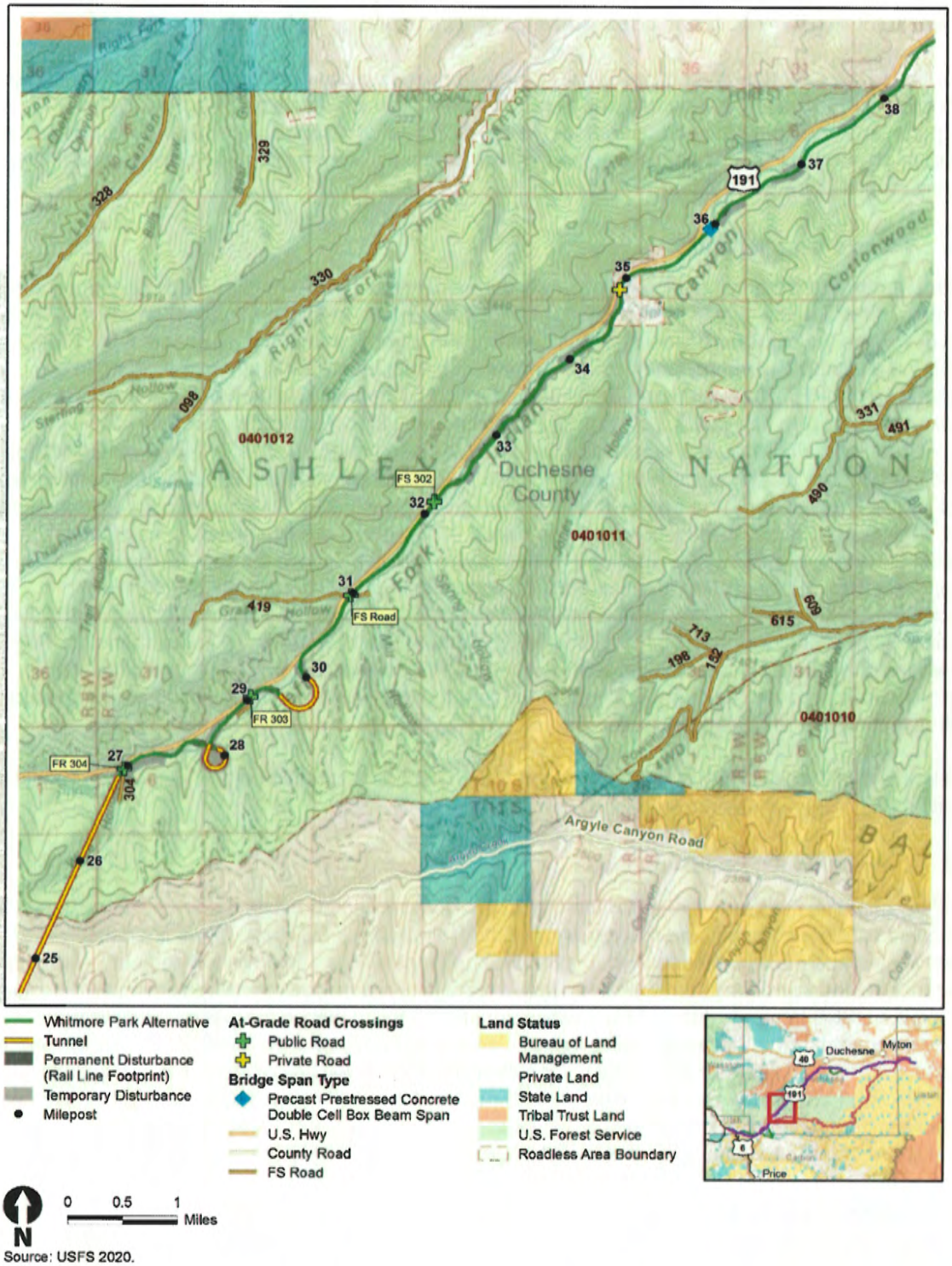


Figure 1 Whitmore Park Alternative - Ashley National Forest

The Coalition's stated goals for developing this railway are to provide common carrier rail service connecting the Basin to the interstate common carrier rail network using a route that would provide shippers with a viable alternative to trucking. Currently, all freight moving into and out of the Basin is transported by trucks on the area's limited road network, which includes one north-south two-lane highway (U.S. Highway 191) and one east-west two-lane highway (U.S. Highway 40).

According to the Coalition, the proposed rail line would provide customers in the Basin with multi-modal options for the movement of freight to and from the Basin; promote a safe and efficient system of freight transportation in and out of the Basin; further the development of a sound rail transportation system; and foster sound economic conditions in transportation and effective competition and coordination between differing modes of transportation.

2.2.2 Plans of Development

To directly carry forward mitigation and other stipulations outlined in the Final EIS into construction and operation of the Project, a plan of development (POD) has been drafted in coordination with USFS. The POD describes the activities associated with construction, operation and maintenance of the Project. Due to the availability of survey and detailed engineering data, the POD is being developed in two phases: 1) a draft POD with sufficient detail of the Selected Alternative to demonstrate compliance with NEPA (Appendix A to this ROD); and 2) final POD with detail for construction, operation and maintenance of the railway. The purpose of the first POD is to provide a sufficient level of information to inform the USFS in making their decision. Since final engineering based on resource survey information is not available at this time, the framework level of detail in the initial POD will be expanded in the final POD, after geotechnical investigations are completed, facilitating more site-specific design detail. Additionally, the final POD will be informed by pedestrian surveys associated with Section 7 of the Endangered Species Act (ESA), Section 106 of the National Historic Preservation Act (NHPA), Paleontological Resources Preservation Act (PRPA), and Section 104 of the Clean Water Act (CWA). The final POD will be developed through continued coordination between the Applicant and the USFS and will include adjustments to the detailed mapping of Project facilities (rail line footprint locations, temporary access points, and temporary footprint) and the identification and depiction of site-specific construction actions, including mitigation.

Development of the final POD in collaboration with the USFS is a condition of this decision and will be a condition of the special-use authorization.

2.2.3 Environmental Protection Plans

The POD contains five plans that detail the Coalition's commitment to mitigate adverse impacts resulting from construction, operation, and maintenance of the Railway Project. These plans are described in Appendices to the POD (Appendix A to this ROD). The plans will be implemented and enforced as an attachment to the special use authorization. Implementation and monitoring of these plans will occur through the USFS Implementation Team, which consists of a line officer, team lead, and resource support specialists. The Biological Opinion (BO) also has been attached to the ROD for USFS (See Appendix C of the ROD). Protection plans for cultural resources will be developed after stipulations in the NHPA Programmatic Agreement (Appendix D of the ROD and Appendix O of the FEIS) have been completed. Protection plans developed because of requirements of the PA will have the same commitment to mitigate adverse effects as other plans included in the ROD.

2.3 Purpose and Need

The purpose of the USFS federal action is to respond to the Coalition's application for a SUP to construct, operate, maintain a railway on NFS lands. The need for this action is to fulfill USFS responsibility under FLPMA and NFMA (16 USC 1601-1614) and USFS Special Use Authorization regulations at 36 CFR 251 Subpart B - Land uses and its implementing polices in FSM 2700, FSH 2709.11, and related environmental policy direction in FSM 1900 and FSH 1900.

2.4 Assessment and Disclosure of Environmental Impacts

In response to the permit application, the STB, as the lead federal agency and in coordination with the USFS and other cooperating agencies, prepared a Draft EIS (STB 2020) and Final EIS (STB 2021) for the Project pursuant to the requirements of NEPA (40 CFR 1500-1508) and other laws, regulations, and policies including the NFMA, and the LRMP for the Ashley National Forest. The EIS evaluated and disclosed the potential Project-related environmental impacts that could result from the implementation of the Proposed Action and any of the alternatives, as discussed in Chapter 3.0 of the Final EIS.

The USFS participated as a cooperating agency for the NEPA process for the Project. The NEPA regulations (40 CFR 1506.3) specify that a cooperating agency may adopt, without recirculating, the EIS of a lead agency when their review of the EIS concludes that its comments, suggestions, and requirements have been satisfied. Based on my independent review of the EIS, I have concluded that the comments and requirements of the USFS have been satisfied. Therefore, I am adopting the Final EIS (STB 2021) and associated record to support my decision.

In accordance with the direction contained in the USFS regulations for special use authorities (36 CFR 251.53) and proposal and application requirements and procedures (36 CFR 251.54), I have the authority to issue special use authorizations for this project crossing National Forest System lands.

2.5 Consideration of Issues

The STB, OEA, and USFS considered effects on all environmental resources as part of the process of evaluating the impacts of the alternatives in the EIS, including the identification of the Preferred Alternative. The Project Interdisciplinary Team considered the effects of each alternative route on vehicle safety and delay, rail operations safety, water resources, biological resources, geology, soils, seismic hazards, hazardous waste sites, noise and vibration, air quality and greenhouse gases, energy, cultural resources, paleontological resources, land use and recreation, inventoried roadless, visual resources, socioeconomics, and environmental justice. All practicable measures to avoid or minimize environmental impacts to resources were adopted and will be implemented as part of the Selected Alternative (see Chapter 4 of the Final EIS). I believe that all reasonably foreseeable potential effects from Project activities have been disclosed. I have reviewed the LRMP standards and guidelines and have determined that one project specific amendment is needed for the Project to be consistent with the LRMP.

The Selected Alternative route was chosen in consideration of impacts to natural resources, cultural resources, visual resources, and impacts to private lands. This required consideration not only of the potential impacts on these resources occurring on USFS lands, but also consideration of the impacts to resources on lands under other jurisdictions because the preferred alternative must connect across jurisdictional lines.

The specific considerations in choosing the Selected Alternative along the Whitmore Park alignment, specifically through Indian Canyon in the Ashley National Forest, include the following:

- The lead agency concludes that, among the three Action Alternatives, the Whitmore Park Alternative would result in the fewest significant impacts on the environment.
- While construction and operation of the rail line would result in unavoidable impacts on surface waters and wetlands, including the loss of wetland habitat and permanent changes to surface water hydrology from crossing structures and stream realignments, when comparing the three Action Alternatives, the Selected Alternative would permanently affect the smallest total area of surface waters and wetlands (FEIS p. S-8).
- The Selected Alternative would avoid or minimize impacts on greater sage-grouse relative to the other Action Alternatives because it would be located further away from more leks and associated summer brood rearing habitat (FEIS pp. S-8-9).

- Compared to the Wells Draw Alternative, the Selected Alternative would permanently and temporarily affect a smaller area of wetlands and of intermittent streams, as well as a smaller number of springs.
- The Selected Alternative would affect a smaller area of suitable habitat for the Pariette Cactus and Uinta Basin Hookless Cactus than the Wells Draw Alternative, would avoid potential impacts on moderately suitable habitat for the threatened Mexican spotted owl and a smaller area of big game habitat.
- The Selected Alternative would result in fewer total emissions of criteria air pollutants and greenhouse gases during construction and during rail operations; would cross a smaller area of land that may be prone to landslides; would result in fewer displacements of residences; would involve a lower risk for accidents at at-grade road crossings; and would cross a smaller area with high potential for wildfires.
- The Selected Alternative would avoid noise impacts on most residences during rail operations, as well as visual and other impacts on residential areas in the Argyle Canyon and Duchesne Mini-Ranches areas of Duchesne County.
- The Selected Alternative would generate more employment, labor income, and local and state tax revenue during construction than the Indian Canyon Alternative and would cross a smaller area of geological units that may be prone to landslides and a smaller area of land with high wildfire hazard potential.

2.6 Scoping Process

To help determine the scope of this EIS, and as required by the Board's regulations at 49 Code of Federal Regulations (C.F.R.) § 1105.10(a)(2), OEA published a Notice of Intent to Prepare an Environmental Impact Statement, Notice of Availability of the Draft Scope of Study, Notice of Scoping Meetings, and Request for Comments (NOI) (84 Federal Register [FR] 28611) on June 19, 2019. OEA sent letters to elected officials; federal, state, and local agencies; tribes; and other potentially interested organizations to notify them of the availability of the NOI and provide details on the scoping process. OEA also prepared and distributed a postcard that introduced the Coalition's proposed rail line, announced OEA's intent to prepare an EIS, and gave notice of scoping meetings to over 360 residents and landowners identified in the vicinity of the preliminary rail line alternatives. OEA circulated a press release and a public service announcement for distribution to media outlets in the areas surrounding the proposed rail line. OEA also distributed a community flyer with similar information to high-traffic areas including chambers of commerce, libraries, and town halls near the proposed rail line. OEA also conducted a digital campaign to advertise public meetings, increase awareness, and direct interested parties to the project website for additional information. OEA placed notices of the scoping meetings in several newspapers, including the Salt Lake *Tribune*, *Deseret News*, *Uintah Basin Standard*, *Vernal Express*, Craig *Daily Press*, Rio Blanco *Herald Times*, and Utah County *Daily Herald*. Publication of the NOI initiated a 45-day public scoping period that commenced on June 19, 2019, and was scheduled to end on August 3, 2019. In response to requests to extend the public scoping period, OEA extended the scoping comment period for an additional 30 days to September 3, 2019.

During the scoping period, OEA held six public scoping meetings in communities in the vicinity of the proposed rail line and in Salt Lake City, Utah. The first 30 minutes of each public meeting was an open-house format, followed by a brief presentation and an opportunity for public comment at an open microphone. Approximately 410 people attended the scoping meetings, including citizens; tribal members; representatives of organizations; elected officials; and officials from federal, state, and local agencies. Some attendees submitted oral and/or written comments during the meetings, and OEA received additional scoping comment forms and letters by mail. OEA received 1,530 comment letter submissions during the scoping comment period. This included one form letter campaign comprising 949

submissions. Upon receipt of each comment letter, the submission was parsed into individual comments and sorted by resource topic. OEA identified 961 unique comments during this process. OEA considered all the of the comments and revised the Draft Scope of Study in response to public and agency input. On December 13, 2019, OEA published the Final Scope of Study for the EIS in the Federal Register. The Final Scope of Study directed OEA's analysis for this EIS.

2.7 EIS Public Review process

On October 30, 2020, the Board issued the draft EIS for review and comment. On that date, OEA published a Notice of Availability in the Federal Register, which announced the availability of the draft EIS, instructions on how to submit comments on the draft EIS, and the schedule and instructions for participating in online public meetings. The Notice of Availability noted that the comment period would end December 14, 2020. Following the issuance of the draft EIS, the Board twice extended the public comment period. On December 9, 2020, OEA announced an extension of the public comment period for 60 days until January 28, 2021. On January 28, 2021, OEA announced an additional extension of the comment period for 15 days until February 12, 2021. OEA conducted six online public meetings during the comment period. These meetings were held online due to OEA's concerns for public safety during the COVID-19 pandemic and COVID-19-related restrictions on large gatherings and travel. Over the course of the six online public meetings, 209 persons registered to attend, and 55 persons registered in advance to make oral comments. Persons who did not register in advance were able to participate in any of the meetings by following the instructions on the project website or by dialing the telephone number that OEA made available on the public website. When time permitted during an online public meeting, the meeting facilitator called upon persons desiring to make an oral comment, but who had not registered in advance to do so. OEA received 1,934 comment submissions on the draft EIS, including both written and oral comments. Of those, 1,065 were form letters associated with one of two master form letters, and 184 were form letters with some unique text. Of the total comment submissions, 869 were unique comment submissions.

OEA consulted with appropriate federal, state, and local agencies during the preparation of this EIS. As part of scoping under NEPA and before the NOI was published, OEA sent consultation letters to 27 agencies soliciting their input, comments, ideas, and concerns regarding this EIS. Following the publication of the NOI, OEA held bi-weekly conference calls with the cooperating agencies and other participating agencies. OEA also held teleconferences and in-person meetings with participating agencies, including the U.S. Environmental Protection Agency and U.S. Fish and Wildlife Service as needed throughout development of this EIS to discuss resource-specific topics.

3.0 Alternatives Considered

3.1 Alternatives Development

The National Environmental Policy Act (NEPA) requires that federal agencies consider reasonable alternatives to the proposed action. To be reasonable, an alternative must meet the project purpose and need and must be logistically feasible and practical to implement. In railroad construction cases, OEA typically determines the range of reasonable alternatives by first developing a list of conceptual routes. OEA then carefully considers those potential alternatives in consultation with appropriate agencies, other stakeholders, and the public. In determining whether an alternative is reasonable, OEA considers the totality of circumstances for each potential alternative, including the following:

- Logistical constraints. Some potential alternatives may not be logistically feasible because they would involve especially steep grades or high curvature ratios that would increase the risk of derailment and other accidents. A potential alternative may also be unreasonable if it would require unusual or unique design features, such as especially long tunnels or long viaducts that may be impossible or impractical to construct or to operate safely.

- Length of the rail line. In general, longer rail lines are more expensive to construct and operate and are likely to result in more environmental impacts than shorter rail lines. A conceptual route that is significantly longer than other potential alternatives may not be reasonable under NEPA if it does not offer potential benefits in terms of lower environmental impacts, improved operational safety, or increased economic efficiency relative to other potential alternatives.

- Disproportionately significant environmental impacts. A potential alternative that would cross areas containing especially sensitive environmental or cultural resources may be not be reasonable under NEPA when it is clear from initial desktop review that the potential alternative would result in significant environmental impacts that cannot be mitigated and that would be substantially greater than the impacts associated with other potential alternatives. OEA believes it would be a misuse of public and agency time and resources to analyze in detail a potential alternative that the Board would not be able to ultimately authorize as its environmentally preferable alternative.

- Construction and operation costs. Because freight rail lines are typically constructed and operated by private companies using private investment funds, the costs of constructing and operating a new rail line are ultimately passed along to shippers in the form of rates charged by the rail line operator to transport freight. If the cost of constructing and operating a new rail line is prohibitively high, it could make it impossible for the operator to offer rates that would be competitive with other means of transportation. Some potential alternatives may, therefore, be economically infeasible because they would entail prohibitively high construction and operation costs.

Because each rail line construction case is unique, OEA does not have established thresholds for any of the above parameters. Therefore, to determine the range of reasonable alternatives, OEA carefully considered the totality of circumstances for each potential alternative, including agency and public comments received during the scoping process.

The three Action Alternatives examined in this EIS were developed over the course of several years of analysis by the Utah Department of Transportation (UDOT) and the Coalition, and later OEA. Because the Basin is surrounded by high mountains and plateaus, there are very few feasible routes that a rail line could follow that would allow for freight trains to operate within modern standards of safety and efficiency. This section summarizes the processes that UDOT, the Coalition, and OEA used to evaluate the feasibility of conceptual routes and determine the final range of alternatives. Additional details regarding the alternative development process, including the reports referenced in this section and listed in Section 2.2, Alternatives, are available to the public on the Board's website (www.stb.gov) and the Board-sponsored project website (www.uintabasinrailwayeis.com).

