
CHAPTER 1: PURPOSE OF, AND THE NEED FOR, THE PROPOSED ACTION

1.0 INTRODUCTION

On July 24, 2003, Caballo Coal Company filed an application with the Bureau of Land Management (BLM) to exchange portions of two federal coal leases located to the south and east, and adjacent to the Caballo Mine in Campbell County, Wyoming, approximately 10 miles south of Gillette, Wyoming (Figure 1-1). The application was made as an Alluvial Valley Floor (AVF) coal lease exchange under the regulations at 43 CFR (Code of Federal Regulations) 3436, Coal Lease and Coal Land Exchanges: Alluvial Valley Floors. The Caballo Mine is owned and operated by Caballo Coal Company, a subsidiary of Powder River Coal Company. In this environmental assessment (EA), the applicant for the tract will be referred to as PRCC.

The Gold Mine Draw tract as offered and the existing federal coal leases in the adjacent Caballo Mine are shown in Figure 1-2. The Gold Mine Draw tract includes approximately 921.6 acres and an estimated 67.2 million tons of in-place coal reserves.

On June 13, 1983, The State of Wyoming Department of Environmental Quality (DEQ) determined the offered tract was designated as an AVF significant to farming. Under Section 510(b)(5) of the Surface Mine Control and Reclamation Act (SMCRA), mining is precluded in any areas with an AVF determined to be significant to farming.

On March 22, 2004, the BLM issued an Instruction Memorandum No. WY-2004-025 detailing the procedures under which BLM Wyoming will address an exchange affecting an Alluvial Valley Floor.

PRCC's AVF exchange application (case file W-3397 & W-83394) was reviewed by the BLM's Wyoming State Office, Division of Mineral and Lands. They determined that it met the regulatory requirements for a lease exchange. The tract offered is referred to as the Gold Mine Draw Exchange (GMDX) tract.

On August 9, 2004, the BLM issued a decision that the applicant is qualified for the exchange and that all of the offered lands are qualified for an exchange.

On March 23, 2005, PRCC and the BLM reached an agreement as to the reserves being offered in the exchange. The reserves are estimated to be 67.2 million tons in-place with an average quality of 8,049 Btu and 0.45% Sulfur.

The GMDX tract is 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 this exchange application at a public

