

# RECORD OF DECISION for the Caballo West Lease by Application Campbell County, Wyoming WYW172657



August 2010



The BLM's multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.

**BLM/WY/PL-10/037+1320**

**U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
RECORD OF DECISION  
CABALLO WEST LEASE BY APPLICATION  
WYW172657  
CAMPBELL COUNTY, WYOMING**

**INTRODUCTION**

On March 15, 2006, Caballo Coal Company filed an application with BLM to lease Federal coal reserves in a tract west of and immediately adjacent to the Caballo Mine in Campbell County, Wyoming, approximately 8 miles south-southeast of Gillette, Wyoming (appendix 1, figure 1). The Federal coal reserves were applied for as a maintenance tract for the Caballo Mine. The application was made pursuant to the "Leasing on Application" regulations found in 43 CFR Subpart 3425.1. The application, which was assigned case file number WYW172657, is referred to as the Caballo West lease by application (LBA) tract.

Caballo Coal Company has applied to lease Federal coal reserves in order to extend the life of the Caballo Mine. The Bureau of Land Management (BLM) refers to these types of applications as maintenance tracts. A maintenance tract is a tract of Federal coal that is adjacent to, and can be mined by, an existing active coal mine. As applied for, the Caballo West LBA tract includes a total of approximately 777.49 acres (appendix 1, figure 2). Caballo Coal Company estimates that, as applied for, the tract includes approximately 87.5 million tons of minable Federal coal.

The Caballo West LBA has been evaluated in a group environmental impact statement (EIS) containing the Caballo West LBA and three other LBAs adjacent to one another in the middle group of mines in the Powder River Basin (PRB), Wyoming. The group EIS is the *South Gillette Area Coal Lease Applications EIS* (hereafter referred to as the South Gillette Area Coal EIS). The Proposed Action analyzed in the South Gillette Area Coal EIS is to hold one competitive sealed-bid lease sale for the Caballo West LBA and issue one lease for the Federal coal lands included in the Caballo West LBA tract as applied for by Caballo Coal Company. As applied for, the Caballo West LBA tract consists of one contiguous block of Federal coal. The Proposed Action assumes that the applicant would be the successful bidder on the tract, and that the tract would be mined as a maintenance lease for the existing Caballo Mine. According to the applicant, the Caballo Mine needs the Federal coal included in the Caballo West coal lease tract in order to extend the life of the mine. The applicant would recover the Federal coal using the same methods, machinery, and facilities that are being used to recover the coal in the existing Caballo Mine coal leases. Caballo Coal Company anticipates that, if they acquire a lease for the Caballo West LBA tract, it would extend the mine life by approximately two years if Bishop Road is moved.

The Caballo Mine has a permit to conduct mining operations approved by the Wyoming Department of Environmental Quality, Land Quality Division (WDEQ/LQD) and the Mineral Leasing Act (MLA) of 1920, as amended, and a mining plan approved by the Secretary of the Interior to conduct surface coal mining operations on their existing coal leases. The mine complies with the requirements of the Clean Air Act (CAA) through an air quality permit approved by the WDEQ's Air Quality Division (AQD) which currently allows mining of up to 50 million tons of coal per year. In the EIS, the estimated production by the year 2015 at the Caballo Mine has been assumed to increase to 39 million tons of coal per year and remain at that rate through the year 2020.

BLM administers the Federal Coal Leasing Program under the MLA as amended and the Federal Coal Leasing Amendments Act of 1976. If any proposed lease tract contains surface lands which are under the jurisdiction of any Federal agency other than the Department of the Interior (USDI) or are occupied by a qualified surface owner, that agency or individual must consent to the issuance of the lease, and in the case of the Federal agency, prescribe the terms and conditions to be imposed on that lease (43 CFR 3400.3-1 and 3420.4-2 and 3427.1). The Caballo West LBA, as configured, does not include any surface held in Federal ownership. The surface estate is owned by the Paul D. Rourke Living Trust; the Anne Rose Rourke Revocable Trust, the Charles T. Rourke, II Revocable Trust, the Annette Rourke Revocable Trust, and Alpha Coal West, Inc.

## **BACKGROUND**

### **Lease by Application Process**

In the PRB, maintenance tracts are nominated for leasing by companies operating adjacent existing mines. To process an LBA, the BLM must evaluate the quantity, quality, maximum economic recovery (MER), and fair market value (FMV) of the Federal coal. The BLM must also evaluate the environmental and socioeconomic impacts of leasing and mining the Federal coal in accordance with the requirements of the National Environmental Policy Act of 1969 (NEPA). BLM prepared the South Gillette Area Coal EIS to evaluate and disclose potential impacts of leasing the Federal coal included in the Caballo West coal lease application. Although leasing the Caballo West LBA tract would not authorize mining operations on the tract, the EIS evaluates the potential impacts of mining the Caballo West tract because mining is a logical consequence of issuing a lease for a maintenance tract of Federal coal.

The Office of Surface Mining Reclamation and Enforcement (OSM) is a cooperating agency on the South Gillette Area Coal Lease EIS because OSM is the Federal agency with the primary responsibility to administer programs that regulate surface coal mining in accordance with section 503 of the Surface Mining Control and Reclamation Act of 1977 (SMCRA). OSM also recommends approval, approval with conditions, or

disapproval of the MLA mining plan to the Assistant Secretary of the Interior, Lands and Minerals Management.

The WDEQ and the Wyoming Department of Transportation (WDOT) are also cooperating agencies on this EIS. WDEQ has 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. WDEQ regulates airborne emissions in Wyoming and administers the air quality standards developed by the Environmental Protection Agency (EPA). The responsibilities of the WDOT include, but are not limited to, management, planning, and oversight of state roads and highways.

