1.0 INTRODUCTION

This Environmental Impact Statement (EIS)[1] analyzes the environmental impacts of leasing six tracts of federal coal reserves adjacent to the Black Thunder, Jacobs Ranch, and North Antelope Rochelle mines. All are operating surface coal mines in the southern Powder River Basin (PRB) of Wyoming, near the town of Wright. The operators of the Black Thunder, Jacobs Ranch, and North Antelope Rochelle mines filed four applications to lease the six tracts of federal coal included in maintenance coal tracts under the regulations at 43 CFR 3425, Leasing On Application. The Division of Minerals and Lands at the Bureau of Land Management (BLM) Wyoming State Office reviewed all four applications and determined that the lease applications met the regulatory requirements for Lease by Applications (LBAs). These maintenance coal tracts, which would continue or extend the life of the applicant mines, are referred to as the North Hilight Field LBA Tract, the South Hilight Field LBA Tract, the West Hilight Field LBA Tract, the West Jacobs Ranch LBA Tract, the North Porcupine LBA Tract, and the South Porcupine LBA Tract. Figure 1-1 shows the six LBA tracts as applied for, other currently pending LBA tracts, and the existing federal leases including previously leased LBA tracts in the Wyoming PRB.

In addition to this EIS, a separate document entitled *Supplementary Information on the Affected Environment in the General Analysis Areas for the Wright Area Coal Lease Applications EIS* has been prepared. The supplementary document provides detailed site-specific information on the existing environment associated with the North Hilight Field, South Hilight Field, West Hilight Field, West Jacobs Ranch, North Porcupine, and South Porcupine LBA Tracts. These six tracts of federal coal reserves are located adjacent to operating mines in the southern Powder River Basin near Wright, Wyoming. Copies of the supplementary information document are available upon request and can be viewed at the BLM offices in Casper and Cheyenne.

1.1 Background

On October 7, 2005, Ark Land Company (ALC) filed an application with the BLM for federal coal reserves in two separate tracts located north and southwest of and immediately adjacent to the Black Thunder Mine in Campbell County, Wyoming. The tracts are referred to as the North Hilight Field and South Hilight Field LBA Tracts. The North Hilight Field tract is located approximately 5.5 miles east of Wright, Wyoming and the South Hilight Field tract is located approximately 7 miles southeast of Wright (Figure 1-1). The federal coal reserves were applied for as maintenance tracts for the Black Thunder Mine. BLM determined that the two tracts in the application would be processed separately and, if the decision is made to conduct a lease sale, would be offered for sale separately. ALC is a wholly owned subsidiary of Arch Coal,

[1] Refer to page xxvii for a list of abbreviations and acronyms used in this document.

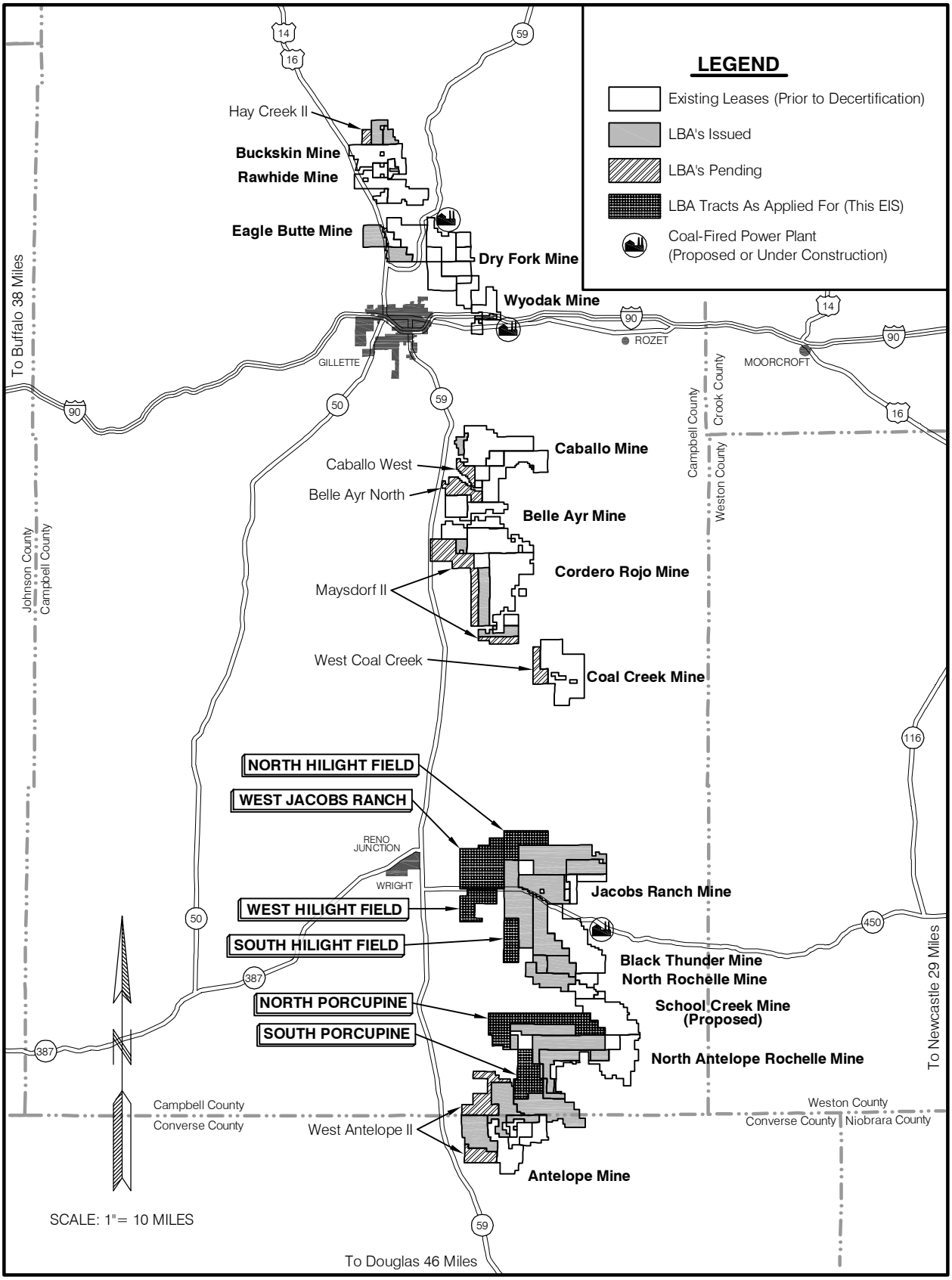

Figure 1-1. General Location Map with Federal Coal Leases and LBA Tracts.

Inc. The Black Thunder Mine is operated by Thunder Basin Coal Company (TBCC), a subsidiary of Arch Western Resources, LLC. In this EIS, ALC is referred to as the applicant and TBCC is referred to in discussions of mine operations. ALC's coal lease application was assigned case file numbers WYW164812 (North Hilight Field) and WYW174596 (South Hilight Field).

On January 17, 2006, ALC filed an application with the BLM for federal coal reserves in a tract located west of and immediately adjacent to the Black Thunder Mine in Campbell County, Wyoming, approximately 4 miles southeast of Wright, Wyoming (Figure 1-1). The tract, which is referred to as the West Hilight Field LBA Tract, was assigned case file number WYW172388. The federal coal reserves were applied for as a maintenance tract for the Black Thunder Mine.

On March 24, 2006, Jacobs Ranch Coal Company (JRCC) filed an application with the BLM for federal coal reserves in a tract located approximately 0.75 mile west of the Jacobs Ranch Mine in Campbell County, Wyoming. The tract, which is referred to as the West Jacobs Ranch LBA Tract, is located approximately 2.5 miles east of Wright, Wyoming (Figure 1-1). JRCC's coal lease application was assigned case file number WYW172685. The federal coal reserves were applied for as a maintenance tract for the Jacobs Ranch Mine. On October 1, 2009, the Jacobs Ranch Mine was acquired by Arch Coal, Inc. ALC intends to consolidate the permits for the Jacobs Ranch Mine and the Black Thunder Mine in order to integrate the two separate mining operations. In this EIS, the applicant for the West Jacobs Ranch LBA Tract will be referred to as ALC. It is assumed that ALC would be the successful bidder, and that the West Jacobs Ranch tract would be mined as a maintenance lease for the existing Jacobs Ranch Mine.

On September 29, 2006, BTU Western Resources, Inc. (BTU) filed an application with the BLM for federal coal reserves in three separate tracts located west, northwest, and north of and immediately adjacent to the North Antelope Rochelle Mine in Campbell County, Wyoming. The two tracts on the north side of the mine are referred to as the North Porcupine LBA Tract, and the tract on the west side of the mine is referred to as the South Porcupine LBA Tract.

