1.0 PURPOSE AND NEED FOR ACTION

1.1 Introduction

The Bureau of Land Management (BLM) Buffalo Field Office (BFO) has issued leases to private firms to develop coal bed natural gas (CBNG) in the Fortification Creek Planning Area (FCPA) in Northeastern Wyoming. These leases conveyed the right to develop Federal CBNG under certain stipulations and terms and conditions. Since those leases were issued, the Wyoming Game and Fish Department (WGFD) and BLM have been studying an isolated, non-migratory herd of Rocky Mountain Elk (*Cervus elaphus nelson*) located within the planning area. In addition, BLM has deferred taking action on plans of development (PODs) filed with the BFO until it could analyze the impacts of the CBNG on the elk, visual resources, cultural resources and water quality.

This chapter will present BLM's purpose and need for the action, outline the legal authorities that will guide the analysis and decisionmaking, and provide an overview of the planning area.

1.2 Purpose and Need

The purpose of this Resource Management Plan Amendment (RMPA)/Environmental Assessment (EA) is to provide the necessary level of analysis upon which to base a decision on future CBNG development within the FCPA. Critical issues that this RMPA will address are wildlife, cultural, paleontological, and visual resources and how to best manage CBNG development in a region with erosive soils and steep slopes. Of particular importance is consideration of a proposed Area of Critical Environmental Concern (ACEC), which was deferred from the Powder River Basin (PRB) Oil and Gas RMPA/Final Environmental Impact Statement (FEIS; PRB O&G FEIS) in 2003 (BLM 2003a). In addition, given that BLM has received CBNG PODs for lands that have been leased within the FCPA, this is an opportune time to review existing management decisions in light of new information.

Under the Federal Land Policy and Management Act (FLPMA) and National Environmental Policy Act (NEPA), BLM is required to consider impacts to non-BLM lands and resources that would occur as a result of its actions. An RMPA, and an EA prepared under NEPA, are needed to consider the proposed ACEC designation and to consider possible new or changed management actions or other protective measures that are not currently authorized in the existing land use plan.

BLM is required to allow lease holders reasonable access to the lands for which they hold leases. Therefore the need for the action is to consider all reasonable alternatives including one in which current management would continue. Under current management direction, CBNG extraction would be allowed in accordance with the existing stipulations and terms and conditions for development. BLM will use this RMPA to consider additional management controls, including timing and location stipulations, to mitigate potential impacts.

This is a programmatic RMPA/EA that includes evaluation of environmental impacts of broad BFO actions in the FCPA. The proposed action will define and implement a program that sets the stage for site-specific actions to follow. Individual NEPA analyses will be required for individual actions—in this case based on PODs. Each POD submitted to BLM for gas development on a lease will go through a NEPA analysis before BLM approves the POD.

Initially, BLM considered a proposed land exchange with the State of Wyoming for land within a Wilderness Study Area (WSA) in the FCPA. This proposal has since been withdrawn and was not analyzed in this RMPA/EA.

Since BLM approved the original Buffalo Resource Area (BRA) Resource Management Plan (RMP) Record of Decision (ROD; BLM 1985a) in 1985, CBNG has replaced conventional oil and gas development as the dominant play throughout the PRB. BLM estimates that CBNG development could result in more than 726 wells in the FCPA compared to approximately 100 wells for conventional gas development. CBNG development requires electricity to operate the wells, gas metering stations, compression facilities and other infrastructure, and for water treatment and disposal. Power lines are buried from central overhead power line points to individual wells, and there are approximately six wells and 2 miles of buried power lines per drop point.

The BFO RMP (BLM 2001a) designated the FCPA as Visual Resource Management (VRM) Class III, which allows changes to the landscape as long as the changes do not become the predominant element in the landscape. BLM prohibited overhead power lines on Federal surface land within the FCPA in the BRA RMP. Typically, overhead power is allowed in VRM Class III areas. The overhead power line prohibition will be revisited in this RMPA/EA.

Since completing the PRB O&G FEIS (BLM 2003a) and the original BRA RMP, BLM and the WGFD have gathered additional information regarding the population levels and crucial winter and parturition (calving) ranges of an isolated elk herd within the FCPA. This information will be used to determine the impact of CBNG development on the herd and to develop protective measures to minimize future impacts to the herd based on the latest data. BLM has also recently completed an inventory of paleontological resources within the FCPA. This inventory will assist in the analysis and help minimize impacts to fossil resources from CBNG development.