By law and regulation, the LBA process is an open, public, competitive sealed-bid process. Bidding at any potential sale is not restricted to the applicant. In order for BLM to award and issue a coal lease, the highest bid received must meet or exceed the fair market value of the coal as determined by BLM's economic evaluation.

Caballo Coal Company filed the Caballo West LBA because the area applied for is adjacent to their existing approved mining operations at the Caballo Mine and the Federal coal can be mined using their existing mine facilities, equipment, and employees. As shown in appendix 1, figure 1, the Caballo Coal mine and related Caballo West LBA are adjacent to one another. In the South Gillette Area Coal EIS, the alternatives that are analyzed in detail assume that the applicant will be the successful bidder if a competitive sale is held.

### **History of Coal Leasing Activity in the Wyoming Portion of the Decertified Powder River Coal Region**

Since decertification of the Powder River Federal Coal Region in 1990, 20 Federal coal leases in Campbell and Converse counties, Wyoming, have been issued under the LBA process with competitive sealed-bid sales. These leases include approximately 49,183 surface acres and 5.793 billion tons of mineable coal. Nineteen of the new leases were issued to the following existing mines for the purpose of extending operations at those mines: Jacobs Ranch (2), Black Thunder (3), North Antelope Rochelle (5), Eagle Butte (2), Antelope (3), Buckskin (1), Cordero/Rojo (2), and the former North Rochelle (1). The remaining lease, the West Rocky Butte, was issued to Northwestern Resources Company in 1992. They planned to start a new mine to recover the coal included in the Rocky Butte and West Rocky Butte leases, but the new mine was never developed. The Rocky Butte and West Rocky Butte leases are now held by Caballo Coal Company, a subsidiary of Peabody Holding Company, Inc. and are included in the Caballo Mine.

### **Pending Coal Leasing Applications and Other Proposed Projects in the Wyoming Powder River Basin**

There are 12 pending maintenance lease applications in the Wyoming portion of the PRB, including the Caballo West LBA tract (appendix 1, figure 1). As applied for, the

pending coal lease applications include approximately 35,605 acres and 4.474 billion tons of Federal coal. In addition to the Caballo West LBA, the pending coal lease applications and applicant mines are: Caballo West (*Caballo Mine*), North Hilight Field (*Black Thunder Mine*), South Hilight Field (*Black Thunder Mine*), West Hilight Field (*Black Thunder Mine*), West Coal Creek (*Coal Creek Mine*), Caballo West (*Caballo Mine*), Hay Creek II (*Buckskin Mine*), West Jacobs Ranch (*Jacobs Ranch Mine*), Maysdorf II (*Cordero Rojo Mine*), South Porcupine (*North Antelope Rochelle Mine*), and North Porcupine (*North Antelope Rochelle Mine*).

Oil and gas leasing and development have occurred in this area in addition to coal leasing and mining. Both conventional and coalbed natural gas (CBNG) wells have been drilled in and around the Caballo Mine and the Caballo West LBA area. Conventional and CBNG resources are currently being recovered from Federal and private oil and gas leases in the application area. Federal oil and gas lease ownership in the Caballo West LBA area is described in figure 3-38 and table 3-16 of the final EIS. Federal oil and gas lessees and private interests identified by the applicant were included on the mailing list for the South Gillette Area Coal EIS.

The EIS discusses energy development in and around the Caballo West LBA tract. The BLM Wyoming Reservoir Management Group (WSO-RMG) prepared a summary of the results of an analysis of the conventional oil and gas drilling that has occurred in the area. The analysis found that there are no active conventional oil or gas wells on lands included in the Caballo West study area, the Proposed Action, or Alternatives 1 and 2. The Caballo Mine has obtained mine-over rights for all oil and gas installations within the tract area.

The EIS also includes a summary of the results of the BLM WSO-RMG analysis of the CBNG resources in the area. At the Caballo Mine, the mineable coal seams are the Wyodak-Anderson coal zone. In this area, CBNG has been produced from that coal zone since the late 1980s. The WSO-RMG analysis indicated that in the Wyodak-Anderson zone underlying the Caballo Mine, CBNG depletion had already occurred before accelerated CBNG development began in the region in the late 1990s. Methane in the coals in the Caballo West LBA will essentially be removed by the CBNG operators before mining occurs. This results in the reduction of the amount of methane released into the atmosphere by coal exposed during mining. The EIS identifies CBNG wells on lands included in the BLM study area of the Caballo West LBA and the operating status of those wells. The remaining CBNG wells can continue to operate in advance of the coal mining operation until the wells become prepared for mine-over.

Several mechanisms can be used to facilitate recovery of the conventional oil and gas and CBNG resources prior to mining if the Federal coal in the tract is leased:

- BLM will attach a Multiple Mineral Development stipulation to the Federal coal lease which states that BLM has the authority to withhold approval of coal mining operations that would interfere with the development of mineral leases that were

issued prior to the Caballo West coal tract being leased (appendix 2). The Caballo Mine has obtained mine-over rights to the oil and gas leases included in this tract for any remaining oil and gas operations within the tract area.