In 2014 and 2015, UDOT completed alternative feasibility studies that examined the feasibility of constructing a rail line to connect the Basin to the interstate railroad network (2014–2015 UDOT Studies). The 2014–2015 UDOT Studies identified 26 conceptual routes for a potential rail line and applied four levels of screening to determine which, if any, of those routes could feasibly be constructed. In the first-level screening, UDOT assessed whether each route would meet the project's purpose and need. The second-level screening involved a high-level engineering analysis to determine whether the routes that passed the first-level screening would have a maximum grade of no more than 2.4 percent, which UDOT considered to be the maximum grade that a heavy freight rail line can safely and efficiently operate. In the third-level screening, UDOT overlaid the conceptual routes that passed the second-level screening with available geospatial data and eliminated those that would have disproportionate environmental impacts on residences, known resources of cultural and historic value, and unique or particularly sensitive wildlife habitat. In the fourth-level screening, UDOT conducted a more detailed engineering analysis of the conceptual routes that passed the third-level screening and eliminated the routes that would be infeasible to construct.

In 2019 and 2020, the Coalition issued their route alternative selection reports (2019–2020 Coalition Reports), which detailed the Coalition's efforts to reassess the conceptual routes identified in the 2014–2015 UDOT Studies. In addition to the 26 routes that UDOT identified, the Coalition also considered three additional routes that it had identified. The Coalition then conducted a three-level screening process to eliminate routes that would not be reasonable alternatives. In the first-level screening, the Coalition conducted a desktop analysis and eliminated routes that would cross areas of particularly sensitive wildlife habitat, areas known to contain important cultural resources, or highly developed areas with many residences, buildings, and infrastructure. In the second-level screening, the Coalition conducted a high-level engineering review of the routes that passed the first-level screening and eliminated those that would be infeasible to construct and operate; the primary criterion that the Coalition used in this second-level screening was a maximum grade of 2.5 percent, which is slightly higher than UDOT's criterion of 2.4 percent maximum grade. In the third-level screening, the Coalition eliminated several conceptual routes that passed the second-level screening due to being largely duplicative with other routes that passed the secondlevel screening. For routes that passed all three levels of screening, the Coalition provided additional information regarding the relative technical and economic feasibility of the route and the results of desktop review of potential environmental impacts.

The Coalition proposed that OEA consider three routes as potential alternatives in the EIS, based on UDOT's and the Coalition's screening results. Those proposed alternatives were the Indian Canyon Alternative, the Wells Draw Alternative, and an alignment referred to as the Craig Route. After considering the comments that OEA received during the EIS scoping process, which are available to the public on the Board's website, the Coalition proposed an additional route as a potential alternative. That route, the Whitmore Park Alternative, although largely similar to the Indian Canyon Alternative, would avoid some sensitive habitat and some residential areas relative to the Indian Canyon Alternative. The Coalition also concluded, based on new information received during scoping, that the Craig Route would not meet the Coalition's purpose and need and requested that OEA eliminate that route from further review.

Throughout 2019 and 2020, OEA conducted its own analysis of the conceptual routes that were considered by UDOT and the Coalition. OEA also requested and received from the Coalition additional, more detailed engineering information about some of the routes that were eliminated during the screening analysis that the Coalition conducted. OEA also consulted with and carefully considered comments from federal, state, and local agencies; tribes; other potentially affected stakeholders; and the public about potential alternatives during the scoping process. Based on the analyses conducted by UDOT, the Coalition, and OEA, as well as comments submitted during scoping, OEA concluded that, of the conceptual routes that were considered at various times, only three routes would be reasonable under NEPA. OEA notes that the major reason that conceptual routes were found to be infeasible is due to the prevailing, challenging topography (e.g., mountain elevations, steep grades) surrounding the Basin. All of the routes identified by UDOT and the Coalition that OEA ultimately found infeasible would require substantial cut-and-fill and large or numerous bridges. Most routes would have also required numerous or large tunnels to pass through mountains. For example, the Coalition estimates that the least-cost route, the Indian Canyon Alternative, would cost approximately 1.29 billion dollars to construct, which is equivalent to approximately 16 million dollars per mile, while a typical rail line constructed on relatively flat terrain typically costs between approximately 1 and 2 million dollars per mile to construct. The other two reasonable alternatives analyzed in detail in this EIS, the Whitmore Park Alternative and the Wells Draw Alternative, would have estimated construction costs of approximately 1.35 billion dollars and 2.14 billion dollars, respectively.

3.2 No Action Alternative

Under the No Action Alternative, the USFS would not issue ROW grants or SUPs and the Project would not be constructed. The Ashley National Forest Plan would not need to be amended if the No Action Alternative is selected.

3.3 Alternatives Considered in Detail

All Action Alternatives would connect two terminus points near Myton, Utah and Leland Bench, Utah to an existing rail line near Kyune, Utah. The following subsections include additional details concerning project features and an overview map for each alternative showing those features. Appendix A of the FEIS, Action Alternatives Supporting Information, includes detailed map sets for each alternative illustrating project features and tables showing the same information in tabular form. Three alternatives were analyzed in the FEIS.

3.3.1 Indian Canyon Alternative

The Indian Canyon Alternative would extend approximately 81 miles from two terminus points in the Basin near Myton and Leland Bench to a connection with an existing UP rail line near Kyune (Figure 2-1 FEIS). Starting at Leland Bench, approximately 9.5 miles south of Fort Duchesne, Utah, the route would proceed westward, past the South Myton Bench area, until intersecting Indian Canyon approximately 2 miles south of Duchesne, Utah. After entering Indian Canyon, the route would turn southwest and follow Indian Creek upstream toward its headwaters below Indian Creek Pass, paralleling U.S. Highway 191 (US 191) for approximately 21 miles. The Indian Canyon Alternative would use a summit tunnel to pass through the West Tavaputs Plateau near Indian Creek Pass on US 191. After emerging from the tunnel, it would descend the Roan Cliffs to reach Emma Park, an open grassy area at the base of the Roan Cliffs. The route would then run westward through Emma Park where it would split into a westbound and eastbound wye configuration that would connect to the UP Provo Subdivision near the railroad timetable station at Kyune. In addition to the summit tunnel, the Indian Canyon Alternative would include two additional tunnels.

The 2014–2015 UDOT Studies concluded that this route would meet the project's purpose and need, would be feasible to construct in terms of engineering and economics, and would result in fewer significant impacts on the natural and built environment than other conceptual routes. The 2019– 2020 Coalition Reports also concluded that the route would be feasible to construct and operate and would not result in disproportionate environmental impacts relative to other routes. Among all of the conceptual routes that have been considered for the proposed rail line, the Indian Canyon Alternative would be the shortest in length at approximately 81 miles and would entail the lowest estimated construction cost at approximately 1.29 billion dollars. Because it would be logistically and economically feasible to construct and operate and because it would not present unreasonable challenges related to engineering, economics, or disproportionately significant environmental impacts, OEA concluded that the Indian Canyon Alternative is a reasonable alternative and has analyzed it in detail in this EIS.

The Indian Canyon Alternative would cross 12 miles of National Forest System land within Ashley National Forest. Selecting this alternative, the USFS would need to approve the permitting of the rail line right-of-way, which could include amending the Ashley Forest Plan with a project-specific amendment in the areas of visual quality and scenery management, pursuant to the requirements of the 2012 Planning Rule (36 C.F.R. Part 219). With the exception of the project-specific amendment for visual quality and scenery management, the Indian Canyon Alternative would be consistent with the Ashley Forest Plan. The project-specific amendment would include the following language:

> The plan amendment adds the following to the Forest Plan Standard and Guideline for Objective 9 for Recreation under IV. Forest Management Direction, C. Goals, Objectives, Standards and Guidelines by Management Area (Forest Plan, page IV-19): This standard and guideline does not apply to the Uinta Basin Railway Project.

Because the Indian Canyon Alternative would cross through inventoried roadless areas in Ashley National Forest, review and approval of construction of the railway in an inventoried roadless area would have to be completed to ensure consistency with the 2001 Roadless Area Conservation Rule (36 C.F.R., Part 294, Subparts A and B).

3.3.2 Wells Draw Alternative

The Wells Draw Alternative would extend approximately 103 miles from two terminus points in the Basin near Myton and Leland Bench to an existing UP rail line near Kyune (Figure 2-2 FEIS). The lines from the two terminus points would meet at a junction approximately 6.5 miles south of South Myton Bench. From the junction, the Wells Draw Alternative would run southward, generally following Wells Draw toward its headwaters. After reaching the headwaters of Wells Draw, the alternative would turn westward and enter Argyle Canyon. It would remain on the north wall of Argyle Canyon for approximately 25 miles, eventually reaching the floor of the canyon near the headwaters of Argyle Creek. The Wells Draw Alternative would then enter a summit tunnel through the West Tavaputs Plateau. The location of the summit tunnel's west portal would be similar to the Indian Canyon's summit tunnel west portal, but its east portal would be located in the upper reaches of Argyle Canyon instead of the upper reaches of Indian Canyon. After emerging from the tunnel, the Wells Draw Alternative would descend the Roan Cliffs to reach Emma Park. It would then run westward through Emma Park where it would split into a westbound and eastbound wye configuration that would connect to the UP Provo Subdivision near Kyune. In addition to the summit tunnel, the Wells Draw Alternative would include 12 additional tunnels.

The Wells Draw Alternative was not considered in the 2014–2015 UDOT Studies. The Coalition first identified the route prior to issuing the 2019–2020 Coalition Reports, which concluded that the Wells Draw Alternative would be technically and economically feasible to construct and operate. The Wells Draw Alternative would traverse primarily moderate terrain, characterized by foothills and incised river valleys, as well as some rugged terrain comprising mountains and deep valleys. Construction of this alternative would require numerous bridges, many large areas of cut-and-fill, and 13 tunnels of varying length. The Wells Draw Alternative would, therefore, have a much higher construction cost than the Indian Canyon Alternative at 2.14 billion dollars. However, the available information indicates that the alternative would not require features that would present unreasonable engineering challenges or significant safety or operational risks. Because it would be logistically and economically feasible to construct and operate and because it would not present unreasonable challenges related to engineering, economics, or disproportionately significant environmental impacts, OEA concluded that the Wells Draw Alternative is a reasonable alternative and has analyzed it in detail in this EIS.

The Wells Draw alternative would not cross NFS lands however, it would cross 57.2 miles of land managed by the BLM Vernal Field Office, Price Field Office, and Salt Lake Field Office. As proposed, the Wells Draw Alternative would not be in compliance with greater sage-grouse noise thresholds in the Price Field Office RMP and Pony Express RMP, as amended by the Utah greater sage-grouse Approved RMP Amendment/Record of Decision (2015). In addition, the Wells Draw Alternative would exceed the ground disturbance cap for greater sage-grouse in the Price Field Office RMP and Pony Express RMP. BLM would need to amend these plans in order to issue a right-of-way grant. BLM may also need to amend the Vernal Field Office RMP based on where the Wells Draw Alternative crosses BLM Visual Resource Management Class II land and the Lears Canyon Area of Critical Environmental Concern.

3.3.3 Whitmore Park Alternative (Preferred Alternative)

The Whitmore Park Alternative would extend approximately 88 miles from terminus points in the Basin near Myton and Leland Bench to an existing UP rail line near Kyune (Figure 2-3 FEIS, Figure 1 ROD). This alternative would overlap for much of its length with the Indian Canyon Alternative. Approximately 23 miles west of the terminus point near Leland Bench, the Whitmore Park Alternative would diverge from the Indian Canyon Alternative, heading south to avoid the residential Mini Ranches area near Duchesne, Utah. It would then continue west to Indian Canyon and turn southwest to follow Indian Creek, paralleling US 191. Like the Indian Canyon Alternative, the Whitmore Park Alternative would use

a summit tunnel to pass through the West Tavaputs Plateau near Indian Creek Pass on US 191. After emerging from the tunnel, the Whitmore Park Alternative would again diverge from the Indian Canyon Alternative to head south and southeast on its descent from the Roan Cliffs. After reaching Emma Park, it would follow Whitmore Park Road westward, cross US 191, and continue west along Quarry Road and Emma Park Road where it would split into a westbound and eastbound wye configuration that would connect to the UP Provo Subdivision near Kyune. In addition to the summit tunnel, the Whitmore Park Alternative would include four additional tunnels.

The Whitmore Park Alternative was not considered in the 2014–2015 UDOT Studies or in the 2019–2020 Coalition Reports. The Coalition developed the alternative during the scoping process in response to comments that OEA received from federal, state, and local agencies; tribes; other affected stakeholders; and the public, as well as additional outreach and consultation that the Coalition conducted. According to the Coalition, the Whitmore Park Alternative was developed specifically to avoid or minimize impacts on the natural and built environments, including residences in the Mini Ranches area near Duchesne and known greater sage-grouse leks in the Carbon Sage-Grouse Management Area. Although it would entail a construction cost of approximately 1.35 billion dollars, which is approximately 60 million dollars higher than the Indian Canyon Alternative, the Coalition has identified the Whitmore Park Alternative as its preferred alternative.

The Whitmore Park Alternative would cross 12 miles of National Forest System land within Ashley National Forest. Selecting this alternative, the USFS would need to approve the permitting of the rail line right-of-way, which would include amending the Ashley Forest Plan with a project-specific amendment in the areas of visual quality and scenery management, pursuant to the requirements of the 2012 Planning Rule (36 C.F.R. Part 219). With the exception of the project-specific amendment for visual quality and scenery management, the Whitmore Park Alternative would be consistent with the Ashley Forest Plan. The project-specific amendment would include the following language:

> The plan amendment adds the following to the Forest Plan Standard and Guideline for Objective 9 for Recreation under IV. Forest Management Direction, C. Goals, Objectives, Standards and Guidelines by Management Area (Forest Plan, page IV-19): This standard and guideline does not apply to the Uinta Basin Railway Project.

Because the Whitmore Park Alternative would cross through inventoried roadless areas in Ashley National Forest, review and approval of construction of the railway in an inventoried roadless area would have to be completed to ensure consistency with the 2001 Roadless Area Conservation Rule (36 C.F.R., Part 294, Subparts A and B).

3.4 Land Use Plan Amendment

The amendment to the Ashley National Forest LRMP will consist of a project-specific exception to exempt the Uinta Basin Railway from the standard and guideline in the Ashley LRMP for the management area where the rail line is proposed to be built. The Forest Plan Standard and Guideline for Objective 9 for Recreation under IV. Forest Management Direction, C. Goals, Objectives, Standards and Guidelines by Management Area (Forest Plan, page IV-19) describes the Visual quality Objective for this management area as retention. The amendment specifies this direction would not apply to the Uinta Basin Railway. The amendment applies to this rail line in this management area only.

3.5 Alternatives Considered but Not Analyzed in Detail

There were numerous conceptual routes that OEA considered but did not analyze in detail in this EIS because they would be logistically infeasible or unreasonable to construct and operate. Additional information regarding the conceptual routes that OEA did not analyze in detail is provided in the 2014–2015 UDOT Studies and the 2019–2020 Coalition Reports, which are publicly available on the Board's website (www.stb.gov) and on the Board-sponsored project website (www.uintabasinrailwayeis.com). Notably, none of the routes are entirely unique and many include substantial overlap with other routes.

Where appropriate, this section notes the similarities between routes. Twenty-seven additional routes are described in the FEIS in chapter 2 that were considered but not analyzed in detail. Several of those alternatives would have also crossed NFS lands.

3.6 EIS Consistency with Federal Agency Policy and Other Programs

3.6.1 Forest Plan Compliance

The USFS land use planning regulations (36 CFR 219.15) require that project-specific decisions, including authorized uses of land, conform to or be consistent with the applicable LRMP. If a proposed project-specific decision is not consistent with or does not conform to the applicable LRMP, the responsible official may modify the proposed project to make it conform or be consistent with the LRMP, reject the proposal, amend the LRMP such that the action will conform or be consistent with the LRMP as amended, or amend the LRMP contemporaneously with the approval of the project so that the project is consistent with the LRMP as amended and limited to apply only to the project.

The USFS plan amendments are subject to public review and procedures outlined in federal regulations (36 CFR 219.16). For a plan amendment that is approved in the decision document approving the project, and when the amendment applies only to the project, the public notification requirements of 36 CFR part 218, subpart A applies (36 CFR 219.16(b)). Pursuant to these regulations, outreach activities (see Chapter 5.0 in the Final EIS) were conducted to gather public input on the Project and the proposed amendment, planning criteria were developed and circulated for use in evaluating the amendment, and an analysis of the plan amendment was incorporated into this EIS. For the USFS, when a plan amendment that is approved in a decision document approving a project or activity and that applies only to one specific project or activity, the administrative review process for the project or activity applies (36 CFR 219.17(b)(3), 36 CFR 219.51(c) and 36 CFR 219.59(b)). In this case, the administrative review process would be the objection process at 36 CFR Part 218 Subparts A and B.

For the Project, each potential situation of non-conformance or inconsistency by proposed and alternative routes as well as associated Project components was identified through a comparison to the respective land use plan (Forest Plan Compliance Checklist, Pages 1-69) A plan amendment that would allow authorization of the proposed or alternative route was presented as the proposed plan amendment for that situation. Land use planning regulations require that the EIS identify the "agency preferred alternative," or those plan amendments that best meet multiple use and sustained yield mandates of FLPMA and the NFMA. The Final EIS identifies the "proposed amendment," or the amendment that the USFS proposes to implement for the selected alternative. Plan amendments would only be implemented as described for the Project routes that are authorized under this decision. The plan amendment for the Ashley National Forest was identified in the EIS. For the USFS, under 36 CFR 219.16(b), when a plan amendment is approved in a decision document approving a project or activity and the amendment applies only to the project or activity, the notification requirements for the project or activity applies. The required 45-day opportunity for comment on the EIS was provided. Comments received on the plan amendment during these comment periods were considered (see Appendix T, Final EIS Response to Comments).

3.6.1.1 NATIONAL FOREST MANAGEMENT ACT AND THE PLANNING RULE

For the plan amendment, consistency with the NFMA is based on consistency with the Planning Rule, the Forest Service implementing regulations for the NFMA. I prepared this amendment to the Forest Plan under the 2012 Planning Rule.

Because this amendment applies only to one project or activity, even though it was analyzed in an EIS, it is not considered a significant change in the plan for the purposes of the NFMA (see Planning Rule at36 CFR 219.13(b)(3)).

Compliance with the Planning Rule's procedural provisions

As explained below, this amendment complies with the procedural provisions of the 2012 Planning Rule (36 CFR 219.13(b)).

USING THE BEST SCIENTIFIC INFORMATION TO INFORM THE PLANNING PROCESS (36 CFR 219.3)

My decision is based on the consideration of the best available scientific information. This information is thoroughly discussed throughout the Final EIS, in the response to comments, and in the project file documentation.

Resource specialists considered what is most accurate, reliable, and relevant in their use of the best available scientific information. The best available scientific information used to help estimate environmental consequences in the Final EIS is listed in Chapter 9, References, of the Final EIS.