Any decisions based on this RMPA/EA will be programmatic, in that they will provide overall management guidance that will be applied to future PODs filed by lease holders or their operators. The individual PODs will be evaluated against the decisions from this RMPA/EA.

The plan chosen will set goals and objectives to be considered in site-specific actions that will follow. Individual NEPA analyses will be required for individual PODs and individual well applications for permits to drill (APDs).

1.2.1. Split Estate Lands

Throughout this document, BLM uses the term “split estate” to describe certain lands that have a retained Federal mineral interest. The reasons for this split between surface and subsurface ownership varies, but it usually pertains to land (surface) originally passed from Federal ownership under the Homestead acts or Statehood Act that contains minerals (subsurface) held for the benefit of all Americans. The surface of split estate lands in the FCPA is privately owned. These tracts have retained Federal minerals below them, most of which have been leased for mineral development.

While BLM has the authority to lease and allow development of these split estate tracts, it works closely with surface owners to respect property rights and ensure compatibility with surface uses. In some cases, BLM may not allow activities on private or State split estate lands in conjunction with Federal mineral development if such development would cause undue or unnecessary degradation to the environment.

1.3 Fortification Creek Planning Area

The FCPA is located within the PRB in Northeastern Wyoming. The location of the FCPA is shown on Figure 1-1. As shown on Figure 1-2, the FCPA is generally bounded on the northeast by Wild Horse Creek, on the west by the Powder River, and on the south by Fortification and Montgomery roads.

Total acreage within the boundaries of the FCPA is 100,655 acres. The plan will address the management of 79,362 acres of Federal mineral estate managed by BLM within Sheridan, Johnson, and Campbell counties. Total Federal mineral estate in the FCPA is 93,159 acres; however because the WSA will not be developed, Federal mineral estate in the WSA was not included in the analysis. Also Federal coal mineral estate was not included in the analysis. There are approximately 42,755 acres of BLM surface land, 52,576 acres of private surface land, and 5,324 acres of State of Wyoming surface and subsurface land in the area. While the FCPA encompasses private, state, and Federal lands, BLM will only make decisions on lands and resources under its jurisdiction. However, under the FLPMA and NEPA, BLM is required to consider impacts to non-BLM lands and resources that would occur as a result of its actions. Land ownership is shown on Figure 1-2.

With generally rugged topography, elevations in the FCPA range from approximately 3,700 feet along the Powder River on the western boundary to approximately 4,800 feet on ridges. The area is covered by shrublands, with ridges supporting juniper woodlands. This diverse landscape is home to an isolated elk herd as well as a variety of other wildlife.