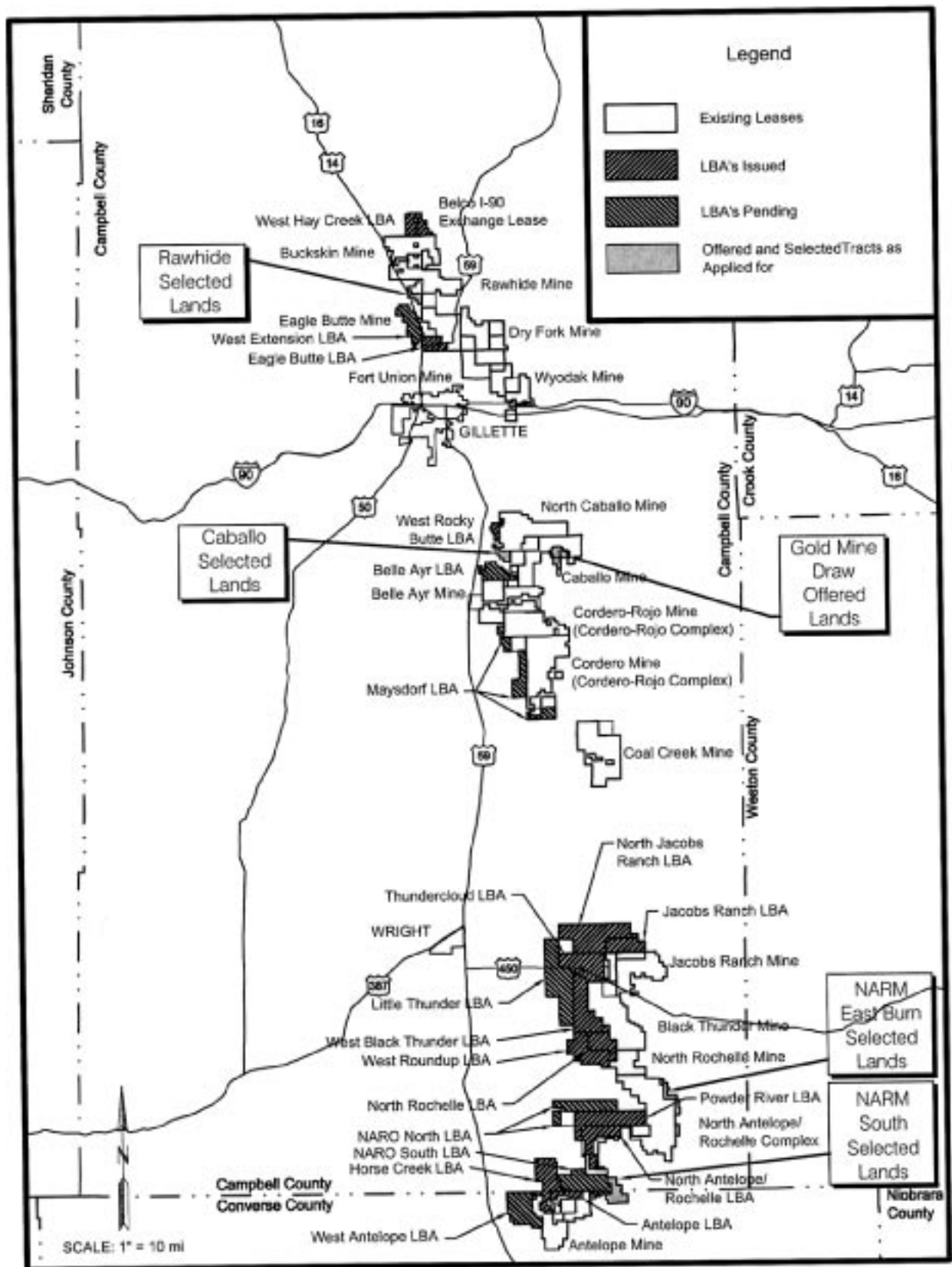


Figure 1-1 General Location Map

meeting held on April 27, 2005, in Gillette, Wyoming. At that meeting, the PRRCT concurred with BLM's decision to continue to process the lease exchange.

In order to process a lease exchange, the BLM must evaluate the quantity, quality, maximum economic recovery, and fair market value of both the offered and selected federal coal tracts and fulfill the requirements of the National Environmental Policy Act (NEPA) by evaluating the environmental consequences of leasing new tracts of federal coal. This EA has been prepared to evaluate the site-specific and cumulative environmental impacts of leasing and developing the federal coal included in the list of selected tracts. BLM does not authorize mining by issuing a lease for federal coal, but the impacts of mining the coal are considered in this EA because it is a logical consequence of issuing a lease. BLM will use the analysis in this EA to decide which of the selected tracts will be exchanged for the offered tract, or to reject all of the selected tracts in favor of a new proposal.

If a lease exchange is made, new lease(s) would be issued to the applicant after the relinquishment of the identified portions of the leases included as a part of the offered tract. The US Department of Justice (DOJ) determines that there would be no antitrust violations if a lease is issued to the applicant.

In return for receiving a lease, the lessee must make annual rental payments to the federal government, and make royalty payments to the federal government when the coal is mined. Federal rental and royalty payments are equally divided with the state in which the lease is located.

Other agencies may use this analysis to make decisions related to leasing and mining the federal coal in this tract. The Office of Surface Mining Reclamation and Enforcement (OSM), the federal agency responsible for regulating surface coal mining operations, is a cooperating agency on this EA. OSM will use this EA to make decisions related to the approval of the Mineral Leasing Act (MLA) mining plan for this tract if a lease is issued. The United States Forest Service (USFS) is also a cooperating agency and will use this document in support of their decision consenting to mining on USFS administered lands.