PROVIDING OPPORTUNITIES FOR PUBLIC PARTICIPATION (36 CFR 219.4) AND PROVIDING PUBLIC NOTICE (36 CFR 219.16; 36 CFR 219.13(b)(2))

The requirements for providing opportunities for public participation were met through the actions described above and in FEIS Sections 1.3.3 (Scoping Process), 1.3.4 (Public Comment Period for the Draft EIS), and 1.3.5 (Public Meetings).

As provided by 36 CFR 219.16(b), formal public notification for this amendment, which is "approved in a decision document approving a project or activity and the amendment applies only to the project or activity project-specific amendment," the required public notifications are those that meet the requirements for the project, 36 CFR 218. These public notifications are also described above in the Public Involvement section. All public notifications for the Project, including the amendment, were posted on the Forest's website.

FORMAT FOR PLAN COMPONENTS (36 CFR 219.13 (b)(4); 36 CFR 219.7 (e))

The plan amendment adds a statement of exception to an existing standard and guideline of the current Forest Plan. As described in 36 CFR 219.7(e), standards and guidelines establish constraints. Although the existing Forest Plan does not separate standards from guidelines, the standard and guideline amended by this decision constrains activities through the visual quality objective for the area. Adding the exception does not change this; thus, the resulting standard and guideline continues to meet the format for a standard or guideline plan component as described in 36 CFR 219.7(e).

CONSISTENT WITH THE PLAN AMENDMENT PROCESS (36 CFR 219.13)

In accordance with 36 CFR 219.16(b), the public notification requirements for the project-specific amendment are those for the project. As a cooperating agency, the Forest Service is using the FEIS developed by the Surface Transportation Board to make its decision for the Forest Service action and associated project-specific amendment. The public was notified of the possible need to change the plan due to the proposed project through the Surface Transportation Board's Federal Register Notice (June 19, 2019; FRN 84(118):28611-28616). The public engagement and public notifications for the plan amendment are described above in the Public Involvement section. The Federal Register Notice was posted on the Forest's webpage for the project.

The substantive requirements likely to be directly related to the amendment were identified in the Surface Transportation Board Notice. As described in the Notice, the Forest Service is adopting the EIS, led by the Surface Transportation Board and for which the Forest Service is a cooperating agency, to

support this decision. A 45-day comment period was provided for the Draft EIS, which meets the Planning Rule requirement and NEPA requirement.

Compliance with the Rule's Applicable Substantive Provisions (36 CFR 219.13(b))

The Planning Rule requires that those substantive rule provisions within 36 CFR 219.8 through 219.11 that are directly related to the amendment are applicable to this amendment. The applicable substantive provisions apply only within the scope and scale of the amendment (36 CFR 219.13(b)(5)).

SCOPE AND SCALE OF THE AMENDMENT

The scope and scale of the amendment is defined by the Project actions that I am approving. The scope of the amendment is limited to the Project activities I am approving with this decision. The scale of the amendment is the Project area that occurs on National Forest System lands.

The section that follows identifies the provisions in the Planning Rule that are directly related to the amendment. I have applied those provisions within the scope and scale of the amendment.

APPLICABLE SUBSTANTIVE RULE PROVISIONS AND HOW THEY ARE APPLIED

Although the Surface Transportation Board's Federal Register Notice (June 19, 2019; FRN 84(118):28611-28616) identified substantive requirements that were considered at the time as "likely to be directly related" to the plan amendment, I am using the analysis in the FEIS to make my determination of the directly related substantive requirements for the plan amendment, as listed below by each criterion set forth in the Planning Rule in 219.13(b)(5) and as applied to the scope and scale of the amendment, as described above.

Criterion 1, Purpose of the amendment (219.13(b)(5)(i)): The purpose of the amendment relates to two factors.

The first is the purpose of the Project, which is to provide transportation. For this purpose, I have determined that the directly related substantive requirement is 36 CFR 219.10(a), Integrated resource management for multiple use, (3), specifically transportation. My approval of the amendment is needed to ensure consistency between my decision for the project; therefore, I am applying this substantive requirement by considering if the project provides for transportation. The project does so, as described above and in FEIS Section 1.2.

The second is the purpose of the plan component being amended, which is the management of scenery resources. For this purpose, I have determined that the directly related substantive requirement is 36 CFR 219.10(a), Integrated resource management for multiple use, (1) specifically scenery. My approval of the amendment would result in an exemption to the requirement of meeting the visual objectives established in the Forest Plan, which would be "Retention" and "Partial Retention" for the scale of the amendment. Although I am requiring the mitigations for visual resources, as described in appendix F of the ROD, I acknowledge that even with the mitigation, the visual effect will be lessened but not eliminated. With this under consideration, I am applying the substantive requirement by comparing the area that would no longer meet "Retention" and "Partial Retention" visual objectives with the plan area's acres designated for "Retention" and "Partial Retention" to determine if the provision of the array of scenery resources in the Forest Plan can still be met. The overall affected area is 258 acres identified as "Retention" and 51 acres as "Partial Retention," which are only .05% and .02% of those designations across the plan area. The Forest Plan, when amended, will continue to provide the visual resources as set forth in the affected standard.

Criterion 2, Beneficial effects of the amendment (219.13(b)(5)(i)): Beneficial effects of the amendment would be the beneficial effects of the Project, as identified in the FEIS.

Although the FEIS, Chapter 3, identifies specific beneficial effects as part of overall effects for several resources, only the beneficial impact on socioeconomics is identified as a major impact (FEIS, Summary, page 2-8). This socioeconomic beneficial impact includes the creation of jobs for construction and operations and maintenance workers, as well as increased local tax revenue. For this beneficial impact, I have determined that the directly related substantive requirement is 36 CFR 219.8(b), Social and economic sustainability, specifically social and economic conditions in (b)(1). I am applying the substantive requirement by considering that the socioeconomic beneficial effect would be progress toward meeting the requirement to provide for socioeconomic sustainability.

Criterion 3. Adverse effects of the amendment as determined by substantial adverse effects associated with a rule requirement (36 CFR 219.13(b)(5)(i) and (ii)(A)): I am considering substantial adverse effects to be the equivalent of findings of significant adverse impacts identified in the FEIS.

The FEIS analysis indicates a substantial adverse effect on water quality, specifically surface waters during construction (FEIS, page 3.3-25), changes to surface water hydrology from crossing structures and stream realignments (FEIS, page 3.3-27). There would also be substantive adverse effects on wetlands due to site disturbance during construction as well as loss of wetland function (stormwater and floodwater storage capacity) due to changes to hydrology (FEIS, pages 3.3-32-33). With the mitigations that I will require, listed in appendix F of the ROD, the net effect will no longer be a substantial adverse effect; therefore, I have determined that there is no associated directly related substantive requirement. With no other findings in the FEIS of substantive adverse effects, I have determined that there are no directly related substantive requirements for Criterion 3.

Criterion 4. Adverse effects of the amendment as determined by substantial lessening of protections for a specific resource or use (36 CFR 219.13(b)(5)(i) and (ii)(A)): I am considering a substantial lessening of protection to be equivalent to the removal of protection that is provided by a plan component.

Protection for scenery resources would be lessened by the exemption provided by the amendment at its scope and scale. As above, I have determined that the directly related substantive requirement for the exemption for the visual resources is 36 CFR 219.10(a), Integrated resource management for multiple use, specifically scenery in (a)(1). My application of the substantive requirement is described under Criterion 1.

Criterion 5. Substantial impacts to a species or substantially lessening protections for a species if the species is a potential species of conservation concern (36 CFR 219.13(b)(6): Effects on species are disclosed in the FEIS, Section 3.4 (pages 3.3-4 ff). No substantial impact to any species would occur. No plan component that provides protection for a species is being exempted or changed by the amendment; therefore, for Criterion 5, I have determined that there are no substantive requirements directly related to the amendment.

DETERMINATION OF CONSISTENCY WITH THE PLANNING RULE

Based on my findings on the directly related substantive requirements as described above, at the scope and scale of the amendment, I have determined that my approval of the plan amendment is consistent with the Planning Rule.

3.7 Other Laws

3.7.1 Endangered Species Act

Under the provisions of section 7(a)(2) of the ESA, a federal agency that carries out, permits, licenses, funds, or otherwise authorizes an activity must consult with the U.S. Fish and Wildlife Service (USFWS) as appropriate to ensure the action is not likely to jeopardize the continued existence of any species listed under the ESA or result in the destruction or adverse modification of designated critical habitat. Informal consultation for the proposed Project began with the submittal of written

correspondence to the USFWS from the STB in April 2019, at which time USFWS concurred with the list of ESA-listed species to consider for the proposed rail line. Biological resource coordination meetings were held between February 2020 and June 2020, with participation by the STB, USFWS, and OEA consultants. The purpose of the meetings was to discuss the proposed rail line, ESA-listed species potentially affected by the proposed project, potential survey needs for ESA-listed species, and development of the BA.

On September 1, 2020, STB provided the USFWS with a draft BA including supporting information, fieldwork reports prepared by the Project applicants, and a request for review and comment. A series of conference calls were held with the USFWS through March of 2021 to discuss the project description, cumulative effects, and mitigation options. In March of 2021 the final BA was submitted to the USFWS. In September 2021 the final BO was received from the USFWS. The BO is included in this ROD as Appendix C.

On May 26 2022 the status of Wolverine changed to proposed. Wolverine were analyzed as a sensitive species in the FEIS. The change in status does not change the affect analysis and there are still no impacts to Wolverine.

3.7.2 Bald and Golden Eagle Protection and the Migratory Bird Treaty Acts and Executive Order 13186

Potentially suitable habitat for bald and golden eagles exists in the study areas. During the field surveys, both eagle species were recorded in the study areas for all three Action Alternatives, as well as within a 2-mile radius of the study areas (Coalition 2020a). Complete analysis of potential impacts to migratory bird species covered under the Migratory Bird Treaty Act in addition to further analysis of species identified as species of conservation priority by USFWS is located in Section 3.4.3 of the Final EIS. The analysis regarding migratory birds presented in the Final EIS is compliant with the terms of the EO 13186. To mitigate impacts to Bald and Golden Eagles the Coalition must comply with the Bald and Golden Eagle Protection Act and follow the USFWS National Bald Eagle Management Guidelines (USFWS 2007).

If take of an eagle or eagle nest cannot be avoided, the Coalition would obtain a permit from USFWS. To minimize potential impacts on eagles, mitigation requires the Coalition abide by the reasonable requirements of all appropriate federal and state permits to possess, relocate, or disassemble a bald or golden eagle nest, and/or work within 0.5 mile of a bald eagle or golden eagle nest, regardless of whether the nest is active or inactive (BIO-MM-11). The Coalition will also follow the guidelines for avoiding and minimizing impacts set out in the Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances for the protection of bald and golden eagles, as applicable (BIO-MM-11). OEA expects that construction related impacts on eagles would be insignificant if mitigation measures are implemented.

3.7.3 National Historic Preservation Act

Section 106 of the NHPA (16 USC § 470f) requires federal agencies to take into account the effect of their undertakings on historic properties listed in or eligible for the National Register of Historic Places (NRHP), which may include any prehistoric or historic district, site, building, structure, or object.

Regulations for the implementation of Section 106 are defined in 36 CFR Part 800 – Protection of Historic Properties. The Section 106 process seeks to accommodate historic preservation concerns with the needs of federal undertakings through consultation among the agency official and other parties with an interest in the effects of the undertaking on historic properties (36 CFR 800.1). These parties include the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Officer (SHPO), Indian Tribes, Tribal Historic Preservation Officers, state and other federal agencies, and individuals or organizations with a demonstrated interest in the undertaking due to their legal or economic relation to the undertaking or affected properties, or their concern with the effects of undertakings on historic properties (36 CFR 800.2).

To achieve compliance with Section 106, a programmatic agreement (PA) among STB, Utah SHPO, Ute Tribe, BIA, BLM, Coalition, State of Utah Trust Lands, COE, USFS and PLPCO was developed as allowed in 36 CFR 800.14 b(1) (ii) when effects on historic properties cannot be fully determined prior to approval of the undertaking. The PA specifies the procedures and responsible parties for identification and evaluation of historic properties, assessment of potential effects on historic properties, and the resolution of adverse effects on historic properties. As part of the PA process, the STB sent letters to local governments, organizations, agencies, interested parties, and Native American Tribes inviting them to be consulting parties to the agreement. Consulting parties participated in development of the PA through virtual meetings as well as regular conference calls throughout the PA development process from January 2020 through April of 2021. A complete description of development of the PA can be found in the Final EIS (Chapter 5.0, Section 5.2.2)

The signature process for the Final Draft PA was completed in March of 2021. The PA, which is included as Appendix D of this ROD, contains a list of all signatories, required signatories and concurring parties. All parties signing the PA agree that all project activities associated with the rail line will be implemented in accordance with stipulations and measures set forth in the PA.

During Phase 1 of the NHPA Phased Identification process, three NRHP eligible cultural resources were identified within the study area on National Forest Service lands. These resources include two segments of the historic Indian Canyon Road (42DC328 and 42DC3802) and the Indian Canyon Ranger Station (42DC348). Phase 2 of the NHPA Phased Identification process (as specified in the Programmatic Agreement) will likely identify additional National Register-eligible examples of these property types, and likely other property types. If any proposed activities may have adverse effects on NRHP eligible cultural resources, the effects must be resolved in accordance with the Programmatic Agreement and 36 CFR 800.6, before the activities may be authorized.

3.7.4 Executive Order 13175

Executive Order 13175 requires that federal agencies conduct government-to-government consultations with federally recognized Indian tribes in the development of federal policies (including regulations, legislative comments or proposed legislation, and other policy statements or actions) that have tribal implications. Tribes may have concerns about natural resources that would not be brought up during the NHPA Section 106 process and that can be voiced during government-to-government consultation. On June 19, 2019, OEA sent letters to several federally recognized tribes that have current and ancestral connections to the area surrounding the proposed rail line. A full list of those tribes can be found in the FEIS (Chapter 5.0, section 5.3.1).

The letters provided information regarding the STB's responsibility for preparing the appropriate NEPA documentation for the proposed rail line. The letters also notified the tribes of the issuance of the NOI, provided directions on how to comment on the Draft Scope of Study, and invited the tribes to engage with OEA in government-to-government consultation. OEA requested that the tribes reply to indicate interest in consultation with OEA regarding the broader range of impacts assessed under NEPA including impacts on tribal lands and resources. The letter also included a questionnaire on which tribes could indicate their interest in future involvement in the NEPA process. OEA has engaged in government-to-government consultation with the Ute Indian Tribe of the Uintah and Ouray Reservation throughout the NEPA process. The Ute Indian Tribe is the only federally recognized tribe that accepted STB's invitation to engage in government-to-government consultation. Details of the consultation process are described in Section 5.3.1 of the Final EIS. Consultation with the tribes will continue throughout the Project as stipulated under EO 13175.

3.7.5 Clean Air Act

The Federal Clean Air Act (CAA) amendments require all states to control air pollution emission sources so that National Ambient Air Quality Standards (NAAQS) are met and maintained. The NAAQS are established by the USEPA and represent maximum acceptable concentrations that generally may not be exceeded more than once per year, except the annual standards, which may never be exceeded. Details of the air quality impact analysis are provided in Section 3.1.6 of the Final EIS. The impact conclusion for air quality is that the construction of the proposed rail line would involve activities that would emit air pollutants and GHGs. Emissions from construction activities would be temporary and would move continually during the construction period. With implementation of the Coalition's mitigation measures, (Chapter 4 FEIS, Appendix F of the ROD), OEA concludes that impacts related to air quality and GHG emissions would not be significant if those mitigation measures were implemented. During rail operations, the primary source of air emissions would be locomotives operating on the proposed rail line. Based on the revised air quality modeling, OEA concludes that operation of the proposed rail line would not cause air pollutant concentrations to exceed the NAAQS at any location. Therefore, OEA concludes that operation of the proposed rail line would not result in significant air quality impacts. Mitigation measures related to GHG emissions can be found in Chapter 4.0 of the FEIS, but operation of the proposed rail line would result in unavoidable GHG emissions even if these measures were implemented. GHG emissions from rail operations (Table 3.7-10, FEIS) would represent a small percentage (ranging from 0.9 percent to 3.5 percent) of existing regional and statewide GHG emissions, however, and would not contribute significantly to global climate change.

3.7.6 Clean Water Act, Executive Order 11988, and Executive Order 11990

The CWA, EO 11988 (Floodplain Management), and EO 11990 (Wetland Protection) are regulations that protect the water quality in waters of the U.S., as well as floodplains and wetlands. Section 402 of the CWA created the National Pollutant Discharge Elimination System, which is administered by most individual states and includes storm water permits and requirements for construction areas. Section 404 of the CWA regulates dredging and filling of waters of the U.S., with permits issued by the USACE. The construction and operation of the Selected Alternative would comply with the requirements of EO 11988, EO 11990, and Sections 402 and 404 of the CWA through effective implementation of design features, BMPs, and proposed mitigation (refer to Sections 3.3.3, Impacts to Water Resources; of the Final EIS). Even with the mitigation measures, some adverse impacts on surface waters and wetlands would be unavoidable. Those unavoidable impacts would include changes to natural drainage around water crossings; changes to channel morphology and sinuosity; increased potential for debris jams and water backup; increased channel scour and erosion; increased turbidity, sediment loads, and concentration of pollutants during construction; degradation of wetland stormwater and floodwater storage capacity and wetland quality from alterations or filling of wetlands; decreased wetland quality from discharges of pollutants into wetlands; the loss of wetland habitat; and the loss of springs. Due to the large number of surface water crossings and the large area of potentially affected wetlands, OEA concludes that unavoidable impacts on surface waters and wetlands, including and in particular, the loss of wetland habitat and permanent changes to surface water hydrology from crossing structures and stream realignments, would be locally significant for any of the Action Alternatives. Construction and operation of the proposed rail line would not significantly affect water quality or ecological services associated with water resources on a watershed or regional level.

Construction and operation of any of the Action Alternatives would result in some minor adverse impacts on floodplains and groundwater, including decreased floodplain storage capacity, diversion of flood flows by fill placement, constriction of flood flows at bridge and culvert locations, decreased floodplain water retention, and altered flood dynamics from the presence of rail infrastructure; altered infiltration recharge characteristics and temporary degradation of groundwater quality. The mitigation measures would minimize these impacts, and OEA does not anticipate that construction and operation of the proposed rail line would significantly affect floodplains or groundwater. All impacts to streams, wetlands and floodplains would be mitigated on NFS lands at a 1:1 ratio.