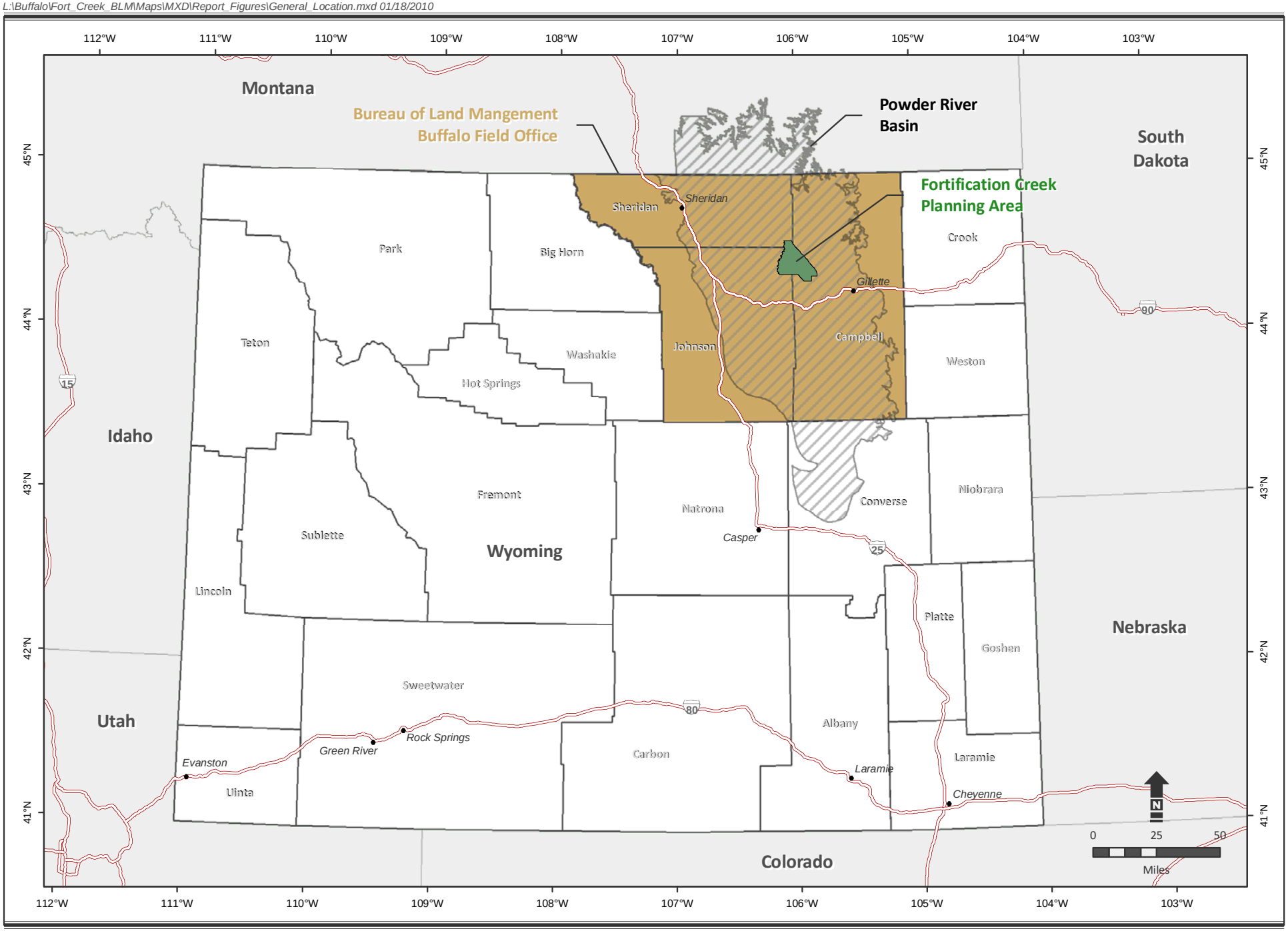
The FCPA is used as a hunting area for resident and non-resident hunters. Effects of human activity are visible throughout the landscape with gas field developments on the south and east, and private ranches surrounding the FCPA.

1.4 Overview of the Plan

This Draft RMPA/EA has been organized and formatted consistently with applicable NEPA and Council on Environmental Quality (CEQ) guidelines and the BLM Land Use Planning Handbook. The goal of this document is to provide the reader with a clear understanding of the alternatives, environmental resources that may be affected, potential environmental consequences, and the environmental review and evaluation process. The following are the chapter titles for this document and brief descriptions of the chapter contents:

- Chapter 1 – Purpose and Need: This chapter offers a brief history and background of the FCPA and describes the purpose and need for the action, the scoping process and issues, planning criteria, the planning process, related plans, relevant policy, and the overall vision of the Draft RMPA/EA.
- Chapter 2 – Alternatives: This chapter describes potential management approaches, or “alternatives” and discusses the alternative development process. It describes three alternatives that are evaluated in detail in this Draft RMPA/EA, including the No Action Alternative and two action alternatives that provide a range of alternate management approaches to address the planning issues.

L:\Buffalo\Fort_Creek_BLM\Maps\MXD\Report_Figures\General_Location.mxd 01/18/2010



