U.S. Department of the Interior
Bureau of Land Management

Final Environmental Impact Statement
West Antelope III Coal Lease Application
DOI-BLM-WY-P070-2025-0098-EIS

PREPARING OFFICE
U.S. Department of the Interior
Bureau of Land Management
Buffalo Field Office
Wyoming

I have considered the factors mandated by the National Environmental Policy Act (NEPA). This environmental impact statement (EIS) represents the Bureau of Land Management's (BLM's) good-faith effort to fulfill NEPA's requirements by prioritizing documentation of the most important relevant considerations within the statutorily mandated page limits and timeline. This prioritization reflects the BLM's expert judgment; and any considerations addressed briefly or left unaddressed are, in the BLM's judgment, comparatively non-substantive and would not meaningfully inform the BLM's consideration of environmental effects and the decision to be made. The EIS is substantially complete, considers the factors mandated by NEPA, and, in my judgment, contains analysis adequate to inform the BLM's decision regarding the proposed action.

KRISTINA KIRBY Digitally signed by KRISTINA KIRBY
Date: 2025.08.15 17:04:25 -06'00'

Responsible Official: _____
Kris Kirby
Acting Wyoming State Director

Table of Contents

1 Introduction

1.1 Background

On August 24, 2015, Antelope Coal LLC filed a lease by application (LBA) (serial number: WYW-184599) with the Bureau of Land Management (BLM) Buffalo Field Office (BFO) for a tract of federal coal under the provisions of 43 Code of Federal Regulations (CFR) Part 3420, Subpart 3425. According to the application, the coal in this tract would be mined to extend the life of the Antelope Coal Mine. The Powder River Regional Coal Team (RCT) reviewed the coal LBA at a public meeting held on January 27, 2016, and recommended that the BLM process the application. The application was identified as the West Antelope III LBA.

A Federal Register Notice of Intent was published on July 28, 2017, initiating the scoping period for an Environmental Impact Statement (EIS). The scoping period concluded on September 29, 2017. Cloud Peak Energy, parent company of Antelope Coal LLC, filed for bankruptcy in May 2019, and the EIS was put on hold. Navajo Transitional Energy Company (NTEC) purchased Antelope Coal in March 2021 (BLM 2021) and requested on July 25, 2025, that BLM process the West Antelope III LBA.

The One Big Beautiful Bill Act (OBBB) (Pub. L. No. 119-21) was signed on July 4, 2025. Section 50201 of the OBBB requires that not later than 90 days after July 4, 2025, the Secretary of the Interior shall, with respect to each qualified application, (1) if not previously published for public comment, publish any required environmental review; (2) establish the fair market value of the applicable coal tract; (3) hold a lease sale with respect to the applicable coal tract; and (4) identify the highest bidder at or above the fair market value and take all other intermediate actions necessary to identify the winning bidder and grant the qualified application. The 2016 West Antelope III LBA was identified as a qualified application; therefore, BLM has reinitiated the National Environmental Policy Act (NEPA) process.

To evaluate the environmental impacts of leasing and mining the coal, the BLM must prepare an Environmental Assessment (EA) or an EIS to evaluate the environmental and socioeconomic impacts of leasing and developing the federal coal in the application area. BLM does not authorize mining by issuing a lease for federal coal, but the impacts of mining the coal are considered in the West Antelope III Coal Lease Application EIS (2025 West Antelope EIS) because it is a logical consequence of issuing a lease to an existing mine.
BLM is the lead agency responsible for completing the NEPA process and Office of Surface Mining Reclamation and Enforcement (OSMRE) participated in the preparation of this NEPA document as a cooperating agency (516 DM 1, sec. 1.7). OSMRE is an “eligible governmental entity” pursuant to section 1.7(b) of the Department Of Interior (DOI) NEPA Handbook.

1.2 Purpose and Need

The purpose of the 2025 West Antelope EIS is to evaluate the environmental impacts associated with the BLM’s potential approval of the West Antelope III LBA area for coal leasing and to identify any necessary mitigation. The need is to fulfill the requirements of Section 50201 of the OBBB.

1.3 Decision to be Made

Based on the analysis contained in this EIS, the BLM will decide whether to approve or deny the West Antelope III Coal Lease by Application and if approved, what mitigation should be applied.

1.4 Land Use Plan Conformance

On November 20, 2024, the BLM Director signed an amendment to the *2015 Buffalo Field Office Resource Management Plan* (2015 Buffalo RMP) which made no federal coal available for future consideration for leasing within the BFO planning area. Although the *2024 Buffalo Field Office Resource Management Plan Amendment and Supplemental Environmental Impact Statement* (2024 Buffalo SEIS) makes no BLM-administered coal within the planning area available for consideration for leasing, the OBBB requires the BLM to publish any required environmental review with respect to each qualified application, including the West Antelope III LBA, within 90 days of July 4, 2025, the date of enactment of the OBBB. To be responsive to the statutory mandate in Section 50201 of the OBBB, the BLM is completing this EIS for the West Antelope III LBA.

On July 7, 2025, BLM published a Notice of Intent in the Federal Register to potentially amend the 2015 Buffalo RMP in order to evaluate the coal allocations within the BFO planning area and to determine the availability of lands acceptable for further consideration for coal leasing in accordance with the new executive and secretarial orders. The BLM will not issue any lease unless and until the subject BLM-administered coal is open for leasing.

1.5 Relationship to Statutes, Regulations, Other NEPA Documents

The BLM has several laws, regulations, and policies that guide its management of federal coal resources, as follows:

- The Mineral Leasing Act of 1920, as amended
- The Mineral Leasing Act for Acquired Land of 1947, as amended by the Federal Coal Leasing Amendments Act of 1976
- The Federal Land Policy and Management Act of 1976, as amended (FLPMA)
- Surface Mining Control and Reclamation Act of 1977, as amended (SMCRA)
- 43 CFR Parts 3000 and 3400

The following federal laws and applicable regulations, policies, and actions affect the alternatives analyzed in this EIS:

- National Historic Preservation Act of 1966 (NHPA), as amended
- National Environmental Policy Act of 1969, as amended (NEPA)
- Clean Air Act of 1970, as amended
- Clean Water Act of 1970, as amended
- Endangered Species Act of 1973, as amended

FLPMA is the primary authority for the BLM's management of public lands. It provides the statutory framework by which the BLM manages resources on BLM-administered lands and mineral estate. BLM is required to follow the multiple-use and sustained yield mandate of FLPMA when making the decision.

The preparation of this EIS also follows guidelines and regulations adopted by the DOI found in 43 CFR Part 46, 516 DM 1 – *U.S. Department of the Interior Handbook of National Environmental Policy Act Implementing Procedures*, and policies regarding the implementation of NEPA. The BLM verifies that it has complied with the requirements of NEPA, 42 U.S.C. § 4321 et seq.

1.5.1 Relationship to State and Local Plans

The BLM has considered plans of other state and local agencies that are relevant in the development of this EIS. BLM's analysis is consistent with these laws and plans.

- 1973 Wyoming Environmental Quality Act
- 2023 Natural Resource Protection Act
- 2022 Campbell County Natural Resource Land Use Plan
- 2015 Converse County Land Use Plan

1.6 Resource Issues

The BLM focused on resource issues raised by the public in 2017 and the BLM's interdisciplinary team. While many issues may arise during scoping, not all issues raised warrant detailed analysis. Issues are analyzed if: (1) an analysis of the issue is necessary to make a reasoned choice between alternatives, or (2) if the issue is associated with a significant impact, or where analysis is necessary to determine the significance of the impact. The following sections list the resources considered and the determination as to whether or not they require additional analysis.

Issues that the BLM identified in 2015 prior to public scoping included concern about impacts to air quality, greenhouse gas emissions, groundwater, surface water, and wildlife, as well as the potential conflicts between overlapping proposed coal mining and existing and proposed oil and gas development. The 2017 scoping added public health and economics as potential issues.

Based on a review of the West Antelope II Lease Modification documents, regulatory changes, and their knowledge of the West Antelope III LBA tract, BLM's 2025 interdisciplinary team added coal, quality of life, cultural resources, and tribal consultation as resource issues for detailed analysis. BLM's 2025 interdisciplinary team also dismissed several resources as not present or not affected as identified in the Internal Scoping document, including: paleontology, livestock grazing, and soils.

1.6.1 Resource Issues Identified but Eliminated from Further Analysis

BLM eliminated the following resource issues associated with the coal screening unsuitability assessment (43 CFR 3420.1-4(e) (1–4)) after determining that the resources are not present within the West Antelope III tract or, where present, the anticipated impacts to the resource from potential coal mining would not require mitigation.

Locatable and Salable Minerals

BLM's Mineral & Land Records System (MLRS), BLM's *Final Environmental Impact Statement for the West Antelope II Coal Lease Application: WYW163340* (2008 West Antelope II EIS), and aerial imagery were reviewed; there are no known scoria deposits, uranium claims or deposits, or bentonite claims or deposits within the West Antelope III LBA Tract.

Vegetation

The vegetation within the West Antelope III LBA tract consists of species and communities common to northeast Wyoming and is consistent with vegetation within the adjacent Antelope Coal Mine and West Antelope II LBA areas. The vegetation and land use types that have been identified and mapped include Blue Grama Upland, Big Sagebrush Upland, Grassy Bottom, Disturbed Land, Blue Grama Roughland, Birdfoot Sagebrush Upland, Water/Wetlands, Treated Grazing Land, and Silver Sagebrush Lowland. Complete descriptions of the vegetation types are contained in the 2008 West Antelope II EIS , and the SVC Vegetation Resource Report (SVC 2018). These are common vegetation communities which have been successfully reclaimed by Powder River Basin coal mines in the past.

Lands

There are no lands in the project area within 100 feet of cemeteries, residential, commercial, or public buildings, or within 300 feet of a right-of-way (ROW) for public roads. Because the West Antelope III LBA tract has no BLM administered surface, there are no lands within federal ROW issued under 43 CFR Part 2800 or easements issued under 41 CFR § 102-73, 43 CFR Subpart 2807, or 43 CFR Part 2920. However, a ROW issued under the Railroad Act of 1875 crosses a small section of the LBA in the northeast corner and encompasses 0.43 acres. This ROW is included in the infrastructure analysis of this EIS, Section 3.8.

The following issues that were raised during the 2017 public scoping are inconsistent with the identified Purpose and Need:

- Expanding the purpose and need beyond evaluating the environmental impacts associated with the BLM's potential approval of the West Antelope III LBA area for coal leasing such as by including renewable energy sources like solar or wind for electrical generation.
- Preparation of a programmatic EIS for coal leasing within the Powder River Basin.
- Increasing coal reclamation and bonding requirements.
- International exportation of coal.

2 Alternatives

2.1 Alternative 1 - No Action Alternative

No federal coal would be leased, and the West Antelope III LBA would be denied. Antelope Coal Mine's existing coal leases would continue through their associated lease terms and could continue to be developed. In 2021, Antelope Mine was estimated to have 21.7 billion tons of federal coal leased sufficient for anticipated mining into at least 2040. The recoverable coal volume and duration of leased reserves is driven by economics and subject to change.