3.7.7 Environmental Justice (Executive Order 12898)

EO 12898 requires each Federal agency to make achieving environmental justice part of its mission. Any of the Action Alternatives could result in environmental justice impacts. Based on consultation with the Ute Indian Tribe, OEA considered impacts related to noise, air quality, water resources, cultural resources, land use, vehicle safety and delay, rail operations safety, socioeconomics, and big game and concluded that those impacts would not result in disproportionately high and adverse impacts on minority populations, low-income populations, or American Indian tribal members. OEA concluded that construction impacts on the Pariette cactus and Uinta Basin hookless cactus would result in disproportionately high and adverse impacts for the Ute Indian Tribe because those plant species are culturally important to the tribe. Additional mitigation measure requiring the Coalition consult with the Ute Indian Tribe regarding impacts on the Pariette cactus and Uinta Basin hookless cactus will be implemented including abiding by the tribe's requirements for the management of those species. Additionally, the Coalition will consult with the Ute Indian Tribe regarding final design of the rail line, including the locations and designs of rail-related features, to ensure that impacts on tribal members and land and resources under the tribe's jurisdiction are minimized (refer to Section 3.14.3 of the Final EIS).

3.7.8 Roadless Area Conservation Rule

Inventoried Roadless Areas (IRAs) are identified as areas of NFS land currently inventoried for planning purposes as roadless. The 2001 Roadless Area Conservation Rule (36 CFR 294.13(b)(2)) prohibits road construction, road reconstruction, and timber harvesting on IRAs on NFS lands. The Roadless Rule does not prohibit special use developments such as rail lines, nor does it strictly prohibit multiple use activities on these lands. Pursuant to prior NFMA implementing regulations at 36 CFR 219.17 (as published in 36 CFR 200 to 299 [July 1, 2000 edition]), and using inventory procedures found in FSH 1909.12, Chapter 71, the national forests each created an inventory of draft Unroaded/Undeveloped Areas (URUD) areas. These were formally initiated with NOIs in 2002 (*Federal Register* 11 67[90]:31178 and 67[91]:31761, respectively), with the purpose of identifying potential wilderness areas in the NFS during upcoming LRMP revision efforts.

One IRA is located on NFS lands within the Project analysis area. Impact analysis for the IRA associated with the Project alternatives is provided in the Final EIS in Chapter 3, Section 3.11.2. Details for the analyses are provided in Sections 3.11.3.2 of the Final EIS and in the Inventoried Roadless Area Specialist Report attached as Appendix E of the ROD. The Whitmore Park alternative would be constructed entirely within Roadless Area 0401011 on that segment within NFS lands, along the edge of the roadless area and adjacent to HWY 191.

The railway would parallel Highway 191 for its entire length on NFS lands, to the southernmost tunnel. The railway would be approximately a 0.1 to 0.6 miles from the highway in the bottom of the drainage. The proposed railroad construction and operation would have an adverse impact to the roadless characteristics of Natural Integrity, Apparent Naturalness, Remoteness or Solitude, Opportunities for Primitive Recreation, Soil, Water and Air Resources, Diversity of plant and animal communities, Habitat for TES and species dependent on large undisturbed areas of land, and Natural appearing landscapes with high scenic quality within the Left Fork of Indian Canyon of the IRA. When considering the IRA 0401011 as a whole for the six wilderness attributes that characterize wilderness potential and nine values or features identified in the 2001 Roadless Conservation Rule the IRA condition remains stable with the construction and operation of the proposed railroad due to the size of the IRA and location of the proposed railroad adjacent to the western boundary and adjacent to a highway.

This project is in compliance with the 2001 roadless rule. The proposed action would not construct or reconstruct a road, as defined by 36 CFR 294.11. Any timber cut, sold or removed in the inventoried roadless area would be incidental to the implementation of a non-recreational special use permit which is allowed under 36 CFR 294(b)(2). Non Recreational special use permits, like the one issued for this project, are not prohibited by the 2001 roadless rule.

3.7.9 Environmentally Preferable Alternative

The environmentally preferable alternative is the alternative that, on balance, appears to best promote the national environmental policy in Section 101 of the NEPA. This is ordinarily the alternative that causes the least damage to the biological and physical environment and best protects, preserves, and enhances the historic, cultural, and natural resources (Question 6a, *CEQ, Forty Most Asked Questions Concerning NEPA Regulations, March 23, 1981*).

Identification of the environmentally preferable alternative involves some difficult judgments regarding tradeoffs between different natural and cultural impacts and values. This becomes more complex as the USFS considers the impacts to resources outside of NFS lands and beyond its mandated management jurisdiction. Based on location the Wells Draw alternative would result in no impacts to NFS lands since it would not cross NFS lands. However, based on a comparison of impact parameters involving impacts to water resources and cultural impacts, the Whitmore Park alternative would result in the lowest level of impacts to natural and cultural resources and private lands for the entire project (Table 1). USFS NFS lands crossed by this Project comprise less than 14 percent of lands crossed by the entire Project. Accordingly, the USFS supports the STB in their identification of the Whitmore Park alternative as the environmentally preferable alternative. A comparison of the environmental impacts is included in **Appendix H**. This summary compares impacts of the 3 action alternatives as well as the no action alternative across the entire 88-mile railway, including the 12 miles on Forest Service Lands.

Table 1 Comparison of Impact Parameters on National Forest System Lands

	Impact Parameters			
Alternative	ROW Miles	Roadless Acres disturbed	Total Acres of Disturbance	Final Rail Footprint (acres)
Indian Canyon	12.0	401	401	167
Whitmore Park	12.0	401	401	167
Wells Draw	0	0	0	0

Although the impact parameter comparison on NFS lands indicated Wells Draw as the environmentally preferable alternative, the USFS supports the STB's determination that the Whitmore Park Alternative is the environmentally preferable alternative. The STB's selection was based on a broader scope that involved resource impacts throughout the entire Project area. Although the impact analysis for the Selected Alternative indicated that it would not result in the lowest level of impacts on NFS lands, the alternative still has the following merits:

- The lead agency concludes that, among the three Action Alternatives, the Whitmore Park Alternative would result in the fewest significant impacts on the environment.
- While construction and operation of the rail line would result in unavoidable impacts on surface waters and wetlands, including the loss of wetland habitat and permanent changes to surface water hydrology from crossing structures and stream realignments, when comparing the three Action Alternatives, the Selected Alternative would permanently affect the smallest total area of surface waters and wetlands (FEIS p. S-8).

- The Selected Alternative would avoid or minimize impacts on greater sage-grouse relative to the other Action Alternatives because it would be located further away from more leks and associated summer brood rearing habitat (FEIS pp. S-8-9).
- Compared to the Wells Draw Alternative, the Selected Alternative would permanently and temporarily affect a smaller area of wetlands and of intermittent streams, as well as a smaller number of springs.
- The Selected Alternative would affect a smaller area of suitable habitat for the Pariette Cactus and Uinta Basin Hookless Cactus than the Wells Draw Alternative, would avoid potential impacts on moderately suitable habitat for the threatened Mexican spotted owl and a smaller area of big game habitat.
- The Selected Alternative would result in fewer total emissions of criteria air pollutants and greenhouse gases during construction and during rail operations; would cross a smaller area of land that may be prone to landslides; would result in fewer displacements of residences; would involve a lower risk for accidents at at-grade road crossings; and would cross a smaller area with high potential for wildfires.
- The Selected Alternative would avoid noise impacts on most residences during rail operations, as well as visual and other impacts on residential areas in the Argyle Canyon and Duchesne Mini-Ranches areas of Duchesne County.
- The Selected Alternative would generate more employment, labor income, and local and state tax revenue during construction than the Indian Canyon Alternative and would cross a smaller area of geological units that may be prone to landslides and a smaller area of land with high wildfire hazard potential.

4.0 Statement of All Practicable Mitigation Adopted

As required in 40 CFR 1505.2(c), all practicable mitigation measures that are necessary to fully mitigate the potential effects of the Project according to federal laws, rules, policies, and regulations have been adopted by this ROD. Mitigation measures are discussed in Chapter 4 of FEIS and listed in Appendix F, Table F-1 of this ROD. Design criteria and mitigation measures developed under the stipulations of the NHPA Programmatic Agreement (Appendix D of the ROD and Appendix O of the FEIS. Additional mitigation is also included in Appendices F.2 and F.3 included as part of the plan of development.

5.0 Administrative Review

Objection Opportunities

This decision was subject to the objection process pursuant to 36 CFR 218 Subpart B. During the objection filing period, two parties and seven individuals filed objections: CBD et al.and Utah Physicians for a Healthy Environment, and Kirk Mendenhall, Mary Ann Wright, David Grainger, Sean Slack, Sam Rushforth, Janet Houtz, and David Pedersen. The issues and assertions are described in the objection responses to each party, as are the instructions as determined by the Objection Reviewing Official (36 CFR 218 (12)(b). All instructions specified in the responses to the objectors have been addressed and completed.

6.0 Implementation Date

The USFS decisions will be implemented through signing of a final ROD and through issuance of a Special Use Permit as described above. The implementation of the decision may occur once the Special Use Permit has been issued as described above.

7.0 Contact Person

Kristy Groves, District Ranger, Duchesne Ranger District
kristy.groves@usda.gov, 435-781-5203

8.0 Signature and Date

Susan Eickhoff
Forest Supervisor
Ashley National Forest

7/14/22
Date

9.0 References Cited

U.S. Forest Service (USFS). 2012. National Best Management Practices for Water Quality Management on National Forest System Lands. Volume 1: National Core BMP Technical Guide. U.S.Department of Agriculture; U.S. Forest Service. FS-99a. April 2012.

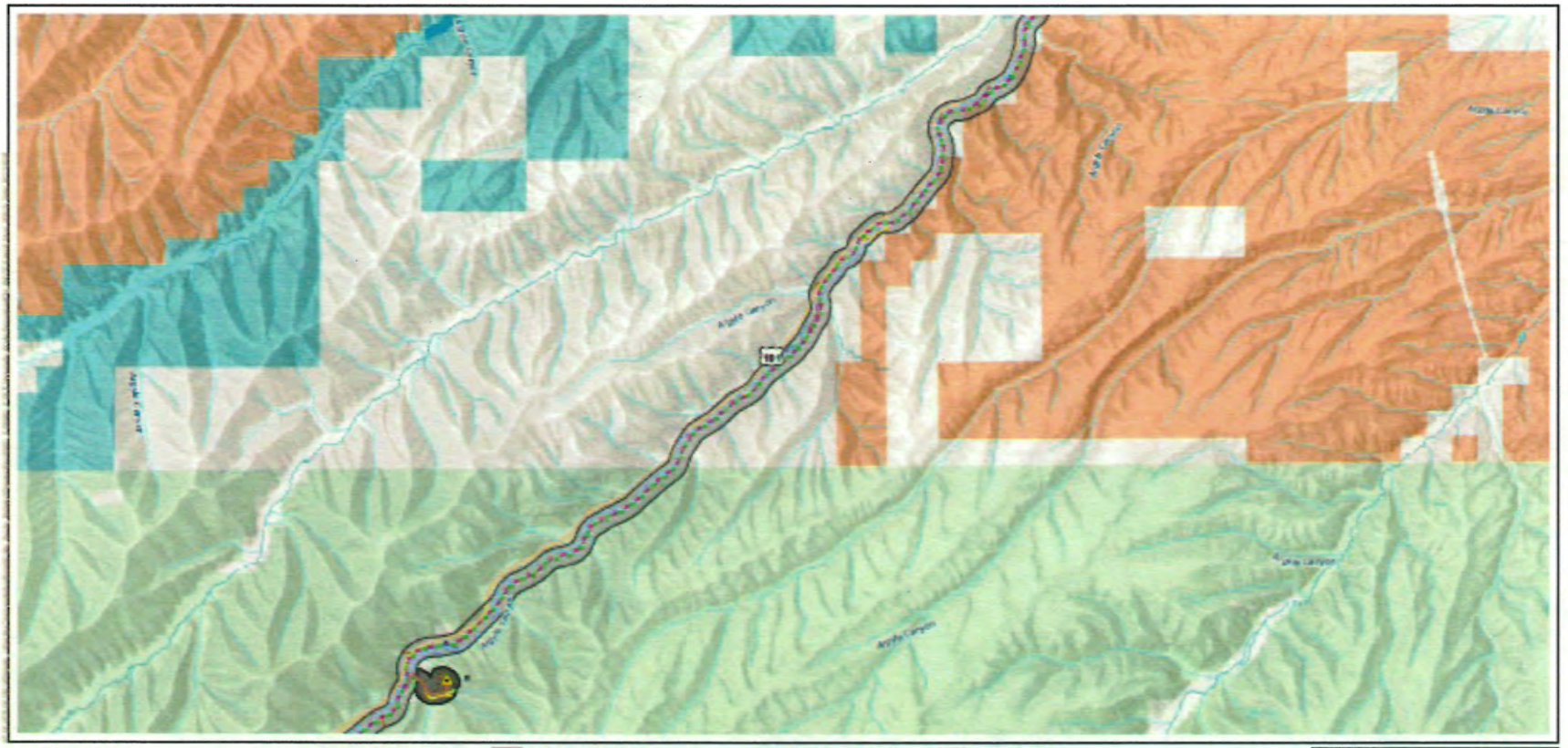
U.S. Forest Service (USFS). 2001. Special Areas; Roadless Area Conservation. Federal Register, Volume 66, No. 9, Pages 3244-3273. January 12, 2001.

Appendix A

Draft Plan of Development (POD)

Appendix B

Maps of Selected Alternative by Segment



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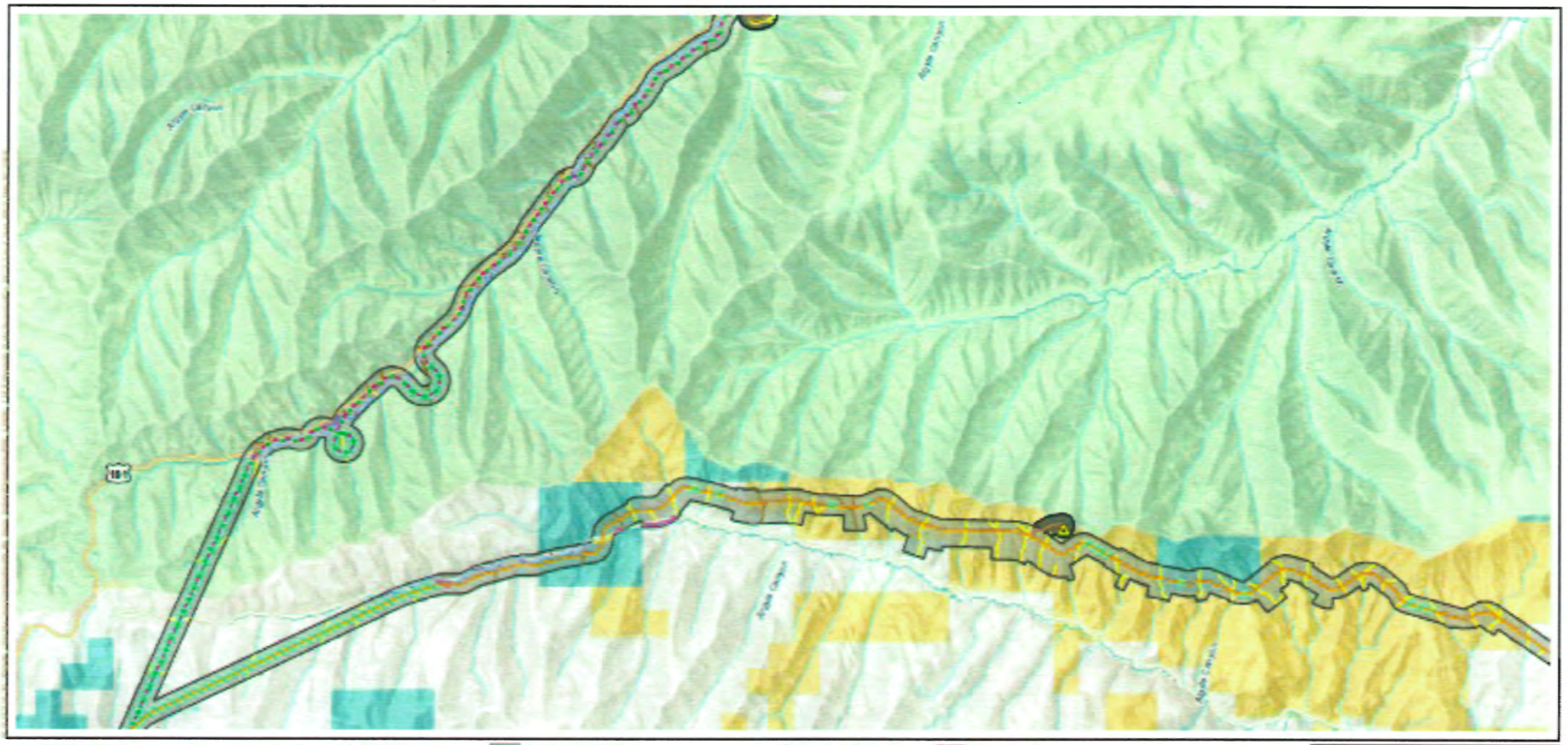

Uinta Basin Railway - Waters of the U.S.
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Appendix C
Biological Opinion

Appendix D

NHPA Programmatic Agreement

Appendix E

Inventoried Roadless Area Specialist Report

Appendix F

Mitigation Measures

Construction and Rail Operations Safety

VM-1. The Coalition will follow all applicable federal Occupational Safety and Health Administration, Federal Railroad Administration (FRA), tribal, and state construction and operational safety regulations to minimize the potential for accidents and incidents during construction and operation of the rail line.

Grade Crossing Safety

VM-2. The Coalition will consult with appropriate federal, tribal, state, and local transportation agencies to determine the final design of the at-grade crossing warning devices. Implementation of all grade-crossing warning devices on public roadways will be subject to review and approval, depending on location, by the Ute Indian Tribe, Utah Department of Transportation (UDOT), U.S. Forest Service (Forest Service), or Carbon, Duchesne, or Uintah Counties. The Coalition will follow standard safety designs for each at-grade crossing for proposed warning devices and signs. These designs will follow the Federal Highway Administration *Manual on Uniform Traffic Control Devices for Streets and Highways* as implemented by UDOT and the American Railway Engineering and Maintenance-of-Way Association standards for railroad warning devices. They will also comply with applicable UDOT, tribal, city, and county requirements.

VM-3. For construction of road crossings, when reasonably practical, the Coalition will consult with tribal and local transportation officials regarding detours and associated signs, as appropriate, or maintain at least one open lane of traffic at all times to allow the quick passage of emergency and other vehicles.

VM-4. The Coalition will develop a plan to consult with private landowners to determine the final details and reasonable signage for grade crossings on private roads.

VM-5. Where practical, at-grade crossings for minor roads and private roads will be combined and consolidated into right-angle, at-grade crossings for safety, and in order to reduce the total the number of highway-rail at-grade crossings.

VM-6. The Coalition will consult with affected communities regarding ways to improve visibility at highway-rail at-grade crossings, including by clearing vegetation or installing lights at the crossing during construction.