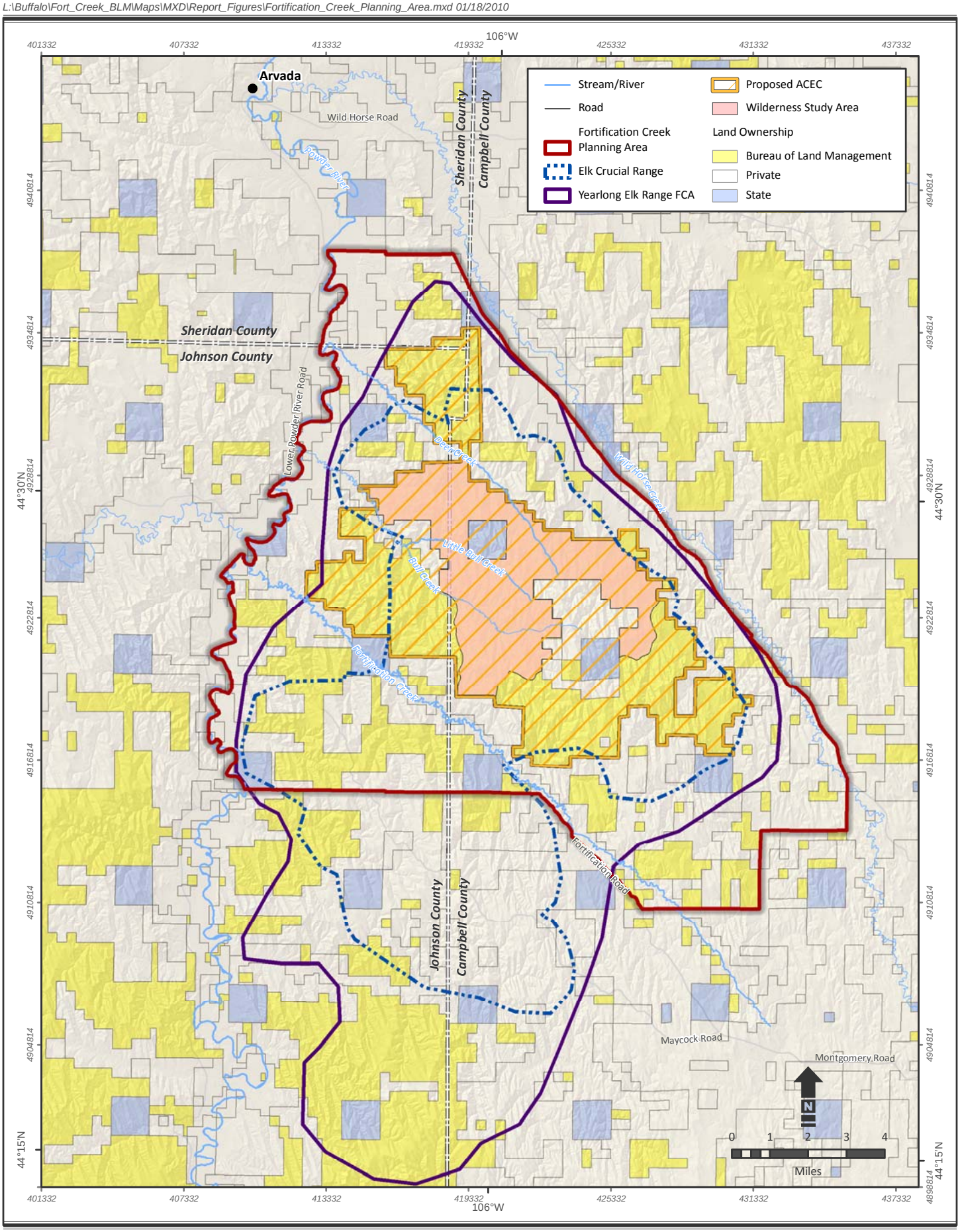
Source:
Wilderness Boundaries - Bureau of land Management 2009
Basemap - ESRI 2009

Figure 1-1

General Location Map

Fortification Creek Planning Area

L:\Buffalo\Fort_Creek_BLM\Maps\MXD\Report_Figures\Fortification_Creek_Planning_Area.mxd 01/18/2010



Source:
Mineral Estate/Boundaries - Bureau of land Management 2009
Topography - United States Geological Survey 2005
Hydrography - National Hydrography Dataset 2003

Figure 1-2

Fortification Creek Planning Area

Campbell, Johnson, and Sheridan Counties, Wyoming

- Chapter 3 – Affected Environment: This chapter describes the current physical, biological, human, and land use environments of the FCPA. The description provides a baseline against which the impacts of the alternatives may be compared. The baseline described in this chapter represents environmental and social conditions and trends in the FCPA at the time this document was being prepared.
- Chapter 4 – Environmental Consequences: This chapter describes how, and to what extent, baseline conditions would be altered by the alternatives. These changes are measured in terms of adverse and beneficial impacts, and direct, indirect, and cumulative impacts.
- Chapter 5 – Consultation and Coordination: This chapter describes how BLM interacted with cooperators and stakeholders.
- Chapter 6 – References: This chapter provides full citation information for all references, published and unpublished, cited in this document, as well as personal contacts used in developing this Draft RMPA/EA.

Appendices A through F provide supporting information for the chapters described above. The appendices offer more detailed information, which some readers may find helpful when reviewing the main text of the document.