- Conventional oil and gas wells must be abandoned while mining and reclamation operations are in progress. If the value of the remaining oil and gas reserves justifies the expense of reestablishing production, the wells could be recompleted or redrilled following mining. There are currently no producing conventional oil and gas wells on this LBA tract. The analysis prepared by WSO-RMG indicates that there has been little conventional exploration and development in this area in recent years.
- BLM has a policy in place regarding CBNG-coal development conflicts (BLM Washington Office Instruction Memorandum (IM) No. 2006-153). The IM directs BLM decision-makers to optimize the recovery of both CBNG and conventional resources and to ensure that the public receives a reasonable return. This policy offers royalty incentives to CBNG operators to accelerate production in order to recover the natural gas while simultaneously allowing uninterrupted coal mining operations. In addition, the IM also states that it is the policy of the BLM to encourage oil and gas and coal companies to resolve conflicts between themselves and, when requested, BLM will assist in facilitating agreements between the companies.
- Mining the Caballo West LBA tract would not be authorized until: 1) the coal lessee obtains a permit approved by the WDEQ/LQD to mine the tract, and 2) the MLA mining plan is approved by the Secretary of the Interior. Before the MLA mining plan can be approved, BLM must approve a resource recovery and protection plan (R2P2). Prior to approving the R2P2, BLM can review the status of CBNG and conventional oil and gas development on the tract and the mining sequence proposed by the coal lessee. Because the permit approval process generally takes the coal lessee several years to complete, CBNG resources on the coal tract could continue to be recovered during that time.
- Prior to mining the Federal coal, the coal lessee can negotiate an agreement with the oil, gas, and pipeline owners and operators regarding the removal of their existing facilities on the Caballo West tract.

Other proposed projects in the Wyoming PRB that have advanced to the planning, permitting, or construction stages and that would reasonably be expected to be completed in the foreseeable future include: the Wygen III coal-fired power plant at the Black Hills Corporation energy complex near the WYODAK Mine site in Gillette, Wyoming (being constructed); the Dry Fork Station coal-fired power plant proposed by Basin Electric Power Cooperative near the Dry Fork Mine north of Gillette (being constructed); the Two Elk coal-fired Unit 1 and Unit 2 power plants proposed by the North American Power Group (NAPG), which would be located east of the Black Thunder Mine; and a

railroad line from the PRB to Minnesota proposed by the Dakota, Minnesota, and Eastern Railroad Corporation (DM&E). In September, 2007, Canadian Pacific Railway Ltd. announced acquisition of the DM&E and its subsidiaries. The transaction was reviewed and approved by the Surface Transportation Board in October 2008.

In addition, several coal conversion projects have been proposed. Based on status and available information, only one, the KFx Coal Beneficiation Project, was considered to have a high enough likelihood of proceeding to include it in the PRB coal review. The KFx (now Evergreen Energy) coal beneficiation plant produced a commercially viable product in 2007 until the plant was idled down in 2008. Since then, Evergreen Energy Inc. and its strategic partner, Bechtel Power Cooperation, decided to relocate the operation elsewhere.

Methane production from in situ low temperature methanogenesis is being proposed in the PRB. LUCA Technologies Inc. has developed a method of increasing biogenetic methane within a coal seam through enriched methanogenesis using the coal as a hydrogen source. This process uses the predominantly anaerobic microorganisms that metabolize the complex organic molecules in hydrocarbon deposits and produce methane gas as a waste product. The company proposes to transform uneconomically producing CBNG wells and use the existing infrastructure for its operations, which are handled by their directly owned subsidiary, Patriot Energy Resources. None of the CBNG wells located within the Caballo West LBA are owned by Patriot Energy Resources, and none of the wells proposed for this process will be impacted by operations at the Caballo Mine during the life of the lease. Furthermore, the Caballo Mine has mine-over rights to all CBNG wells on the Caballo West LBA tract.

The proposed power plants, the DM&E railroad line, coal conversion projects, and the ongoing and proposed oil, gas, and CBNG operations are separate projects being developed independently of leasing the Caballo West LBA tract. If these other projects are developed as proposed and the Caballo West lease application area is leased and mined as proposed, there would potentially be some overlap between the environmental and economic impacts of constructing and operating some of those projects and the environmental and economic impacts of mining the Caballo West LBA tract. The cumulative effects of these projects are described in chapter 4 of the *South Gillette Area Coal Lease Application EIS*. The cumulative impact discussion in the EIS is based on the analyses done for the PRB coal review, which can be viewed on the BLM website at: [http://www.blm.gov/wy/st/en/programs/energy/Coal\\_Resources/PRB\\_Coal/prbdocs.html](http://www.blm.gov/wy/st/en/programs/energy/Coal_Resources/PRB_Coal/prbdocs.html).

## DECISION

As BLM Wyoming State Director, my decision is that it is in the public interest to offer the Caballo West LBA tract as described below for competitive sale so that these reserves are available to compete for sale in the open coal market to meet the national coal demand that is expected to exist until at least 2035.

Under this decision, Alternative 2 for the Caballo West LBA, as described in chapter 2 of the *South Gillette Area Coal EIS*, has been selected. Under Alternative 2 the Caballo West LBA tract has been modified by BLM to include all lands within the study area.

The tract will be offered for lease at a competitive sealed-bid sale. If the highest bid received at the sale meets or exceeds the FMV as determined by the BLM and if all other leasing requirements are met, a lease will be issued to the successful qualified high bidder. The competitive lease sale will be held as described in the Federal regulations found at 43 CFR 3422, "Lease Sales."

In the event that the highest bid submitted at the competitive lease sale of the Caballo West LBA tract does not meet or exceed the FMV as determined by BLM, the BLM may, but is not obligated to, re-offer the coal tract for leasing at a later date.

This decision is in conformance with the *Approved Resource Management Plan for Public Lands Administered by the BLM Buffalo Field Office (RMP)*, which was completed in 1985 with an RMP Plan Update in 2001 and an RMP Plan Amendment in 2003.

This decision incorporates by reference the standard coal lease stipulations which address compliance with the basic requirements of the environmental statutes and additional BLM special stipulations (appendix 2).

Under Alternative 2, it is assumed that the applicant would be the successful bidder on the Caballo West LBA tract, and that the Federal coal would be mined to extend the life of the adjacent Caballo Mine. The tract would be mined and contemporaneously reclaimed in a logical sequence in concert with ongoing mining and reclamation operations at the adjacent existing mine. This would be consistent with the analysis of the impacts described in the EIS.