On October 12, 2007, BTU filed a request with the BLM to modify the Porcupine LBA Tract configuration to increase the lease area and coal volume. The North Porcupine LBA Tract, which is located approximately 12 miles southeast of Wright, Wyoming, was combined into one tract and its size was increased with additional lands. The South Porcupine LBA Tract, which is located approximately 14 miles southeast of Wright, was also increased in size with additional lands (Figure 1-1). BLM reviewed the modified tract configuration and notified the company that their application had been modified. The federal coal reserves were applied for as maintenance tracts for the North Antelope Rochelle Mine. BLM determined that the two tracts in the application would be processed separately and, if the decision is made to

conduct a lease sale, would be offered for sale separately. The North Antelope Rochelle Mine is operated by Powder River Coal, LLC (PRC), a subsidiary of Peabody Energy Corporation (PEC). BTU is also a subsidiary of PEC, and in this EIS, BTU is referred to as the applicant and PRC is referred to in discussions of mine operations. BTU's coal lease application was assigned case file numbers WYW173408 (North Porcupine) and WYW176095 (South Porcupine).

These federal coal lands are located within the Powder River Federal Coal Region, which was decertified in January, 1990. Although the Powder River Federal Coal Region is decertified, the Powder River Regional Coal Team (PRRCT), a federal/state advisory board established to develop recommendations concerning management of federal coal in the region, has continued to meet regularly and review all federal lease applications in the region. The PRRCT reviewed the ALC and JRCC maintenance coal lease applications (case file numbers WYW164812, WYW174596, WYW172388, and WYW172685) at a public meeting held on April 19, 2006 in Casper, Wyoming. The PRRCT reviewed the BTU maintenance coal lease application (case file numbers WYW173408 and WYW176095) at a public meeting held on January 18, 2007 in Casper, Wyoming. The PRRCT recommended that the BLM process the coal lease applications at those respective meetings.

In order to process an LBA, the BLM must evaluate the quantity, quality, maximum economic recovery, and fair market value of the federal coal and fulfill the requirements of the National Environmental Policy Act of 1969 (NEPA) by evaluating the environmental impacts of leasing the federal coal. BLM does not authorize mining by issuing a lease for federal coal, but the impacts of mining the coal are considered in this EIS because it is a logical consequence of issuing a maintenance lease to an existing mine.

The BLM determined that one EIS would be prepared to evaluate the environmental impacts that would be expected to occur if leases are issued for the North Hilight Field, South Hilight Field, West Hilight Field, West Jacobs Ranch, North Porcupine, and South Porcupine LBA Tracts. This EIS has been prepared to evaluate the site-specific and cumulative environmental impacts of leasing and developing the federal coal included in these application areas. For each of the six LBA tracts, BLM will use the analysis in this EIS to decide whether to hold a competitive, sealed-bid lease sale for the tract as applied for, hold a competitive, sealed-bid lease sale for the modified tract, or reject the lease application and not offer the tract for sale at this time. A separate Record of Decision (ROD) will be issued for each LBA tract. If the decision is made to offer the tract for lease, then a separate sale would be held for each tract. The bidding at the sale would be open to any qualified bidder; it would not be limited to the applicant.

If a lease sale is held, each lease would be issued to the highest bidder at the sale if a federal sale panel determines that the high bid meets or exceeds the fair market value of the coal as determined by BLM's economic evaluation.

Also, before the lease could be issued to the high bidder, the United States Department of Justice would need to determine that there would be no antitrust violations.

In return for receiving a lease, a lessee must pay the federal government a bonus equal to the amount it bids at the time the lease sale is held (the bonus can be paid in five yearly installments), make annual rental payments to the federal government, and make royalty payments to the federal government when the coal is mined. Prior to 2008, federal bonus, rental, and royalty payments were equally divided with the state in which the lease was located. However, in fiscal year 2008, Congress decreased the state's royalty share to 48 percent, and increased the federal government's share to 52 percent. The percentage of federal bonus, rental, and royalty payments distribution reverted back to 50 percent/50 percent at the end of the 2008 fiscal year.

Other agencies may use this analysis to make decisions related to leasing and mining the federal coal in these tracts. Cooperating agencies on this EIS include: Office of Surface Mining Reclamation and Enforcement (OSM), U.S. Department of Agriculture-Forest Service (USFS), Wyoming Department of Transportation (WYDOT), Wyoming Department of Environmental Quality (WDEQ) Air Quality Division (AQD) and WDEQ Land Quality Division (LQD), and the Converse County Board of Commissioners. OSM has primary responsibility to administer federal programs that regulate surface coal mining operations and will use this EIS to make decisions related to the approval of the Mineral Leasing Act of 1920 (MLA) mining plan if the tracts are leased. If USFS lands are included in a tract, USFS must consent to lease the federal coal that is located on USFS-administered lands before BLM can make a decision to hold a federal coal lease sale. WYDOT's responsibilities include planning and supervising road improvement work, maintaining roads, and supporting airports and aviation in the state. WDEQ has entered into a cooperative agreement with the Secretary of the Interior to regulate surface coal mining operations on federal and non-federal lands within the state of Wyoming.

Since decertification of the Powder River Federal Coal Region in 1990, 20 federal coal leases have been sold at competitive sealed-bid sales and three exchanges of federal coal in the Wyoming portion of the Powder River Federal Coal Region have been completed (BLM 2009a). Each mine with an application being considered in this EIS has previously been issued a maintenance coal lease since decertification (Table 1-1 and Figure 1-1).

Table 1-2 summarizes the 12 LBAs that are currently pending (BLM 2009a).

1.1.1 North and South Hilight Field LBA Tracts

As applied for, the Hilight Field LBA Tract, adjacent to the Black Thunder Mine, consisted of two separate blocks of federal coal and included a total of approximately 4,590.19 acres with an estimated 477.0 million tons of

Table 1-1. Leases Issued and Exchanges Completed Since Decertification, Powder River Basin, Wyoming.

Leases Issued			
LBA Name (Lease Number) **Applicant Mine** **Current Lessee** **Effective Date**	**Acres Leased[1]**	**Mineable Tons of Coal[1]**	**Successful Bid**
Jacobs Ranch (WYW117924) Jacobs Ranch Mine Thunder Basin Coal Co. 10/1/1992	1,708.620	147,423,560	$20,114,930.00
West Black Thunder (WYW118907) Black Thunder Mine Thunder Basin Coal Co. 10/1/1992	3,492.495	429,048,216	$71,909,282.69
North Antelope/Rochelle (WYW119554) North Antelope Rochelle Mine Powder River Coal Co., LLC 10/1/1992	3,064.040	403,500,000	$86,987,765.00
West Rocky Butte (WYW122586) No Existing Mine[2] Caballo Coal Co. 1/1/1993	463.205	56,700,000	$16,500,000.00
Eagle Butte (WYW124783) Eagle Butte Mine Alpha Coal West, Inc. 8/1/1995	1,059.180	166,400,000	$18,470,400.00
Antelope (WYW128322) Antelope Mine Antelope Coal Co. 2/1/1997	617.200	60,364,000	$9,054,600.00
North Rochelle (WYW127221) North Rochelle Mine Ark Land Co. 1/1/1998	1,481.930	157,610,000	$30,576,340.00
Powder River (WYW136142) North Antelope Rochelle Mine Powder River Coal Co., LLC 9/1/1998	4,224.225	532,000,000	$109,596,500.00
Thundercloud (WYW136458) Jacobs Ranch Mine Thunder Basin Coal Co. 1/1/1999	3,545.503	412,000,000	$158,000,008.50
Horse Creek (WYW141435) Antelope Mine Antelope Coal Co. 12/1/2000	2,818.695	275,577,000	$91,220,120.70
North Jacobs Ranch (WYW146744) Jacobs Ranch Mine Thunder Basin Coal Co. 5/1/2002	4,982.240	537,542,000	$379,504,652.00
NARO South (WYW154001) North Antelope Rochelle Mine BTU Western Resources, Inc. 9/1/2004	2,956.725	297,469,000	$274,117,684.00
West Hay Creek (WYW151634) Buckskin Mine Kiewit Mining Properties, Inc. 1/1/2005	921.158	142,698,000	$42,809,400.00

Table 1-1. Leases Issued and Exchanges Completed Since Decertification, Powder River Basin, Wyoming (Continued).