Since decertification of the Powder River Federal Coal Region only one other coal lease exchange has resulted in the issuance of a new federal coal lease (WYW150152). The lease was issued to EOG Resources in exchange for federal coal lease WYW0322794, the Belco I-90 lease. This exchange was authorized by the I-90 Exchange Act of 1978. The lease acquired by EOG Resources as a result of this exchange is adjacent to the Buckskin Mine (Figure 1-2). Triton acquired this lease from EOG Resources in 2000.

A coal exchange proposal by the Pittsburg and Midway Coal Mining Company has also been completed. Pittsburg and Midway has exchanged lands and minerals it owns in Lincoln, Carbon, and Sheridan counties, Wyoming for federal coal in Sheridan County, Wyoming.

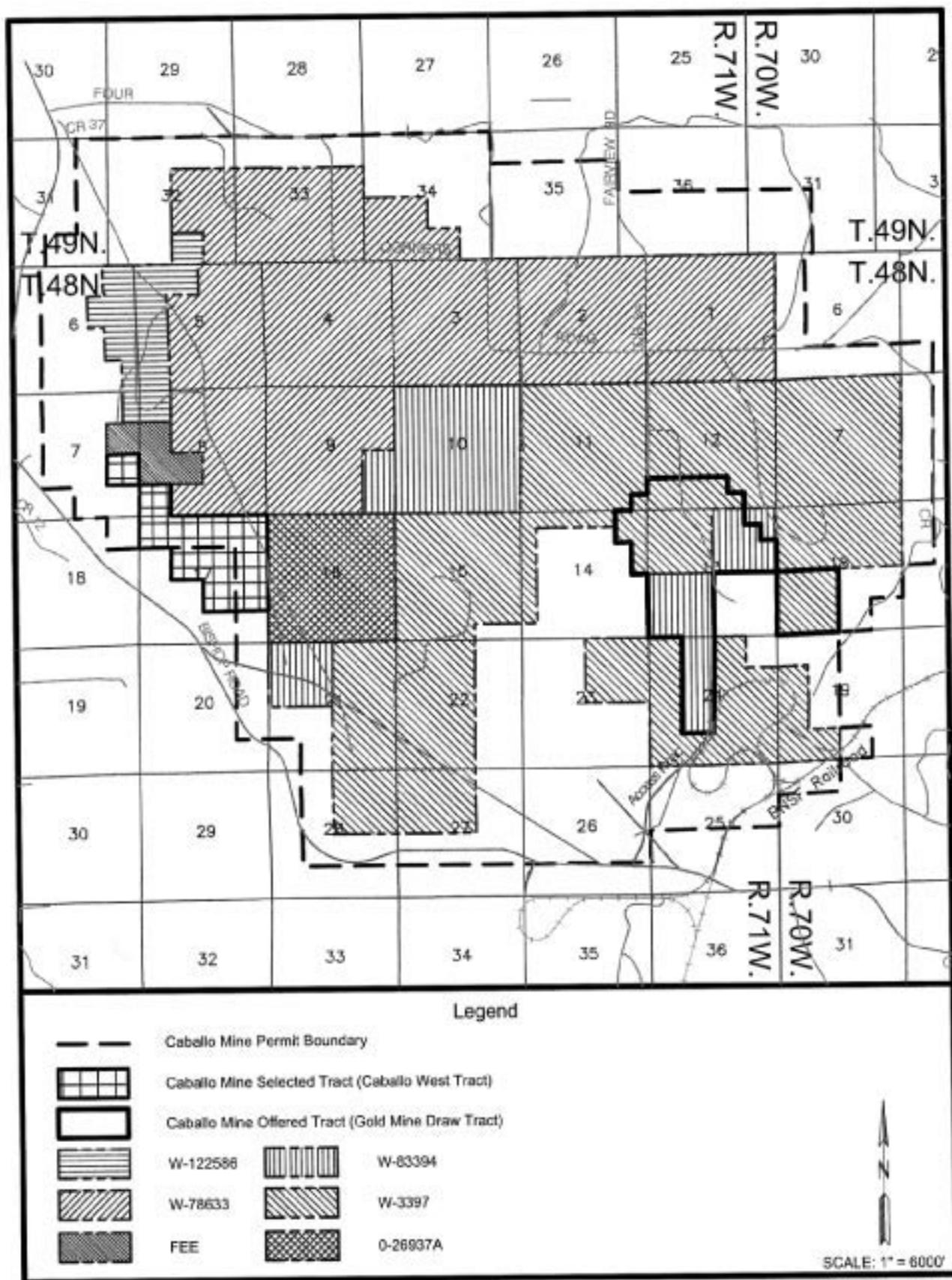


Figure 1-2 Caballo Mine Federal Coal Leases with Offered and Selected Tracts

The GMDX tract adjoins the Caballo Mine (Figure 1-2). The tract lies within the current mine permit area for the Caballo Mine. The area offered is substantially similar to the area for which detailed site-specific environmental data have been collected and for which environmental analyses have previously been prepared to secure the existing leases and the necessary mining permits.

PRCC owns the surface of the GMDX tract. Current land uses of the tract include livestock grazing, wildlife habitat, cropland and pastureland.

1.1 PURPOSE AND NEED FOR THE PROPOSED ACTION

BLM administers the federal coal leasing program under the Mineral Leasing Act of 1920. A federal coal lease grants the lessee the exclusive right to obtain a mining permit for, and to mine coal on, the leased tract subject to the terms of the lease, the mining permit, and applicable state and federal laws.

This EA was prepared in response to an application BLM received to exchange a tract of federal coal at an existing mine, the Caballo Mine, in the Wyoming Powder River Basin. The purpose of this application is to allow the Caballo Mine to exchange portions or two coal leases that are unsuitable for coal mining for coal leases that are suitable for coal mining. Continued leasing of PRB coal enables coal-fired power plants to meet Clean Air Act (CAA) of 1990 requirements without constructing new plants, revamping existing plants, or switching to existing alternative fuels, which would potentially significantly increase power costs for individuals and businesses.