2.2 Alternative 2 – Antelope Coal Mine's 2015 LBA (Proposed Action)

Alternative 2 is to hold a competitive coal lease sale and issue a maintenance lease to the successful bidder consisting of federal coal within the West Antelope III LBA area from which a coal lease tract could be delineated and has the following legal description:

T. 41 N., R. 71 W., 6th PM, Wyoming
Section 8;
Section 9: Lots 1 through 8;
Section 10: Lot 5;
Section 17;
Section 19
Section 20: Lots 1 through 13;
Section 29: Lots 4, 5, 12, and 13;
Section 30: Lots 5 through 16;

The total area within the LBA from which a coal lease tract could be delineated contains approximately 3,508 acres, more or less, and represents approximately 441 million tons of coal or ten years of mining at 2015 production rates. The recoverable coal volume and duration of leased reserves is driven by economics and subject to change.

2.3 Alternatives Considered but Eliminated

BLM Study Area
After receiving the West Antelope III LBA in 2015, BLM identified a larger "study area" which includes the tract as applied for and additional adjacent unleased federal coal. Adding additional land may provide a more efficient recovery of the federal coal resource and reduce the possibility that some mineable federal coal in the area would be bypassed if it was not included in the leased tract. BLM eliminated the study area from detailed analysis in this EIS after it determined that the additional coal may not be economically feasible for leasing and production at this time. The removal of this alternative from detailed study is consistent with the DOI NEPA Handbook, Appendix 3 which states "Bureaus should use their expert judgment and exercise their discretion in identifying the reasonable alternatives, which must be technically and economically feasible." (citing *Seven County Infrastructure Coalition v. Eagle County*, No. 23–975, Slip Op. p. 10–11, 145 S. Ct. 1497, 1511–1512 (2025)).

3 Affected Environment and Environmental Consequences

The Antelope Coal Mine is the southernmost mine of twelve coal mines in northeastern Wyoming's Powder River Basin. The mines are located in three clusters which stretch over 75 miles from north of Gillette, Wyoming to south of Wright, Wyoming. The southern cluster includes the three largest mines within the Basin, of which Antelope is the smallest. In 2021, Antelope Coal Mine produced 21.74 million tons of coal and distributed 19.4 million tons to 38 electrical power plants within 16 states (US EIA 2022) (Appendix A, Table A1).

The surface estate within the West Antelope III LBA tract (3,508 acres) is all non-federal, predominantly private (86%) with one parcel of State of Wyoming land (477 acres) (Appendix b, Figure B1). The coal estate is 100% federal including beneath the State surface.

The LBA Area consists primarily of a dissected rolling upland plain with low relief, broken by steeply cut washes. Elevations range from about 4,500 feet to 5,100 feet above sea level and slopes range from flat to around 34% and average about 5%. The coal proposed for mining is widely known as the Wyodak-Anderson coal zone of the Tongue River Member of the Fort Union Formation.

This chapter describes the affected environment, specifically the existing or baseline conditions relevant to each resource issue, followed by a description of the effects projected to result from each alternative. The description of the affected environment will provide the basis for identifying and interpreting potential impacts in a concise manner.

Table A2 (Appendix 1) of this EIS identifies the regulatory compliance, mitigation and monitoring measures required by the Surface Mining Control and Reclamation Act (SMCRA) and Wyoming State Law for surface coal mining operations.

3.1 Resource Issue – Coal

3.1.1. Methodology

The coal resource discussion was developed from the coal resource sections of the 2024 Buffalo SEIS (Section 3.5.5) and the 2008 West Antelope II EIS (Section 3.3.1), incorporated by reference.

3.1.2 Affected Environment

The Wyodak-Anderson coal zone is comprised of four mineable coal seams. Locally, these seams are referred to as the Anderson, Lower Anderson, Canyon/Upper Canyon, and Lower Canyon. Fort Union coal is subbituminous and generally of low-sulfur, low-ash, low-carbon, and high-water content. These attributes make Powder River Basin coal well-suited for electrical generation through combustion. The coal has a higher heating value and lower sulfur content south of Gillette than north of Gillette. Antelope Coal Mine is the southernmost mine with the West Antelope III LBA approximately 50 miles south of Gillette. The heating value of the West Antelope III LBA coal seams is expected to range from 8,500 to 9,200 Btu/lb. The ash content in the coal seams is expected to vary from 3.5% to 8%, the sulfur content from 0.15% to 0.4%, and the moisture content from 23% to 28%. Federal coal underlies the entire West Antelope III LBA tract (Figure B2). More information on the coal resource is included in the 2008 West Antelope II Final EIS (Section 3.3.1.1), incorporated by reference.

3.1.3 Environmental Impacts - Alternative 1 (No Action)

Under the No Action Alternative, the West Antelope III lease application would be rejected, and coal removal would not occur on the West Antelope III LBA tract. Mining operations, coal removal and the associated impacts would continue as permitted on the existing adjacent Antelope Coal Mine coal leases through approximately 2040. Additional impacts to other resources as described below would not be associated with the West Antelope III LBA, including additional opportunities for researching and developing alternative uses for Fort Union coal or carbon sequestration techniques.

A decision to reject the West Antelope III LBA at this time would not preclude an application to lease the tract in the future.

3.1.4 Environmental Impacts - Alternative 2 (Proposed Action)

Mining would remove an average of 280 feet of overburden and 60 feet of coal to produce approximately 441 million tons of coal. Mining of the West Antelope III reserves are anticipated to extend mining at the Antelope Coal Mine for at least ten years. The replaced overburden and interburden would be a relatively homogeneous (compared to the pre-mining layered overburden and interburden) and partly recompacted mixture averaging about 323 feet in thickness. Following reclamation, the mined West Antelope III tract would again be suited and available for historic uses such as livestock grazing and fluid mineral production.

Impacts to other resources directly associated with mining the West Antelope III LBA are described below. Several entities, including the State of Wyoming, are researching potential nonthermal uses for Fort Union coal resources, such as extracting rare earth minerals from coal or using coal as a carbon feedstock in the manufacturing of carbon fiber. Research on carbon capture and storage technologies is also ongoing. These technologies have the potential to extend the life of coal mining in the Powder River Basin if they become technically and economically viable on a large scale. Additional information on alternative coal uses and present research is available in the 2024 Buffalo SEIS Section 3.5.5.1, hereby incorporated by reference.

3.2 Resource Issue – Air Quality

3.2.1 Methodology

BLM reviewed the 2024 Buffalo SEIS; the SEIS disclosed the air quality related affected environment and the environmental consequences from mining, transporting, and burning coal for electricity generation. The 2024 Buffalo SEIS estimated emissions from the production, transportation/processing, and downstream combustion of coal using Energy Information Administration (EIA) forecasted production rates and emission factors from the EPA and National Energy Technology Laboratory of the Department of Energy (DOE). Descriptions of the approaches used to estimate criteria pollutant emissions are provided in Section 2.0 of the 2024 BFO SEIS's Air Resources Technical Support Document (Appendix C, 2024 BFO SEIS).[1]

3.2.2 Affected Environment

The air quality affected environment is incorporated by reference from the 2024 Buffalo SEIS (Section 3.5.1.1). The 2024 Buffalo SEIS affected environment section discussed the regulatory framework and reviewed the current conditions and trends of criteria pollutants (carbon monoxide, lead, nitrogen oxides, ozone, particulate matter, sulfur dioxide) and air quality related values (AQRV). All coal mined in the BFO is subbituminous which is used as fuel for steam-

[1] In order to meet the statutory timeline established by Section 50201 of the OBBB, the BLM is incorporating the analysis from the 2024 BFO SEIS by reference. However, the 2024 BFO SEIS and, as a result of its incorporation, this EIS contains more analysis than is required under NEPA pursuant to the Supreme Court's decision in *Seven County Infrastructure Coalition v. Eagle County* because the BLM has no authority or control over downstream actions that may produce emissions, such as the transportation, processing, and downstream combustion of coal produced from federal leases. In addition, these downstream actions are attenuated in time and geography from the West Antelope III LBA. Effects generally do not need to be considered if they are remote in time, geographically remote, or the product of a lengthy causal chain. Effects do not include conditions or activities that the agency has no ability to prevent under its regulatory authority, or that would occur regardless of the proposed action, or that would need to be initiated by a third party. A "but for" causal relationship is insufficient to make an agency responsible for a particular effect under NEPA.

electric power generation. The 2024 Buffalo SEIS analysis area for air quality included all regions of the United States where coal-fired power plants received coal from mines located within the BFO. Table A2 (Appendix A) of this EIS identifies the power plants (38 within 16 states) and the amount of coal (19.4 million tons total) that was received from the Antelope Coal Mine in 2021. Figure B3 (Appendix B) displays the locations of the 38 power plants that received coal from the Antelope Coal Mine in 2021 and the railroad network used for coal transportation.

3.2.3 Environmental Impacts—Alternative 1 (No Action)

Under the No Action Alternative, the West Antelope III lease application would be rejected and coal removal would not occur on the West Antelope III LBA tract. Mining of the presently leased reserves would continue.

The air quality environmental impacts section (Alternative A, 2024 Buffalo SEIS) is incorporated by reference from the 2024 Buffalo SEIS (Section 3.5.1.2 and Section 3.5.1.3). Downstream coal combustion emits Criteria Air Pollutants (CAPs), precursor pollutants (ammonia [NH3] and Volatile Organic Compounds (VOCs)), and Hazardous Air Pollutants (HAPs) that would impact air quality and public health. From an air quality perspective, some of the key pollutants emitted from downstream coal combustion are PM2.5, PM10, SO_2, NO_2, NH_3, and HAPs and other VOCs. From a public health perspective, some of the key pollutants emitted from downstream coal combustion are NOx, SO_2, PM2.5, and PM10 and the HAPs acrolein, arsenic, benzo(a)pyrene, cadmium, chlorine gas, hexavalent chromium), hydrochloric acid, mercury, manganese, nickel, and dioxins, as these could have either high exposure or high toxicity.

Alternative A (No Leasing) from the 2024 Buffalo SEIS, incorporated here by reference (Section 3.5.1.2), analyzed coal combustion from 2023 into mid-2041, when the collective amount of coal presently leased by the 12 mines was predicted to be exhausted. Antelope Coal Mine is anticipated to have a similar production time frame, with sufficient coal leased anticipated to last until 2040, at which time production would likely cease, and mine reclamation would begin. The similar remaining coal production timeline and the no additional leasing makes Alternative A from the 2024 Buffalo SEIS the best comparison for Alternative 1 in this EIS.

The 12 BFO area mines distributed 220.42 million tons of coal in 2021, Antelope Coal Mine shipped 19.40 million tons, 8.8% of the total coal shipped. Therefore, approximately 8.8% of the CAPs, precursor pollutants (ammonia [NH_3] and VOCs), and HAPs emissions and their air quality and public health effects disclosed in the 2024 BFO SEIS through 2040 could be attributed to the Antelope Coal Mine.

3.2.4 Environmental Impacts—Alternative 2

The air quality environmental impacts section is incorporated by reference from the 2024 Buffalo SEIS (Section 3.5.1.2, Section 3.5.1.3, and Alternative C). Downstream coal combustion emits CAPs, precursor pollutants (ammonia [NH_3] and VOCs), and HAPs that would impact air quality and public health. From an air quality perspective, some of the key pollutants emitted from downstream coal combustion are PM2.5, PM10, SO_2, NO_2, NH_3, and HAPs and other VOCs. From a public health perspective, some of the key pollutants emitted from downstream coal combustion are NOx, SO_2, PM2.5, and PM10-2.5 and the HAPs acrolein, arsenic,

benzo(a)pyrene, cadmium, chlorine gas, hexavalent chromium), hydrochloric acid, mercury, manganese, nickel, and dioxins, as these could have either high exposure or high toxicity.