Leases Issued

LBA Name (Lease Number) Applicant Mine Current Lessee Effective Date	Acres Leased[1]	Mineable Tons of Coal[1]	Successful Bid
Little Thunder (WYW150318) Black Thunder Mine Ark Land Co. 3/1/2005	5,083.500	718,719,000	$610,999,949.80
West Antelope (WYW151643) Antelope Mine Antelope Coal Co. 3/1/2005	2,809.130	194,961,000	$146,311,000.00
NARO North (WYW150210) North Antelope Rochelle Mine BTU Western Resources, Inc. 3/1/2005	2,369.380	324,627,000	$299,143,785.00
West Roundup (WYW151134) North Rochelle Mine West Roundup Resources, Inc. 5/1/2005	2,812.510	327,186,000	$317,697,610.00
Eagle Butte West (WYW155132) Eagle Butte Mine Alpha Coal West, Inc. 5/1/2008	1,427.770	255,000,000	$180,540,000.00
South Maysdorf (WYW174407) Cordero Rojo Mine Cordero Mining Co. 8/1/2008	2,900.240	288,082,000	$250,800,000.00
North Maysdorf (WYW154432) Cordero Rojo Mine Cordero Mining Co. 1/29/2009	445.890	54,657,000	$48,098,424.00
TOTALS	**49,183.640**	**5,781,563,776**	**$3,162,452,451.69**

Exchanges Completed

Exchange Name Case File Number Exchange Proponent Exchange Type Effective Date	Acres Exchanged	Mineable Tons of Coal	Federal Coal Exchanged for:
EOG (Belco) I-90 Lease Exchange WYW150152 EOG Resources (formerly Belco)[3] I-90 Lease Exchanged for New Lease 4/1/2000	599.170	106,000,000	Lease Rights to Belco I-90 Lease (WYW0322794).
Pittsburg & Midway Coal Exchange WYW148816 Pittsburg and Midway Coal Mining Co. Private Land Exchanged for Federal Coal 1/27/2005	2,045.530	84,200,000	6,065.77 acres of land and some minerals in Lincoln, Carbon, and Sheridan Counties, Wyoming.
Gold Mine Draw Lease Exchange WYW0321779, WYW154001 Powder River Coal Co., LLC AVF Lease Exchanged for New Lease 6/25/2006	623.000	47,700,000	Lease rights to 921.60 acres of leased federal coal underlying an AVF.
TOTALS	**3,267.700**	**237,900,000**	

1 Information from Sale Notice.
2 The West Rocky Butte LBA was originally leased to Northwestern Resources Co.
3 The EOG Resources Belco Exchange lease is now owned by the Buckskin Mine.

Table 1-2. Pending LBAs, Powder River Basin, Wyoming.

LBA Name Lease Number Applicant Mine	Application Date	Acres as Applied for	Estimated as Applied for Coal (mmt)	Status
Belle Ayr North WYW161248 Belle Ayr Mine	7/6/2004	1,578.74	191.90 [3]	FEIS available 8/14/2009 ROD in preparation
West Antelope II WYW163340 Antelope Mine	4/6/2005	4,108.60	429.70 [1]	FEIS available 12/19/2008 ROD available 4/1/2010
North Hilight Field WYW164812 Black Thunder Mine	10/7/2005	2,613.50	263.40 [3]	FEIS in preparation
South Hilight Field WYW174596 Black Thunder Mine	10/7/2005	1,976.69	213.60 [3]	FEIS in preparation
West Hilight Field WYW172388 Black Thunder Mine	1/17/2006	2,370.52	377.90 [3]	FEIS in preparation
West Coal Creek WYW172585 Coal Creek Mine	2/10/2006	1,151.26	57.00 [3]	FEIS available 8/14/2009 ROD in preparation
Caballo West WYW172657 Caballo Mine	3/15/2006	777.49	81.80 [3]	FEIS available 8/14/2009 ROD in preparation
West Jacobs Ranch WYW172685 Jacobs Ranch Mine	3/24/2006	5,944.37	669.60 [3]	FEIS in preparation
Hay Creek II WYW172684 Buckskin Mine	3/24/2006 Modified 5/19/2008 Modified 1/23/2009	415.00	51.90 [2]	DEIS available 3/12/2010 Hearing 4/22/2010 FEIS in preparation
Maysdorf II WYW173360 Cordero Rojo Mine	9/1/2006	4,653.84	474.50 [3]	FEIS available 8/14/2009 ROD in preparation
North Porcupine WYW173408 North Antelope Rochelle Mine	9/29/2006 Modified 10/12/2007	5,795.78	601.20 [3]	FEIS in preparation
South Porcupine WYW176095 North Antelope Rochelle Mine	9/29/2006 Modified 10/12/2007	3,185.96	309.70 [3]	FEIS in preparation
TOTALS		**34,571.75**	**3,722.20**	

[1] Estimated tons of in-place coal as reported in the lease application.
[2] Estimated tons of mineable coal as reported in the lease application.
[3] Estimated tons of recoverable coal as reported by the applicant.

recoverable coal reserves. The BLM split this LBA into two separate tracts, the North and South Hilight Field Tracts, as shown in Figure 1-2, and the two tracts will be processed separately. The North Hilight Field LBA Tract as applied for includes approximately 2,613.50 acres and an estimated 263.4 million tons of recoverable coal reserves. The South Hilight Field LBA Tract as applied for includes approximately 1,976.69 acres and an estimated 213.6 million tons of recoverable coal reserves.

As of January 1, 2009, TBCC estimates the in-place reserves at the existing Black Thunder Mine to be 1,271.1 million tons, of which approximately 1,169.4 million tons of those remaining reserves would be recoverable. Black Thunder Mine's currently approved by WDEQ/AQD air quality permits (Permit Numbers MD-417A, MD-877, MD-1178, MD-1555, MD-6824, and MD-3851, which were approved on July 1, 1999, June 23, 2003, July 12, 2005, May 13, 2007, January 22, 2008, and August 18, 2008, respectively) allow up to 135 million tons of coal per year to be mined. The Black Thunder Mine produced approximately 67.4 million tons of coal in 2008, 65.3 million tons of coal in 2007, 67.3 million tons of coal in 2006, 62.7 million tons of coal in 2005, and 66.8 million tons of coal in 2004.

The North Hilight Field tract is contiguous with both the Black Thunder Mine and the Jacobs Ranch Mine federal coal leases. The South Hilight Field tract is contiguous with only the Black Thunder Mine federal coal leases. A portion of the North Hilight Field tract lies within Jacobs Ranch Mine's current permit area. A portion of the South Hilight Field tract lies within Black Thunder Mine's current permit area. None of the North Hilight Field tract lies within Black Thunder Mine's current permit area, although it does border the mine's permit boundary (Figure 1-2). The area applied for is similar to the adjacent mines for which detailed site-specific environmental data have been collected. Additionally, environmental analyses have previously been prepared for existing leases and mining permits. As previously stated, the Jacobs Ranch Mine was acquired by Arch Coal, Inc. on October 1, 2009, and ALC intends to consolidate the permits of the Jacobs Ranch Mine and the Black Thunder Mine in order to integrate the two separate mining operations. ALC proposes to mine the North and South Hilight Field LBA Tracts as applied for as maintenance tracts for the consolidated Black Thunder Mine.

The surface of the North Hilight Field LBA Tract as applied for is owned by TBCC, ALC, Mills Brothers Partnership, and Western Railroad Properties, Inc. & Burlington Northern Railroad. The surface of the South Hilight Field LBA Tract as applied for is owned by TBCC, Western Railroad Properties, Inc. & Burlington Northern Railroad, and the United States of America. The federally owned surface comprises roughly 82 percent (approximately 1,625.9 acres) of the South Hilight Field tract as applied for and is part of the Thunder Basin National Grassland (TBNG), administered by the USFS. Current land uses of the tracts include grazing by domestic livestock and wildlife, oil and gas production, recreation, and transportation (i.e., rail lines and public road).