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 to meet the nation's future 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 amended, as well as the Federal Land Policy Management Act of 1976 (FLPMA) and the Federal Coal Leasing Amendments Act of 1976 (FCLAA). The coal leasing program managed by BLM encourages the development of domestic oil, gas, and coal reserves and reduction of the US dependence on foreign sources of energy. As a result of the leasing and subsequent mining and sale of federal coal resources in the PRB, the public receives lease bonus payments, lease royalty payments, and a supply of low cost, low sulfur coal for power generation.

The Caballo Mine, as currently permitted, includes 11,974.7 acres. As of January 1, 2006, the Caballo Mine had an estimated 1,459.8 million tons of in-place federal coal reserves remaining at the mine, and the company estimates that approximately 1,064.6 million tons of those remaining reserves are recoverable. Caballo's currently approved [by Wyoming Department of Environmental Quality, Air Quality Division (WDEQ/AQD)] air quality permit allows the production of up to 40.0 million tons of coal per year (mmtpy). The mine produced approximately 30.6 million tons in 2005. The company

has identified coal reserves adjacent to the Caballo Mine, the Rawhide Mine and the North Antelope/Rochelle Mines to be considered in evaluating the exchange. According to the most recent information from PRCC, they would plan to mine these adjacent tracts in conjunction with the currently held leases. If the coal lease exchange tract(s) are leased to PRCC, they would have to revise their mine permit to include coal recovery in the new lease area before the coal could be mined. This process can take several years to complete.

This EA analyzes the environmental impacts of issuing a federal coal lease and mining the federal coal in the selected tracts as required by NEPA and associated rules and guidelines. A decision to issue new coal lease(s) for the lands in this application is a prerequisite for mining, but it is not the enabling action that would allow mining to begin. 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 WDEQ, Land Quality Division (LQD) and OSM for a surface mining permit and approval of the MLA mining plan. An analysis of a 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.

1.2 REGULATORY AUTHORITY AND RESPONSIBILITY

The PRCC coal lease exchange application was submitted 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
- Surface Mining Control and Reclamation Act of 1977 (SMCRA).

The BLM is the lead agency responsible for leasing and exchanging federal coal lands under the MLA as amended by FCLAA and is also responsible for preparation of this EA.