Hazardous Materials Handling and Spills during Construction

VM-7. Prior to initiating any project-related construction activities, the Coalition will develop a spill prevention, control, and countermeasures plan in consultation with federal, tribal, state and local governments. The plan will specify measures to prevent the release of petroleum products or other hazardous materials during construction activities and contain such discharges if they occur.

VM-8. In the event of a spill over the applicable reportable quantity, the Coalition will comply with its spill prevention, control, and countermeasures plan and applicable federal, state, local and tribal regulations pertaining to spill containment, appropriate clean-up, and notifications.

VM-9. The Coalition will require its construction contractor(s) to implement measures to protect workers' health and safety and the environment in the event that undocumented hazardous materials are encountered during construction. The Coalition will document all activities associated with hazardous material spill sites and hazardous waste sites and will notify the appropriate state, local, and tribal agencies according to applicable regulations. The goal of the measures is to ensure the proper handling and disposal of contaminated materials including contaminated soil, groundwater, and stormwater, if such materials are encountered. The Coalition will use disposal methods that comply with applicable solid and hazardous waste regulations.

VM-10. The Coalition will ensure that gasoline, diesel fuel, oil, lubricants, and other petroleum products are handled and stored to reduce the risk of spills contaminating soils or surface waters. If a petroleum spill occurs in the project area as a result of rail construction, operation, or maintenance and exceeds specific quantities or enters a water body, the Coalition (or its agents) will be responsible for promptly cleaning up the spill and notifying responsible agencies in accordance with federal, state, and tribal regulations.

Hazardous Materials Transport and Emergency Response

VM-11. The Coalition will prepare a hazardous materials emergency response plan to address potential derailments or spills. This plan will address the requirements of the Pipeline and Hazardous Materials Safety Administration and FRA requirements for comprehensive oil spill response plans. The Coalition will distribute the plan to federal, state, local, and tribal emergency response agencies. This plan shall include a roster of agencies and people to be contacted for specific types of emergencies during rail construction, operation and maintenance activities, procedures to be followed by particular rail employees, emergency routes for vehicles, and the location of emergency equipment.

VM-12. The Coalition will work with the affected communities to facilitate the development of cooperative agreements with other emergency service providers to share service areas and emergency call response.

VM-13. After construction is completed, the Coalition will implement a desktop simulation of its emergency response drill procedures with the voluntary participation of local emergency response organizations. If necessary, the Coalition will update the hazardous materials emergency response plan based on the findings and observations of the simulated emergency response.

VM-14. In the event of a reportable hazardous materials release, the Coalition will notify appropriate federal, state, and tribal environmental agencies as required under federal, state, and tribal law.

VM-15. The Coalition will comply with FRA, Pipeline and Hazardous Materials Safety Administration, Transportation Security Administration regulations and tribal ordinances or plans applicable to the safe and secure transportation of hazardous materials.

Topography, Geology, and Soils

VM-16. The Coalition will limit ground disturbance to only the areas necessary for project-related construction activities.

VM-17. During project-related earth-moving activities, the Coalition will require the contractor to remove topsoil and segregate it from subsurface soils. Where practical, the contractor will also stockpile topsoil to be applied later during reclamation activities in disturbed areas along the right-of-way.

VM-18. The Coalition will place the topsoil and other excavated soil stockpiles in areas away from environmentally or culturally sensitive areas and will use appropriate erosion control measures on and around stockpiles to prevent or contain erosion.

VM-19. The Coalition will submit a notice of intent to request permit coverage under Utah Pollutant Discharge Elimination System Construction General Permit UTRC00000 for construction stormwater management.

VM-20. The Coalition will submit an application for coverage under the National Pollutant Discharge Elimination System stormwater construction permits pursuant to Section 402 of the Clean Water Act for construction stormwater management on tribal land.

VM-21. The Coalition will develop a stormwater pollution prevention plan, which will include construction BMPs to control erosion and reduce the amount of sediment and pollutants entering surface waters, groundwater, and waters of the United States. The Coalition will require its construction contractor(s) to follow all water quality control conditions identified in all permits, including the Section 404 permit from the U.S. Army Corps of Engineers (Corps) and the Section 401 Water Quality Certification from the Utah Department of Environmental Quality and the U.S. Environmental Protection Agency.

VM-22. The Coalition will revegetate disturbed areas, where practical and in consultation with the Ute Indian Tribe as applicable, when construction is completed. The goal of reclamation will be the rapid and permanent re-establishment of native groundcover on disturbed areas to prevent soil erosion, where feasible. If weather or seasonal conditions prevent vegetation from being quickly re-established, the Coalition will use measures such as mulching, erosion-control blankets, or dust-control palliatives to prevent erosion until vegetative cover is established. The Coalition will monitor reclaimed areas for 3 years. For areas where efforts to establish vegetative cover have been unsuccessful after 1 year, the Coalition will reseed annually for up to 3 years as needed.

Air Quality

VM-23. Where practical and in consultation with the Ute Indian Tribe as applicable, the Coalition will implement appropriate fugitive-dust controls such as spraying water or other dust treatments in order to reduce fugitive-dust emissions created during project-related construction activities. The Coalition will require its construction contractor(s) to regularly operate water trucks on haul roads to reduce dust generation.

VM-24. The Coalition will work with its contractor(s) to make sure that construction equipment is properly maintained and that mufflers and other required pollution-control devices are in working condition in order to limit construction-related air pollutant emissions.

Water Resources

VM-25. The Coalition will obtain a permit from the Corps under Section 404 of the Clean Water Act before initiating project-related construction activities in wetlands and other jurisdictional waters of the United States. The Coalition will comply with all conditions of the Section 404 permit.

VM-26. The Coalition will obtain a Section 401 Water Quality Certification from the State of Utah and Environmental Protection Agency. The Coalition will incorporate the conditions of the Section 401 Water Quality Certification into its construction contract specifications and will monitor the project for compliance.

VM-27. The Coalition will minimize impacts on wetlands to the extent practicable in the final design of the selected alternative. After all practicable steps have been taken to minimize impacts on wetlands, the Coalition agrees to prepare a compensatory mitigation plan for any remaining wetland impacts in consultation with the Ute Indian Tribe where applicable. Compensatory mitigation may include any one or a combination of the following five methods: restoring a previously existing wetland or other aquatic site, enhancing an existing aquatic site's functions, establishing (that is, creating) a new aquatic site, preserving an existing aquatic site, and/or purchasing credits from an authorized wetland mitigation bank.

VM-28. Bridges at perennial streams will be designed to maintain a natural substrate.

VM-29. The Coalition will obtain stream alteration permits from the Utah Division of Water Rights for crossing waters of the state, and any applicable tribal permits, and will comply with all conditions of the permits.

VM-30. The Coalition will construct stream crossings during low-flow periods, when practical.

VM-31. When practical and in consultation with the Ute Indian Tribe where applicable, the Coalition will relocate natural streams using bioengineering methods, where relocation is needed and is unavoidable.

VM-32. For streams and rivers with a floodplain regulated by the Federal Emergency Management Agency or the Ute Indian Tribe, the Coalition will design the stream crossing with the goal of not impeding floodwaters and not raising water surface elevations to levels that would change the regulated floodplain boundary. If flood elevations change, the Coalition will coordinate with Federal Emergency Management Agency and/or tribal or local floodplain managers to obtain a Letter of Map Revision where construction of bridges, culverts, or embankments results in an unavoidable increase greater than 1 foot to the 100-year water surface elevations.

Biological Resources

VM-33. The Coalition will comply with any conditions and mitigation commitments contained in a biological opinion for sensitive species that could potentially be impacted by the project.

VM-34. The Coalition will require its contractor(s) to comply with the requirements of the Migratory Bird Treaty Act in consultation with the Ute Indian Tribe as applicable. The following measures will be conducted by the Coalition and/or its contractor(s).

a) Where practical, any ground-disturbing, ground-clearing activities or vegetation treatments will be performed before migratory birds begin nesting or after all young have fledged.

b) If activities must be scheduled to start during the migratory bird breeding season, the Coalition will take steps to prevent migratory birds from establishing nests in the potential impact area. Birds can be hazed to prevent them from nesting until egg(s) are present in the nest. The Coalition or its agents will not haze or exclude nest access for migratory birds and other sensitive avian species.

c) If activities must be scheduled during the migratory bird breeding season, a qualified biologist will perform a site-specific survey for nesting birds starting no more than 7 days prior to ground-disturbing activities or vegetation treatments. Birds with eggs or young will not be hazed, and nests with eggs or young will not be moved until the young are no longer dependent on the nest. A qualified biologist will confirm that all young have fledged.

d) If nesting birds are found during the survey, the Coalition will establish appropriate seasonal or spatial buffers around nests. Vegetation treatments or ground-disturbing activities within the buffer areas will be postponed, where feasible, until the birds have left the nest. A qualified biologist will confirm that all young have fledged.

VM-35. The Coalition will execute a Mitigation Agreement with the Utah Division of Wildlife Resources (UDWR) to address impacts within the Carbon Sage-grouse Management Area (CSGMA). The Coalition has discussed several potential mitigation strategies with UDWR and other local, state, tribal and federal stakeholders during the EIS process. The final CSGMA Mitigation Agreement will define the appropriate mitigation ratio for the project type and its impacts and the final mitigation approach.

VM-36. The Coalition shall comply with the Ute Indian Tribe's Greater Sage-Grouse Conservation Ordinance as applicable.

VM-37. If the selected alternative impacts U.S. Bureau of Land Management (BLM) lands, the Coalition will request that BLM join as a signatory to the CSGMA Mitigation Agreement.

VM-38. The Coalition will prepare a noxious and invasive weed control plan in consultation with the Ute Indian Tribe as applicable. Where practical, the Coalition will include the policies and strategies in Utah's Strategic Plan for Managing Noxious and Invasive Weeds when designing response strategies for noxious and invasive weeds.

VM-39. The Coalition will comply with any conditions and mitigation commitments contained in a biological opinion for sensitive plant species that could potentially be impacted by the project.

VM-40. The Coalition will work with UDWR, the Ute Indian Tribe, and adjacent landowners to define areas of the right-of-way that can be left without fences to maintain big game migration corridors.

VM-41. Where practical and necessary, the Coalition will install wildlife-safe fences to confine livestock within grazing allotments.

Cultural Resources

VM-42. The Coalition will work with the Ute Indian Tribe and others to develop training materials to educate construction supervisors about the importance of protecting cultural resources and the procedures for handling undocumented discoveries. The Coalition will make reasonable efforts to include the Ute Indian Tribe in the presentation of these materials.

VM-43. The Coalition will comply with the requirements of the Programmatic Agreement being developed by OEA, the Advisory Council on Historic Preservation, Utah State Historic Preservation Office, Ute Indian Tribe, and other federal and state agencies in consultation with federally recognized tribes and other consulting parties.

Land Use

VM-44. If temporary construction easements on private property are needed, the Coalition will document the preconstruction conditions and, to the extent practical, will restore the land to its preconstruction condition after construction is complete.

VM-45. The Coalition will consult with landowners regarding grazing allotments and will install temporary fences during construction to allow continued grazing, where practicable. Once construction is complete, the Coalition will replace all permanent fences removed during construction.

VM-46. Where practical, the Coalition will maintain livestock access to water sources or will relocate water sources, maintain vehicle and livestock access to grazing allotments, and install safety fences and signs for grazing allotment entrances and exits to enable continuance of livestock operations within grazing allotments.

VM-47. The Coalition will secure agreements with utilities to establish responsibility for protecting or relocating existing utilities, if impacted by construction.

VM-48. The Coalition will coordinate with water districts to develop irrigation infrastructure protection or relocation plans, if irrigation infrastructure will be impacted by construction.

Community Outreach

VM-49. The Coalition will appoint a community liaison to consult with affected communities, businesses, and agencies and seek to develop cooperative solutions to local concerns regarding construction activities.

VM-50. The Coalition will appoint a tribal community liaison to address the needs and concerns of Ute Indian Tribe members and communities and seek to develop cooperative solutions to concerns regarding construction activities and rail operations.

VM-51. The Coalition will maintain a project website throughout the duration of construction to provide regular updates regarding construction progress and schedule.

VM-52. The Coalition will install construction warning and detour signs throughout the corridor and at recreation sites around the project area as needed.

Noise and Vibration

VM-53. The Coalition, in consultation with the Ute Indian Tribe, will comply with FRA regulations (49 Code of Federal Regulations [C.F.R.] Part 210) establishing decibel limits for train operation.

VM-54. The Coalition will work with its contractor(s) to make sure that project-related construction and maintenance vehicles are maintained in good working order with properly functioning mufflers to control noise.

Recreation

VM-55. If needed for the selected alternative, the Coalition will obtain approval from the Forest Service and will follow the conditions of the permit regarding access to, or temporary closure of, recreational features during construction.

VM-56. The Coalition will work with its construction contractor to maintain access to Forest Service roads during construction, where feasible.

OEA's Mitigation Measures

Vehicle Safety and Delay

VSD-MM-1. The Coalition shall design and construct any new temporary or permanent access roads and road realignments to comply with the reasonable requirements of the UDOT Roadway Design Manual (UDOT 2020), other applicable road construction guidance (e.g., county road right-of-way encroachment standards), and land management agency or landowner requirements (e.g., BLM H-9113-1 Road Design Handbook) regarding the establishment of safe roadway conditions.

VSD-MM-2. During project-related construction activities, the Coalition and its contractors shall comply with speed limits and applicable laws and regulations when operating vehicles and equipment on public roadways.

VSD-MM-3. The Coalition shall obtain and abide by the reasonable requirements of applicable permits and approvals for any project-related construction activities within UDOT rights-of way or state highways where UDOT has jurisdiction and off-system roads that are maintained by UDOT.

VSD-MM-4. For each of the public at-grade crossings on the proposed rail line, the Coalition shall provide and maintain permanent signs prominently displaying both a toll-free telephone number and a unique grade-crossing identification number in compliance with Federal Highway Administration regulations (23 C.F.R. Part 655). The toll-free number would enable drivers to report promptly any accidents, malfunctioning warning devices, stalled vehicles, or other dangerous conditions.

VSD-MM-5. The Coalition shall make Operation Lifesaver educational programs available to communities, schools, and other organizations located along the proposed rail line. Operation Lifesaver is a nationwide, nonprofit organization that provides public education programs to help prevent collisions, injuries, and fatalities at highway/rail grade crossings.

VSD-MM-6. The Coalition shall consult with private landowners and communities affected by new at-grade crossings or that are adjacent to the rail line to identify measures to mitigate impacts on emergency access and evacuation routes and incorporate the results of this consultation into the Coalition's emergency response plan. These measures may include identifying new ingress and egress routes that could be used to improve safety in the event of an emergency.

Rail Operations Safety

ROS-MM-1: In the event of a reportable hazardous materials release, the Coalition shall notify appropriate local (county and city) agencies in addition to appropriate federal, state, and tribal environmental agencies as required under federal, state, and tribal law.

ROS-MM-2: As part of routine rail inspections or at least twice annually, the Coalition shall use appropriate technology to inspect both track geometry (horizontal and vertical layout of tracks) and local terrain conditions to identify problems with either the track or the surrounding terrain. The track inspection shall be designed and conducted so as to identify changes in track geometry that could indicate broken rails or welds, misalignments, and other technical issues with the track itself. The visual inspection of terrain shall be designed and conducted so as to identify evidence of subsidence, rockslides, undermining of the track, erosion, changes in run-off patterns, or other issues that could lead to structural weakening of the track bed and potentially cause an accident.

Water Resources

WAT-MM-1. To the extent practicable, the Coalition shall design culverts and bridges to maintain existing surface water drainage patterns, including hydrology for wetland areas, and not cause or exacerbate flooding. Project-related supporting structures (e.g., bridge piers) shall be designed to minimize scour (sediment removal) and increased flow velocity, to the extent practicable. The Coalition shall consider use of multi-stage culvert designs in flood-prone areas, as appropriate.

WAT-MM-2. The Coalition shall design culverts and bridges on land managed by federal, state, or tribal agencies to comply with reasonable applicable agency requirements. All surface water crossings on land under the jurisdiction of the Ute Indian Tribe shall be designed in consultation with the tribe's Business Committee, Tribal Water Quality Department, the Tribal Fish and Wildlife Department, and the Tribal Water Resources Department to ensure that those crossings would not adversely affect the quality of surface waters on the tribe's Uintah and Ouray Reservation.

WAT-MM-3. The Coalition shall design all stream realignments in consultation with the Corps and Utah Division of Water Rights as part of the Section 404 permit mitigation plan development and Utah Stream Alteration Program, respectively, to ensure that effects on stream functions are taken into account and minimized. The Coalition shall also consult with the Ute Indian Tribe through the tribe's Business Committee, Tribal Water Quality Department, the Tribal Fish and Wildlife Department, and the Tribal Water Resources Department regarding the design of stream realignments to ensure that those realignments would not adversely affect the quality of surface

waters on the tribe's Uintah and Ouray Reservation. To the extent practicable, the Coalition shall design realigned streams to maintain existing planform, geomorphology, bed material and flows.

WAT-MM-4. The Coalition shall design, construct, and operate the proposed rail line and associated facilities to maintain existing water patterns and flow conditions and provide long-term hydrologic stability by conforming to natural stream gradients and stream channel alignment and avoiding altered subsurface flow (i.e., shallow aquifer subsurface flow) to the extent practicable.

WAT-MM-5. During project-related construction, the Coalition shall minimize, to the extent practicable, soil compaction and related effects (e.g., increase runoff and erosion), provide surface treatments to minimize soil compaction (e.g., break up compacted soils during reclamation to promote infiltration), and take actions to promote vegetation regrowth after the facilities (e.g., temporary staging areas) are no longer needed to support construction.

WAT-MM-6. During project-related construction, the Coalition shall implement erosion prevention, sediment control, and runoff control and conveyance best management practices (BMPs) to limit the movement of soils and sediment-laden runoff. On lands managed by federal, state, or tribal agencies, the Coalition shall design and implement these BMPs in consultation with the applicable agency. BMPs may include, but are not limited to, seeding disturbed ground and stockpiled soil, seed mixes, silt fences, sediment traps, ditch checks, and erosion monitoring. The Coalition shall coordinate with the appropriate land management agency, private landowner, or the Ute Indian Tribe to select seed mixes for use in restoration and reclamation activities. This may require consultation with range and ecology specialists to determine seed mixes and timing of seeding appropriate to the ecological site. Within Ashley National Forest, disturbed ground area, including stockpiled soil for later reclamation, shall be seeded to prevent erosion and the influx of weeds and invasive species. The Forest Rangeland Management or Ecology specialists shall be consulted for the appropriate seed mix and timing of seeding on Forest Service lands.

WAT-MM-7. During project-related construction, the Coalition shall use temporary barricades, fencing, and/or flagging around sensitive habitats (e.g., wetlands, flowing streams) to contain project-related impacts in the construction area. The Coalition shall locate staging areas in previously disturbed sites to the extent practicable, avoiding sensitive habitat areas whenever possible.