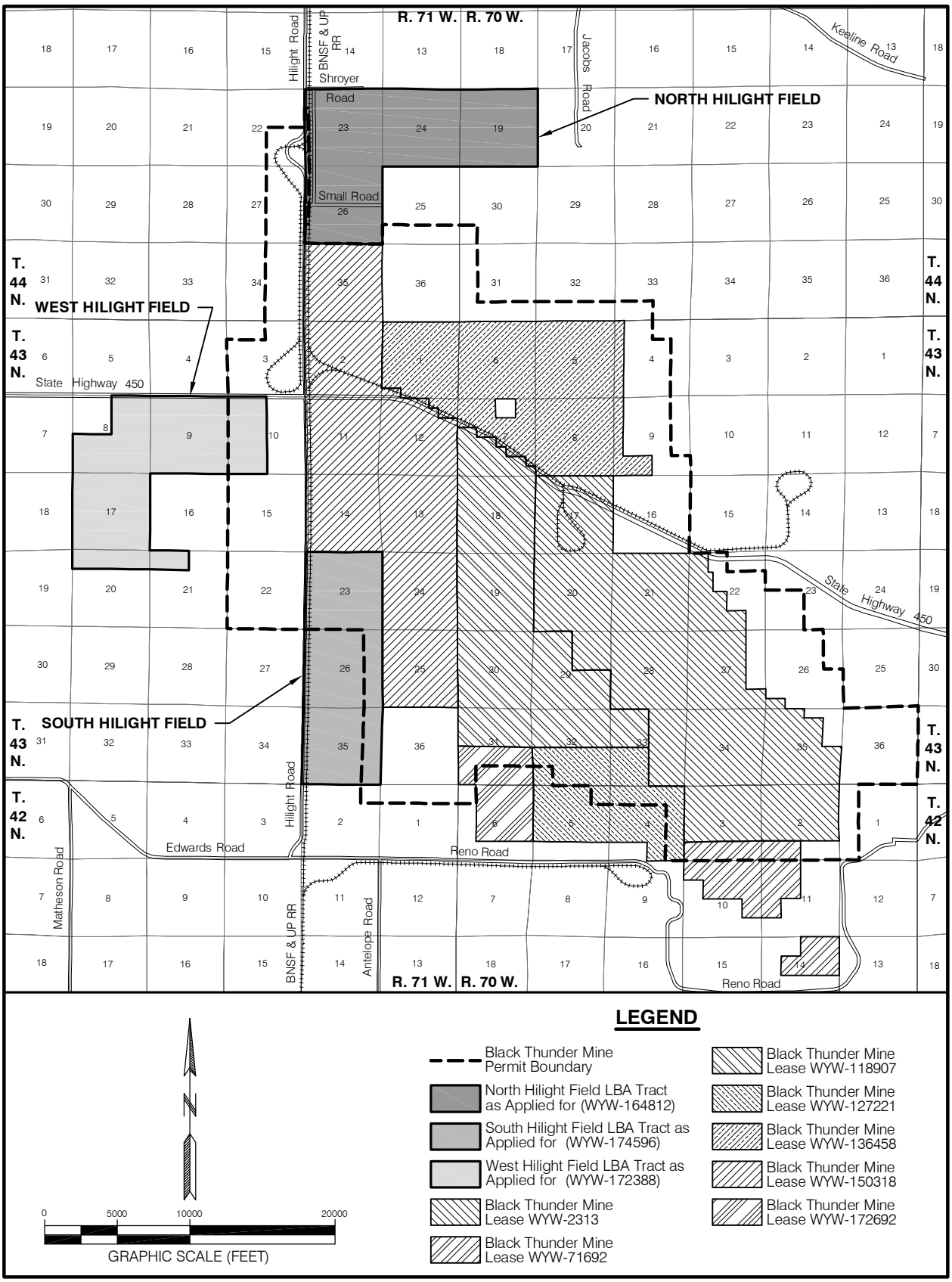

Figure 1-2. Black Thunder Mine's Federal Coal Leases and North Hilight Field, South Hilight Field, and West Hilight Field LBA Tracts as Applied for.

The mining methods would likely be a truck and shovel pre-benching operation in advance of a dragline, while cast blasting may be employed to supplement dragline productivity, which are the mining methods currently in use at the mine. The coal would be used primarily for electric power generation.

After mining, the land would be reclaimed for livestock grazing and wildlife use as is the current practice at the Black Thunder Mine. Industrial postmining land uses, which include but are not limited to oil and gas wells, pipelines, roads, rail lines, and utility easements, also would be reestablished as required.

1.1.2 West Hilight Field LBA Tract

The West Hilight Field LBA Tract as applied for and the existing federal coal leases in the adjacent Black Thunder Mine are shown in Figure 1-2. As applied for, the West Hilight Field LBA Tract consists of a single block of federal coal and includes approximately 2,370.52 acres and an estimated 377.9 million tons of recoverable coal reserves.

As of January 1, 2009, TBCC estimates the in-place reserves at the existing Black Thunder Mine to be 1,271.1 million tons, of which approximately 1,169.4 million tons of those remaining reserves would be recoverable. Black Thunder Mine's currently approved by WDEQ/AQD air quality permits (Permit Numbers MD-417A, MD-877, MD-1178, MD-1555, MD-6824, and MD-3851, which were approved on July 1, 1999, June 23, 2003, July 12, 2005, May 13, 2007, January 22, 2008, and August 18, 2008, respectively) allow up to 135 million tons of coal per year to be mined. The Black Thunder Mine produced approximately 67.4 million tons of coal in 2008, 65.3 million tons of coal in 2007, 67.3 million tons of coal in 2006, 62.7 million tons of coal in 2005, and 66.8 million tons of coal in 2004.

As discussed above, the West Hilight Field LBA Tract as applied for consists of a single block west of the Black Thunder Mine's existing federal coal leases, and a portion of the tract lies within Black Thunder Mine's current permit area (Figure 1-2). The area applied for is similar to the adjacent mines for which detailed site-specific environmental data have been collected. Additionally, environmental analyses have previously been prepared for existing leases and mining permits. As previously stated, the Jacobs Ranch Mine was acquired by Arch Coal, Inc. on October 1, 2009, and ALC intends to consolidate the permits of the Jacobs Ranch Mine and the Black Thunder Mine in order to integrate the two separate mining operations. ALC proposes to mine the West Hilight Field LBA Tracts as applied for as a maintenance tract for the consolidated Black Thunder Mine.

The surface of the West Hilight Field LBA Tract as applied for is owned by TBCC, James R. & Irene Stuart Trusts, and the United States of America. The federally owned surface comprises roughly 29 percent (approximately 695.9 acres) of the tract as applied for and is part of the TBNG, administered by the

USFS. Current land uses of the tract include grazing by domestic livestock and wildlife, oil and gas production, recreation, and transportation (i.e., public road).

The mining methods would likely be a truck and shovel pre-benching operation in advance of a dragline, while cast blasting may be employed to supplement dragline productivity, which are the mining methods currently in use at the mine. The coal would be used primarily for electric power generation.

After mining, the land would be reclaimed for livestock grazing and wildlife use as is the current practice at the Black Thunder Mine. Industrial postmining land uses, which include but are not limited to oil and gas wells, pipelines, roads, and utility easements, also would be reestablished as required.

1.1.3 West Jacobs Ranch LBA Tract

The West Jacobs Ranch LBA Tract as applied for and the existing federal coal leases in the adjacent Jacobs Ranch Mine are shown in Figure 1-3. The existing federal coal leases in the adjacent Black Thunder Mine are shown in Figure 1-2. As applied for, the West Jacobs Ranch LBA Tract consists of a single block of federal coal and includes approximately 5,944.37 acres and an estimated 669.6 million tons of recoverable coal reserves.

As of January 1, 2009, ALC estimates the in-place reserves at the existing Jacobs Ranch Mine to be 403.6 million tons, of which approximately 379.4 million tons of those remaining reserves would be recoverable. The Jacobs Ranch Mine's current WDEQ/AQD air quality permit (Permit Number MD-1005A2, approved on January 22, 2007) allows up to 55 million tons of coal per year to be mined. The Jacobs Ranch Mine produced approximately 42.1 million tons of coal in 2008, 38.1 million tons of coal in 2007, 40.0 million tons of coal in 2006, 37.3 million tons of coal in 2005, and 38.6 million tons of coal in 2004.

As discussed above, the West Jacobs Ranch LBA Tract as applied for consists of a single block located approximately 0.75 mile west of Jacobs Ranch Mine's current mining permit boundary and 1.0 mile west of the mine's current federal coal leases (Figure 1-3). The West Jacobs Ranch tract is contiguous with only the Black Thunder Mine, and a portion of the tract is within Black Thunder Mine's current permit area (Figure 1-2). The area applied for is similar to the adjacent mines for which detailed site-specific environmental data have been collected. Additionally, environmental analyses have previously been prepared for existing leases and mining permits. As previously stated, the Jacobs Ranch Mine was acquired by Arch Coal, Inc. on October 1, 2009, and ALC intends to consolidate the permits of the Jacobs Ranch Mine and the Black Thunder Mine in order to integrate the two separate mining operations. ALC proposes to mine the West Jacobs Ranch LBA Tract as applied for as maintenance tract for the consolidated Black Thunder Mine.