Alternative C (Limited Leasing) from the 2024 Buffalo SEIS, incorporated here by reference (Section 3.5.1.2), analyzed coal combustion from 2023 into 2048, when the collective amount of coal leased by the 12 mines was predicted to be exhausted. The volume of coal in the Limited Leasing alternative represented the volume of coal necessary for the mines to continue mining without interruption following the end of the 2024 Buffalo SEIS's planning period in 2038 to allow for coal lease and permitting processes to be completed, approximately 10 years. The West Antelope III LBA tract is estimated to contain 441 million tons of federal coal estimated to last ten years at 2015 production rates, which with the coal production declining annually could become 12 years or longer.

The 12 BFO area mines distributed 220.42 million tons of coal in 2021, Antelope Coal Mine shipped 19.40 million tons, 8.8% of the total coal shipped. Therefore, approximately 8.8% of the CAPs, precursor pollutants (ammonia [NH_3] and VOCs), and HAPs emissions and their air quality and public health effects disclosed in the 2024 BFO SEIS Alternative C could be attributed to production of Antelope Coal Mine's current reserves and the West Antelope III LBA tract coal.

3.3 Resource Issue – Greenhouse Gas Emissions

3.3.1 Methodology

BLM reviewed the 2024 Buffalo SEIS which disclosed the greenhouse gas (GHG) related affected environment, and the environmental consequences associated with the production, transportation, and downstream combustion of BFO administered federal coal. The 2024 Buffalo SEIS estimated emissions from the production, transportation, processing, and downstream combustion of coal using EIA forecasted production rates and emission factors from the EPA and National Energy Technology Laboratory of the DOE. Descriptions of the approaches used to estimate GHG emissions are provided in Section 2.0 of the 2024 BFO SEIS's Air Resources Technical Support Document (Appendix C, 2024 BFO SEIS).[2]

3.3.2 Affected Environment

The greenhouse gas affected environment is incorporated by reference from the 2024 Buffalo SEIS, section 3.5.2.1. The 2024 Buffalo SEIS affected environment section discussed the regulatory framework and reviewed the current conditions and trends of the three main GHGs (carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O)). GHG emissions are summarized in terms of carbon dioxide equivalents (CO_2e).

All coal mined in the BFO is subbituminous which is used as fuel for steam-electric power generation. The 2024 Buffalo SEIS analysis area included all regions of the United States where coal-fired power plants received coal from mines located within the BFO. Table A1 identifies the power plants (38 within 16 states) and the amount of coal (19.4 million tons total) that they received from the Antelope Coal Mine in 2021. Figure B3 (Appendix B) displays the locations of

[2] As noted in footnote one above, this EIS contains more analysis than is required under NEPA pursuant to the Supreme Court's decision in *Seven County Infrastructure Coalition v. Eagle County* because the BLM has no authority or control over downstream actions that may produce emissions, such as the transportation, processing, and downstream combustion of coal produced from federal leases.

the 38 power plants that received coal from the Antelope Coal Mine in 2021 and the railroad network used for coal transportation.

3.3.3 Environmental Impacts - Alternative 1 (No Action)

Under the No Action Alternative, the West Antelope III lease application would be rejected and coal removal would not occur on the West Antelope III LBA tract. Mining of the presently leased reserves would continue.

The Alternative A GHG environmental impacts section is incorporated by reference from the 2024 Buffalo SEIS (Ssection 3.5.2.2 and Section 3.5.2.3). Alternative A (No Leasing) from the 2024 Buffalo SEIS analyzed coal combustion from 2023 into mid-2041, when the collective amount of coal leased by the 12 mines was predicted to be exhausted. Antelope Coal Mine is anticipated to have a similar production time frame, with sufficient coal leased anticipated to last until 2040, at which time production would likely cease, and mine reclamation would begin. The similar remaining coal production timeline and the no additional leasing makes Alternative A from the 2024 Buffalo SEIS the best comparison for Alternative 1 in this EIS.

Table 3-34 in the 2024 Buffalo SEIS displays the annual GHG emissions from mining, transportation, and downstream combustion of coal within existing federal leases from 2023 through 2041. The 12 BFO mines distributed 220.42 million tons of coal in 2021, Antelope Coal Mine shipped 19.40 million tons, 8.8% of the total coal shipped. Therefore, approximately 8.8% of the GHG emissions disclosed in the 2024 Buffalo SEIS through 2041 could be attributed to the Antelope Coal Mine.

3.3.4 Environmental Impacts - Alternatives 2 (Proposed Action)

The Alternative C GHG environmental impacts section is incorporated by reference from the 2024 Buffalo SEIS(Section 3.5.2.2 and Section 3.5.2.3). The 2024 Buffalo SEIS Alternative C (Limited Leasing) estimates coal production would continue into 2048. This is similar to the timeframe for the estimated coal within the West Antelope III LBA tract. Table 3-34 in the 2024 Buffalo SEIS displays the annual GHG emissions from mining, transportation, and downstream combustion of coal within existing federal leases from 2023 through 2041 and the total emissions for the period from 2023 through 2048. The 12 BFO area mines distributed 220.42 million tons of coal in 2021, Antelope Coal Mine shipped 19.40 million tons, 8.8% of the total coal shipped. Therefore, approximately 8.8% of the GHG emissions and the environmental change and public health effects disclosed in the 2024 Buffalo SEIS could be attributed to production of Antelope Coal Mine's current reserves and the West Antelope III LBA coal.

3.4 Resource Issue - Economics

3.4.1. Methodology

BLM reviewed U.S Census Bureau, U.S. Bureau of Labor Statistics, U.S. EIA, and Wyoming Mining Association data to identify potentially affected communities and develop background for this EIS. The BLM utilized Impact analysis for PLANning (IMPLAN), a regional input-output modeling system, to estimate economic contributions associated with the Antelope Coal Mine. IMPLAN is a static model that estimates impacts for a single moment of time based on the makeup of the economy at the time of the IMPLAN data. The changes put into the model "ripple" through the economy, with IMPLAN tracking the flow of money and goods through industries, households, and governments to determine the impacts. The Proposed Action's

impacts are expected to span Campbell and Converse Counties. The region in IMPLAN consists of 2023 data for both Counties, as it was the most current available data at the time of the analysis.

3.4.2 Affected Environment

Please refer to the 2024 Buffalo SEIS, Section 3.5.3 for additional discussion on resource economics across the total BFO coal development potential area.

The economic study area consists of Campbell and Converse Counties. Table 3.4-1 details the population and median household income for the area, with Wyoming as a baseline.

Table 3.4-1 Study Area Population and Median Household Income

	Campbell County	Converse County	Wyoming
Population (2023)	47,018	13,759	579,761
Median household Income (2023 dollars)	$95,253	$79,164	$74,815

Source: U.S. Department of Commerce. 2024.

Federal mineral royalties, severance taxes, sales and use taxes, and ad valorem taxes associated with mineral development historically comprise a significant amount of state and local revenues (WY LSO 2024). Specifically, these revenues from both federal and non-federal mineral production contribute significantly to respective General Funds for State and local government operations, public K-12 education coffers, and community colleges. Wyoming is in an additionally unique position where its tax and federal mineral royalty (FMR) revenues are supplemented with investment income derived from "legacy" benefits associated with historically garnered severance taxes, as well. Such revenue associated with Permanent Wyoming Mineral Trust Fund investment income and FMRs assist in reducing the tax burden on current Wyoming residents to support the range of government and public services residents currently receive (WY LSO 2024).

Coal Mining is a large industry within the study area, with approximately 11% of jobs in both Counties being related to Coal Mining (U.S. Department of Labor, 2025). Mining (including fossil fuels) related jobs increased from 2001 to 2010, from approximately 7,400 jobs to 10,000 jobs, then decreased over time to approximately 7,500 jobs in 2022.

The Antelope Coal Mine had 421 employees in 2023 and produced 19,254,551 tons of coal (WY Office of Mine Inspector, 2023). This is 8% of Campbell County coal production, and over 5% of Mining related jobs in the study area. This is a reduction in employees, from 537 in 2010, and production, from 35,803,519 tons in 2010 (WY Office of Mine Inspector, 2010). This reduction in production follows the trend in Wyoming, where production in 2010 was 442,061,036 tons and is down to 190,743,727 tons in 2024 (WY Office of Mine Inspector, 2023). The average ton sale price for Wyoming coal in 2023 was $15.24 (EIA 2023).

3.4.3 Environmental Impacts—Alternative 1 (No Action)

Under the No Action Alternative, no new federal coal would be leased. Existing leases for the Antelope Mine are expected to be sufficient through 2040. Based on 2023 employment, production, and average Wyoming ton price, the Antelope Coal Mine (annually) contributes $354.2 million in total output (sales volume across all industries), $231.5 million in value-added economic activity (a measure of regional gross domestic product), and $72.2 million in labor income. The mine supports 678.5 average annual employees, including:

- 421 direct jobs associated with the mine
- 125 indirect jobs from business-to-business transactions
- 133 induced jobs from spending by Mine employees

Table 3.4-2 Summary of Economic Contributions (2025 dollars)

Impact	Employment	Labor Income	Value Added	Output
Direct	421	$57,257,727.75	$197,371,615.62	$294,209,538.28
Indirect	124.78	$9,273,443.59	$20,508,925.37	$38,060,341.32
Induced	132.72	$5,710,497.21	$3,653,078.67	$21,954,616.55
Total	678.5	$72,241,668.54	$231,533,619.54	$354,224,496.15

The Antelope Coal Mine (annually) contributes $4.1 million in County taxes, $14 million in State taxes, and $22.7 million in federal taxes, for a total of $48.7 million Direct, Indirect, and Induced taxes.

Table 3.4-3 Summary of Tax Contributions (2025 dollars)

Impact	County	State	Federal	Total
Direct	$3,551,998.29	$11,975,250.57	$18,568,515.93	$40,926,618.47
Indirect	$317,883.03	$1,108,172.27	$2,533,719.75	$4,567,560.86
Induced	$262,445.79	$895,814.10	$1,584,681.58	$3,246,307.01
Total	$4,132,327.11	$13,979,236.94	$22,686,917.26	$48,740,486.34

The average wage and salary income for a mine employee, based on IMPLAN results, is $105,179. This is higher than the median wage for both Campbell and Converse counties, as well as Wyoming.

Without a new lease it is likely that the mine will slowly downsize its staff and production, resulting in a reduction of economic contributions and taxes detailed above over time.

3.4.4 Environmental Impacts—Alternative 2 (Proposed Action)

At the lease sale stage, it is unknown exactly where and when development would occur. Powder River Basin coal is thermal coal, utilized for electricity generation. Wyoming provides about 41% of all thermal coal used for electricity production, resulting in 16% of U.S. electricity in 2024 (WMA 2024). Coal production for electricity was expected to halve by 2050 (EIA 2023), however, rising electricity demand, particularly for new technologies, makes it difficult to predict future coal production. Any development would require coordination with OSMRE.

All leases require payment of an annual rental fee of not less than $3 an acre, due on the anniversary date of the lease. In addition, a 12.5% royalty must be paid on surface mined coal.[3] Severance tax for surface coal is 6% in Wyoming (Wyoming Statute § 39-14-104).

Under the proposed action, the mine would continue to contribute to the local economy with some variation based on national and global demand, as described in section 3.4.3 of this EIS.