WAT-MM-8. The Coalition shall remove all project-related construction debris (including construction materials and soils) from surface waters and wetlands as soon as practicable following construction.

WAT-MM-9. The Coalition shall implement stormwater BMPs to convey, filter, and dissipate runoff from the proposed rail line during rail operations. These could include, but would not be limited to, vegetated swales, vegetated filter strips, streambank stabilization, and channelized flow dissipation, as appropriate. On lands managed by federal, state, or tribal agencies, the Coalition shall design and implement stormwater BMPs in consultation with the applicable agency.

WAT-MM-10. During rail operations, the Coalition shall ensure that all project-related culverts and bridges are clear of debris to avoid flow blockages, flow alteration, and increased flooding. The Coalition shall inspect all project-related bridges and culverts semi-annually (or more frequently, as seasonal flows dictate) for debris accumulation and shall remove and properly dispose of debris promptly.

WAT-MM-11. To address the closing of active groundwater wells and permanent impacts on springs, the Coalition shall consult with the owner, the Utah Division of Water Rights, and the Ute Indian Tribe, as appropriate, to attempt to replace each active well closed with a new well and to mitigate the water rights associated with springs, as practicable.

WAT-MM-12. The Coalition shall consider potential future changes in precipitation patterns caused by climate change when designing surface water crossings (bridges and culverts) and other rail line features.

Biological Resources

BIO-MM-1. The Coalition shall implement appropriate measures to reduce collision risks for birds resulting from project-related power communications towers. The Coalition shall incorporate the design recommendations in the U.S. Fish and Wildlife Service (USFWS) *Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning* (USFWS 2018) to avoid or minimize the risk of bird mortality at communications towers.

BIO-MM-2. During project-related construction, the Coalition shall comply with any federal, state, tribal, or local in-water work windows and timing restrictions for the protection of fish species, and other reasonable requirements of in-water work permits issued by UDWR and the Corps.

BIO-MM-3. During project-related construction, the Coalition shall use a bubble curtain or other noise-attenuation method (e.g., wood or nylon pile caps) when installing or proofing pilings below the ordinary high water line of a fish-bearing stream to minimize underwater sound impacts on fish.

BIO-MM-4. During project-related construction, the Coalition shall use a block-net to remove and exclude fish from in-water work areas. The Coalition shall deploy the block-net toward the water from land, with the two ends of the net maintained on shore and the middle portion of the net deployed in the water. Any fish handling, exclusion, and removal operation shall be consistent with any reasonable requirements of in-water permits from UDWR and the Corps.

BIO-MM-5. The Coalition shall minimize, to the extent practicable, the area and duration of project-related construction activities within riparian areas and along streambanks. Where construction activities within riparian areas or along streambanks are unavoidable, the Coalition shall implement appropriate erosion control materials to stabilize soil and reduce erosion. Following the completion of project-related construction on a segment of rail line, the Coalition shall promptly restore and revegetate riparian areas using native vegetation.

BIO-MM-6. The Coalition shall design culverts and bridges to allow aquatic organisms to pass relatively unhindered, to the extent practicable.

BIO-MM-7. The Coalition shall develop and implement a wildfire management plan in consultation with appropriate state, tribal, and local agencies, including local fire departments. The plan shall incorporate specific information about operations, equipment, and personnel on the proposed rail line that might be of use in case a fire occurs and shall evaluate and include as appropriate site-specific techniques for fire prevention and suppression. The plan shall also include a commitment for the Coalition and consulting parties to revisit the plan on a regular basis (e.g., every 5 years; but to be determined during plan development) to determine if environmental conditions have changed (e.g., drier conditions) to the point where aspects of the plan would need to be revised to address those changing conditions.

BIO-MM-8: The Coalition shall protect bald and golden eagles by adhering to the Bald and Golden Eagle Protection Act. In addition, the Coalition shall follow the USFWS *National Bald Eagle Management Guidelines* (USFWS 2007), as applicable.

BIO-MM-9. The Coalition shall comply with the terms and conditions of the USFWS Biological Opinion for the protection of federally listed threatened and endangered plants and animals that could be affected by the proposed rail line, and to ensure compliance with Endangered Species Act Section 7.

BIO-MM-10. If the Board authorizes construction and operation of the Indian Canyon Alternative or Whitmore Park Alternative, the Coalition shall implement the reasonable requirements of the Ute Indian Tribe for minimizing impacts on wildlife, fish, and vegetation on Tribal trust lands.

BIO-MM-11. Prior to project-related construction, the Coalition shall acquire and abide by the reasonable requirements of all appropriate federal and state permits to possess, relocate, or disassemble a bald or golden eagle nest, and/or work within 0.5 mile of a bald or golden eagle nest, regardless of whether the nest is active or inactive. The Coalition shall also follow the guidelines for avoiding and minimizing impacts set out in the *Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances* for the protection of bald and golden eagles, as applicable.

BIO-MM-12. Rail employees engaged in routine rail line inspections that observe carcasses along the rail line shall remove carcasses away from the rail line to minimize potential eagle strikes. Carcass data shall be recorded, including species, location, and number, and submitted to UDWR. The Coalition will consult with UDWR to determine the best way to submit this data and the frequency at which it will be transmitted.

BIO-MM-13. The Coalition shall abide by the BLM *Utah Greater Sage-Grouse Approved Resource Management Plan Amendment* for approved Action Alternatives that affect BLM land, and will follow the reasonable requirements of the *Utah Conservation Plan for Greater Sage-Grouse.*

BIO-MM-14. During project-related construction, the Coalition shall employ ecologically sound methods to remove all cleared vegetation and green debris from construction areas, including trees from woodland and timber clearing. On lands managed by federal, state, or tribal agencies, the Coalition shall consult with the appropriate agencies regarding methods for removal or cleared vegetation and green debris and shall implement those agencies' requirements.

BIO-MM-15. Prior to any project-related construction, the Coalition shall consult with the appropriate County Weed Boards/Departments and the Ute Indian Tribe to develop and implement a plan to address the spread and control of nonnative invasive plants during project-related construction. For any construction activities on lands managed by federal, state, or tribal agencies, the Coalition shall seek input on the plan from the appropriate land management agency. The plan shall incorporate the reasonable requirements and recommendations of those agencies and shall identify and address1) planned seed mixes, 2) weed prevention and eradication procedures, 3) equipment cleaning protocols, 4) revegetation methods, 5) protocols for monitoring revegetation, and 6) ongoing inspection of the rail right-of-way for noxious weeds and invasive species during rail operations.

BIO-MM-16. If the Board authorizes the Indian Canyon Alternative or Whitmore Park Alternative, the Coalition shall comply with the reasonable mitigation conditions imposed by the Forest Service in any special use permit allowing the Coalition to cross National Forest System Lands, including complying with the USDA Forest Service Guide to Noxious Weed Prevention Practices and the Ashley National Forest Noxious Weeds Management Supplement.

BIO-MM-17. Prior to any project-related construction, the Coalition shall consult with the Ute Indian Tribe, USFWS, and UDWR to develop and implement a reclamation and revegetation plan for areas that would be temporarily disturbed by construction activities. For any construction activities on lands managed by federal, state, or tribal agencies, the Coalition shall seek input on the plan from the appropriate agency. The

reclamation and revegetation plan shall incorporate the reasonable requirements and recommendations of those agencies and shall clearly identify and address 1) the areas to be reclaimed and revegetated; 2) the proposed reclamation and revegetation materials, methods, and timing; and 3) the proposed monitoring schedule and contingency plans.

BIO-MM-18. The Coalition shall not use bird hazing (or scaring) techniques around documented leks in the Carbon SGMA during construction.

BIO-MM-19. The Coalition shall consult with the Ute Indian Tribe, UDWR, OEA, and appropriate land management agencies to develop and implement a big game movement corridor crossing plan. The plan shall address the need for dedicated big game crossings of the rail line, the need to limit fencing (if applicable), and the need for additional data collection. The plan shall use the latest available big game movement corridor data from UDWR and the Ute Indian Tribe.

BIO-MM-20. The Coalition shall not construct in the Carbon SGMA during the nesting and breeding season to be determined in consultation with OEA, UDWR, and other appropriate land management agencies.

Geology, Soils, Seismic Hazards, and Hazardous Waste Sites

GEO-MM-1. The Coalition shall design and construct the proposed rail line to balance cut and fill earthwork quantities, to the extent practicable, in order to minimize the quantities of materials required to be excavated, transported, or placed off site.

GEO-MM-2. The Coalition shall conduct geotechnical investigations to identify soils and bedrock in cut areas with potential for mass movement or slumping. The geologic hazard investigations shall be conducted in accordance with Utah Geological Survey Circular 122. Where appropriate, the Coalition shall implement engineering controls to avoid mass movement or slumping. If mass movement or slumping of soils or bedrock occurs during project-related construction, the Coalition shall promptly institute appropriate remedial actions. The Coalition shall periodically monitor the railbed during operations to identify changes related to use, cumulative effects of weight and vibration, and changes in underlying soils to prevent deterioration from settling, deformation, collapse, and erosion.

GEO-MM-3. The Coalition shall conduct geotechnical investigations to identify areas within the rail right-of-way where soils with high corrosivity to concrete or steel could affect the rail line. The Coalition shall implement appropriate site-specific measures to address the soil corrosivity in areas identified during the geotechnical investigations, potentially including replacing soils with high corrosivity with non-corrosive engineered soils, as applicable. If soil materials are removed and replaced due to corrosivity to steel or concrete, the Coalition shall consult with the appropriate land management agencies to determine the sites for disposal and the appropriate replacement soil materials. All replacement soil materials shall be certified weed-free engineered material, or shall be checked for the presence of weeds and sprayed for weeds to prevent bringing in invasive species.

GEO-MM-4. The Coalition shall conduct geotechnical studies to identify unmapped abandoned mines that could affect the proposed rail line and shall take actions to appropriately stabilize areas where unmapped mines are identified.

GEO-MM-5. The Coalition shall conduct geotechnical investigations to identify areas within the proposed rail right-of-way that are at risk of seismically induced liquefaction. The geologic hazard investigations shall be conducted in general accordance with *Utah Geological Survey Circular 122*. The Coalition shall implement appropriate site-specific measures to minimize the risk of liquefaction in areas identified during the geotechnical investigations, including replacing soils subject to liquefaction with engineered soils that are not prone to liquefaction, as applicable. If soil materials

are removed and replaced due to liquefaction hazards, the Coalition shall consult with the appropriate land management agencies to determine the sites for disposal and the appropriate replacement soil materials. All replacement soil materials shall be certified weed-free engineered material, or shall be checked for the presence of weeds and sprayed for weeds to prevent bringing in invasive species.

GEO-MM-6. The Coalition shall design and construct any tunnels in accordance with applicable U.S. Occupational Safety and Health Administration guidelines for underground construction (OSHA 2003). Conformance shall include ventilation, air monitoring, and emergency procedures.

GEO-MM-7. In consultation with applicable land management agencies and other agencies with expertise in avalanche mitigation, the Coalition shall identify areas with a high risk of snow slab avalanche that have the potential to affect the rail line and investigate the use of nonstructural and structural methods to control the effects of slab avalanches. Nonstructural methods can include triggering and closures. Structural methods can include avalanche dams and retarding structures, starting zone structures, and avalanche sheds.

GEO-MM-8. Prior to construction, the Coalition shall conduct geophysical investigations to identify risks associated with the Duchesne-Pleasant Valley fault that could affect the rail line.

Noise and Vibration

NV-MM-1. Before undertaking any project-related construction activities, the Coalition shall, with the approval of OEA and in consultation with appropriate tribal and local agencies, develop and implement a construction noise and vibration control plan to minimize project-related construction noise and vibration affecting residences along the proposed rail line, including noise and vibration from general construction equipment, specialized equipment, and tunnel construction. For tunnel construction in particular, the plan shall include estimates of construction noise and vibration levels and identify measures that shall be taken if predicted construction noise or vibration levels exceed Federal Transit Administration (FTA) criteria. The Coalition shall also conduct noise and vibration monitoring for receptors that would exceed FTA criteria. The Coalition shall designate a noise control officer to develop the construction noise and vibration plan, whose qualifications shall include at least 5 years of experience with major construction noise projects, and board from the Institute of Noise Control Engineering or registration as a Professional Engineer in Mechanical Engineering or Civil Engineering.

NV-MM-2. The Coalition shall minimize, to the extent practicable, construction-related noise disturbances in residential areas. The Coalition shall avoid nighttime construction and pile-driving near residential areas and employ quieter vibratory pile-driving or noise curtains for project-related construction where FTA construction noise criteria are exceeded.

NV-MM-3. In consultation with OEA and appropriate tribal and local agencies, the Coalition shall employ reasonable and feasible noise mitigation for receptors where OEA identified receptors that would experience noise impacts at or greater than the regulatory analytical threshold of 65 day-night average sound level (DNL) and an increase of 3 A-weighted decibels (dBA). The design goal for noise mitigation shall be a 10 dBA noise reduction. Using industry standard loudspeaker testing, the building sound insulation performance shall be determined in accordance with ASTM 966-90, Standard Guide for Field Measurements of Airborne Sound Insulation of Building Facades and Façade Elements. The calculated noise reduction shall be at least 5 dBA. Should the calculated noise reduction be less than 5 dBA then no mitigation is warranted as the receptor has sufficient sound insulation. Wayside noise mitigation would be warranted if train traffic reaches 10.5 trains per day. The Coalition shall certify to the Board whether or not traffic volumes reach this level.

NV-MM-4. The Coalition shall install and properly maintain rail and rail beds on the proposed rail line according to American Railway Engineering and Maintenance of Way Association standards and shall regularly maintain locomotives, keeping mufflers in good working order to control noise. The Coalition shall install rail lubrication systems at curves along the proposed rail line where doing so would reduce noise associated with wheel squeal for residential or other noise-sensitive receptors. The Coalition shall regularly inspect and maintain rail car wheels on trains that operate on the proposed rail line in good working order and minimize the development of wheel flats (where a round wheel is flattened, leading to a clanking sound when a rail car passes).

Air Quality

AQ-MM-1. In consultation with the TriCounty Health Department and the Ute Indian Tribe as applicable, the Coalition shall implement appropriate fugitive-dust controls such as spraying water or other dust treatments to reduce fugitive-dust emissions created during project-related construction activities. During project-related construction, the Coalition shall ensure that construction contractors offer workers daily transportation to the work site from a central location to minimize vehicular traffic on unpaved roads in the area and thereby reduce exhaust emissions and fugitive dust.

AQ-MM-2. The Coalition shall ensure that all engine-powered equipment and vehicles used in construction, operation, and maintenance of the proposed rail line are subject to a regular inspection and maintenance schedule in order to minimize air pollutant emissions, greenhouse gas emissions, and fuel consumption. Preventive maintenance activities shall include, but shall not be limited to, the following actions:

- Replacing oil and oil filters as recommended by manufacturer instructions.
- Maintaining proper tire pressure in on-road vehicles.
- Replacing worn or end-of-life parts.
- Scheduling routine equipment service checks.

AQ-MM-3. The Coalition shall develop and implement an anti-idling policy for both rail construction and operations and ensure that equipment operators receive training on best practices for reducing fuel consumption to reduce project-related air emissions. The anti-idling policy shall include required warm-up periods for equipment and prohibit idling beyond these periods. The policy shall define any exceptions where idling is permitted for safety or operational reasons, such as when ambient temperatures are below levels required for reliable operation. In addition, the policy shall include provisions addressing the use of technologies such as idle management systems or automatic shutdown features, as appropriate.

AQ-MM-4. The Coalition shall require its contractors to use diesel fuel that contains a minimum biodiesel content of 5 percent (B5 blend). If B5 is not available from local fuel suppliers, the Coalition shall use fuel with the highest biodiesel content that is available to reduce greenhouse gas emissions.

AQ-MM-5. The Coalition shall consider procuring alternative engine and fuel technologies, e.g., hybrid-electric diesel equipment, for construction and operation of the rail line to reduce greenhouse gas emissions.

AQ-MM-6. The Coalition shall evaluate the feasibility of installing solar and wind microgeneration technologies on site offices, lodgings, and other project-related facilities to reduce the use of grid or privately generated electricity to reduce greenhouse gas emissions. As part of its evaluation, the Coalition shall consider the suitability of site conditions and location of solar and wind generation and the technical and economic feasibility of supplementing site electricity demands with renewable power.

AQ-MM-7. The Coalition shall post signage and/or fencing during project-related construction, including tunnel construction, to ensure that members of the public would be unable to enter areas within the construction easement that could experience temporary adverse air quality impacts.

AQ-MM-8. During project-related construction, the Coalition shall require that construction contractors use renewable diesel fuel to minimize and control exhaust emissions from all heavy-duty diesel-fueled construction diesel equipment and on-road diesel trucks to the extent possible. Renewable diesel must meet the most recent ASTM D975 specification for Ultra Low Sulfur Diesel and have a carbon intensity no greater than 50 percent of diesel with the lowest carbon intensity among petroleum fuels sold in Utah. The Coalition may request an exemption from OEA to use traditional diesel if renewable diesel is not available from suppliers within 200 miles of the construction site. The Coalition must identify the quantity of traditional diesel purchased and fully document the availability and price of renewable diesel to meet project demand in consultation with OEA.

AQ-MM-9. To the extent practicable, the Coalition shall avoid conducting project-related construction activities that could result in the emissions of ozone precursors within the Uinta Basin Ozone Nonattainment Area in January and February to minimize emissions of ozone precursor chemicals in the nonattainment area. Construction-related activities covered by this measure include the use of diesel-powered construction equipment and the transportation by truck of materials to construction sites.

Energy

ENGY-MM-1. The Coalition shall design any project-related road realignments to allow continued vehicle access to existing fixed energy facilities, such as oil pads, during and following construction of the rail line. The Coalition shall work with the owners of the energy facilities to coordinate continued access during construction and rail operations.

ENGY-MM-2. The Coalition shall ensure that any oil and gas-producing wells within the rail right-of-way are plugged and abandoned in accordance with Utah Administrative Code Rule R649-3-24, Plugging and Abandonment of Wells. The Coalition shall consult with the Utah Division of Oil, Gas, and Mining prior to undertaking any construction activities that could affect existing wells and shall follow that agency's reasonable recommendations regarding appropriate safety procedures for the abandonment of wells.

ENGY-MM-3. The Coalition shall design any crossings or relocations of pipelines or electrical transmission lines in accordance with applicable Utah Division of Public Utilities' regulations and guidelines. The Coalition shall consult with appropriate utility providers to develop a plan to ensure that construction activities that could affect existing electrical transmission lines or energy pipelines avoid any interruption of utility service to customers to the extent possible.

ENGY-MM-4. The Coalition shall consult with oil and gas operators of existing facilities (e.g., wells, well pads, gathering pipelines, access roads) that would be affected by construction and operation of the rail line during the final engineering and design phase for the rail line and prior to undertaking project-related construction activities to develop appropriate measures to mitigate impacts on these facilities. These measures may include, but are not limited to, adjusting the location of construction activities to avoid oil and gas facilities or relocating the facilities if impacts cannot be avoided during construction and operations.