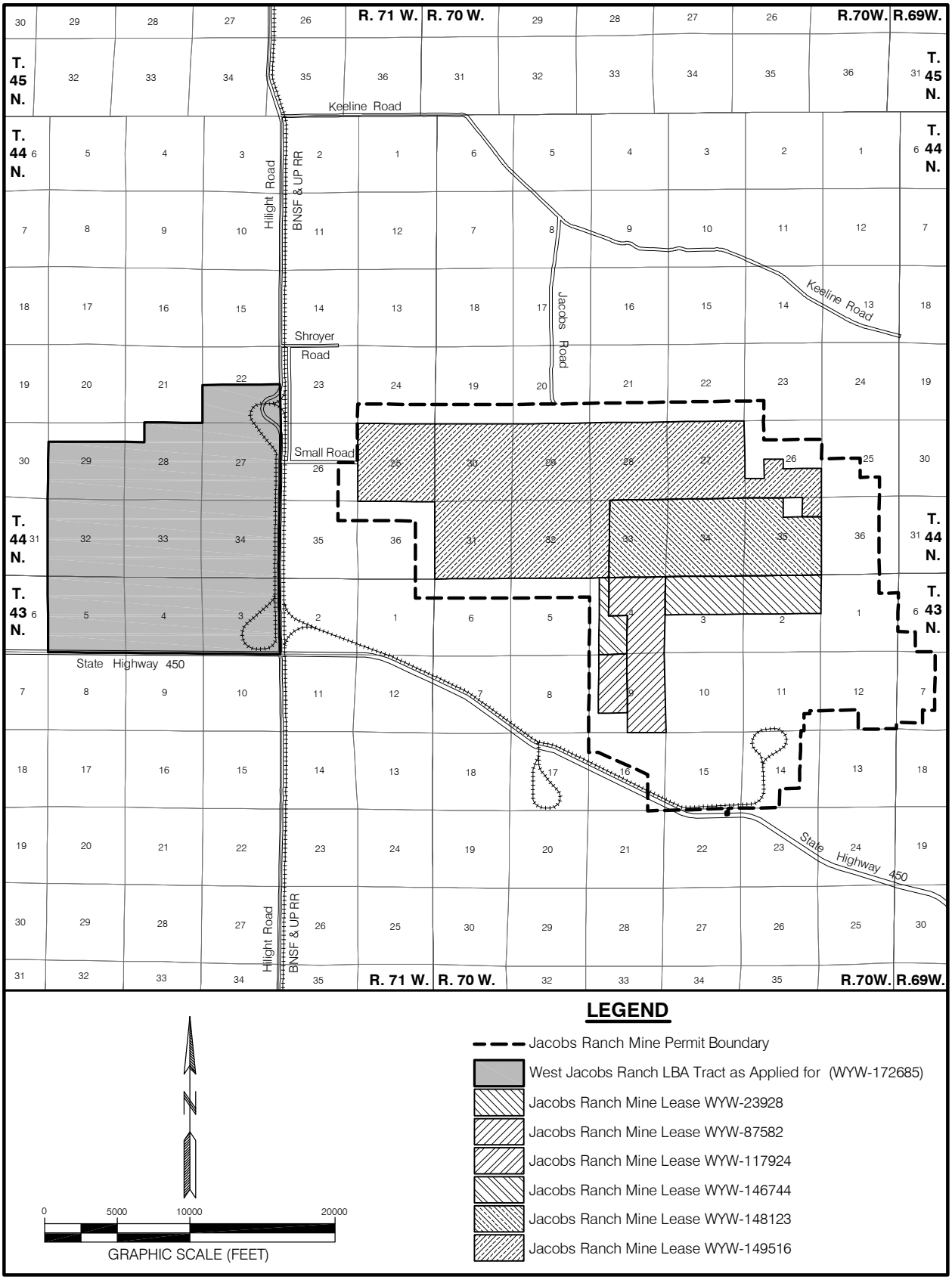

Figure 1-3. Jacobs Ranch Mine's Federal Coal Leases and West Jacobs Ranch LBA Tract as Applied for.

The surface of the West Jacobs Ranch LBA Tract as applied for is owned by ALC, Boller-Mills Ranch LP, and William M. & Lois R. Chittenden. Current land uses of the tract include grazing by domestic livestock and wildlife, oil and gas production, recreation, and transportation (i.e., public roads and railroad).

The mining methods would likely be a truck and shovel pre-benching operation in advance of a dragline, while cast blasting may be employed to supplement dragline productivity, which are the mining methods currently in use at the Black Thunder Mine. The coal would be used primarily for electric power generation.

After mining, the land would be reclaimed for livestock grazing and wildlife use as is the current practice at the Jacobs Ranch Mine. Industrial postmining land uses, which include but are not limited to oil and gas wells, pipelines, roads, and utility easements, also would be reestablished as required.

1.1.4 North and South Porcupine LBA Tracts

As applied for, the Porcupine LBA Tract, adjacent to the North Antelope Rochelle Mine, consisted of two separate blocks of federal coal and included a total of approximately 8,981.74 acres with an estimated 910.9 million tons of recoverable coal reserves. The BLM split this LBA into two separate tracts, the North and South Porcupine Tracts, as shown in Figure 1-4, and will process the two tracts separately. The North Porcupine LBA Tract as applied for includes approximately 5,795.78 acres and an estimated 601.2 million tons of recoverable coal reserves. The South Porcupine LBA Tract as applied for includes approximately 3,185.96 acres and an estimated 309.7 million tons of recoverable coal reserves.

As of January 1, 2009, PRC estimates the in-place reserves at the existing North Antelope Rochelle Mine to be 1,049.9 million tons, of which approximately 933.8 million tons of those remaining reserves would be recoverable. North Antelope Rochelle Mine's current WDEQ/AQD air quality permits (MD-1172, MD-1309, MD-1331, and MD-6375 approved in June 2005, January 2006, March 2006, and November 2008, respectively) allow up to 140 million tons of coal per year to be mined. The North Antelope Rochelle Mine produced approximately 97.6 million tons of coal in 2008, 91.5 million tons of coal in 2007, 88.5 million tons of coal in 2006, 82.7 million tons of coal in 2005, and 82.5 million tons of coal in 2004.

The North Porcupine tract is contiguous with the North Antelope Rochelle Mine's existing federal coal leases; the South Porcupine tract is contiguous with both the North Antelope Rochelle Mine's and the Antelope Mine's existing federal coal leases. Both tracts lie completely within the North Antelope Rochelle Mine's current permit area (Figure 1-4). The area applied for is similar to the adjacent mines for which detailed site-specific environmental

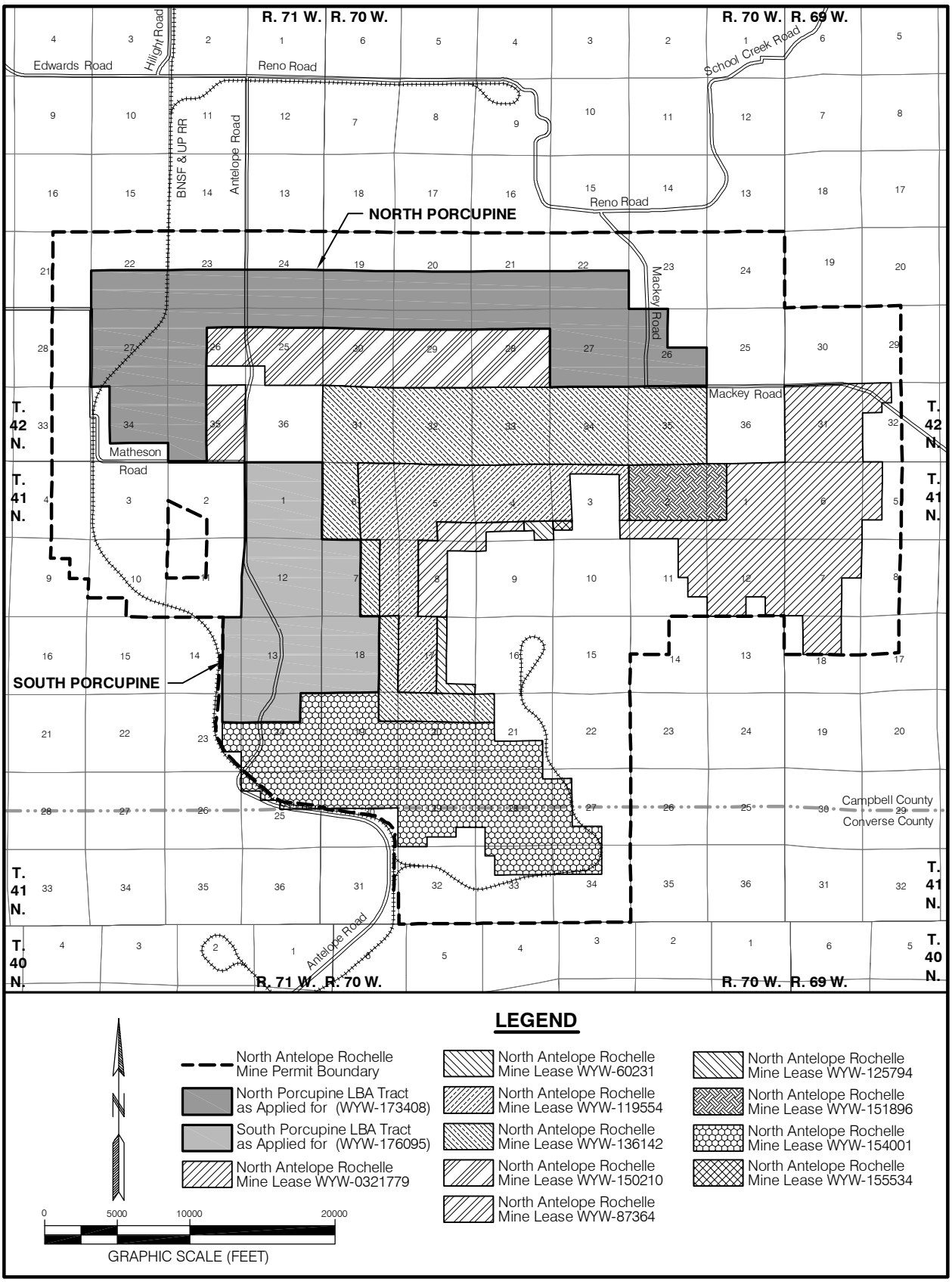

Figure 1-4. North Antelope Rochelle Mine's Federal Coal Leases and North Porcupine and South Porcupine LBA Tracts as Applied for.

data have been collected. Additionally, environmental analyses have previously been prepared for existing leases and mining permits.