The GMDX tract is included in the area covered by the BLM *Approved Resource Management Plan (RMP) for Public Lands Administered by the Bureau of Land Management Buffalo Field Office* (BLM 2001). There are no US Forest Service (USFS) lands included in the GMDX tract. However, there are USFS lands identified in some of the selected tracts and USFS will be a cooperating agency in the preparation of this EA. They will also be involved in leasing consent if the selected tract involving USFS lands is chosen as a part of the lease exchange.

After a coal lease is issued, SMCRA gives OSM primary responsibility to administer programs that regulate surface coal mining operations and the surface effects of

underground coal mining operations. 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 leaseholder in Wyoming must submit a permit application package to OSM and WDEQ/LQD for any proposed coal mining and reclamation operations in the state. WDEQ/LQD reviews the permit application package to ensure 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, and other federal agencies review the permit application package to ensure it complies with the terms of the coal lease, the MLA, NEPA, and other federal laws and regulations. If the permit application package does comply, 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 OSM's recommendation.

If a proposed coal lease tract is leased to an existing mine, the lessee is required to revise its coal mining permit before mining the coal, following the processes outlined above. As a part of that process, a new mining and reclamation plan would be developed showing how the lands in the new lease tract would be mined and reclaimed. The revised permit area would be larger than the revised lease area in order to allow for disturbances outside the actual coal removal areas for such purposes as reclaiming to undisturbed topography, constructing flood control and sediment control facilities, and related activities. Specific impacts which would occur during the mining and reclamation of the new lease tract would be addressed in the mining and reclamation plans as well as specific mitigation measures.

WDEQ enforces the performance standards and permit requirements for reclamation during a mine's operation. OSM retains oversight responsibility for this enforcement. BLM has authority in those emergency situations where WDEQ or OSM cannot act before environmental harm and damage occurs.

BLM also has a responsibility to consult with and obtain the comments of other state or federal agencies which have jurisdiction by law or special expertise with respect to potential environmental impacts. Appendix A presents other federal and state permitting requirements that must be satisfied to mine any new lease tracts.

1.3 RELATIONSHIP TO BLM POLICIES, PLANS, AND PROGRAMS

In addition to the federal acts previously listed, guidance and regulations for managing and administering public lands, including the federal coal lands in the PRCC application, 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 this application will follow BLM Lease Exchange regulations at 43 CFR 3435, BLM Instruction Memorandum No. WY-2004-025 and the *National Environmental Policy Act Handbook* (BLM 1988).

1.4 CONFORMANCE WITH EXISTING LAND USE PLANS

The Federal Coal Leasing Amendments Act (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 1985a)] governs and addresses the leasing of federal coal in Campbell County, Wyoming.

Coal land use planning involves applying four screening procedures to identify federal coal that is acceptable for further consideration for leasing. The four coal screening procedures are:

- estimating development potential of the coal lands;
- applying the unsuitability criteria listed in the regulations at 43 CFR 3461;
- making multiple land use decisions that eliminate federal coal deposits from consideration for leasing to protect other resource values; and
- consulting with surface owners who meet the criteria in the regulations at 43 CFR 3400.0-5 (gg) (1) and (2).

BLM applied these coal screening procedures to federal coal lands in Campbell County in the early 1980s. The results were published in the BLM Buffalo RMP in 1985. In 1993, BLM, USDA-FS, and USFWS began the process of reapplying these screening procedures to federal coal lands in Campbell, Converse, and Sheridan Counties. This analysis was adopted in the BLM Buffalo Field Office RMP update (BLM 2001a) discussed above.

A coal tract that is acceptable for consideration for leasing must be located within an area that has been determined to have coal development potential. The selected tracts are located within the area identified as having coal development potential by the BLM in the coal screening analysis published in the 2001 BLM Buffalo Field Office planning document.