## REASONS FOR DECISION

Denying this proposed coal leasing is not likely to affect current or future domestic coal consumption used for electric generation. Not offering the Caballo West tract is unlikely to affect changes in the national electric generation portfolio. The rationale for this conclusion is summarized below.

Various comments on the South Gillette Area Coal EIS asserted that by not leasing this LBA, and, in a cumulative sense, by denying proposed coal leasing in the Wyoming PRB, BLM would slow global climate change and would push the national electric generation portfolio to contain only non-carbon fuel alternatives. BLM has considered this comment/issue thoroughly in our decision.

BLM agrees that movement toward electric generation capacity not reliant on hydrocarbon fuels is positive. Hydrocarbon fuels are a finite resource and will become more costly and rare. Having more non-hydrocarbon (instead of hydrocarbon based) electric generation would assist in decreasing human-caused greenhouse gas (GHG) emissions. Reducing human-caused GHG emissions would help to lessen any harmful effects that they may be causing to the global climate system.

BLM reviewed two independent studies that determined the ability of the domestic electric generation industry to alter the present portfolio (mix of electric generation technologies) corresponding to the period that the Caballo West reserves would be leased and produced. The first study was done by the Department of Energy (Annual Energy Outlook 2008 Report, Energy Information Administration, April 2008) and the second was by the domestic electric generation industry's research arm, the Electric Power Research Institute (*Electricity Technology in a Carbon Constrained Future*, by R. James, Carnegie-Mellon University, November 2007).

Both studies projected the electric generation portfolio to 2030 (slightly beyond the time the proposed Caballo West lease reserves would be produced) and both studies recognized the likelihood of carbon regulation. While there were differences in each study related to the mix of renewable sources, nuclear, and energy conservation, both studies were consistent in finding that coal-fired electric generation would represent 52 to 58 percent of the electric generation portfolio by 2030, as compared to the current 51 percent.

The Annual Energy Outlook 2010 Report (Energy Information Administration, December 2009) represents a forecast to the year 2035. This most recent report incorporates the 2009 downturn in electric demand which resulted from lowered electric demand for manufacturing in the depressed domestic economy of 2009. This forecast lowered the percentage of coal-fired electric generation in the domestic electric generation portfolio to 44 percent by 2035, based on a slowing in electric demand through 2035, and a doubling, to 17 percent, of renewable electric generation in the domestic electric generation portfolio by 2035.

Based on these studies, even with a considerably more optimistic projection for renewable sources, coal use continues to be projected as the largest portion of the domestic electric fuel mix. The factors affecting change in the electric generation portfolio are time and cost of alternate technologies, infrastructure, and increasing electric demand. BLM concludes that during the time that the proposed Federal coal

lease reserves would be produced, the demand for coal-fired electric generation in the United States will not change substantially compared to present day demand.

Further, BLM disagrees with the comment that denying the proposed Federal coal leasing application would reduce the rate of coal consumption by domestic electric generators. Numerous mines located outside of the PRB are extracting and producing coal in the United States. In order to supply reliable power for the country's electrical needs, many mines outside of the PRB have the capacity to replace the coal production generated by the Caballo Mine.

The Caballo West coal reserves, if leased and approved for mining, would allow the coal mining operator to continue to compete for coal sales in an open, diverse supply and demand market. PRB mines have been selling coal in this market for decades, and denying this lease offer would not cease currently approved mining operations. Rather, a denial would require the mine to stop operations only after the current lease reserves are depleted. This would deny the mine operator the ability to compete with other operators for a future coal demand that is expected to last until at least 2035. The inability of the Caballo Mine, or any other existing PRB producer, to sell in the coal market will not cause electric generators to stop burning coal. Utility companies will operate existing coal-burning facilities until either cost or regulatory requirements make them ineffective, or until they are replaced by non-hydrocarbon electrical generation facilities.

The effect of denying the Caballo West LBA would be that the existing mine would cease operations after the current reserves are depleted, and the Caballo Mine would not be competitive in the national coal market to meet the future coal demand in the U.S. that is expected to last until at least 2035. Other national coal producers have the capacity to produce coal and to replace the production from this existing mine.

Lastly, PRB coal has competed for an increasing share of coal sales in the market, primarily because it is lower cost, environmentally compliant, and successful post-mining reclamation has been thoroughly demonstrated. For these reasons, over the past several decades, PRB coal has been replacing other domestic coals in the open market, and would be expected to compete similarly in the future.

Cumulatively, the effect of denying the leasing proposed throughout the PRB would be that many of the existing mines would cease operations once current reserves are depleted (ranging from 8 to 16 years). Those mines would then not be able to compete with other mines to meet the future coal demand that is expected to last until at least 2035. When current reserves are depleted at these mines, their production would likely be replaced by other domestic and, potentially, international coal producers with coal that is more costly, less environmentally compliant, and has more residual environmental impacts.

Many other factors, listed below, were considered in the decision to lease the Caballo West LBA:

- The BLM coal leasing program encourages the development of domestic coal reserves and the reduction of the United States' dependence on foreign sources of energy. BLM recognizes that the extraction of coal is currently necessary in order to meet the nation's energy needs, and a primary goal of the National Energy Policy is to add energy supplies from diverse sources including domestic oil, gas, and coal. Private development of Federal coal reserves is integral to the BLM coal leasing program under the authorities of the MLA of 1920, the Federal Land Policy and Management Act of 1976 (FLPMA) and the Federal Coal Leasing Amendments Act of 1976 (FCLAA).
- The Caballo Coal Company applied for the Federal coal in the Caballo West LBA in order to extend the life of the Caballo Mine by allowing them to acquire access to a continuing supply of low sulfur compliant coal that will be sold to power plants for generating electricity. Continued leasing of low sulfur PRB coal assists coal-fired power plants to meet the CAA requirements for sulfur emissions.
- The leasing and subsequent mining of Federal coal reserves provides the United States, the state of Wyoming, and its affected counties with income in the form of lease bonus payments, lease royalty payments, and tax payments. Production of Federal coal also provides the public with a supply of cost-efficient, low sulfur coal for power generation. The Wyoming Governor, the Wyoming legislature, and other state and local officials support Federal coal leasing.
- The BLM is the lead agency responsible for leasing Federal coal lands under the MLA as amended. When an application to lease Federal coal is submitted, the BLM is obligated to respond to the application in a timely manner. In order to process an LBA, BLM must fulfill the requirements of NEPA by preparing environmental analyses. In this case, an EIS was prepared to provide the agency decision-makers and the public with a complete and objective evaluation of the environmental impacts of leasing and mining the Federal coal. BLM then makes a decision on whether or not to offer the Federal coal for lease. In either case, BLM must notify the applicant in a timely fashion of its decision.
- Offering this Caballo West LBA tract (totaling 1,023.99 acres more or less and containing approximately 130.2 million tons of mineable Federal coal reserves as estimated by the BLM) is responsive to the coal lease application received on March 15, 2006.
- The decision to offer the Caballo West coal tract for leasing is in conformance with the BLM land use plan decisions covering this area (see section entitled "Conformance with Existing Land Use Plans").

- The *South Gillette Area Coal EIS* was prepared in response to applications BLM received to lease tracts of Federal coal adjacent to existing mines in Wyoming. The environmental impacts of this decision were fully disclosed in the EIS. Public comments were addressed in the final EIS.
- The BLM's preferred tract configuration under Alternative 2 provides for maximum economic recovery of the coal resource.
- The U.S. Fish and Wildlife Service (FWS) has provided written concurrence for leasing the Caballo West tract pursuant to section 7(a)(2) of the Endangered Species Act of 1973, as amended (appendix 3). Suitable habitats for Ute ladies'-tresses were surveyed during the known flowering periods in 2006, and 2007. One golden eagle/ferruginous hawk nest was identified outside the tract but still within the general analysis area. Twenty-three bird species on the "Coal Mine List of 40 Migratory Bird Species of Management Concern in Wyoming" have historically been observed in the South Gillette area combined general analysis area at least once. Additional surveys and mitigation will be completed at the permitting for mining stage of the process for each individual LBA.
- No greater sage-grouse leks occur within the Caballo West LBA tract as applied for, or within lands added under Alternative 2. Four greater sage-grouse leks have been found within 3 miles of the Caballo West wildlife general analysis area. The Belle Ayr II and Stowe leks have been classified as unoccupied/destroyed. The other two leks have essentially been inactive since at least 2004. Occupied leks are protected through prescribed management actions during surface disturbing activities. Additional surveys and mitigation will be completed at the permitting for mining stage of the process for the Caballo West LBA.
- Consultation with the appropriate Native American tribes was initiated by the BLM on May 29, 2008. No tribes indicated concerns with the disturbance of cultural sites in the Caballo West general analysis area. Seven archaeological sites have been located on the Caballo West LBA. Of the seven sites, none are recommended as NRHP eligible.
- National Historic Preservation Act consultation with the Wyoming State Historic Preservation Office will be completed as required during the permitting process prior to any disturbance of the tract.
- Issuing a Federal coal lease for the Caballo West LBA tract would not result in the creation of new sources of human-caused GHG or mercury emissions. The Caballo Mine would produce the Caballo West coal at currently permitted levels using existing production and transportation facilities. If the Caballo West tract is leased and mined, site-specific GHG emission rates from the Caballo Mine are anticipated to increase slightly compared to current emission rates due to increased strip ratios and added hauling distances.

- If the Caballo West LBA Federal coal is leased and mined at the currently permitted levels and is used to generate electricity by coal-fired power plants, the emissions of GHG and mercury attributable to the coal produced at the Caballo Mine would be extended for approximately 2.6 additional years. The rate of anthropomorphic CO<sub>2</sub> and mercury emissions would depend on the permitted levels at the coal combustion facilities where the coal is burned and the potential emission limits that may be applied to those facilities in the future by regulation or legislation.
- The potential for regulation of GHG emissions as an air pollutant is recognized in this decision. Should such regulation be put in place, there may be an effect on coal demand, depending on how the regulatory actions affect the demand for electric power and the mix of methods used to produce electricity. Effects to coal demand would be reflected through the coal market, coal pricing, and supply. If demand decreases, it is expected that less efficient coal producers, or those with reserves having less desired coal characteristics, may lose customers. Based on review of past performance, the Caballo Mine has competed very well in the national coal market.

## PUBLIC INVOLVEMENT

BLM received the Caballo West coal lease application on March 15, 2006. The Caballo West coal lease application was announced to the public on April 19, 2006. The Powder River Regional Coal Team (PRRCT) was notified that Caballo Coal Company had filed an application for the Caballo West coal lease and presented with the Caballo West LBA for review on April 19, 2006. At the April 19, 2006 public meeting, the PRRCT reviewed the Caballo West coal lease application. Caballo Coal Company presented information about their existing mine, the history of the Caballo West LBA, and the current pending Caballo West lease application to the PRRCT at that meeting. The PRRCT recommended that the BLM process the application. On April 27, 2006, BLM notified the Wyoming Governor. BLM published a Notice of Intent to Prepare an Environmental Impact Statement and Notice of Public Meeting in the *Federal Register* on March 29, 2007. Scoping notices were mailed to Federal, state, and local government agencies, conservation groups, commodity groups, and individuals who could be impacted by this LBA. BLM and the applicant jointly developed the distribution list. BLM published a public scoping meeting notice in the local newspapers. On April 11, 2007, a public scoping meeting was held in Gillette, Wyoming. The scoping period extended from March 29 on June 10, 2007, during which time BLM received written, e-mailed, and telephoned comments from six entities.