The surface of the North Porcupine LBA Tract as applied for is owned by PRC, LLC., Jerry N. & Rhonda Wilkinson, the state of Wyoming, Western Railroad Properties, Inc., and the United States of America. The federally owned surface comprises roughly 72 percent (approximately 4,186.0 acres) of the tract as applied for and is part of the TBNG, administered by the USFS. The surface of the South Porcupine LBA Tract as applied for is owned by PRC, LLC., Jerry J. Dilts Living Trust, Jerry J. Dilts Family LP 1, Bridle Bit Ranch Company, Jerry J. Dilts Family LP II and Bridle Bit Ranch Company, and the United States of America. The federally owned surface comprises roughly 51 percent (approximately 1,637.2 acres) of the tract as applied for and is part of the TBNG, administered by the USFS. Current land uses of the tracts include grazing by domestic livestock and wildlife, oil and gas production, recreation, and transportation (i.e., rail lines and public roads).

The mining methods would be a truck and shovel pre-benching operation in advance of a dragline, while cast blasting may be employed to supplement dragline productivity, which are the methods currently in use at the North Antelope Rochelle Mine. The coal would be used primarily for electric power generation.

After mining, the land would be reclaimed for livestock grazing and wildlife use as is the current practice at the North Antelope Rochelle Mine. Industrial postmining land uses, which include but are not limited to oil and gas wells, pipelines, roads, rail lines, and utility easements, also would be reestablished as required.

1.2 Purpose and Need for Action

Approximately 92 percent of the total coal that is mined in the U.S. is used for generating reasonably priced electricity (USDOE 2009a). Coal is mined in 25 states (USDOE 2009a); the low cost and abundance of coal resources within the country is one of the primary reasons why consumers in the U.S. currently benefit from some of the lowest electricity rates of any free-market economy (USDOE 2009b).

Electricity is important to the country's security and economy and is structured on a market-based supply and demand system. Currently, coal-fired electric generating plants are the cornerstone of the nation's central power configuration (USDOE 2009b). Approximately half of the electricity currently generated in the United States comes from coal (USDOE 2009b). Wyoming coal is used to generate electricity in 36 other states (WMA 2009).

The Federal Land Policy and Management Act of 1976 (FLPMA) mandated BLM to manage public lands for multiple use so that the lands are utilized in the combination that will best meet the present and future needs of the American

people. FLPMA authorized BLM to manage the use, occupancy, and development of public lands through leases and permits (BLM 2007).

The Energy Policy Act of 2005 directs federal agencies to undertake efforts to ensure energy efficiency and the production of secure, affordable, and reliable domestic energy. A primary goal of the National Energy Policy is to add energy supplies from diverse sources, including domestic oil, gas, and coal, as well as hydropower and nuclear power. BLM recognizes that the continued extraction of coal is essential in order to meet the nation's energy needs. As a result, private development of federal coal reserves is integral to the BLM coal leasing program under the authority of the Mineral Leasing Act of 1920 (MLA), as well as FLPMA and Federal Coal Leasing Act Amendments of 1976 (FCLAA).

The United States has the world's largest known coal reserves (BP 2009). The BLM's coal leasing program encourages the development of domestic coal reserves and the reduction of U.S. dependence on foreign sources of energy. As a result of the leasing, mining, and sale of federal coal resources in the PRB, the public has a reliable supply of low sulfur coal for generating affordable electric power. The public also receives extensive revenue from lease bonuses, rentals, and royalty payments.

As this EIS describes, the Black Thunder Mine, Jacobs Ranch Mine, and North Antelope Rochelle Mine have applied for a total of six maintenance tracts of federal coal reserves. The mines applied for these reserves in order to continue to supply and sell low sulfur compliance coal to power plants for the purpose of generating electric power for the public.

This EIS is being prepared in response to the four coal lease applications that BLM received from the three mines mentioned above. In response to each of the applications, BLM must decide whether to: 1) hold a competitive, sealed-bid lease sale for the tract as applied for, 2) hold a competitive, sealed-bid lease sale for a modified tract, or 3) reject the current lease application and not offer the tract for sale at this time.

If a decision is made to lease a tract of federal coal and if the tract is sold and a lease is issued, the federal coal lease would grant the lessee the exclusive right to apply for a WDEQ mining permit. The WDEQ approved mining permit is what allows coal mining to take place on a lease. It authorizes surface disturbance and mining operations subject to the terms of the lease, the mining permit, and applicable state and federal laws. Before mining operations can be conducted on a new lease, the lessee must obtain approval of a detailed mining permit. Additionally, for federal coal lessees, the lessee may not conduct surface coal mining operations on federal coal land prior to obtaining approval of the MLA mining plan, through OSM and by the Assistant Secretary of the Interior, Land and Minerals Management.

If an LBA tract is leased to the applicant as a maintenance tract, the permit to conduct mining operations for the adjacent mine would have to be amended to

include the new lease area before it could be disturbed. This process takes several years to complete. ALC and BTU are applying for federal coal reserves now so that they can secure coal resources to market, enter into new contracts, and complete the permitting processes in time to mine the new federal reserves in a logical progression.

If a tract is leased, a WDEQ mining permit is obtained and Assistant Secretarial approval through OSM is obtained. The coal would then be mined and sold to power plants for the purpose of generating electricity for the United States. Continued leasing of low sulfur PRB coal would assist coal-fired power plants in meeting the Clean Air Act (CAA) requirements without constructing new plants or revamping existing ones. This helps to provide a stable supply of power to meet increasing electrical demands without a potentially significant increase in power costs for the public.

This EIS analyzes the environmental impacts of issuing federal coal leases and mining the federal coal in the North Hilight Field, South Hilight Field, West Hilight Field, West Jacobs Ranch, North Porcupine, and South Porcupine maintenance coal lease applications as required by NEPA and associated rules and guidelines. A decision to hold a competitive sale and issue a lease for the lands in any of these applications is a prerequisite for mining but it is not the enabling action that would authorize mining.

The BLM does not authorize mining operations by issuing a lease. After a lease has been issued but prior to mine development, the lessee must file a permit application package with the Land Quality Division (LQD) of the WDEQ and OSM for a surface mining permit and approval of the MLA mining plan. An analysis of a detailed site-specific mining and reclamation plan occurs at that time. Authorities and responsibilities of the BLM and other concerned regulatory agencies are described in the following sections.

1.3 Regulatory Authority and Responsibility

The four Wright Area coal lease applications analyzed in this EIS were submitted to BLM and will be processed and evaluated under the following federal authorities:

- MLA, as amended;
- Multiple-Use Sustained Yield Act of 1960;
- NEPA;
- FCLAA;
- FLPMA; and
- SMCRA.

The development of federal coal reserves is integral to the BLM coal leasing program under the authority of the Mineral Leasing Act of 1920 (MLA), as well as the Federal Land Policy Management Act of 1976 (FLPMA) and the Federal Coal Leasing Act Amendments of 1976 (FCLAA). BLM is the lead agency

responsible for leasing federal coal lands under the MLA as amended by FCLAA and is also responsible for preparation of this EIS to evaluate the potential environmental impacts of issuing a coal lease.

OSM is a cooperating agency on this EIS. After a federal coal lease is issued, the Surface Mining Control and Reclamation Act of 1977 (SMCRA) gives OSM primary responsibility to administer programs that regulate surface coal mining operations and the surface effects of underground coal mining operations. USFS is also a cooperating agency on this EIS. If any USFS-administered lands are included in a tract that is proposed for leasing, USFS must consent to leasing the federal coal before BLM can make a decision to hold a federal coal lease sale.

WDEQ is also a cooperating agency on this EIS. Pursuant to Section 503 of SMCRA, the WDEQ developed, and in November 1980 the Secretary of the Interior approved, a permanent program authorizing WDEQ to regulate surface coal mining operations and surface effects of underground mining on nonfederal lands within the state of Wyoming. In January 1987, pursuant to Section 523(c) of SMCRA, WDEQ entered into a cooperative agreement with the Secretary of the Interior authorizing WDEQ to regulate surface coal mining operations and surface effects of underground mining on federal lands within the state.