3.5 Resource Issue – Quality of Life

3.5.1. Methodology

BLM reviewed U.S. EIA data, International Energy Agency (IEA) data, and publications to develop background for this EIS.

3.5.2 Affected Environment

The study area consists of Campbell and Converse Counties.

Access to Products
Coal is a fuel source for electrical generation. The use of low-sulfur coal from the Antelope Coal Mine allows coal fueled generating units that may otherwise be retired due to difficulties meeting air quality standards to stay compliant and continue to operate. The continued operation of these plants and the resulting deferred need for the construction of new generating capacity and associated distribution infrastructure may help keep electricity rates lower and energy more affordable for consumers.

Public Services
Public services that are supported through mineral revenue play a large role in boosting quality of life for the surrounding communities. Coal production and development contributes to federal and local revenues through royalties, rents, bonuses, severance taxes, and ad valorem taxes. In Wyoming, a portion of revenues from royalties, rents, and bonuses are returned to support state government and are distributed to the counties that generated coal production. A portion of the bonus revenue from coal leases that is returned to the state is used to fund the Wyoming School Capital Construction Account, and a portion of royalty revenues disbursed to the state goes to support public K-12 education, the University of Wyoming, and cities and towns (Wyoming Legislative Service Office 2022; Wyoming Consensus Revenue Estimating Group 2022). Severance tax revenues associated with Powder River Basin coal production have allowed the Campbell and Converse Counties to invest in public infrastructure projects and other non-mining-related ventures to maintain and improve quality of life, including educational, recreational, and social opportunities for Wyoming residents. Ad valorem tax revenues also provide a key revenue source that the counties, the municipalities, and special districts rely on to fund services such as schools, roads, hospitals, community colleges, sheriff's departments, fire departments, and other public health services.

[3] Section 50202(a) of the One Big Beautiful Bill amended Section 7(a) of the Mineral Leasing Act (30 U.S.C. § 207(a)) by providing that the royalty rate "shall be not more than 7 percent during the period that begins on the date of enactment of the [One Big Beautiful Bill Act] and ends September 30, 2034."

In addition to current energy demands, the electricity grid has capacity requirements. The electricity grid must be able to meet the maximum demand at any one time, and does this with a mixture of resources, such as peaking units.

3.5.3 Environmental Impacts—Alternative 1 (No Action)

Access to Products
Under the No Action Alternative, the West Antelope III LBA would not be granted. Thermal coal would remain a resource available while the existing leases remain, estimated to be until 2040, but would eventually see a reduction in access.

Public Services
Under No Action Alternative, coal production would be limited to existing leases, and the life of the mine would not be extended. In the absence of revising funding structures within state and local governments, this loss of mineral revenues could put strain on state and local governments' budgets. With the constriction of budgets from loss of revenue sources such as severance taxes and federal mineral royalties, public services directly funded by coal revenue, such as education, roads, and other community infrastructure, would also be impacted.

Reduced funding for public services could result in reduced access and quality of public services, which could be impactful in rural communities experiencing job loss and economic instability. During these periods of economic downturn from reduced mineral development, demand for public services may increase, and collectively, these factors can adversely affect community cohesion and the quality of life in affected communities.

3.5.4 Environmental Impacts—Alternative 2 (Proposed Action)

Access to Products
Under the Proposed Action, the West Antelope III LBA would be granted, allowing continued access to thermal coal, approximately 7 years' worth at 2015 production rates. Additional coal would be available to support the electricity market.

Public Services
Under the Proposed Action, access to coal would continue, enabling the Antelope Coal Mine to supply electricity generators and additional mineral revenue. The additional mineral revenue would support state and local government budgets and public services that are important for providing support throughout the communities. These public services that are funded by coal revenue support education, infrastructure, social programs and serval other services relating to the quality of life in Campbell and Converse counties.

3.6 Resource Issue – Cultural Resources

3.6.1. Methodology

Cultural resource information for the West Antelope III LBA was analyzed using the BLM Geographic Information System (GIS) cultural resource geodatabase, BFO cultural resource database, and Wyoming State Historic Preservation Office (SHPO) on-line database (Wyotrack).

3.6.2 Affected Environment

The cultural resource environment for the project area is discussed in the 2008 West Antelope II EIS, which is 1.5 miles south of the West Antelope III LBA tract with similar topography and habitats and is therefore incorporated by reference. The 2008 West Antelope II EIS includes a summary of the cultural history of the area from 13,000 years before present to the modern era (pg. 1-131 – 1-135) as well as the methodology for the process to fulfill the requirements of and comply with Section 106 of the National Historic Preservation Act (pg. 1-135), through SHPO consultation, Class III inventory, site recording and evaluation, site treatment plans and data recovery.

The West Antelope III LBA tract received Class III inventory over a majority of the acreage dating from 1982 – 2012 (Table A3, Appendix A). However, 221 acres have never received any Class III inventory.

Per the 2014 BLM and Wyoming SHPO Protocol, any Class III inventory older than 20 years would require a resurvey or a notification from the BLM that an inventory older than 20 years is determined to be adequate (BLM 2014b, pg. 18). The BLM does not consider any survey older than 2005 to be adequate Class III inventory.

As a result of the previous Class III inventories there are 44 cultural resource sites that have been discovered in the LBA area (Table A4, Appendix A). Three sites (48CA4434, 48CA5005, and 48CA5006) have been determined National Register of Historic Place (NRHP) eligible under Criterion D, which applies to sites that have yielded, or may be likely to yield, information important in prehistory or history.

Nine sites remain unevaluated for inclusion in the NRHP (48CA2967, 48CA2973, 48CA4337, 48CA4338, 48CA4340, 48CA4341, 48CA4342, 48CA4343, and 48CA4348) that will require a full evaluation to determine significance, including 6 that have discrepant evaluations between the BLM and Wyoming SHPO databases. Unevaluated sites are treated by regulation as if they were NRHP eligible, that is, disturbance is to be avoided until they have been evaluated for the NRHP.

The 32 other sites have been determined to be Not Eligible for inclusion in the NRHP.

3.6.3 Environmental Impacts - Alternative 1 (No Action)

Under the no action alternative, the West Antelope III LBA lease would not be issued, and no historic properties within the LBA tract would be adversely affected.

3.6.4 Environmental Impacts - Alternative 2 (Proposed Action)

BLM would issue the West Antelope III lease. In order to mine, the successful bidder would submit a proposed mine plan of operations to OSMRE, the bureau with regulatory authority over mining federal coal. BLM and OSMRE would follow the Programmatic Memorandum of Agreement Among the DOI, BLM, OSMRE, and United States Geological Survey (USGS) and The Advisory Council on Historic Preservation Regarding the federal Coal Management Program, dated 5/1/1980. OSMRE would additionally follow DOI-OSMRE Directive TSR-7, Protecting Historic Properties, dated 12/18/1987 (available at: https://www.osmre.gov/sites/default/files/pdfs/directive404.pdf).

Data recovery plans would be required for all sites determined eligible for inclusion in the NRHP following testing and consultation with SHPO. Until consultation with SHPO has occurred and agreement regarding NRHP eligibility has been reached, all sites would be protected from disturbance.

Full consultation with SHPO must be completed prior to approval of the mine plan. At that time, those sites determined to be unevaluated or eligible for inclusion in the NRHP through consultation would receive further protection or treatment. Impacts to eligible or unevaluated cultural resources would not be permitted. If unevaluated sites cannot be avoided, they must be evaluated prior to disturbance. If eligible sites cannot be avoided, a data recovery plan must be implemented prior to disturbance.

Any eligible sites in the West Antelope III LBA tract that cannot be avoided or that have not already been subjected to data recovery action would be carried forward in the mining and reclamation plan as requiring protective stipulations until a testing, mitigation, or data recovery plan is developed to address the impacts to the sites. The lead federal and state agencies would consult with Wyoming SHPO on the development of such plans and the manner in which they are carried out.

Cultural resources adjacent to the mine area may be impacted as a result of increased access to the areas. There may be increased vandalism and unauthorized collecting associated with recreational activity and other pursuits outside of but adjacent to mine permit areas. Unintended impacts to cultural resources related to increased off-road traffic during mine related activities are the most frequents impacts to cultural resources.

3.7 Resource Issue – Tribal Consultation

3.7.1. Methodology

The 2008 West Antelope II EIS 3.6.2 (Section 3.12.3) identified 24 federally recognized Tribal Nations that attach religious and cultural significance to the Powder River Basin. An initial Tribal Consultation Meeting was held in Wright, Wyoming, on August 1, 2018, with BLM, Cloud Peak Energy (Antelope Coal Mine), and Tribal Historic Preservation Officers from the Cheyenne River Sioux Tribe, Rosebud Sioux Tribe, Standing Rock Sioux Tribe, Northern Cheyenne Tribe, Spirit Lake Tribe of Fort Totten, and the Northern Arapaho Tribe. Tribal concerns were raised at that meeting that have not yet been resolved.

3.7.2 Affected Environment

Table A4 (Appendix a) of this EIS identifies the 44 known cultural resources within the West Antelope III LBA area, many of these sites are likely to be of interest to Native Americans. There are three historic properties (48CA4334, 48CA5005, and 48CA5006) and nine sites (48CA2967, 48CA2973, 48CA4337, 48CA4338, 48CA4340, 48CA4341, 48CA4342, 48CA4343, and 48CA4348) that have not yet been evaluated for inclusion in the NRHP. Sites of cultural interest include but are not limited to rock art, stone circles, stone cairns, various rock features, fortifications or battle sites, burials, or locations that are sacred or part of the oral history and heritage but have no man-made features. Identification of sacred or traditional

localities must be verified in consultation with authorized tribal representatives prior to development activities permitted with specific individual projects.

3.7.3 Environmental Impacts - Alternative 1 (No Action)

Under the no action alternative, the West Antelope III lease would not be issued, and no cultural resources within the West Antelope III LBA tract would be adversely affected. There would be no need for additional identification efforts coordinated with tribes that attach religious and cultural significance to the West Antelope III LBA tract.

3.7.4 Environmental Impacts - Alternative 2 (Proposed Action)

If a lease were to be issued, mining and other surface disturbing activities could result in the destruction of archaeological sites including sites of religious significance to the tribes listed in Table A5 (Appendix A). Following identification of potentially significant religious or cultural sites consistent with the requirements of Section 106 of the National Historic Preservation Act and determination of eligibility for inclusion in the NRHP, resolution of adverse effects must be done in consultation with authorized tribal representatives. Prior to approval of a mine permit, the OSMRE would follow guidance found in the 1980 Programmatic Memorandum of Agreement between the DOI, BLM, OSMRE, and the USGS, and the Advisory Council on Historic Preservation Regarding the Federal Coal Management Program (available at: https://www.okhistory.org/shpo/docs/PA-osmre-federalcoalmanagement.pdf), and the 2013 OSMRE Directive REG 18, Tribal Consultation and Protection of Tribal Trust Resources (available at: https://www.osmre.gov/sites/default/files/pdfs/directive979.pdf). OSMRE would consult with the 24 Tribal Nations listed in Table A5 (Appendix A) on the identification of potentially significant religious or cultural sites, determination of National Register eligibility, and resolution of adverse effects, in coordination with the BLM.