The coal mining unsuitability criteria listed in the federal coal management regulations (43 CFR 3461) were applied to the selected tracts and surrounding lands during the coal screening conducted for the 2001 BLM Buffalo Field Office RMP update. No lands

included in the selected tracts were found to be unsuitable for mining during the application of the unsuitability criteria for the 2001 RMP update; however, site-specific unsuitability determinations for some criteria were deferred until an application to lease was filed.

Unsuitability Criterion 3 states that lands within 100 feet of the outside line of the right-of-way of a public road shall be considered unsuitable for surface coal mining, with certain exceptions. The exceptions allow a surface coal mining in the ROW and buffer zone for a public road if the regulatory authority (or the appropriate public road authority designated by the regulatory authority) allows the public road to be relocated or closed after providing public notice and opportunity for a public hearing; and finding in writing that the interests of the affected public and landowners will be protected (30 CFR 761.11).

A portion of US Highway 14-16 crosses the western edge of the Rawhide tract. The 2001 BLM Buffalo RMP update deferred a decision on the unsuitability of the Highway 14-16 ROW and buffer zone until a leasing action occurred, with the assumption that the exceptions discussed above would be applicable. At this time, PRCC does not have approval from the appropriate public road authority (WYDOT) to relocate the road and the exceptions do not apply. As a result, BLM has determined that the portion of the Rawhide selected tract within the ROW for US Highway 14-16 and the 100 foot buffer zone on either side of the highway must be considered unsuitable for mining under Unsuitability Criterion 3 at this time.

Although the Highway 14-16 ROW and associated buffer zone are now determined to be unsuitable for mining, they are included in the Rawhide selected tract. If PRCC does not get approval to relocate the road and the unsuitability designation remains in place, including these lands in the tract will allow recovery of all the mineable coal outside of the highway ROW and associated buffer zone and will comply with the coal leasing regulations, which do not allow leasing in less than 10-acre aliquot parts. If a permit to relocate the road is approved, including these lands will allow recovery of the coal underlying the highway ROW and buffer zone. A stipulation stating no mining activity may be conducted within the Highway 14-16 ROW and buffer zone until a permit to move the highway is approved will be attached if a lease is issued for the tract.

Only those federal coal lands that pass these screens are given further consideration for leasing. BLM applied these coal screens to federal coal lands in Campbell County in the early 1980s. The results were published in the Buffalo RMP. 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 BLM Buffalo Field Office RMP update, discussed above. The results of this analysis are included in Appendix D of the Buffalo RMP (BLM 2001a).

A coal tract that is acceptable for further consideration for leasing must be located within areas that have been determined to have coal development potential. The BLM has

determined that the land in this coal lease application is within the area identified as having coal development potential.

The coal mining unsuitability criteria listed in the federal coal management regulations (43 CFR 3461) have been applied to high to moderate coal development potential lands in the Wyoming Powder River Basin. Appendix B summarizes the unsuitability criteria, describes the general findings for the Buffalo RMP, and presents a validation of these findings for the selected coal lease tract.

As indicated in Appendix B, no lands in the selected tracts have been found to be unsuitable for mining.

Surface owner consultation was completed during the preparation of the coal screening analyses published in 1985 and 2001.

As part of the coal planning for the 1985 Buffalo RMP, a multiple land use conflict analysis was 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 3420.1-4e(3).

The 1985 multiple use conflict evaluation in the Buffalo RMP identified approximately 221,000 acres within Campbell, Sheridan, and Johnson counties that were potentially affected by multiple use conflicts in four categories (producing oil and gas fields, communities, recreation and public purpose facilities, and cultural resources). No lands within the offered or selected tracts were identified as potentially affected by multiple use conflicts.

No additional lands were specifically identified as potentially affected by multiple use conflicts in the multiple use analysis referenced in the 2001 Buffalo RMP update.

The 1985 Buffalo RMP addressed coal and oil and gas development conflicts in two planning decisions. Decision MM-4 recommended authorizing oil and gas drilling on coal leases only where drilling would not conflict with coal mining. Decision MM-5 recommended deferring coal leasing in producing oil and gas fields until coal development would not interfere with economic recovery of the oil and gas resource, as determined on a case by case basis. The multiple use analysis published in the 2001 Buffalo RMP update did not recommend changes to the existing 1985 RMP decisions.