Pursuant to the cooperative agreement, a federal coal lease holder in Wyoming must submit a permit application package to OSM and WDEQ/LQD for any proposed coal mining and reclamation operations on federal lands in the state. WDEQ/LQD reviews the permit application package to insure the permit application complies with the permitting requirements and the coal mining operation will meet the performance standards of the approved Wyoming program. OSM, BLM, USFS and other federal agencies review the permit application package to insure it complies with the terms of the coal lease, the MLA, NEPA, and other federal laws and their attendant regulations. If the permit application package complies, WDEQ issues the applicant a permit to conduct coal mining operations. OSM recommends approval, approval with conditions, or disapproval of the MLA mining plan to the Assistant Secretary of the Interior, Land and Minerals Management. Before the MLA mining plan can be approved, the BLM must concur with this recommendation.

If a proposed LBA tract is leased to an existing mine, the lessee is required to revise its coal mining permit prior to mining the coal, following the processes outlined above. As a part of that process, a detailed new plan would be developed showing how the newly-leased lands would be mined and reclaimed. The area of mining disturbance would be larger than the newly-leased area to allow for activities such as overstripping, matching reclaimed topography to undisturbed topography, constructing flood control and sediment control facilities, and related activities. Specific impacts that would occur during the mining and reclamation of the LBA tract would be addressed in the mining and

reclamation plan, and specific mitigation measures for anticipated impacts would be described in detail at that time.

WDEQ enforces the performance standards and permit requirements for reclamation during a mine's operation and has primary authority in environmental emergencies. OSM retains oversight responsibility for this enforcement. Where federal surface or coal resources are involved, BLM, and USFS for USFS-administered lands, have authority in emergency situations if WDEQ or OSM cannot act before environmental harm and damage occurs.

Appendix A presents other federal and state permitting requirements that must be satisfied to mine these LBA tracts.

1.4 Relationship to BLM Policies, Plans, and Programs

In addition to the federal acts listed under Section 1.3, guidance and regulations for managing and administering public lands, including the federal coal lands in the ALC and BTU applications, are set forth in 40 CFR 1500 (Protection of Environment), 43 CFR 1601 (Planning, Programming, Budgeting), and 43 CFR 3400 (Coal Management).

Specific guidance for processing applications is provided by BLM Manual 3420, Competitive Coal Leasing (BLM 1989) and the 1991 *Powder River Regional Coal Team Operational Guidelines For Coal Lease-By-Applications* (BLM 1991). The *National Environmental Policy Act Handbook* (BLM 2008a) has been followed in developing this EIS.

1.5 Conformance with Existing Land Use Plans

FCLAA requires that lands considered for leasing be included in a comprehensive land use plan and that leasing decisions be compatible with that plan. The BLM *Approved Resource Management Plan for Public Lands Administered by the Bureau of Land Management Buffalo Field Office* (BLM 2001a), an update of the *Buffalo Resource Area Resource Management Plan* (BLM 1985), governs and addresses the leasing of federal coal in Campbell County. The *Land and Resource Management Plan for the Thunder Basin National Grassland, Medicine Bow-Routt National Forest, Rocky Mountain Region* (USFS 2001) offers guidance for all resource management activities on the TBNG.

The major land use planning decision that BLM must make concerning the federal coal resources is a determination of which federal coal lands are acceptable for further consideration for leasing. There are four screening procedures that BLM uses to identify these coal lands. These screening procedures require BLM to:

- estimate development potential of the coal lands;
- apply the Unsuitability Criteria listed in the regulations at 43 CFR 3461;

- make multiple land use decisions that eliminate federal coal deposits from consideration for leasing to protect other resource values; and
- consult with surface owners who meet the criteria defined in the regulations at 43 CFR 3400.0-5(gg)(1) and (2).

Only those federal coal lands that pass these screens are given further consideration for leasing. BLM has applied these coal screens to federal coal lands in the Wyoming PRB several times, starting in the early 1980s. Most recently, in 1993, BLM began the process of reapplying these screens to federal coal lands in Campbell, Converse, and Sheridan counties. This analysis was adopted in the 2001 BLM Buffalo Field Office Resource Management Plan (RMP) update (BLM 2001a). The results of this analysis were included as Appendix D of the 2001 RMP update, which can be viewed in the 2001 NEPA documents section on the Wyoming BLM website at: http://www.blm.gov/wy/st/en/info/NEPA/documents.html. The coal screen was completed for use not only in updating the 1985 Buffalo RMP but also the TBNG planning documents. Appendix D of the 2001 RMP update was prepared in cooperation with the USFS, Douglas Ranger District for lands within the TBNG.

Under the first coal screening procedure, a coal tract must be located within an area that has been determined to have coal development potential in order to be acceptable for further consideration for leasing (43 CFR 3420.1-4(e)(1)). The lands in these four coal lease applications are within the area identified as having coal development potential by the BLM and the USFS in the coal screening analyses published in the 2001 BLM and USFS planning documents.

The second coal screening procedure requires the application of the coal mining unsuitability criteria listed in the federal coal management regulations at 43 CFR 3461. The coal mining unsuitability criteria were applied to high through moderate coal development potential lands in the Wyoming PRB, including the six LBA tracts and surrounding lands in these four coal lease applications, during the coal screening conducted for the 2001 BLM Buffalo Field Office RMP update. Appendix B of this EIS summarizes the Unsuitability Criteria, describes the general findings for the 2001 BLM Buffalo Field Office RMP update, and presents a validation of these findings for the North Hilight Field, South Hilight Field, West Hilight Field, West Jacobs Ranch, North Porcupine, and South Porcupine LBA Tracts.

Unsuitability Criterion Number 2 addresses lands within rights-of-way (ROWs) on federal lands. Under this criterion, portions of the Burlington Northern Santa Fe & Union Pacific (BNSF & UP) railroad ROW shall be considered unsuitable for surface coal mining. As shown in Figures 1-2 and 1-4, the BNSF & UP railroad borders the west sides of the North and South Hilight Field LBA Tracts as applied for, crosses the North Porcupine LBA Tract as applied for, and lies west of and adjacent to the South Porcupine LBA Tract as applied for.

Unsuitability Criterion Number 3 addresses lands used for public roads and other public purposes. Wyoming State Highway 450 east of the BNSF & UP railroad shall be considered unsuitable for surface coal mining. The 2001 BLM Buffalo RMP update deferred a decision on the unsuitability of the public road ROWs and associated buffer zones (with the exclusion of Wyoming State Highway 450 east of the BNSF & UP railroad and Interstate Highway I-90 ROWs) until a leasing action occurred.

There were no findings of unsuitability for the other criteria listed in the regulations; however, as indicated in Appendix B, several criteria will be further evaluated during the leasing process.

The third coal screening procedure, a multiple land use conflict analysis, must be completed to identify and "eliminate additional coal deposits from further consideration for leasing to protect resource values of a locally important or unique nature not included in the Unsuitability Criteria," in accordance with 43 CFR 3420.1-4(e)(3). The 2001 Buffalo RMP update addresses two types of multiple land use conflicts: municipal/residential conflicts and multiple mineral development (coal versus oil and gas) conflicts.

The North Hilight Field, South Hilight Field, West Hilight Field, West Jacobs Ranch, North Porcupine, and South Porcupine LBA Tracts do not lie within or in proximity to an identified buffer zone surrounding an existing community. Therefore, no federal coal lands within these six LBA tracts have been eliminated from further consideration for leasing due to municipal/residential conflicts.

The 2001 Buffalo RMP includes two decisions related to multiple mineral development conflicts in Campbell, Converse and Sheridan counties. With respect to oil and gas leasing in coal mining areas, the RMP update determines that oil and gas tracts that would interfere with coal mining operations would not be offered for lease but that, where possible, oil and gas leases will be issued with specific conditions to prevent a development conflict with coal mining operations. With respect to coal leasing in oil and gas fields, the 2001 Buffalo RMP update states that coal leasing in producing oil and gas fields would be deferred unless or until coal development would not interfere with the economic recovery of the oil and gas resources, as determined on a case-by-case basis.

Both conventional oil and gas and coal bed natural gas (CBNG) wells have been drilled within or around the North Hilight Field, South Hilight Field, West Hilight Field, West Jacobs Ranch, North Porcupine, and South Porcupine LBA Tracts. BLM's evaluation of the potential for conflict with the development of oil and gas resources within the six LBA tracts is included in the Mineral Resources discussion in Section 3.3 and in the Land Use discussion in Section 3.11 of this EIS. BLM's policy and guidance on conflicts between surface coal mine and conventional oil and gas and CBNG development is to optimize the recovery of both resources and ensure that the public receives a reasonable

return, as explained in BLM Instruction Memorandum No. 2006-153 (BLM 2006a).