The EPA published a notice announcing the availability of the *South Gillette Area Coal Lease Application Draft EIS* in the *Federal Register* on October 24, 2008. Parties on the distribution list were sent copies of the draft EIS at that time, and the draft EIS

became available on the Wyoming BLM webpage. A 60-day comment period on the draft EIS commenced with publication of the EPA's Notice of Availability and ended on December 24, 2008. The BLM published a Notice of Availability/Notice of Public Hearing in the *Federal Register* on October 17, 2008. The BLM's *Federal Register* notice announced the date and time of the formal public hearing, which was held on November 19, 2008, in Gillette, Wyoming. The purpose of the public hearing was to solicit public comment on the draft EIS, fair market value, maximum economic recovery, and the proposed competitive sale of Federal coal from the LBA tract. One individual presented a statement on the draft EIS during the hearing. Written comments were received from 18 individuals, agencies, or organizations during the comment period.

The EPA published a notice announcing the availability of the *South Gillette Area Coal Lease Application Final EIS* in the *Federal Register* on August 17, 2009. Parties on the distribution list were sent copies of the final EIS at that time. The comment period for the final EIS ended on September 16, 2009. The review period was open for 30 days after the EPA's Notice of Availability (NOA) published in the *Federal Register*.

Comments BLM received on the draft EIS and how BLM considered these comments during preparation of the final EIS were included in appendix I of the final EIS. BLM received eight comment letters regarding the final EIS. Of the eight letters, six letters were from individuals and two were form letters. Of the form letters, form letter 1 was received from 423 individuals and form letter 2 was received from 14,427 individuals. Within form letter 1, four individuals modified their letter to include additional comments. Within form letter 2, 665 individuals modified their letter to include additional comments. The six individual letters were from: Dorsey and Whitney LLP, Crook County Land Use Planning and Zoning Commission, WildEarth Guardians, Clean Energy Action, Rio Tinto Energy America, and Powder River Basin Resource Council/Center for Biological Diversity. The issues of greatest concern were: power plant greenhouse gas emissions from PRB coal combustion, PRB air quality, wanting greater emphasis on renewable energy development from the BLM, concern about the success of the mining reclamation process, concern about water resources in the PRB, and concern for adequate protection of plant and animal species. Comments that BLM received on the final EIS have been reviewed and evaluated, and comment letters and a consolidated BLM response, are available at <http://www.blm.gov/pgdata/content/wy/en/info/NEPA/HighPlains/SouthGillette.html>. Written comments and the transcript of the formal hearing are also on the South Gillette Area Coal EIS webpage. All comments that were received were considered in the preparation of the final EIS and in this Record of Decision.

## **SUMMARY OF THE PROPOSED ACTION AND ALTERNATIVES**

The EIS analyzed the proposed action and two alternatives in detail for the Caballo West LBA tract. Chapter 2 of the EIS contains a full description of each alternative. Summarized descriptions are presented below.

**Proposed Action: Hold a competitive sale for the Federal coal lands as applied for and issue a maintenance lease to the successful bidder.**

Under the Proposed Action, the lands applied for in the Caballo West application by the Caballo Coal Company would have been offered for lease at a competitive sealed-bid sale. As applied for, the tract included approximately 777.49 acres (appendix 1, figure 2). The applicant estimated that the lands contained approximately 87.5 million tons of mineable Federal coal if the Bishop Road is moved. This alternative assumed that the applicant would be the successful bidder, and that the coal would be mined, processed, and sold by the Caballo Mine.

**Alternative 1: The No Action Alternative**

Under Alternative 1, the Caballo Coal Company application to lease the coal included in the Caballo West LBA tract would be rejected. The tract would not be offered for competitive sale at this time, and the coal included in the tract would not be mined. Under this alternative, the Caballo Mine would mine its remaining 687.8 million tons of recoverable coal reserves on the existing Caballo Mine leases in nearly 15.4 years at an average production rate of approximately 38.7 mmtpy (million tons per year).

Rejection of the application would not affect permitted mining activities or employment at the Caballo Mine during the remaining life of the mine.

**Alternative 2 (Selected Alternative): Reconfigure the tract and hold one competitive sale for Federal coal lands in the tract as modified by BLM and issue a lease to the successful bidder.**

Along with the Federal coal lands that were applied for by the Caballo Coal Company, BLM identified and analyzed an additional 246.51 acres of unleased Federal coal adjacent to the southwestern edge of the application land. These additional lands and the as-applied-for tract were referred to as the BLM study area. The study area enabled BLM to evaluate and explore the potential of increasing competitive interest in the tract, allowing for more efficient recovery of Federal coal in the area, and reducing the likelihood of bypassed Federal coal.

Under the selected configuration, the Caballo West LBA modified tract includes approximately 1,023.99 acres. BLM estimates that it contains approximately 130.2 million tons of mineable coal if the Bishop Road is moved.

The legal descriptions of the lands to be offered for competitive sale under Alternative 2, BLM's selected tract configuration, for the Caballo West LBA tract is:

T. 48 N., R. 71 W., 6<sup>th</sup> P.M., Campbell County, Wyoming

Section 7: lots 12, 19;	81.88 acres
Section 8: lot 10;	39.67 acres
Section 17: lots 1 through 12, 15, 16;	573.18 acres
Section 18: lot 5, 12, 13;	125.14 acres
Section 20: lots 1, 2, 8;	122.87 acres
Section 21: lots 11, 12.	<u>81.25 acres</u>
Total:	1,023.99 acres

The land descriptions and acreage are based on the BLM Status of Public Domain Land and Mineral Titles Approved Master Title Plat as of March 8, 2006. The coal estate in the tracts described above is Federally owned. Surface ownership consists entirely of privately owned lands.