3.8 Resource Issue – Infrastructure (Transportation and Fluid Minerals)

3.8.1. Methodology

Various GIS databases including BLM's Automated Fluid Mineral Management System II (AFMMS II) and the Wyoming Oil and Gas Conservation Commission (WOGCC) database were consulted to identify existing infrastructure such as oil wells, roads, pipelines, and electrical transmission lines.

3.8.2 Affected Environment

The surface estate within the West Antelope III LBA tract is all non-federal, predominantly private (3,031 acres, 86% of the LBA tract) with one parcel of state land (477 acres, 14% of the LBA tract) (Figure B1, Appendix B). There are only two private surface owners, NTEC owns 2,548 acres and a ranch owns the remaining 483 acres of the private surface. The ranch is located in the western half of T41N R71W Sections 8 and 17 north of the State land. The coal estate is entirely federal (Figure B2). Fluid mineral ownership is predominantly federal (2,867 acres or 82%) with the 641 acres (18%) of non-federal fluid minerals split into three parcels within T41N R78W Sections 8 (79 acres), 19 (324 acres), and 29/30 (237 acres). The non-federal fluid minerals lie beneath only NTEC owned surface estate.

There are no paved roads within the West Antelope III LBA tract; however, there are several miles of narrow native surface roads most created during coal bed natural gas (CBNG) development. CBNG has declined and essentially ceased production with no presently active CBNG wells within the West Antelope III LBA area. Thirty-seven CBNG wells and facilities have been plugged, abandoned, and reclaimed. Horizontal oil and gas drilling and operations have increased, and the associated development activity includes traffic, large drilling and completion rigs, and construction of drilling pads, facilities, utilities, improved native surface roads, etc. Buried pipelines and overhead electrical distribution lines crisscross the West Antelope III LBA area connecting oil and gas facilities within and around the proposed coal lease tract. Currently there are five active horizontal wells within the West Antelope III LBA tract.

The Burlington Northern Santa Fe Railroad, Orin Line, possesses a ROW issued under the Railroad Act of 1875, crossing a small section of the West Antelope III LBA tract in the northeast corner, and encompasses 0.43 acres.

3.8.3 Environmental Impacts - Alternative 1 (No Action)

Under the No Action Alternative, the West Antelope III lease application would be rejected and coal removal would not occur on the West Antelope III LBA tract. Fluid mineral production, and other land uses with their associated infrastructure would continue uninterrupted.

3.8.4 Environmental Impacts - Alternative 2 (Proposed Action)

If the tract is leased and mined, pipelines and utility/power transmission lines that currently cross the West Antelope III LBA tract would have to be removed or relocated if they are still active. Relocation of these pipelines and utility lines would be handled according to specific agreements between the coal lessee and the pipeline and utility owners. Coal production would mine through CBNG wells effectively removing the plugged wells. Because the CBNG wells have all been reclaimed, there are no anticipated impacts from mining through the plugged wells.

Active horizontal oil and gas wells, approved applications to drill, and pending applications to drill would be affected by mining activity and might limit approved permit term timeframes, ultimate reservoir recovery, rig scheduling, infrastructure development stages, etc. The coal lessee is responsible for working out conflicts with the existing infrastructure owners. Traditionally, coal mines have been able to reach agreements with surface owners and infrastructure operators. The railroad ROW would be addressed by OSMRE and Wyoming Department of Environmental Quality (DEQ) during mine plan permitting; if the ROW area is proposed to be disturbed an agreement would need to be worked out with the railroad or the ROW area would be excluded from the mining plan.

3.9 Resource Issue – Water Resources

3.9.1. Methodology

Wyoming DEQ, U.S Geological Society, Wyoming State Engineer's Office (SEO), U.S. Fish and Wildlife Service (FWS), and BLM databases were searched for water resource data. The 2008 West Antelope II EIS was also referenced and is incorporated by reference (Section 3.5.3).

3.9.2 Affected Environment

Groundwater

Eighteen ground water monitoring wells, identified in the 2008 West Antelope II EIS and incorporated by reference (Section 4.2.4. 1, locations in Figure 3-11) provided baseline data. Additional ground water monitoring wells would be necessary for monitoring if the LBA and subsequent mining plan are authorized, as many of the monitoring wells have been decommissioned with the CBNG reclamation efforts. The West Antelope II Modification tract identified five water-bearing units potentially affected by mining: recent alluvium, Wasatch Formation overburden, Anderson coal seam, Fort Union Formation interburden (confining unit), and Canyon coal seam.

- **Recent Alluvium**: Found along Horse, Spring, and Antelope Creeks, consisting of silty to clayey sand and gravel (0–40 feet thick). Hydraulic conductivity ranges from 0.01–5.33 feetfeet/day, influenced by potential coal seam leakage. Total dissolved solids (TDS) range from 370–20,800 mg/L, suitable for livestock and wildlife.
- **Wasatch Formation**: Comprises discontinuous sandstones, siltstones, and shales with limited saturated zones. Hydraulic conductivity is 0.03–5.6 feet/day, with TDS of 380–2,610 mg/L, suitable for livestock but not domestic use.
- **Anderson Coal Seam**: Part of the regional Wyodak aquifer, with hydraulic conductivity of 2.4–14 feet/day, driven by fracturing. TDS ranges from 370–5,610 mg/L, suitable for livestock but not domestic or irrigation use.
- **Canyon Coal Seam**: Also part of the Wyodak aquifer, with hydraulic conductivity of 0.17–1.9 feet/day and TDS of 300–620 mg/L, suitable for domestic, irrigation, livestock, and wildlife use.

The subcoal Fort Union Formation, used for water supply by the Antelope Coal Mine and regional mines, is undisturbed by mining.

Surface Water

The West Antelope III LBA tract lies within the Antelope Creek drainage basin, a tributary of the Cheyenne River. Surface water includes ephemeral Horse and Spring Creeks and intermittent Antelope Creek, driven by precipitation and snowmelt. Antelope Coal Mine monitoring (station SW-2) showed Antelope Creek's average discharge at 5.6 cfs, with Total Dissolved Solids (TDS) of 1,800 mg/L and suspended sediment of 100–300 mg/L, suitable for livestock but marginal for irrigation. Spring Creek (TDS 210–8,050 mg/L) and Horse Creek (TDS 1,020–5,888 mg/L) were influenced by coalbed natural gas (CBNG) discharges, which have largely ceased since 2008, requiring reassessment for West Antelope III during the mining plan phase. A 114-acre area along Antelope Creek in the West Antelope III LBA tract is designated as a riverine floodplain under 43 CFR Subpart 3461, deemed unsuitable for leasing to protect floodplain functions.

Water Rights

Wyoming SEO records search for the 2008 West Antelope II EIS, identified 980 groundwater wells within 3 miles, with 884 owned by coal or CBNG entities and 96 for stock watering (51), domestic/stock (15), industrial (3), or monitoring/miscellaneous (27) uses. Surface water rights totaled 260 within 0.5 miles and 3 miles downstream, with 184 held by mining entities and 76

for stock, irrigation, or industrial use. A current SEO search would be conducted by OSMRE during the mining permit stage to confirm water rights.

Alluvial Valley Floors (AVFs)
Wyoming DEQ identified 10.04 acres of AVF deposits within the West Antelope III LBA tract. WDEQ would determine AVF significance to agriculture during the mine plan phase.

Wetlands
The FWS National Wetland Inventory identified 16.7 acres of freshwater emergent wetlands in the West Antelope III LBA tract primarily along Antelope, Horse, and Spring Creeks, supporting diverse vegetation and ecological functions.

3.9.3 Environmental Impacts - Alternative 1 (No Action)

The West Antelope III LBA would be denied, no federal coal would be leased. Antelope Coal Mine's existing coal leases would continue through their associated lease terms and could continue to be developed. The surface and potentially some shallow aquifers along the east side of the West Antelope III LBA tract adjacent to the Antelope Coal Mine would be disturbed to recover the coal in the existing leases. If so, the surface would be reclaimed following mining operations. Ground water beneath the West Antelope III LBA tract would experience drawdown from the adjacent mining operations.

3.9.4 Environmental Impacts - Alternative 2 (Proposed Action)

Groundwater
Mining the West Antelope III LBA would remove coal and overburden aquifers, which would be replaced by backfill with higher hydraulic conductivity (e.g., 36 feet/day at nearby mines) and initially elevated TDS, which decreases post-leaching. Drawdowns in the Anderson and Canyon coal seams may extend up to 4 miles from active pits, with maximum recorded drawdowns of 95.3 feet (Anderson) and 146.6 feet (Canyon). Post-mining backfill aquifers may require over 100 years to reach equilibrium water levels and quality. Subcoal Fort Union aquifers would remain unaffected. Additional ground water wells and updated monitoring would be required for the West Antelope III tract during mining plan permitting by Wyoming DEQ and OSMRE.

Surface Water
Mining disrupts drainages, increasing runoff and sediment, mitigated by sediment control structures (e.g., flood control reservoirs on Horse and Spring Creeks). Antelope Creek would remain largely undisturbed, except for two crossings, with a 100-feet buffer. Reclamation would restore the pre-mining channel geometry, minimizing long-term effects. The 114-acre floodplain exclusion along Antelope Creek would prevent impacts to floodplain functions. Ceased CBNG discharges since 2008 necessitate reassessment of surface water conditions during the mining plan permitting.

Water Rights
Mining may impact non-mining wells through removal or drawdown, mitigated per Wyoming regulations. A new SEO search would quantify potential impacts surrounding the West Antelope III LBA, updating the 2008 West Antelope II EIS data and would be required for the mining plan permitting by Wyoming DEQ and OSMRE.

Alluvial Valley Floors (AVFs)
Mining could disturb the 10.04 acres of AVFs in the LBA, pending Wyoming DEQ's determination of agricultural significance. A site-specific study would be part of the mining permitting process, if deemed non-significant, mining would be permitted with reclamation requirements to restore hydrologic functions. The West Antelope III LBA tract is undeveloped rangeland; therefore, it is reasonable to assume that mining would be permitted. If Wyoming DEQ were to declare the AVF significant for agriculture, the area would be excluded from mining.

Wetlands
Mining would disturb the 16.7 acres of wetlands in the West Antelope III LBA tract. The U.S. Army Corps of Engineers (USACE) would verify delineations and require replacement of jurisdictional wetlands under Section 404 of the Clean Water Act, pending regulatory review. Interim mitigation and final reclamation plans would be developed during permitting to ensure no net loss of wetland functions.

3.10 Resource Issue - Wildlife

3.10.1. Methodology

BLM reviewed geographical information system (GIS) databases developed by the BFO and Casper Field Offices (CFO), the Wyoming Game and Fish Department (WGFD), and the Wyoming Natural Diversity Database (WYNDD) (https://wyndd.org/data_explorer) to identify wildlife occupancy and suitable habitat for species of concern. Data layers reviewed included: eagle winter roost sites, big game seasonal habitats and migration routes, fish bearing streams, raptor nest sites, riparian and aquatic habitat, prairie dog colonies, sage-grouse lek sites and habitat management areas, sharp-tailed grouse lek sites, amphibian and reptile habitats, and bat roosting and foraging habitats. The U.S. Fish and Wildlife Service Information for Planning and Consultation (IPaC) website (https://ipac.ecosphere.fws.gov/) was used to identify federally threatened and endangered (T&E) species that may occur within the West Antelope III LBA tract.