Paleontological Resources

PALEO-MM-1. The Coalition shall contract with a qualified paleontologist to develop and implement a paleontological resources monitoring and treatment plan to mitigate potential impacts on paleontological resources on lands classified as Potential Fossil Yield Classification 3, 4 or 5. The plan shall include the following requirements:

- A preconstruction survey where appropriate to describe and recover paleontological resources found on the surface.
- Monitoring of ground-disturbing activities during construction to recover paleontological resources, including inspection of spoils piles created by tunnel construction.
- Identification, preparation, and documentation of fossils collected during surveys or monitoring.
- Curation and deposition of significant paleontological resources into a federally approved repository.
- Increasing public awareness about the scientific importance of paleontological resources by developing web-based education material, interpretive displays, or other means.

Land Use and Recreation

LUR-MM-1. The Coalition shall consult with the Ute Indian Tribe during the final engineering and design phase of the proposed rail line and prior to undertaking any project-related construction to ensure that construction and operation of the proposed rail line would not significantly impact land uses on land under the tribe's jurisdiction.

LUR-MM-2. If the Board authorizes the Indian Canyon Alternative or the Whitmore Park Alternative, the Coalition shall implement the reasonable mitigation measures imposed by the Ute Indian Tribe during negotiations for the consent of the tribe for a right-of-way across Tribal trust land. The Coalition shall implement any mitigation measures imposed by the Ute Indian Tribe as a condition of a right-of-way across Tribal trust lands.

LUR-MM-3. If the Indian Canyon Alternative or the Wells Draw Alternative is authorized by the Board, the Coalition shall adhere to the reasonable mitigation conditions imposed by BLM in any right-of-way granted by BLM allowing the Coalition to cross BLM lands and shall ensure that construction and operation of the rail line is in compliance with applicable Resource Management Plans, including any potential amendments to those plans, for BLM lands that the rail line would cross.

LUR-MM-4. If the Indian Canyon Alternative or the Whitmore Park Alternative is authorized by the Board, the Coalition shall adhere to the reasonable mitigation conditions imposed by the Forest Service in any special use permit allowing the Coalition to cross National Forest System Lands. These reasonable mitigation conditions may include identifying areas where use and storage of petroleum products, herbicides, and other hazardous materials should be avoided during construction and operation. Conditions may also include avoiding or minimizing impacts on horse pastures to maintain adequate pasture size and replacing pasture fences removed during construction, as determined appropriate through consultation with the Forest Service. The Coalition shall consult with the Forest Service to ensure that construction and operation of the rail line complies with *Ashley Forest Land and Resource Management Plan*, including any existing or potential amendments to that plan, and with the Forest Service 2001 Roadless Rule.

LUR-MM-5. The Coalition shall adhere to the reasonable mitigation conditions imposed by the State of Utah School and Institutional Trust Lands Administration (SITLA) in any right-of-way grant allowing the Coalition to cross SITLA lands.

LUR-MM-6. If the Indian Canyon Alternative or the Whitmore Park Alternative is authorized by the Board, the Coalition shall obtain a right-of-way from the U.S. Bureau of Indian Affairs (BIA) to cross Tribal trust lands and shall implement the reasonable terms and conditions imposed by BIA in any decision granting a right-of-way on Tribal trust lands.

LUR-MM-7. Prior to project-related construction, the Coalition shall consult with BLM, the Forest Service, the Ute Indian Tribe, and SITLA, and local agencies as appropriate, to develop a plan to limit, to the extent practicable, impacts on recreational resources under those agencies' management or jurisdiction, including roads used for recreation and recreational site access. The Coalition shall also consult with private landowners to develop appropriate measures to mitigate impacts to land uses and recreation activities on private land. The Coalition shall develop the plan prior to completing the final engineering plans for the proposed rail line and following the above-mentioned consultation to determine the location of all public roads used as access points to a recreation area that would be crossed by the proposed rail line. The plan shall designate temporary access points if main access routes must be obstructed during project-related construction. The plan shall also include the number and location of access points as decided during consultation with the applicable agencies.

LUR-MM-8. The Coalition shall coordinate with owners of properties used for recreation during project-related right-of-way acquisition negotiations to provide adequate private road at-grade crossings to ensure that recreationists maintain access to and movement within recreational properties and areas. The Coalition shall coordinate with UDWR, the Ute Indian Tribe, SITLA, BLM, and the Forest Service, as appropriate, to develop reasonable measures to maintain access to hunting and recreation access points.

LUR-MM-9. The Coalition shall consult with appropriate land management agencies to develop appropriate measures to mitigate impacts of construction and operation of the rail line on grazing allotments on public lands. These measures could include improving forage production in other areas of affected allotments through implementation of vegetation treatment projects, including sagebrush reduction treatments and/or seedings, to increase forage production and maintain preconstruction carrying capacity, requiring vegetation treatments within affected allotments to improve remaining forage, as appropriate.

LUR-MM-10. The Coalition shall install cattle guards, livestock exclusion fencing, or other design features, as appropriate, within grazing areas along the rail line to prevent livestock from entering rail tunnels or congregating at tunnel entrances or in other areas in the rail right-of-way that could be hazardous to livestock. The Coalition shall work with landowners and land management agencies, as applicable, to identify appropriate locations for cattle guards, fencing, and other design features and to plan for ongoing maintenance of any of these features.

LUR-MM-11. The Coalition shall consider installing cattle underpasses along the right-of-way, as appropriate and practical. These underpasses could also be used by wildlife. The Coalition shall work with landowners to identify appropriate locations for cattle passes.

LUR-MM-12. The Coalition shall coordinate with landowners and holders of conservation easements crossed by the rail line to develop appropriate measures to mitigate impacts of construction and operation of the rail line on affected conservation easements.

Visual Resources

VIS-MM-1. The Coalition shall install visual barriers, as appropriate, to obstruct views of project-related construction activities and to maintain the privacy of adjacent landowners.

VIS-MM-2. The Coalition shall direct nighttime lighting, if used during construction, onto the immediate construction area during project-related construction to minimize impacts from shining lights on sensitive viewers, sensitive natural resource areas, recreational areas, and roadway or trail corridors.

VIS-MM-3. During project-related construction, the Coalition shall grade contours to create slopes with undulations and topographical variations that mimic natural terrain, where possible. If this grading practice results in larger areas of cut or fill that would further degrade natural features of scenic value, the Coalition shall not implement this measure at those locations. For example, a steeper cut slope may be more desirable than removing many trees to create more rounded terrain. The Coalition shall grade and restore roadbeds that are abandoned because of roadway relocation due to project-related construction to mimic the adjacent natural landscape and revegetate the roadway surface.

VIS-MM-4. The Coalition shall design bridges, communications towers, and other project-related features to complement the natural landscape and minimize visual impacts on the landscape. To the extent practicable, the Coalition shall use paint colors that are similar to colors in the surrounding landscape and shall implement design features that mimic natural materials (e.g., stone or rock surfacing) and colors to reduce visibility and to blend better with the landscape.

VIS-MM-5. If the Board authorizes construction and operation of the Indian Canyon Alternative or Whitmore Park Alternative, the Coalition shall implement the reasonable requirements of any Forest Service decision permitting the proposed rail line within Ashley National Forest and shall ensure that construction and operation on National Forest System lands complies with the requirements for visual resources management in *Ashley National Forest Land and Resource Management Plan*, including any potential amendments to that plan.

VIS-MM-6. If the Board authorizes the Indian Canyon Alternative or the Wells Draw Alternative, the Coalition shall consult with BLM during all phases of project design to ensure that construction and operation of the proposed rail line on BLM lands would be in compliance with all applicable BLM Visual Resource Management requirements and procedures. The Coalition shall incorporate visual design considerations into the design of the proposed rail line on BLM lands; undertake additional visual impact analyses on BLM lands, as appropriate, in consultation with BLM and considering applicable BLM Visual Resources Inventories; and implement appropriate measures to mitigate visual impacts on BLM lands, as requested by BLM.

VIS-MM-7. If the Board authorizes the Indian Canyon Alternative or the Wells Draw Alternative, the Coalition shall, in consultation with BLM, implement appropriate additional measures to minimize light pollution on BLM lands, potentially including limiting the height of light poles, limiting times of lighting operations, limiting wattage intensity for lighting, and constructing light shields, as applicable.

VIS-MM-8. If the Board authorizes construction and operation of the Indian Canyon Alternative or Whitmore Park Alternative, the Coalition shall implement the reasonable requirements of the Ute Indian Tribe regarding the design of the proposed rail line on Tribal trust lands for minimizing visual disturbances to Tribal trust lands.

VIS-MM-9. On NFS lands, facilities shall incorporate appropriate camouflage coloring (chosen by Forest Service), facility design, proper placement, edge "feathering" along vegetation/road boundaries, and/or topographic screening to reduce or eliminate the casually observable effects of buildings and other facilities in association with the railroad.

Socioeconomics

SOCIO-MM-1. The Coalition shall negotiate compensation—for direct loss of agricultural land in the right-of-way and the indirect loss of agricultural land from severance—with each landowner whose property would be affected by construction and operation of the proposed rail line, consistent with applicable state law. The Coalition shall assist landowners in developing alternative agricultural uses for severed land, where appropriate. The Coalition shall apply a combination of alternative land use assistance and compensation as agreed upon during right-of-way negotiations, pursuant to state law. Where capital improvements are displaced by construction or operation of the proposed rail line, the Coalition, in consultation with the landowner and relevant agencies, such as water districts or the local Natural Resources Conservation Services office, shall relocate or replace these improvements or provide appropriate compensation based on the fair market value of the capital improvements being displaced, consistent with applicable state law.

SOCIO-MM-2. The Coalition shall consult with landowners to limit the loss of access to properties during rail construction. The Coalition also shall consult with landowners to determine the location of property access roads that would be crossed by the proposed rail line. The Coalition shall install temporary property access points for landowner use if main access routes must be obstructed during project-related construction. The Coalition shall coordinate with landowners while negotiating the railroad right-of-way easement to identify key access points that would be affected by construction and operation of the proposed rail line. The Coalition shall install at-grade crossings and relocate roads to maintain adequate access to and movement within properties after rail operations begin.

Environmental Justice

EJ-MM-1. The Coalition shall consult with the Ute Indian Tribe regarding potential impacts on the Pariette cactus and Uinta Basin hookless cactus and shall abide by the requirements of the tribe's Sclerocactus Management Plan and the tribe's other reasonable requirements and recommendations for project-related activities on Tribal trust lands, which may include soil assessments, complying with mitigation measures to be developed in consultation with the tribe, and contributing to a conservation mitigation fund, as appropriate.

EJ-MM-2. The Coalition shall consult with the Ute Indian Tribe regarding the final design of the rail line, including the locations and designs of rail-related features, such as sidings, communications towers, culverts, bridges, and warning devices, to ensure that impacts on tribal members and land and resources under the tribe's jurisdiction are minimized.

Monitoring and Compliance

MC-MM-1. The Coalition shall submit quarterly reports to OEA on the progress of, implementation of, and compliance with all Board-imposed mitigation measures. The reporting period for these quarterly reports shall begin on the date of the Board's final decision authorizing the project until 1 year after the Coalition has completed project-related construction activities. The Coalition shall submit copies of the quarterly reports within

30 days following the end of each quarterly reporting period and distribute the reports to appropriate federal, state, local, and tribal agencies, as specified by OEA.

Appendix G

Legal Description of Special Use Permit

Appendix H

Impact Comparison

Impacts Comparison of The Unita Basin Railway

This table summarizes the impacts of the no action alternative and each of the 3 major construction routes of the 88-mile rail line including the 12 miles through Forest Service Lands

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
Vehicle Safety and Delay				
Total VMT during construction	194,035,062	328,384,855	234,989,847	There would be no construction under this alternative therefore no change to VMT
Annual VMT during operations	• Low rail traffic scenario:[a] -902,385 • High rail traffic scenario:[a] 1,002,046	• Low rail traffic scenario: -15,409 • High rail traffic scenario: 2,346,551	• Low rail traffic scenario: -835,637 • High rail traffic scenario: 1,135,542	There would be no construction under this alternative therefore no change to VMT
Average daily trips during construction	3,659	3,243	4,163	0, no construction would occur under the no action alternative
Average daily trips during operation	• Low rail traffic scenario: 4 • High rail traffic scenario: 104	• Low rail traffic scenario: 34 • High rail traffic scenario: 144	• Low rail traffic scenario: 4 • High rail traffic scenario: 104	0, no construction would occur under the action alternative
Average number of accidents at grade crossings per year	• Low rail traffic scenario: 0.088 • High rail traffic scenario: 0.153	• Low rail traffic scenario: 0.324 • High rail traffic scenario: 0.559	• Low rail traffic scenario: 0.190 • High rail traffic scenario: 0.331	0, there would be no grade crossing because the railroad would not be constructed
Average delay at grade crossings in 24-hour period	• Low rail traffic scenario: 4.07 minutes • High rail traffic scenario: 11.10 minutes	• Low rail traffic scenario: 7.67 minutes • High rail traffic scenario: 20.89 minutes	• Low rail traffic scenario: 3.99 minutes • High rail traffic scenario: 10.88 minutes	0, there would be no delay at grade crossings because the railroad would not be constructed
Rail Operations Safety				
Predicted rail accident (collisions and derailments) frequency	0.20 to 0.56 accident per year	0.24 to 0.72 accident per year	0.22 to 0.60 accident per year	0, the railroad would not be constructed under this alternative so there would be no increases in accidents related to the railroad.

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
Water Resources				
Temporary surface water impacts	• Perennial stream: 15.4 acres • Intermittent stream: 0.2 acre • Ephemeral stream: 8.6 acres • Canal/ditch: 1.3 acres • Pond: 1.0 acre • Playa: <0.1 acre	• Perennial stream: 6.5 acres • Intermittent stream: 28.1 acres • Ephemeral stream: 24.7 acres • Canal/ditch: 1.1 acres • Pond: 4.6 acre • Playa: 1.2 acre	• Perennial stream: 16.4 acres • Intermittent stream: 0.2 acre • Ephemeral stream: 15.7 acres • Canal/ditch: 1.3 acres • Pond: 0.9 acre • Playa: <0.1 acre	The Coalition would not construct and operate the proposed rail line, and there would be no impacts on temporary surface water
Permanent surface water impacts	• Perennial stream: 6.3 acres • Intermittent stream: 0.2 acre • Ephemeral stream: 4.1 acres • Canal/ditch: 0.9 acre • Pond: 1.0 acre • Playa: 0.1 acre	• Perennial stream: 3.0 acres • Intermittent stream: 30.4 acres • Ephemeral stream: 23.5 acres • Canal/ditch: 0.3 acre • Pond: 3.3 acres • Playa: 0.8 acre	• Perennial stream: 5.6 acres • Intermittent stream: 0.2 acre • Ephemeral stream: 6.4 acres • Canal/ditch: 0.9 acre • Pond: 0.4 acre • Playa: 0.1 acre	The Coalition would not construct and operate the proposed rail line, and there would be no impacts on permanent surface water

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
Stream realignments	59 realignments	17 realignments	55 realignments	0 realignments
Section 303(d) Impaired Assessment Unit impacts	2,660.0 acres	7,089.6 acres	2,866.2 acres	0 acres
Accidental spills of hazardous materials	Depends on train accident or derailment occurrence and severity, but expected to be minimized with mitigation	Same as Indian Canyon Alternative	Same as Indian Canyon Alternative	There would be no railroad under this alternative so no increased risk of accident spills from accidents
Temporary floodplain impacts	0.8 acre	1.7 acres	20.2 acres	0 acres, Under this alternative there would be no construction or operation of the railway, therefore no impact on floodplains
Permanent floodplain impacts	0.1 acre	0.2 acre	5.9 acres	0 acres, Under this alternative there would be no construction or operation of the railway, therefore no impact on floodplains
Temporary wetland impacts	13.2 acres	16.3 acres	11.2 acres	0 acres, Under this alternative there would be no construction or operation of the railway, therefore no impact on wetlands
Permanent wetland impacts	7.0 acres	6.5 acres	3.6 acres	0 acres, Under this alternative there would be no construction or operation of the railway, therefore no impact on wetlands
Temporary groundwater wells and springs impacts	• Groundwater wells: 6 • Springs: 7	• Groundwater wells: 4 • Springs: 9	• Groundwater wells: 2 • Springs: 4	0 acres, Under this alternative there would be no construction or operation of the railway, therefore no impact on groundwater wells or springs
Permanent groundwater wells and springs impacts	• Groundwater wells: 2 • Springs: 2	• Groundwater wells: 1 • Springs: 2	• Groundwater wells: 0 • Springs: 2	0 acres, Under this alternative there would be no construction or operation of the railway, therefore no impact on groundwater wells or springs

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
Water rights	• Water rights within the rail line footprint would be discontinued	• Same as Indian Canyon Alternative	• Same as Indian Canyon Alternative	0 acres, Under this alternative there would be no construction or operation of the railway, therefore no impact on water rights
Biological Resources				
Temporary big game crucial habitat impacts[2]	3,782.8 acres	4,364.6 acres	5,504.6 acres	This alternative would not construct and operate the proposed rail line and there would be no impacts on big game habitat
Permanent big game crucial habitat impacts[2]	2,406.3 acres	2,367.9 acres	2,723.5 acres	This alternative would not construct and operate the proposed rail line and there would be no impacts on big game habitat
Temporary big game substantial habitat impacts[2]	1,837.5 acres	7,595.6 acres	2,144.0 acres	This alternative would not construct and operate the proposed rail line and there would be no impacts on big game habitat
Permanent big game substantial habitat impacts[2]	1,015.5 acres	3,969.8 acres	1,039.3 acres	This alternative would not construct and operate the proposed rail line and there would be no impacts on big game habitat

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
The largest percent removal of big game crucial habitat in UDWR management unit for any species in any management unit	≤0.38	≤0.97	≤0.59	This alternative would not construct and operate the proposed rail line and there would be no impacts on big game habitat
Number of Big Game Movement Corridor Crossings	36 (6 low importance, 15 medium importance, 15 high importance)	31 (1 low importance, 9 medium importance, 21 high importance)	34 (6 low importance, 15 medium importance, 13 high importance)	This alternative would not construct and operate the proposed rail line and there would be no impacts on big game crossing corridors
Fish habitat degradation	Fewest impacts on fish habitat due to fewest number of surface waters crossed and fewest number of crossing structures	Greatest impacts on fish habitat due to greatest number of surface waters crossed and greatest number of crossing structures	Impacts on fish habitat due to surface water crossings and crossing structures	This alternative would not construct and operate the proposed rail line and there would be no impacts on fish habitat
Temporary vegetation community impacts	2,467.8 acres	5,095.7 acres	3,087.9 acres	This alternative would not construct and operate the proposed rail line and there would be no impacts on vegetation communities
Permanent vegetation community impacts	1,340.5 acres	2,559.9 acres	1,430.5 acres	This alternative would not construct and operate the proposed rail line and there would be no impacts on riparian vegetation
Temporary riparian vegetation impacts	57.1 acres	40.0 acres	54.0 acres	This alternative would not construct and operate the proposed rail line and there would be no impacts on riparian vegetation
Permanent riparian vegetation impacts	36.5 acres	22.6 acres	27.6 acres	This alternative would not construct and operate the proposed rail line and there would be no impacts on riparian vegetation
	Action Alternative			