Potential decisions and/or other discussions contained in this document may refer directly to maps and figures and many potential decisions themselves are "map based." Therefore, the reader must rely on the text and maps taken together to fully understand the potential decisions described for each alternative.

1.5 Scoping and Issues

As required by NEPA, the BLM BFO completed a process to determine the relevant issues that will guide the scope of the environmental analysis and alternatives to be analyzed in the FCPA RMPA/EA. This process, called scoping, is conducted in the early phases of the planning process, and is used to determine important issues, identify possible alternatives, and gather public comments on BLM's action. The BFO used comments received during the scoping period to determine:

- Important issues to be addressed;
- Possible data needs and sources;
- Alternatives to be assessed; and
- Potential environmental and socioeconomic effects of the various alternatives.

The formal scoping period began on August 20, 2007, with the publication of the Notice of Intent (NOI) in the Federal Register (FR). Written comments on the proposal for the RMPA/EA were accepted through November 30, 2007 and BLM received more than 25,000 form letters and 16 unique comment letters during the scoping period. A Draft RMPA/EA was released for public comment on August 7, 2008. Written comments were received through October 7, 2008 and more than 32,000 form letters were received along with 56 unique comment letters. These comments were incorporated into this version.

Concerns regarding the ability to access gas leases in the FCPA and protection of the elk herd, prompted BLM to reconsider the alternatives. These new alternatives are evaluated in this RMPA/EA.

The vast majority of the comment letters received were from members of the Natural Resources Defense Council (NRDC), who were supportive of management objectives to protect sensitive resources in the FCPA, a land exchange for the State parcel surrounded by the WSA, underground power lines, and required phased development with proven reclamation.

1.5.1. Issues Addressed

Based on BLM's management concerns, and input from cooperating agencies; other Federal, State, and local agencies; and the public, the RMPA/EA will address the following issues:

- Wildlife and wildlife habitat (particularly the elk herd);
- Visual resource management;
- Steep slopes and sensitive soils;
- Phased development;
- CBNG produced water management; and
- Consideration of designating a portion of the FCPA as an ACEC.

1.6 Planning Criteria

Planning criteria are the constraints or ground rules that are developed to guide and direct the planning revision of the FCPA RMPA/EA. Planning criteria are based on laws and regulations; guidance provided by the BLM Wyoming State Director; results of consultation and coordination with the public, other agencies, and governmental entities, and Native American tribes; analysis of information pertinent to the FCPA; public input; and professional judgment. Additional planning criteria may be identified as the planning process progresses.

Planning criteria proposed for the RMPA/EA include the following:

- The RMPA/EA will comply with FLPMA and all other applicable laws, regulations, and policies. The land use plan amendment process will be governed by the planning regulations in 43 Code of Federal Regulations (CFR) 1610 and the BLM Land Use Planning Handbook H-1601-1.
- The proposed action and alternatives will be analyzed in accordance with NEPA.
- Lands affected by the RMPA/EA will be public lands and mineral estate managed by BLM. No decisions will be made relative to non-BLM administered lands or non-Federal minerals.
- Broad-based public participation will be an integral part of the planning process.
- The RMPA/EA will recognize all valid existing rights.
- The planning team will work cooperatively and collaboratively with cooperating agencies and all other interested groups, agencies, and individuals. The RMPA/EA will be consistent with existing non-Federal plans and policies, provided the decisions in the existing plans are consistent with the purposes, policies, and programs of Federal law, and regulations applicable to public lands.
- The WSA will continue to be managed under the Interim Management Policy for Lands under Wilderness Review until Congress either designates all or portions of the WSA as wilderness or releases the lands from further wilderness consideration.

- The planning process will involve American Indian tribal governments and will provide strategies for the protection of recognized traditional uses.
- The RMPA/EA shall include adaptive environmental management (AEM) principles and protocols to deal with unknown future issues and outcomes.