3.10.2 Affected Environment

Only those species and habitats that are potentially present are discussed. Threatened and endangered species that may be present included Ute ladies' tresses orchid, monarch butterfly, and Suckley's cuckoo bumble bee. Ute ladies' tresses have been previously surveyed within the West Antelope III LBA tract, but none have been found. However, there is a known population along Antelope Creek upstream in Converse County. Monarch butterfly (proposed Threatened & proposed critical habitat) and Suckley's cuckoo bumble bee (proposed Endangered) are present within the West Antelope III LBA tract. BLM sensitive habitats and species present include fish bearing streams, prairie dog colonies, raptor nests (i.e., unknown raptors, golden eagles, ferruginous hawk, red-tailed hawk, and burrowing owl), riparian and aquatic habitats, amphibian habitat, bat roosting and foraging habitats, blowout penstemon habitat, migratory birds, mountain plover, and swift fox. Additional information on the species and habitats likely present are included in the 2014 West Antelope II EA (Section 3.1) (BLM 2014a), the 2008 West Antelope II EIS (Section 3.10 all affected environment subsections) (BLM 2008), and the OSMRE

Biological Assessment for Antelope Coal Mine, West Antelope II South Modification tract (Section 4) (OSMRE 2025a), all three are incorporated by reference.

3.10.3 Environmental Impacts—Alternative 1 (No Action)

No federal coal would be leased, and the West Antelope III LBA would be denied. Antelope Coal Mine's existing coal leases would continue through their associated lease terms and could continue to be developed. Antelope Coal Mine was estimated to have sufficient coal leased for mining to continue into at least 2040. Impacts from disruptive activities and habitat loss on the existing leases would continue through the mining and reclamation phases. There would be no physical disturbance to the West Antelope III LBA area. OSMRE and Wyoming DEQ permits require the restoration of pre-mining habitats. No unanalyzed effects would be anticipated. The 2008 West Antelope II EIS wildlife related No Action Alternative environmental consequences subsections of Section 3.10 are incorporated by reference.

3.10.4 Environmental Impacts - Alternative 2

Issuing the West Antelope III LBA tract would extend mining for a minimum of ten years. BLM's regulatory authority ends with issuance of the lease. Mine permitting is regulated by OSMRE and Wyoming DEQ, impacts to wildlife would be addressed as part of their review of the mining permit application and would include coordination with the WGFD and the FWS. OSMRE consulted with the FWS on their recent *Environmental Assessment: Antelope Mine Converse County, Wyoming Mining Plan for Federal Coal Lease WYW-177903* (OSMRE 2025b). The FWS concurred with OSMRE's determination that coal mining in the West Antelope II Modification Tract, located 1.5 miles south of the West Antelope III LBA tract, is not likely to adversely affect listed species or critical habitat. The 2008 West Antelope II EIS describes anticipated coal mining effects on wildlife; Section 3.10 is incorporated by reference (BLM 2008). The OSMRE Biological Assessment for the West Antelope II South Modification Tract (OSMRE 2025a) discusses coal mining effects specific to ESA listed and proposed species; Section 4 of the Biological Assessment is incorporated by reference.

4 Consultation and Coordination

4.1 Summary of Consultation and Coordination

BLM coordinated with the following persons and agencies during the 2025 development of this EIS.

Name	Purpose & Authorities for Consultation
Charlie Kwak U.S. Office of Surface Mining, Reclamation, and Enforcement	OSMRE has jurisdiction by law and special expertise in permitting and regulating coal mining and reclamation.
Mark Smith U.S. Environmental Protection Agency	EPA has jurisdiction by law and special expertise in environmental statutes and regulations, including but not limited to NEPA, surface water, ground water, stream and wetland systems, water quality, and air quality.

Name	Purpose & Authorities for Consultation
Nolan Rap State of Wyoming	Wyoming has jurisdiction by law and special expertise including but not limited to health, safety, welfare, custom, culture and socio-economic viability of the State
Kelley McCreery Campbell County Board of Commissioners	Campbell County has statutory responsibility including but not limited to health, safety, welfare, custom, culture and socio-economic viability of the County.
Jim Willox Converse County Board of Commissioners	Converse County has statutory responsibility including but not limited to health, safety, welfare, custom, culture and socio-economic viability of the County.
Bill Novotny Johnson County Board of Commissioners	Johnson County has statutory responsibility including but not limited to health, safety, welfare, custom, culture and socio-economic viability of the County.
Karla Schwartz Campbell County Conservation District	The Conservation District has statutory responsibility including but not limited to range improvement and stabilization, conservation of soil, water and vegetative resources, control and prevention of soil erosion and for flood prevention of the conservation, development, utilization and disposal of water with the District.

4.2 Summary of Public Participation

A Federal Register Notice of Intent was published on July 28, 2017, initiating the scoping period for an Environmental Impact Statement (EIS) for the West Antelope III LBA. A public meeting was held in Wright on September 20, 2017. The scoping period concluded on September 29, 2017.

One letter was received at the scoping meeting. In addition, six unique and independent scoping comment letters were received from an individual, two coal companies, two cooperating agencies (Campbell County and Wyoming Game and Fish Department, and one non-government organization (Powder River Basin Resource Council). There were three organized form letter campaigns from non-government organizations (Sierra Club, WildEarth Guardians, and an unidentified organization). Combined, approximately 400 form letters were received. All three form letters recommended no coal expansion because of concerns related to climate impacts. Substantive issues raised by the unique letters included:

- Reviewing renewable energy sources like solar and wind for electrical generation.
- Public health effects.
- Downstream combustion air effects.
- Effects to wildlife.

The scoping reports, Draft SEIS comment analysis reports, protest response reports, and Governor consistency review responses and appeal responses from the 2019 and 2024 Buffalo Approved RMP Amendments were reviewed to identify potential resource issues.

No additional public comment periods were provided after the 2017 scoping period.

5 List of Preparers

Name/Title	Role
Thomas Bills Planning & Environmental Coordinator	Team lead
Shari Ketcham Wildlife Biologist	Wildlife Resources
Ardeth Hahn Archaeologist	Tribal Consultation National Historic Preservation Act
Clint Crago Archeologist	Cultural Resources National Historic Preservation Act
Andrew McLean Geologist	Solid Minerals
Brent Sobotka Hydrologist	Water Resources
Will Robbie Supervisory Petroleum Engineer	Fluid minerals
Charlotte Darling Rangeland Management Specialist	Vegetation
Rebecca Ramirez Realty Specialist	Infrastructure and Transportation
Christopher Toalson Economist	Economics Quality of Life
Christopher Durham Assistant Field Manager-Resources	Reviewer
Casey Friese Exercising the designated authority of Field Manager	Recommending Official
Todd Yeager Exercising the designated authority of District Manager	Recommending Official

6 References

Shell Valley Consulting Associate, INC. (SVC). 2018. Antelope Coal LLC West Antelope 3 LBA Vegetation Types, Trees, Sensitive Plants, T&E Species, Weeds.

U.S. Bureau of Land Management (BLM). 2008. Final Environmental Impact Statement for the West Antelope II Coal Lease Application: WYW163340. https://eplanning.blm.gov/eplanning-ui/project/73240/510

U.S. BLM. 2014a. Environmental Assessment West Antelope II South Lease Modification: WYW 177903. Available at: https://eplanning.blm.gov/eplanning-ui/project/67029/510

U.S. BLM & Wyoming State Historic Preservation Office. 2014b. *State Protocol Agreement between the Wyoming Bureau of Land Management and the Wyoming State Historic Preservation Office*. U.S. Department of the Interior. https://www.blm.gov/sites/blm.gov/files/documents/files/WY_Cultural_Resources_Protocol_2014.pdf

U.S. BLM. 2021. Approved Record Title Assignment: Operator of Logical Mining Units Changed. Letter from BLM Wyoming State Office to Navajo Transitional Energy Company.

U.S. BLM. 2024. Buffalo Field Office Final Supplemental Environmental Impact Statement and Proposed Resource Management Plan Amendment. https://eplanning.blm.gov/eplanning-ui/project/2021239/510

U.S. Department of Commerce. 2024. Census Bureau, American Community Survey Office, Washington, D.C., as reported in Headwaters Economics' Economic Profile System

U.S. Department of Labor. 2025. Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Washington, D.C., as reported in Headwaters Economics' Economic Profile System

U.S. Energy Information Administration (EIA). 2022. Coal Data Browser. https://www.eia.gov/coal/data/browser/.

U.S. EIA. 2023. Annual Energy Outlook 2023.

U.S. Fish and Wildlife Service. (FWS) Information for Planning and Consultation (IPAC). Website. https://ipac.ecosphere.fws.gov/

U.S. Office of Surface Mining, Reclamation and Enforcement (OSMRE). 2025a. Biological Assessment for Antelope Mine, West Antelope II South Modification tract, Mining Plan Modification for Federal Coal Lease WYW-177903.

U.S. OSMRE. 2025b. Environmental Assessment: Antelope Mine Converse County, Wyoming Mining Plan for Federal Coal Lease WYW-177903

Wyoming Legislative Service Office (WY LSO). 2024. 2023 Budget Fiscal Data Book. Available at: https://wyoleg.gov/Databook/Historical/2025%20Data%20Book.pdf

Wyoming Mining Association (WMA), 2024. 2024-2025 Concise Guide to Wyoming Coal.

Wyoming, State of. Department of Employment. Office of Mine Inspector. 2010. Annual Report of the State Inspector of Mines.

Wyoming, State of. Department of Employment. Office of Mine Inspector. 2023. Annual Report of the State Inspector of Mines.

7 List of Appendices

Appendix A - Tables

Appendix B - Figures

Appendix A: Tables

Table A2. 2021 Distribution of Produced Coal from Antelope Coal Mine.

State	Power Plant	Million Tons Delivered	State	Power Plant	Million Tons Delivered
AL	James H Miller Jr	2.251512	MO	Labadie	0.359173
AR	White Bluff	0.642761	MO	Meramec	0.031462
AR	Independence Electric Station	0.355613	MO	Sioux	0.804467
AR	Plum Point Energy Station	0.884360	MO	Rush Island	0.770057
AZ	Coronado	0.255457	MO	John Twitty Energy Center	1.315644
AZ	Springerville	0.734254	OK	Hugo	0.049415
CO	Rawhide	1.026291	TN	Kingston	0.788351
CO	Ray D Nixon	0.098939	TX	Coleto Creek	0.544120
IA	Prairie Creek	0.073361	TX	Fayette Power Project	0.459274
IA	Walter Scott Jr Energy Center	1.237163	WI	South Oak Creek	0.415327
IA	George Neal North	0.052880	WI	Weston	0.482561
IA	Louisa	0.589489	WI	Elm Road Generating Station	0.481531
IA	George Neal South	0.105785	WY	Laramie River Station	0.991769
IL	Joppa Steam	0.298928		**Total**	**19.396339**
IL	Newton	0.097247			
KY	Shawnee	0.839658			
KY	Calvert City	0.188891			
KY	Four Rivers Terminal	0.237796			
LA	Brame Energy Center	0.226370			
MI	Dan E Karn	0.169596			
MI	J H Campbell	0.301626			
MI	Monroe (MI)	0.803092			
MI	Trenton Channel	0.078339			
MN	Clay Boswell	0.105884			