Coal bed natural gas (CBNG) wells have been drilled or are permitted to drill inside the offered tracts (see "Mineral Resources" section). BLM's policy on conflicts between coal and CBNG development, is explained in BLM Instruction Memorandum No. 2003-253 (on file at the BLM's Casper Field Office). BLM's policy is to optimize the recovery of both resources and ensure that the public receives a reasonable return.

In summary, the lands in the selected tracts have been subjected to the coal planning screens and determined acceptable for further lease consideration. Thus, a decision to lease the federal coal lands in this application would be in conformance with the BLM Buffalo RMP and the Platte River RMP.

1.5 CONSULTATION AND COORDINATION

Initial Involvement

BLM received the GMDX application on July 24, 2003. The application was initially reviewed by the BLM, Wyoming State Office, Division of Mineral and Lands. The BLM ruled that the application and lands involved met the requirements of regulations at 43 CFR 3436, Coal Lease and Coal Land Exchanges: Alluvial Valley Floors.

The Governor of Wyoming was notified on August 9, 2004, that PRCC had filed an application for a coal lease exchange with BLM for the GMDX tract.

The PRRCT reviewed this lease application at a public meeting held on April 25, 2005 in Gillette, Wyoming. PRCC presented information about their existing mine and pending exchange application to the PRRCT at that meeting. The PRRCT concurred that the BLM should continue to process this application.

The BLM published legal notices in the Gillette, WY and Douglas, WY newspapers requesting scoping comments concerning the exchange. Letters requesting comments were also mailed to all potentially affected parties.

The scoping period extended from August 1 through August 31, 2005 during which time BLM received six written comments.

Chapter 5 provides a list of other federal, state, and local governmental agencies that were consulted in preparation of this EA (table 5-1) as well as the distribution list for this EA (table 5-3).

Issues and Concerns

Issues and concerns expressed by the public and government agencies relating to the GMDX coal lease exchange and previous coal lease applications included:

- potential conflicts with existing conventional oil and gas development and existing and proposed CBNG development;
- cumulative impacts of mineral development to all other resources;
- validity and currency of resource data;
- public access;

- potential impacts to threatened and endangered species and other species of concern;
- potential air quality impacts (including cumulative impacts to visibility);
- potential surface and groundwater quality and quantity impacts;
- potential impacts of and possible mitigation for nitrogen oxide emissions resulting from blasting of coal and overburden;
- the need to address increasing coal production in the Powder River Basin in the cumulative analysis;
- potential impacts on cultural and paleontological resources;
- wetland impacts;
- short- and long-term impacts on fish and wildlife.

Draft EA

BLM published a Notice of Availability and Notice of Public Hearing in the *Federal Register* on March 22, 2006. A 30-day comment period on the DEA commenced with publication of this notice and will end on April 21, 2006.

The BLM's *Federal Register* notice announced the date and time of a public hearing, as required under 43 CFR 3435.3-5. The public hearing is scheduled to be held at the Clarion Hotel in Gillette, Wyoming, at 7 p.m., on April 11, 2006. The purpose of the public hearing will be to solicit public comments on the DEA, fair market value, maximum economic recovery, and the proposed exchange of federal coal from the GMDX tract. A transcript of the hearing will be available following the hearing and can be viewed at the BLM offices in both Casper and Cheyenne.

Notification of the Governor and Department of Justice Consultation

Before an exchange can be finalized, the Governor of the affected State must be notified and has 30 days to comment on the proposal. Also, before a written decision can be made and before a lease is issued, the BLM must solicit the opinion of the DOJ on whether the planned lease issuance creates a situation inconsistent with federal anti-trust laws. The DOJ is allowed 30 days to make this determination. If the DOJ has not responded in writing within the 30 days, the BLM can proceed with lease issuance.

Notification of the Powder River Basin Regional Coal Team

After this document is issued in final form and before the BLM issues a Decision Record, the PRBRCT will be notified of the pending decision and will again be allowed to review the proposal and offer comments to be considered by the BLM when finalizing the Decision Record.