Impact	Indian Canyon	Wells Draw	Whitmore Park	No Action
Temporary federally listed plant species habitat impacts	• Barneby ridge-cress Pinyon-juniper habitat: 46.0 acres • Barneby ridge-cress white shale habitat: 5.4 acres • Pariette cactus: 364.0 acres • Uintah Basin hookless cactus: 364.0 acres • Ute's ladies-tresses: 2.8 acres	• Barneby ridge-cress Pinyon-juniper habitat: 0 acre • Barneby ridge-cress white shale habitat: 0 acre • Pariette cactus: 396.5 acres • Uintah Basin hookless cactus: 396.5 acres • Ute's ladies-tresses: 0.1 acres	• Barneby ridge-cress Pinyon-juniper habitat: 97.3 acres • Barneby ridge-cress white shale habitat: 14.1 acres • Pariette cactus: 364.0 acres • Uintah Basin hookless cactus: 364.0 acres • Ute's ladies-tresses: 2.7 acres	• This alternative would not construct and operate the proposed rail line and there would be no impacts on federally listed plant species or their habitat
Permanent federally listed plant species habitat impacts	• Barneby ridge-cress Pinyon-juniper habitat: 20.0 acres • Barneby ridge-cress white shale habitat: 3.4 acres • Pariette cactus: 140.7 acres • Uintah Basin hookless cactus: 140.7 acres • Ute's ladies-tresses: 1.5 acres	• Barneby ridge-cress Pinyon-juniper habitat: 0 acres • Barneby ridge-cress white shale habitat: 0 acres • Pariette cactus: 153.5 acres • Uintah Basin hookless cactus: 153.5 acres • Ute's ladies-tresses: <0.1 acre	• Barneby ridge-cress Pinyon-juniper habitat: 34.3 acres • Barneby ridge-cress white shale habitat: 6.6 acres • Pariette cactus: 140.7 acres • Uintah Basin hookless cactus: 140.7 acres • Ute's ladies-tresses: 1.5 acres	• This alternative would not construct and operate the proposed rail line and there would be no impacts on federally listed plant species or their habitat

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No action**
Temporary Mexican Spotted Owl habitat impacts	865.8 acres	3,535.1 acres	1,531.7 acres	This alternative would not construct and operate the proposed rail line and there would be no impacts on Mexican Spotted Owl Habitat
Permanent Mexican Spotted Owl habitat impacts	584.8 acres	1,856.3 acres	777.8 acres	This alternative would not construct and operate the proposed rail line and there would be no impacts on Mexican Spotted Owl Habitat
Temporary greater sage-grouse habitat impacts	• UDWR-defined: 459.8 acres • BLM-defined: 544.0 acres	• UDWR-defined: 459.8 acres • BLM-defined: 588.0 acres	• UDWR-defined: 1,123.6 acres • BLM-defined: 1,047.0 acres	This alternative would not construct and operate the proposed rail line and there would be no increase of impacts on sage-grouse habitat
Permanent greater sage-grouse habitat impacts	• UDWR-defined: 294.5 acres • BLM-defined: 360.3 acres	• UDWR-defined: 294.5 acres • BLM-defined: 328.3 acres	• UDWR-defined: 482.8 acres • BLM-defined: 486.4 acres	This alternative would not construct and operate the proposed rail line and there would be no increase of impacts on sage-grouse habitat
Train noise impacts on at five closest greater sage-grouse leks	37–79 dBA	37–79 dBA	49–64 dBA	This alternative would not construct and operate the proposed rail line and there would be no increase of noise impacts on sage-grouse leks
Geology, Soils, Seismic Hazards, and Hazardous Waste Sites				
Distance of the proposed rail line that would cross unstable geologic units	21 miles	54 miles	18 miles	0, in this alternative no rail line would be constructed so no unstable geologic units would be disturbed.
Area of soil disturbance	1,340 acres	2,560 acres	1,431 acres	0, in this alternative no rail line would be constructed so no soil would be disturbed.
Impacts on hazardous waste sites	None	None	None	None

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
Noise and Vibration				
Number of receptors adversely affected by construction-related noise	0	0	0	0
Number of receptors adversely affected by construction-related vibration	0	0	0	0

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
Number of receptors adversely affected by operations-related noise	6	1	2	0
Number of receptors adversely affected by operations-related vibration	0	0	0	0
Air Quality				
Construction-related criteria pollutant emissions	• CO: 917 tons • NOx: 512 tons • PM10: 779 tons • PM2.5: 228 tons • SO_2: 2 tons • VOCs: 94 tons	• CO: 1,541 tons • NOx: 649 tons • PM10: 1,075 tons • PM2.5: 299 tons • SO_2: 2 tons • VOCs: 146 tons	• CO: 992 tons • NOx: 598 tons • PM10: 880 tons • PM2.5: 281 tons • SO_2: 2 tons • VOCs: 103 tons	• There would be no construction related emissions because there would be no construction under this alternative
Operations-related criteria pollutant emissions	• Low rail traffic scenario: o CO: 136 tons/year o NOx: 343 tons/year o PM10: 10 tons/year o PM2.5: 7 tons/year o SO2: 0.4 tons/year o VOCs: 13 tons/year • High rail traffic scenario: o CO: 373 tons/year o NOx: 969 tons/year o PM10: 29 tons/year o PM2.5: 21 tons/year o SO_2: 1 ton/year o VOCs: 36 tons/year	• Low rail traffic scenario: o CO: 176 tons/year o NOx: 413 tons/year o PM10: 13 tons/year o PM2.5: 9 tons/year o SO_2: 0.5 tons/year o VOCs: 18 tons/year • High rail traffic scenario: o CO: 479 tons/year o NOx: 1,162 tons/year o PM10: 35 tons/year o PM2.5: 26 tons/year o SO_2: 2 ton/year o VOCs: 48 tons/year	• Low rail traffic scenario: o CO: 147 tons/year o NOx: 374 tons/year o PM10: 11 tons/year o PM2.5: 8 tons/year o SO_2: 0.4 tons/year o VOCs: 14 tons/year • High rail traffic scenario: o CO: 405 tons/year o NOx: 1,056 tons/year o PM10: 32 tons/year o PM2.5: 23 tons/year o SO_2: 1 ton/year o VOCs: 40 tons/year	• There would be no operations related emissions because there would be no railway constructed or operated under this alternative
Concentrations in comparison to the NAAQS	All concentrations would be less than the NAAQS at all modeled locations	Same as Indian Canyon Alternative	Same as Indian Canyon Alternative	Air pollutant concentrations would not change related to this project. There would be no construction or operation of railway in this alternative

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
Energy				
Electricity consumption and distribution	Existing electricity distribution system would be adequate for construction and operations	Same as Indian Canyon Alternative	Same as Indian Canyon Alternative	under this alternative there would be no construction or operation of railway, therefore there would be no increase in electricity consumption
Construction-related fuel (gasoline and diesel) consumption	19,859,000 gallons	27,803,000 gallons	23,217,000 gallons	0 gallons, under this alternative there would be no construction therefore no construction related fuel consumption
Operations-related fuel (gasoline and diesel) consumption	• Low rail traffic scenario: 3,955,941 gallons/year • High rail traffic scenario: 11,696,171 gallons/year	• Low rail traffic scenario: 5,206,157 gallons/year • High rail traffic scenario: 15,127,985 gallons/year	• Low rail traffic scenario: 4,341,206 gallons/year • High rail traffic scenario: 12,765,347 gallons/year	• 0 gallons, under this alternative there would be no construction therefore no operations related fuel consumption
Impacts on utilities (pipelines and transmission lines)	114 utilities would be crossed; some impacts on service would be avoided or minimized with mitigation but some portions of existing pipelines may need to be relocated	6 utilities would be crossed but impacts on service would be avoided or minimized with mitigation	13 utilities would be crossed; some impacts on service would be avoided or minimized with mitigation but some portions of existing pipelines may need to be relocated	0 utilities impacted, under this alternative there would be no construction or operation of railway
Number of oil and gas wells adversely affected by construction	4	11	2	0, under this alternative there would be no construction therefore no impacts to existing or planned oil and gas wells.
Cultural Resources				
Sensitive cultural resources physically affected	14	12	13	0
Sensitive cultural resources affected by change in setting	2	7	3	0

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
Paleontological Resources				
PFYC acreage in the project footprint	• PFYC 5: 787 acres • PFYC 4: 879 acres • PFYC 3: 628 acres	• PFYC 5: 926 acres • PFYC 4: 4,901 acres • PFYC 3: 628 acres	• PFYC 5: 853 acres • PFYC 4: 977 acres • PFYC 3: 1,370 acres	• NA
Scientifically important fossil localities in the project footprint	26	1	26	NA

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
Land Use and Recreation				
Temporary disturbance by land ownership	• BLM: 73 acres • SITLA: 285 acres • Tribal: 257 acres • UDOT: 4 acres • Forest Service: 234 acres • Private: 1,614 acres	• BLM: 3,246 acres • SITLA: 554 acres • Tribal: 0 acres • UDOT: 1 acre • Forest Service: 0 acres • Private: 1,293 acres	• BLM: 0 acres • SITLA: 283 acres • Tribal: 255 acres • UDOT: 4 acres • Forest Service: 234 acres • Private: 2,312 acres	• Under this alternative there would be no construction or railway operation and thus no land disturbance
Permanent disturbance by land ownership	• BLM: 46 acres • SITLA: 158 acres • Tribal: 121 acres • UDOT: <1 acre • Forest Service: 167 acres • Private: 847 acres	• BLM: 1,571 acres • SITLA: 327 acres • Tribal: 0 acres • UDOT: 0 acre • Forest Service: 0 acres • Private: 662 acres	• BLM: 0 acres • SITLA: 103 acres • Tribal: 118 acres • UDOT: 0 acre • Forest Service: 167 acres • Private: 1,042 acres	• Under this alternative there would be no construction or railway operation and thus no land disturbance
Temporary disturbance of agricultural land in the study area	• Irrigated cropland: 145 acres • Prime farmland: 56 acres	• Irrigated cropland: 35 acres • Prime farmland: 15 acres	• Irrigated cropland: 145 acres • Prime farmland: 56 acres	• Under this alternative there would be no construction or railway operation thus no disturbance to agricultural land
Permanent disturbance of agricultural land in the study area	• Irrigated cropland: 92 acres • Prime farmland: 6 acres	• Irrigated cropland: 6 acres • Prime farmland: 4 acres	• Irrigated cropland: 92 acres • Prime farmland: 6 acres	• Under this alternative there would be no construction or railway operation thus no disturbance to agricultural land
Temporary loss of AUMs	50	176	73	Under this alternative there would be no construction or railway operation and thus no loss of AUMS
Permanent loss of AUMs	34	88	37	Under this alternative there would be no construction or railway operation and thus no loss of AUMS
Special designations	Forest Service Inventoried Roadless Areas	Route would cross BLM's Lears Canyon ACEC, Nine Mile Canyon ACEC, two Lands with Wilderness Characteristics areas, and the Nine Mile SRMA	Same as Indian Canyon Alternative	Under this alternative there would be no construction or railway operation and thus no impacts to areas under special designations.
BLM Land Use Plan Amendment Required	Yes	Yes	No	No

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
Forest Service Land Use Plan Amendment Required	Yes	No	Yes	No
Disturbance within Forest Service Inventoried Roadless Areas	394 acres	0 acres	394 acres	0 acres under this alternative there would be no construction or railway operation and thus no land disturbance

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
Cooperative Wildlife Management Units impacts	816 acres	466 acres	1,472 acres	0 acres
Conservation Easements affected	1	0	1	0
Visual Resources				
RKOP scenic quality ratings on BLM- administered lands	No change in scenic quality rating	Same as Indian Canyon Alternative	Alternative does not cross BLM-administered land	Under this alternative there would be no construction or operation of railway therefore no change in scenic quality rating
Visual quality ratings on other federal, state, tribal, and private land	• No change in rating at 1 RKOP • -1 reduced rating at 2 RKOPs • -2 reduced rating at 2 RKOPs • -3 reduced rating at 1 RKOP • -4 reduced rating at 1 RKOP	• -1 reduced rating at 1 RKOP • -2 reduced rating at 1RKOPs • -4 reduced rating at 1 RKOP	• -1 reduced rating at 2 RKOPs • -2 reduced rating at 3 RKOPs • -3 reduced rating at 1 RKOP	• Under this alternative there would be no construction or operation of railway therefore no change in scenic quality rating
Sensitive viewscapes	• Ashley National Forest • BLM lands • Tribal trust lands • Indian Canyon Scenic Byway • Reservation Ridge Scenic Backway	• Ashley National Forest • BLM lands • Reservation Ridge Scenic Backway	Same as Indian Canyon Alternative	Under this alternative there would be no construction or operation of railway therefore no effect on sensitive viewscapes
Infrastructure changes	• Install 4 new towers • Install 6 new sidings • Remove 3 nonresidential structures	• Install 4 new towers • Install 3 new sidings • Remove 4 residences • Remove 1 other structure	• Install 4 new towers • Install 9 new sidings • Remove 1 residence • Remove 5 other structures	• Under this alternative there would be no construction or operation of railway therefore no infrastructure changes
Socioeconomics				
Land acquisitions required	3,808.2 acres	7,655.3 acres	4,518.3 acres	0 acres

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
Impacts on private property	Greatest adverse impact on smaller private property owners because it would cross the greatest number of smaller-subdivided properties in the Argyle Canyon and Duchesne Mini-Ranches areas of Duchesne County	Route would affect the smallest area of private property, but would displace the largest number of residences	Route would affect the largest area of private property across the three Action Alternatives and would primarily affect larger property owners and ranching and farming operations	Under this alternative there would be no construction or operation of railway therefore no impact on private property
Annual employment, labor income, and value added impacts from construction	$290.6 million	$351.3 million	$311.8 million	Under this alternative there would be no construction or operation of railway therefore no impact on annual employment, labor income, or added value

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
Annual Employment (direct, indirect, induced) during Operations	• Low rail traffic scenario: 170 jobs • High rail traffic scenario: 420 jobs	• Low rail traffic scenario: 220 jobs • High rail traffic scenario: 530 jobs	• Low rail traffic scenario:190 jobs • High rail traffic scenario: 470 jobs	Under this alternative there would be no operation of railway therefore no impact on annual employment
Annual labor income from operation	• Low rail traffic scenario: $8.3 million • High rail traffic scenario: $23.3 million	• Low rail traffic scenario: $10.4 million • High rail traffic scenario: $29.0 million	• Low rail traffic scenario: $9.3 million • High rail traffic scenario: $25.8 million	Under this alternative there would be no operation of railway therefore no impact on labor income
Operations-related state tax revenue	• Low rail traffic scenario: $0.4–0.5 million • High rail traffic scenario: $1.1–1.4 million	Same as Indian Canyon Alternative	Same as Indian Canyon Alternative	Under this alternative there would be no operation of railway therefore no impact on state tax revenue
Environmental Justice				
Air Quality, Water Resources, Land Use, Socioeconomics, Vehicle Safety and Delay, Rail Operations Safety, Noise	No disproportionately high and adverse impacts on minority or low-income populations	Same as Indian Canyon Alternative	Same as Indian Canyon Alternative	Under this alternative there would be no construction or operation of the railway, therefore no impact on minority or low income populations.
Cultural resources	Impacts may disproportionately affect the Ute Indian Tribe but would be mitigated and would not be high and adverse	Same as Indian Canyon Alternative	Same as Indian Canyon Alternative	Under this alternative there would be no construction or operation of the railway, therefore no impact on cultural resources
Biological resources	Effects on suitable habitat for the Pariette cactus and Uinta Basin hookless cactus would represent a disproportionately high and adverse effect on the Ute Indian Tribe	Same as Indian Canyon Alternative	Same as Indian Canyon Alternative	Under this alternative there would be no construction or operation of the railway, therefore no impact on biological resources
Downline				
Delay at downline at-grade road crossings	Increase delay up to 9.84 seconds per vehicle	Same as Indian Canyon Alternative	Same as Indian Canyon Alternative	There would be no delays at road crossing because the rail would not be constructed.

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
Predicted downline rail accident frequency at grade crossings	Increase of 0.001 to 0.024 accident per year	Same as Indian Canyon Alternative	Same as Indian Canyon Alternative	Under this alternative there would be no railway operation, therefore no increase of accidents at grade crossings
Noise level increases at downline receptors	0.4 dB to 6.0 dB	Same as Indian Canyon Alternative	Same as Indian Canyon Alternative	Under this alternative there would be no railway operation, therefore no noise level increases

	Action Alternative			
Impact	**Indian Canyon**	**Wells Draw**	**Whitmore Park**	**No Action**
Maximum downline criteria pollutant emissions	• CO: 1,048.35 tons/year • NOx: 2,913.84 tons/year • PM10: 63.00 tons/year • PM2.5: 61.11 tons/year • SO_2: 3.70 tons/year • VOC: 103.66 tons/year	Same as Indian Canyon Alternative	Same as Indian Canyon Alternative	No addition pollutant emissions related to a railroad.

Notes:

[24] The Coalition estimates that rail traffic on the proposed rail line could range from as few as 3.68 trains per day, on average (the low rail traffic scenario), to as many as 10.52 trains per day, on average (the high rail traffic scenario), depending on future market conditions, including future demand for crude oil produced in the Basin.

[25] Notably, there is significant overlap of big game habitat for the different big game species (see Appendix G, *Biological Resources Figures*, for big game habitats along the Action Alternatives), and the permanent and temporary habitat impacts affect multiple big game species in those areas of habitat overlap.

VMT = vehicle miles traveled; UDWR = Utah Division of Wildlife Resources; BLM = U.S. Department of the Interior, Bureau of Land Management; dBA =A-weighted decibels; dB = decibels; CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter 10 microns or less in diameter; PM2.5 = particulate matter 2.5 microns or less in diameter; SO_2 = sulfur dioxide; VOCs = volatile organic compounds; NO_2 = nitrogen dioxide; NAAQS = National Ambient Air Quality Standards; PFYC = Potential Fossil Yield Classification; AUM = animal unit month; SITLA = School and Institutional Trust Lands Administration; UDOT = Utah Department of Transportation; ACEC = Area of Critical Environmental Concern; SRMA = Special Recreation Management Area; Forest Service = U.S. Forest Service; RKOP = rendered key observation point