Table A3 - West Antelope III LBA Class III block cultural inventories

Fieldwork Year	Report Title	Agency ID #/WYCRO #
1982	Petrel Fed 1	None/DBI_WY_1999_7696
1985	Litton Fed 1	None/DBI_WY_1999_11150
1994	Antelope Off-Lease Drill Holes	None/DBI_WY_1999_17884
1995	Fiddleback Ranch Land Exchange	USDA FS/None
1995-2004	Powder River Coal Company, Track L (Phase II) and Track M – compilation of studies	None/DBI_WY_2005_4237
1997	Sapelo Federal No.8-32	65980032/DBI_WY_1999_19389
1997	Federal 21-17 Well & Access	65980047/DBI_WY_1999_19079
2001	Class III Inventory of Antelope Coal Company's West Antelope LBA Area	70020197/DBI_WY_2002_3031
2002	Kane Fed. Proj. Dilts Lease Cbm	70030026/DBI_WY_2002_4596
2002	Kane Fed. Proj. Litton Lease Cbm	70020207/DBI_WY_2002_4595
2003	Antelope Federal Coalbed Methane Plan of Development	70030077/DBI_WY_2004_2924
2003	Antelope I Addendum Cbm	70040009/DBI_WY_2003_4497
2003	Antelope II POD	70050071/DBI_WY_2003_4504
2004	Rochelle Hills Coalbed Methane POD	70040133/DBI_WY_2004_3480
2004	East Litton Pod Addition	None/DBI_WY_2005_5426
2005	W. Antelope II & Off Lease Drill	None/DBI_WY_2005_2801
2012	A Class III Cultural Resource Inventory Of The Antelope Mine Coal Exploration License, Campbell And Converse Counties, Wyoming	70120023/DBI_WY_2012_259
2010	Class III Cultural Resources Inventory of Yates Petroleum Corporation's Mosquito Federal #5-H Well, T41N, R71W, Sections 30 and 31, Converse County, Wyoming	62-2011-0017/DBI_WY_2011_10
2012	A Class III Cultural Resource Inventory of the Crossbow 224-30H and 059-30H Well Pad and Access Road Project, Converse County, Wyoming	62-2013-0015/DBI_WY_2012_787

Table A4 - West Antelope III LBA cultural resource sites

Site number	Site type	Eligibility	Notes on Eligibility
48CA2967	Prehistoric	Unevaluated	Per agency signature
48CA2968	Prehistoric	Not Eligible	No agency signature
48CA2969	Prehistoric	Not Eligible	No agency signature
48CA2970	Prehistoric	Not Eligible	Agency determined
48CA2971	Prehistoric	Not Eligible	Agency determined
48CA2972	Historic	Not Eligible	Agency determined
48CA2973	Multicomponent	Unevaluated	No agency signature
48CA2974	Prehistoric	Not Eligible	Agency determined
48CA2975	Multicomponent	Not Eligible	Agency determined
48CA2976	Multicomponent	Not Eligible	Agency determined
48CA3926	Historic	Not Eligible	Agency determined
48CA4311	Historic	Not Eligible	Agency determined
48CA4333	Prehistoric	Not Eligible	Agency determined
48CA4334	Prehistoric	Eligible	Agency determined
48CA4335	Historic	Not Eligible	Agency determined
48CA4336	Prehistoric	Not Eligible	Agency determined
48CA4337	Prehistoric	Unevaluated	Per agency signature – Eligible in Wyotrack
48CA4338	Prehistoric	Unevaluated	Per agency signature
48CA4340	Prehistoric	Unevaluated	Per agency signature – Eligible in Wyotrack
48CA4341	Prehistoric	Unevaluated	Per agency signature – Eligible in Wyotrack
48CA4342	Prehistoric	Unevaluated	Per agency signature – Eligible in Wyotrack
48CA4343	Prehistoric	Unevaluated	Per agency signature – Eligible in Wyotrack
48CA4344	Prehistoric	Not Eligible	Agency determined
48CA4345	Historic	Not Eligible	Agency determined
48CA4346	Prehistoric	Not Eligible	Agency determined
48CA4347	Prehistoric	Not Eligible	Agency determined
48CA4348	Prehistoric	Unevaluated	Per agency signature – Eligible in Wyotrack
48CA4349	Prehistoric	Not Eligible	Agency determined
48CA4350	Prehistoric	Not Eligible	Agency determined
48CA4351	Prehistoric	Not Eligible	Agency determined
48CA4720	Historic	Not Eligible	Agency determined
48CA5000	Historic	Not Eligible	Agency determined
48CA5004	Multicomponent	Not Eligible	Agency determined
48CA5005	Multicomponent	Eligible	Agency determined
48CA5006	Multicomponent	Eligible	Agency determined
48CA5007	Prehistoric	Not Eligible	Agency determined
48CA5008	Multicomponent	Not Eligible	Agency determined
48CA5009	Multicomponent	Not Eligible	Agency determined
48CA5015	Prehistoric	Not Eligible	Agency determined
48CA5276	Historic	Not Eligible	Agency determined
48CA5296	Historic	Not Eligible	Agency determined
48CO885	Multicomponent	Not Eligible	Agency determined
48CO2869	Prehistoric	Not Eligible	Agency determined
48CO2886	Prehistoric	Not Eligible	Agency determined

Table A5. Federally Recognized Tribal Nations which attach religious and cultural significance to the Powder River Basin.

Apache Tribe of Oklahoma
Comanche Tribe of Oklahoma
The Crow Tribe of Indians
Northern Cheyenne Tribe
Eastern Shoshone Tribe
Northern Arapaho Tribe
Fort Peck Assiniboine and Sioux Tribes
Standing Rock Sioux Tribe
Cheyenne River Sioux Tribe
Crow Creek Sioux Tribe
Lower Brule Sioux Tribe
Oglala Sioux Tribe
Rosebud Sioux Tribe
Sisseton Wahpeton Oyate of the Lake Traverse Reservation
Yankton Sioux Tribe
Spirit Lake Tribe of Fort Totten
Fort Belknap Indian Community
Three Affiliated Tribes – Mandan, Hidatsa and Arikara Nation
Cheyenne and Arapaho Tribes of Oklahoma
Kiowa Tribe of Oklahoma
Pawnee Nation of Oklahoma
Blackfeet Nation
Chippewa Cree Tribe
Ponca Tribe of Nebraska

Table A6. Regulatory Compliance, Mitigation and Monitoring Measures for Surface Coal Mining Operations Required by SMCRA and Wyoming State Law.

Regulatory Resource	Compliance or Mitigation Required	Monitoring[1]
Topography & Physiography	Restoring to approximate original contour or other approved topographic configuration.	WDEQ/LQD checks as-built vs. approved topography with each annual report.
Geology & Minerals	Identifying & selectively placing or mixing chemically or physically unsuitable overburden materials to minimize adverse effects to vegetation or groundwater.	WDEQ/LQD requires monitoring in advance of mining to detect unsuitable overburden.
Soil	Salvaging soil suitable to support plant growth for use in reclamation; Protecting soil stockpiles from disturbance and erosional influences; Selectively placing at least four feet of suitable overburden on the graded backfill surface below replaced topsoil to meet guidelines for vegetation root zones.	Monitoring vegetation growth on reclaimed areas to determine need for soil amendments; Sampling regraded overburden for compliance with root zone criteria.

[1]These requirements, mitigation plans, and monitoring plans are in place for the existing Antelope Coal Mine in its current approved mining and reclamation plan (the No Action Alternative). If the West Antelope III LBA tract were leased, these requirements, mitigation plans, and monitoring plans would be part of a mining plan revision covering the West Antelope III LBA tract that must be approved before mining can occur on the tract under the Proposed Action or Action Alternatives.

Regulatory Resource	Compliance or Mitigation Required	Monitoring[1]
Air Quality	Dispersion modeling of mining plans for annual average particulate pollution impacts on ambient air; Using particulate pollution control technologies; Using work practices designed to minimize fugitive particulate emissions; Using EPA- or state-mandated BACT, including: • Fabric filtration or wet scrubbing of coal storage silo and conveyor vents, • Watering or using chemical dust suppression on haul roads and exposed soils, • Containment of truck dumps and primary crushers, • Covering of conveyors, • Prompt revegetation of exposed soils • High efficiency baghouse dust collection systems or PECs, or atomizers/foggers on the crusher, conveyor transfer, storage bin and train loadout, meeting a standard of 0.01 grains per dry standard cubic foot (dscf) of exit volume, • Watering of active work areas, • Reclamation plan to minimize surface disturbances subject to wind erosion, • Paving of access roads, • Haul truck speed limits, • Limited material drop heights for shovels and draglines.	On-site air quality monitoring for PM10 and/or TSP; Off-site ambient monitoring for PM10 and/or TSP; On-site compliance inspections.
Surface Water	Building and maintaining sediment control ponds or other devices during mining; Restoring approximate original drainage patterns during reclamation; Restoring stock ponds and playas during reclamation.	Monitoring storage capacity in sediment ponds; Monitoring quality of discharges; Monitoring streamflow and water quality.
Groundwater Quantity	Evaluating cumulative impacts to water quantity associated with proposed mining; Replacing existing water rights that are interrupted, discontinued, or diminished by mining with water of equivalent quantity.	Monitoring wells track water levels in overburden, coal, interburden, underburden, and backfill.

Regulatory Resource	Compliance or Mitigation Required	Monitoring[1]
Groundwater Quality	Evaluating cumulative impacts to water quality associated with proposed mining; Replacing existing water rights that are interrupted, discontinued, or diminished by mining with water of equivalent quality.	Monitoring wells track water quality in overburden, coal, interburden, underburden, and backfill.
Alluvial Valley Floors	Identifying all AVFs that would be affected by mining; Determining significance to agriculture of all identified AVFs affected by mining (WDEQ); Protecting downstream AVFs during mining; Restoring essential hydrologic function of all AVFs affected by mining.	Monitoring to determine restoration of essential hydrologic functions of any declared AVF.
Wetlands	Identifying all wetlands that would be affected by mining; Identifying jurisdictional wetlands (COE); Replacing all jurisdictional wetlands that would be disturbed by mining; Replacing functional wetlands as required by surface managing agency, surface landowner, or WDEQ/LQD.	Monitoring of reclaimed wetlands using same procedures used to identify premining jurisdictional wetlands.
Vegetation	Permanently revegetating reclaimed areas according to a comprehensive revegetation plan using approved permanent reclamation seed mixtures consisting predominantly of species native to the area; Reclaiming 20% of reclaimed area with native shrubs at a density of one per square meter; Controlling erosion on reclaimed lands prior to seeding with final seed mixture using mulching, cover crops, or other approved measures; Chemically and mechanically controlling weed infestation; Direct hauling of topsoil; Selectively planting shrubs in riparian areas; Planting sagebrush; Creating depressions and rock piles; Using special planting procedures around rock piles; Posting reclamation bond covering the cost of reclamation	Monitoring of revegetation growth & diversity until release of final reclamation bond (minimum 10 years); Monitoring of erosion to determine need for corrective action during establishment of vegetation; Use of controlled grazing during revegetation evaluation to determine suitability for post-mining land uses.