### **ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL**

Further descriptions of these alternatives may be found in Chapter 2 of the final EIS.

#### **Alternative 4**

Under this alternative, as under the Proposed Action and Alternative 2, BLM would hold a competitive coal lease sale and issue a lease for the lands included in the Caballo West LBA tract. Alternative 4 assumes, however, that the successful qualified bidder would be someone other than the applicant, and that this bidder would plan to open a new mine to develop the Federal coal resources. In BLM's current estimation, in order for a new mine to open in the Wyoming PRB the first lease would need to contain approximately 500 to 600 million tons of coal.

This alternative was considered but was not analyzed in detail because it was unlikely that a new mine would start up by the lease of this tract. The total amount of coal included in the tract is not sufficient to consider opening a new mine. Also, a new mine would create a new source of air quality impacts. The potential difficulty in obtaining an air quality permit is another issue that could discourage new mine starts in the PRB.

#### **Alternative 5**

Under Alternative 5, the BLM would have delayed the sale of the Caballo West LBA tract as applied for. Delaying the sale may have allowed CBNG resources to be more completely recovered prior to mining. If market prices increased in the future, bonus and royalty payments to the government would have been higher if the tract was offered for sale at a later date.

This alternative was not analyzed in detail because it would not produce substantially different impacts than other alternatives that were analyzed in detail. First, rental and royalty provisions in the proposed lease provide for the U.S. to benefit if coal prices increase by the time of mining. Royalty and tax payments are collected at the time the coal is sold. They increase as coal prices increase, which allows the United States to benefit if coal prices have increased by the time of mining. Second, as described in chapter 2 of the EIS, several mechanisms are already in place to facilitate continued CBNG recovery prior to mining the Caballo West LBA.

## CONFORMANCE WITH EXISTING LAND USE PLANS

Under the requirements of FCLAA, lands that are being considered for Federal coal leasing must be included in a comprehensive land use plan, and leasing decisions must be compatible with that plan. The *Approved Resource Management Plan for Public Lands Administered by the BLM Buffalo Field Office (RMP)*, which was completed in 1985 with an RMP Plan Update in 2001 and an RMP Plan Amendment in 2003, governs and addresses the leasing of Federal coal in Campbell County.

The major land use planning decision that BLM must make concerning Federal coal resources is a determination of which Federal coal lands are acceptable for further consideration for leasing. There are four coal screening procedures that BLM uses to identify these coal lands. The screening procedures require BLM to: 1) estimate development potential of the coal lands; 2) apply the unsuitability criteria listed in the regulations at 43 CFR 3461; 3) make multiple land use decisions that eliminate Federal coal deposits from consideration for leasing to protect other resource values; and, 4) consult with surface owners who meet the criteria defined in the regulations at 43 CFR 3400.0-5 (gg) (1) and (2). The coal screens were developed for Federal decision-making and are used in environmental analyses associated with BLM RMPs, EISs, and other evaluations, and resource management activities.

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 receive further consideration for leasing [43 CFR 3420.1-4(e)(1)]. The Caballo West coal lease application is within the area identified by BLM as having coal development potential.

The second coal screening procedure requires the application of the coal mining unsuitability criteria which are listed in the Federal coal management regulations at 43 CFR 3461. These criteria have been applied to high to moderate coal development potential lands in the Wyoming PRB, including the Caballo West LBA tract and surrounding lands.

Unsuitability criterion 3 states that lands within 100 feet of the outside line of the right-of-way (ROW) of a public road shall be considered unsuitable for surface coal mining. A portion of the Bishop Road crosses BLM's selected configuration for the Caballo West

LBA tract (appendix 1, figure 3). BLM has determined that the portion of the Caballo West tract that includes this road, the ROW, and the 100-foot buffer zone on either side of the ROW must be considered unsuitable for mining at this time.

There are certain exceptions to criterion 3. One of the exceptions which would potentially allow for surface coal mining in a public road ROW and buffer zone is 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. A finding must be reached, stated in writing, that the interests of the affected public and landowners will be protected [30 CFR 761.11(d) and 43 CFR 3461.5(c)(iii)]. When the Caballo West application was filed, the applicant did not have approval from the appropriate county road authority (Campbell County Commission) to relocate the road. At this time, there are no proposals to relocate Bishop Road. Therefore, this exception does not presently apply. If a permit to relocate the road within the Caballo West tract is approved at some point in the future, then it would allow for recovery of the coal that underlies the public road ROW and associated buffer zones.

Although the lands that are within the ROWs and buffer zones have been determined to be unsuitable for mining, they are included in the Caballo West tract to allow for efficient recovery of all mineable coal adjacent to and outside of the ROWs and buffer zones. This determination also complies with the coal leasing regulations which do not allow leasing in less than 10-acre aliquot parts. If a lease is issued for this tract, it will include a stipulation stating that no mining activity may be conducted in the portion of the lease within the public road ROW or associated 100-foot buffer zones unless a permit to move the roads is approved. The stipulation honors the finding of unsuitability for mining under criterion 3.

No other lands included in the Caballo West tract were found to be unsuitable for mining during the application of the unsuitability criteria for BLM's 2001 Buffalo RMP update. Site-specific unsuitability determinations for some criteria were deferred until an application to lease was filed. These findings are included in appendix B of the South Gillette Area Coal Final EIS.

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 municipal/residential multiple land use conflict was addressed by applying buffers around the municipal planning boundaries for the major municipalities within the BLM Buffalo Field Office area, including Gillette and Wright. BLM's selected Caballo West

tract configuration does not extend into any of the municipal buffer zones.