The fourth coal screening procedure requires consultation with surface owners who meet the criteria defined in the regulations at 43 CFR 3400.0-5(gg)(1) and (2). Chapter 7 includes a definition of the term "qualified surface owner," based on these regulations. Surface owner consultation was conducted as part of the coal screening analysis published in the 2001 Buffalo RMP update. Private surface owners in the Gillette coal development potential area were provided the opportunity to express their preference for or against surface mining of federal coal under their private surface estate during that screening. At that time, no attempt was made to distinguish qualified surface owners, and Appendix D of the 2001 Buffalo RMP update states that "no area should be dropped from further consideration for leasing as a result of responses received from surface owners." Therefore, no federal coal lands within the North Hilight Field, South Hilight Field, West Hilight Field, West Jacobs Ranch, North Porcupine, and South Porcupine LBA Tracts have been eliminated from further consideration for leasing due to qualified surface owner conflicts at this time. The current surface ownership of the LBA tracts is discussed in Section 1.1 of this chapter and in Section 3.11. Private surface owners who are found to be qualified must consent to leasing before BLM can offer the underlying federal coal for lease. BLM will review the current surface ownership in the tracts that will be considered for leasing prior to holding a lease sale for each tract. Prior to holding a lease sale, surface owner consultation must be completed with any private surface owners who are determined to be qualified.

In summary, the lands in the ALC and BTU coal lease applications have been subjected to the four coal planning screens. The results are detailed in Appendix B and detailed in the description of the Proposed Action and alternatives for each LBA tract contained in Chapter 2 of this EIS. Thus, a decision to lease the federal coal lands in these applications, conditioned consistent with RMP decisions, would be in conformance with the current BLM Buffalo RMP and the TBNG RMP.

1.6 Consultation and Coordination

Initial Involvement

BLM received the Hilight Field coal lease application on October 7, 2005, the West Hilight Field coal lease application on January 17, 2006, the West Jacobs Ranch coal lease application on March 24, 2006, and the Porcupine coal lease application on September 29, 2006. The applications were initially reviewed by the BLM Wyoming State Office-Division of Minerals and Lands. BLM ruled that these four applications and the lands involved met the requirements of regulations governing coal leasing on application (43 CFR 3425).

The BLM Wyoming State Director notified the Governor of Wyoming on April 27, 2006, that ALC had filed a lease application with BLM for the North Hilight

Field and South Hilight Field LBA Tracts. The BLM Wyoming State Director notified the Governor of Wyoming on February 2, 2006, that ALC had filed a lease application with BLM for the West Hilight Field LBA Tract. The BLM Wyoming State Director notified the Governor of Wyoming on September 18, 2006, that JRCC had filed a lease application with BLM for the West Jacobs Ranch LBA Tract. The BLM Wyoming State Director notified the Governor of Wyoming on March 14, 2007, that BTU had filed a lease application with BLM for the North Porcupine and South Porcupine LBA Tracts.

The PRRCT reviewed the Hilight Field, West Hilight Field, and West Jacobs Ranch maintenance coal lease applications at a public meeting held on April 19, 2006 in Casper, Wyoming. The PRRCT reviewed the Porcupine maintenance coal lease application at a public meeting held on January 18, 2007 in Casper, Wyoming. Each of the applicants presented information about their existing mine and pending lease application to the PRRCT at those meetings. The PRRCT recommended that the BLM continue to process all four lease applications at those respective meetings. The major steps in processing an LBA are shown in Appendix C.

BLM published a Notice of Intent (NOI) to prepare an EIS and Notice of Public Meeting in the *Federal Register* on July 3, 2007, in the Gillette News-Record on July 6, 2007, and in the Douglas Budget on July 11, 2007. The publications served as public notice that the Hilight Field, West Hilight Field, West Jacobs Ranch, and Porcupine coal lease applications had been received, announced the time and location of a public scoping meeting, and requested public comment on the four applications. Letters requesting public comment and announcing the time and location of the public scoping meeting were mailed to all parties on the distribution list on July 11, 2007.

A public scoping meeting was held July 24, 2007 in Gillette, Wyoming. At the public meeting, the applicants orally presented information about their mines and their need for the coal. The presentations were followed with a question and answer period, during which three oral comments were made. The scoping period extended from July 3 through September 3, 2007, during which time BLM received nine comment letters.

Chapter 5 provides a list of other federal, state, and local governmental agencies that were consulted in preparation of this EIS and the distribution list for this EIS.

Issues and Concerns

Issues that have been identified through scoping and other recently expressed concerns related to the potential impacts of leasing the Wright Area maintenance tracts and other federal coal in the Wyoming PRB include:

- potential conflicts between coal mining and existing and proposed conventional oil and gas and CBNG development;

- potential cumulative impacts of coal leasing decisions combined with other existing and proposed development in the Wyoming PRB;
- potential impacts to Highway 450 and other transportation routes;
- potential impacts to people living in the area;
- socioeconomic concerns;
- potential impacts to ranching operations associated with the loss of grazing leases and permits;
- noxious weed concerns;
- potential impacts to visual resources;
- potential impacts to cultural and paleontological resources;
- potential impacts to Greater sage-grouse and other wildlife;
- potential impacts to threatened and endangered species and other species of concern;
- potential impacts to wetland resources;
- potential impacts related to coal loss during rail transport;
- potential air quality impacts and cumulative impacts to visibility;
- potential surface and groundwater quality and quantity impacts;
- potential impacts associated with nitrogen oxide emissions resulting from the blasting of coal and overburden;
- human health impacts;
- the need to address reasonably foreseeable actions, including the construction and operation of the DM&E railroad and power plants, in the cumulative analysis;
- the need to address mercury, coal combustion residues, and other by-products from coal-fired power plants;
- the need to address increasing PRB coal production in the cumulative analysis;
- the need to address site-specific greenhouse gas emissions;
- ozone; and
- climate change.

Draft EIS

Parties on the distribution list were sent copies of the Draft EIS, and copies were made available for review at the BLM offices in Casper and Cheyenne, Wyoming. The document was also available for review on the BLM Wyoming website at: http://www.blm.gov/wy/st/en/info/NEPA/HighPlains/Wright-Coal.html.

The U.S. Environmental Protection Agency (EPA) published a notice announcing the availability of the Draft EIS in the *Federal Register* on June 26, 2009. A 60-day comment period on the Draft EIS commenced with publication of the EPA's Notice of Availability (NOA) and ended on August 25, 2009. BLM published a NOA/Notice of Public Hearing for the Draft EIS in the *Federal Register* on July 8, 2009. The BLM's *Federal Register* notice announced the date and time of a public hearing, which was held during the 60-day comment period on July 29, 2009 at 7:00 p.m. at the Clarion Inn in Gillette, Wyoming. The purpose of the public hearing was to solicit public comments on the Draft

EIS and on the fair market value, the maximum economic recovery, and the proposed competitive sale of federal coal from the LBA tracts. BLM also published a notice of public hearing in both the Douglas Budget and Gillette News-Record newspapers on July 8, 2009. Two individuals representing organizations presented statements on the Draft EIS during the hearing. A summary of the statements that were presented at the public hearing are included in Appendix I of this Final EIS. An official transcript of the public hearing is available for review at the BLM High Plains District Office in Casper.

Final EIS and Future Involvement

BLM received written comments from 17 individuals, agencies, businesses, and organizations, as well as over 500 e-mails from interested individuals and entities regarding the Draft EIS. These comments are included, with agency responses, in Appendix I of this Final EIS. Availability of the Final EIS will be published in the *Federal Register* by BLM and EPA. After a 30-day availability period commencing from the date of the EPA's notice, BLM will make separate decisions to hold or not to hold a competitive lease sale for the federal coal in the North Hilight Field, South Hilight Field, West Hilight Field, West Jacobs Ranch, North Porcupine, and South Porcupine LBA Tracts.

The USFS must consent to leasing the federal coal underlying lands that they administer before BLM can include those lands in a decision to hold a federal coal lease sale. If any lands administered by the USFS are included in the tract that BLM considers for leasing, the USFS will issue a separate record of decision (ROD) consenting to leasing those lands. The decision to consent to leasing the USFS land can be appealed within 45 days from the date that the Notice of Publication of the USFS ROD is published in the Laramie Boomerang newspaper.

A public ROD for each of the tracts will be mailed to parties on the mailing list and others who commented on this EIS during the NEPA process. The public and/or the applicant can appeal the BLM decision to hold or not to hold a competitive sale and issue a lease for any of the six tracts. The BLM decision must be appealed within 30 days from the date the NOA for the ROD is published in the *Federal Register.* The decision can be implemented at that time if no appeal is received. If competitive lease sales are held, the lease sales will follow the procedures set forth in 43 CFR 3422, 43 CFR 3425, and BLM Handbook H-3420-1 (Competitive Coal Leasing).

Department of Justice Consultation

After each competitive coal lease sale, but prior to issuance of the lease, BLM must solicit the opinion of the Department of Justice on whether the planned lease issuance creates a situation inconsistent with federal antitrust laws. The Department of Justice is allowed 30 days to make this determination. If the Department of Justice has not responded in writing within the 30 days, the BLM can proceed with issuance of the lease.