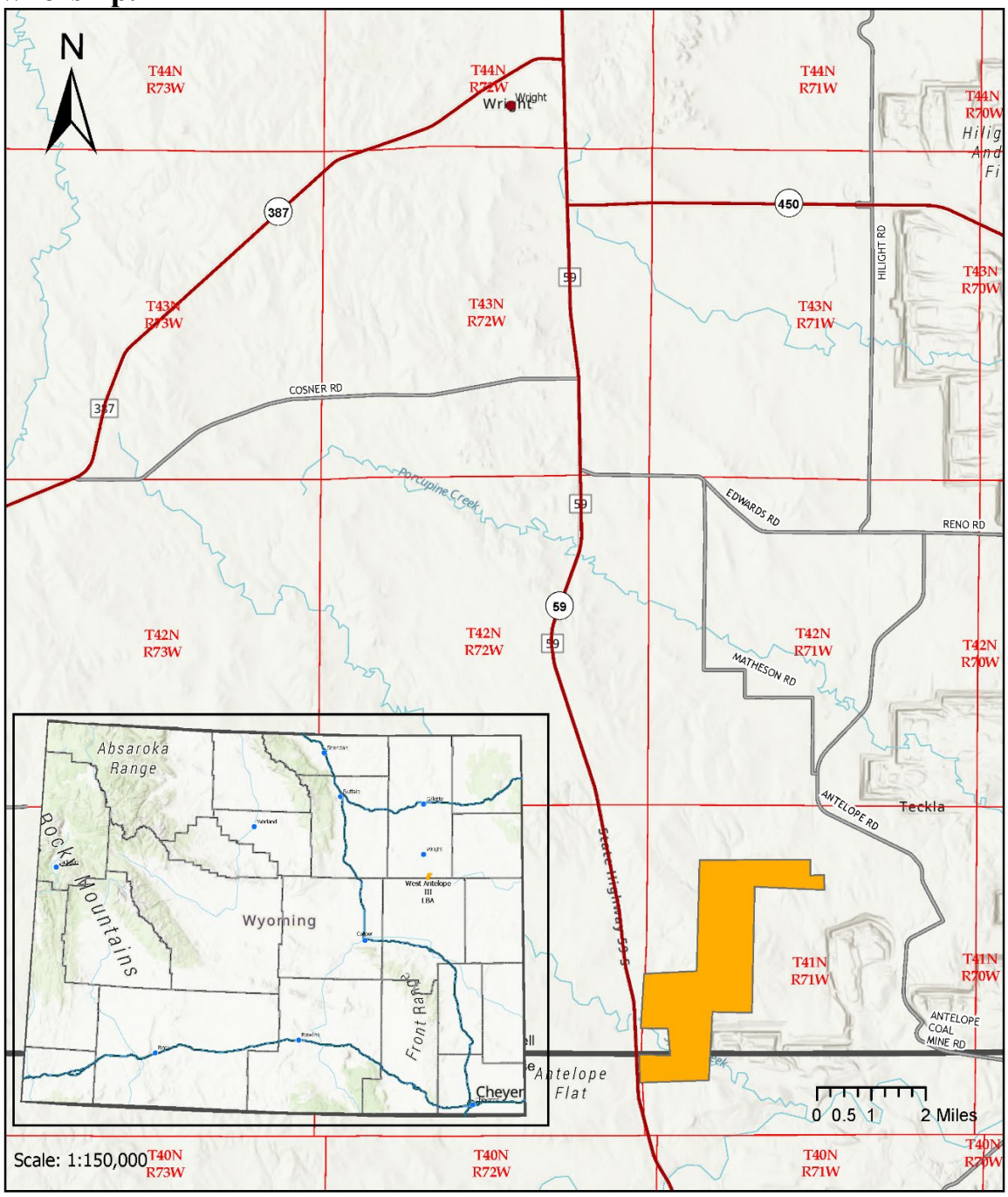
Regulatory Resource	Compliance or Mitigation Required	Monitoring[1]
Wildlife and Sensitive Species	Restoring pre-mining topography to the maximum extent possible; Planting a diverse mixture of grasses, forbs, and shrubs in configurations beneficial to wildlife; Designing fences to permit wildlife passage; Raptor-proofing power transmission poles; Using raptor safe power lines; Creating artificial raptor nest sites; Increasing habitat diversity by creating rock clusters and shallow depressions on reclaimed land; Cottonwood plantings along reclaimed drainages; Replacing drainages, wetlands, and AVFs disturbed by mining; Reducing vehicle speed limits to minimize mortality; Instructing employees not to harass or disturb wildlife; Following approved raptor mitigation plans; Avoiding bald eagle disturbance; Restoring bald eagle foraging areas disturbed by mining; Restoring mountain plover habitat disturbed by mining; Surveying for mountain plover; Surveying for black-tailed prairie dog.	Baseline and annual wildlife monitoring surveys; Monitoring for Migratory Bird Species of Management Concern in Wyoming.
Threatened, Endangered, Proposed, and Candidate Species	Surveying for Ute ladies'-tresses; Searching for black-footed ferrets if prairie dog colonies are on or move onto tract; surveys. Proposed, Same as Wildlife Resource and Sensitive Species above.	Baseline and annual wildlife monitoring
Land Use	Suitably restoring reclaimed area for historic uses (grazing and wildlife);	Monitoring of controlled grazing prior to bond release evaluation.

Regulatory Resource	Compliance or Mitigation Required	Monitoring[1]
Cultural Resources	Conducting Class I & III surveys to identify cultural properties on all state and federal lands and on private lands affected by federal undertakings; Consulting with SHPO to evaluate eligibility of cultural properties for the NRHP; Avoiding or recovering data from significant cultural properties identified by surveys, according to an approved plan; Notifying appropriate federal personnel if historic or prehistoric materials are uncovered during mining operations; Instructing employees of the importance of and regulatory obligations to protect cultural resources.	Monitoring of mining activities during topsoil stripping; cessation of activities and notification of authorities if unidentified sites are encountered during topsoil removal.
Native American Concerns	Notifying Native American tribes with known interest in this area of leasing action and request for help in identifying potentially significant religious or cultural sites.	No specific monitoring program.
Paleontological Resources	Notifying appropriate federal personnel if potentially significant paleontological sites are discovered during mining.	No specific monitoring program.
Visual Resources	Restoring landscape character during reclamation through return to approximate original contour and revegetation with native species.	No specific monitoring program.
Noise	Protecting employees from hearing loss.	MSHA inspections.
Transportation Facilities	Relocating existing pipelines, if necessary, in accordance with specific agreement between pipeline owner and coal lessee.	No specific monitoring program.
Socioeconomics	Paying royalty and taxes as required by federal, state, and local regulations. No mitigation measures are proposed.	Surveying and reporting to document volume of coal removed.

Regulatory Resource	Compliance or Mitigation Required	Monitoring[1]
Hazardous & Solid Waste	Disposing of solid waste and sewage within permit boundaries according to approved plans; Storing and recycling waste oil; Maintaining of files containing Material Safety Data Sheets for all chemicals, compounds, and/or substances used during course of mining; Ensuring that all production, use, storage, transport, and disposal of hazardous materials is in accordance with applicable existing or hereafter promulgated federal, state, and government requirements; Complying with emergency reporting requirements for releases of hazardous materials as established in CERCLA, as amended; Preparing and implementing spill prevention control and countermeasure plans, spill response plans, inventories of hazardous chemical categories pursuant to Section 312 of SARA, as amended; Preparing emergency response plans.	No specific monitoring other than required by these other regulations and response plans.

Appendix B: Figures

Figure B1: West Antelope III Lease by Application Tract and Surface Ownership.



No warranty is made by the Bureau of Land Management to the accuracy, reliability, or completeness of this data for individual use or aggregate use with other data. BLM data may be updated without notice.

Map Create Date: 7/25/2025 Map Created By: Buffalo BLM GIS mcorey Credits: BLM Corporate Data Projected Coordinate System: NAD 1983 UTM Zone 13

Figure B2: Federal Mineral Ownership within the West Antelope III LBA Tract.

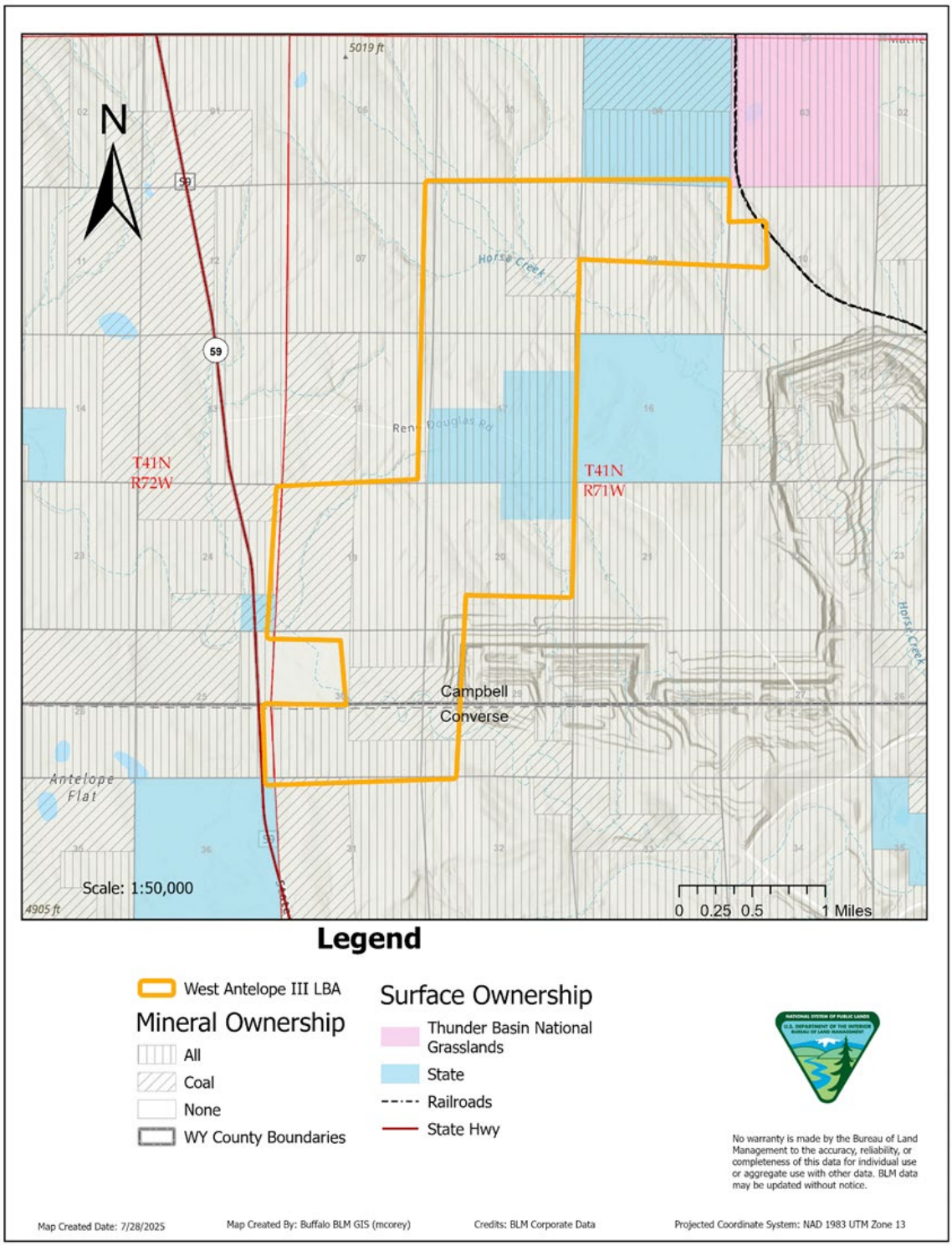


Figure B3: 2021 Distribution of Coal from the Antelope Coal Mine to 38 Power Plants in 16 States.