BLM's evaluation of the multiple mineral development conflicts related to issuing a lease for the Caballo West lands is discussed above in the "Pending Coal Leasing Applications and Other Proposed Projects in the Wyoming Powder River Basin" section of this Record of Decision.

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). Under BLM's selected alternative, surface ownership consists of privately owned lands. If private surface owners are determined to be qualified under this regulation, then qualified surface owner consent is required before those lands can be included in a Federal coal lease. The Paul D. Rourke Living Trust; the Anne Rose Rourke Revocable Trust, the Charles T. Rourke, II Revocable Trust, and the Annette Rourke Revocable Trust are qualified surface owners for some of the lands in the selected alternative for the Caballo West LBA. The BLM has received a consent document and will verify the consent document prior to offering the qualified surface owner lands at a competitive sale.

In summary, the lands in the Caballo West tract have been subjected to the four coal planning screens and are determined to be acceptable for further consideration for leasing. Thus, a decision to lease the Caballo West Federal coal lands is in conformance with the current BLM Buffalo RMP.

### **MITIGATION, COMPLIANCE, AND MONITORING**

If the Caballo West LBA tract is leased, the lease will contain standard coal lease stipulations and also BLM special stipulations. BLM has applied special stipulations (appendix 2) to avoid environmental damage or mitigate potential conflicts affiliated with cultural resources, paleontological resources, threatened and endangered species, multiple mineral development of oil and/or gas and coal resources, resource recovery and protection, and/or public land survey. No additional special stipulations were identified in appendix D of the final EIS. The final special stipulations are attached to this decision and will become part of the Federal coal lease records and will pertain to all lands described in the Federal coal lease tract.

After Federal coal leases are issued, SMCRA gives the OSM authority to administer programs that regulate surface coal mining operations. The WDEQ regulates surface coal mining activities in Wyoming. If the Caballo Coal Company is the successful, qualified high bidder for the Federal coal included in the Caballo West LBA tract, a permit revision must then be approved by the WDEQ/LQD. An MLA mining plan revision must also be approved by the Assistant Secretary of the Interior before the coal in the tracts can be mined. The existing mitigation measures specific to the currently approved mine plan for the adjacent mine would be revised to include the new

mitigation measures specific to the Caballo West tract. The mining permit would be amended to include the new mitigation requirements.

If the successful bidder on the Caballo West coal lease sale does not currently operate a mine that is adjacent to the Caballo West tract (WYW 172657), then the bidder would likely propose to construct a new mine in order to recover these Federal coal reserves. Because this would be a new mine start, the proponent would submit a new permit application package to WDEQ/LQD for approval. A new MLA mining plan would also need to be submitted and approved by the Assistant Secretary of the Interior before the tracts could be mined. The approved permit(s) would include mitigation measures and monitoring plans specific to mining the newly leased tract.

Prior to mining the coal lease area, the lease must be permitted for mining by OSM and WDEQ. If a lease is permitted for mining, additional conditions and stipulations may be assigned by OSM and WDEQ. Please see section 1.3 of the final EIS for additional information regarding regulatory authority and responsibility in relation to coal mining in Wyoming.

To ensure that the revised plan is in compliance with the leasing stipulations, BLM has a responsibility to review the R2P2 prior to approval of the mining plan. Before any mining operations can begin on the Caballo West LBA tract, the R2P2 applicable to the tract must be approved by the BLM, a permit or permit revision must be approved by WDEQ/LQD, and an MLA mining plan or plan revision must be approved by the Assistant Secretary of the Interior.

## RECOMMENDATION

I recommend that, after a competitive lease sale is held, Federal coal tract WYW172657, with its associated 1,023.99 acres more or less, be issued to the successful, qualified high bidder, provided it is determined that the highest bid at the sale meets or exceeds the FMV of the tract as determined by the BLM and that all other leasing requirements are met.

This is Alternative 2 for the Caballo West LBA, as modified by BLM, and as described in this Record of Decision. The competitive lease sale will be held in accordance with the requirements at 43 CFR 3422. The lease will be subject to the attached BLM special lease stipulations (appendix 2).



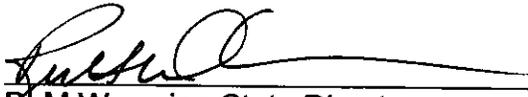
Assistant District Manager for Solid Minerals  
Wyoming High Plains District Office

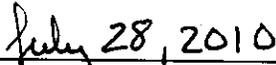


Date

## APPROVAL

I agree with the recommendation of the Assistant District Manager for Solid Minerals, and I approve the decision to offer Federal coal tract WYW172657 for competitive lease sale.

for   
\_\_\_\_\_  
BLM Wyoming State Director

  
\_\_\_\_\_  
Date

## APPEAL OF STATE DIRECTOR DECISION

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR 4 and the enclosed form 1842-1 (appendix 4). If an appeal is filed, your notice of appeal must be filed in this office (BLM, Wyoming State Office, PO Box 1828, Cheyenne, WY 82003) within thirty (30) days from the date BLM published the Notice of Availability (NOA) of this Record of Decision in the *Federal Register*. The appellant has the burden of showing that the decision appealed is in error.

If you wish to file a petition (request) pursuant to regulations 43 CFR 4.21(a)(2) for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

### Standard for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

- 1) The relative harm to the parties if a stay is granted or denied;
- 2) The likelihood of the appellant's success on the merits;
- 3) The likelihood of the immediate and irreparable harm if the stay is not granted; and,
- 4) Whether the public interest favors granting a stay.

**Appendix 1: Figures 1, 2, and 3**

**Appendix 2: BLM Special Coal Lease Stipulations and Coal Lease Form 3400-12**

**Appendix 3: U.S. Fish and Wildlife Service Concurrence Letter**

**Appendix 4: Appeal Procedures**