1.7 Planning Process

In general, BLM follows a nine-step land use planning process, as outlined below. Steps 1 through 7 have been completed for the current process. The results of these steps have been incorporated throughout this Draft RMPA/EA, and are as follows:

- Step 1 – Identify Planning Issues: Issues and concerns are identified through a scoping process that includes the public, Native American tribes, other Federal agencies, and State and local governments.
- Step 2 – Develop Planning Criteria: Planning criteria are created to ensure that decisions are made to address the issues pertinent to the planning effort. Planning criteria are derived from a variety of sources, including applicable laws and regulations, existing management plans, coordination with other agencies' programs, and the results of public and agency scoping. As planning proceeds, planning criteria may be updated or changed.
- Step 3 – Collect Data and Information: Based on the planning criteria, data and information for the resources in the FCPA are collected.
- Step 4 – Analyze the Management Situation: The collected data and information are assembled into the Analysis of the Management Situation (AMS) (BLM 2008a).
- Step 5 – Formulate Alternatives: A range of reasonable management alternatives that address issues identified during scoping are developed.
- Step 6 – Assess Alternatives: The environmental effects of each alternative are estimated and analyzed.
- Step 7 – Select Preferred Alternative: The alternative that best resolves planning issues is identified as the Preferred Alternative. The Preferred Alternative may be a combination of the analyzed alternatives or an entirely new alternative.
- Step 8 – Select Resource Management Plan: A Draft RMPA/EA is issued and made available to the public for a review period of 60 calendar days. This document represents this step in the process. During the public review period, BLM will hold additional public meetings to further explain the Draft RMPA/EA, address public questions, and accept comments in writing. After comments on the draft document have been received and analyzed, the Draft RMPA/EA will be revised and modified, as necessary, and the Proposed RMPA/Final EA will be published and made available for public review for 30 calendar days. A Finding of No Significant Impact (FONSI) will be signed to approve the RMPA/EA.
- Step 9 – Implement and Monitor: Upon approval of the FONSI, land use decisions outlined in the approved RMPA would be effective immediately and would require no additional planning or NEPA analysis.

Consistent with BLM Land Use Planning Handbook H-1601-1, BLM will monitor plan

implementation and effectiveness, and will report annually, or as BLM determines is appropriate, on:

- The management actions undertaken;
- The management actions remaining to be undertaken; and
- The effectiveness of those actions toward meeting goals and objectives.

Monitoring strategies have been developed that identify indicators of change, acceptable thresholds, methodologies, protocols, and timeframes that would be used to evaluate and determine whether desired outcomes are being achieved. Elk and reclamation monitoring plans have been included as Appendix A.

The RMPA will be evaluated, at least every five years as documented in an evaluation schedule. Special or unscheduled evaluations may also be required to review unexpected management actions or significant changes that have the potential to trigger an amendment or revision.

1.7.1. Relationship to BLM Policies, Plans, and Programs

BLM has three principal levels of land use planning decisions: (1) the RMP or RMPA level; (2) the activity level; and (3) the site-specific level. This Draft RMPA/EA focuses on establishing resource objectives and direction while providing some activity-level guidance and site-specific decisions. It builds on the history of natural resource management planning in the vicinity of the FCPA.

Table 1-1 highlights the major BLM plans, policies, and resource-specific regulations. These plans and regulations are incorporated into this Draft RMPA/EA by reference, but are not included herein. In addition, some of these plans, as well as other related plans, are currently being updated. All of the new and revised plans and regulations will be included in the Administrative Record (AR) for this project and made available upon request.

Table 1-1 Plans, Policies, and Regulations
General Plans, Policies, and Regulations
National Environmental Policy Act
Federal Land Policy and Management Act
BLM Planning Regulations 40 CFR 1600
BLM Land Use Planning Handbook, H-1601-1, updated March 11, 2005 (BLM 2005a)
BLM National Environmental Policy Act Handbook H-1790-1 (BLM 2008b)
Air Resources
Clean Air Act
Water Resources
Clean Water Act of 1977, as amended
Soil Resources

Table 1-1 Plans, Policies, and Regulations
Wyoming Standards for Healthy Public Rangelands (BLM 1995a)
Vegetation Resources
Taylor Grazing Act of 1934 (43 United States Code [U.S.C.] 315)
Healthy Forests Act of 2003
Clean Water Act of 1977, as amended
Executive Order 11990: Protection of Wetlands
Executive Order 13112: Control of Invasive Species
Federal Noxious Weed Act of 1974 (Public Law [PL] 93-629)
Final EIS: Vegetation Treatment on BLM Lands in the 13 Western States (BLM 1991)
BLM Manual 4180 – Rangeland Health Standards (BLM 2001b)
Wyoming Standards for Healthy Public Rangelands (BLM 1995a)
Fish, Wildlife, and Special Status Species
Endangered Species Act
The Bald and Golden Eagle Protection Act
The Migratory Bird Treaty Act
Sikes Act of 1960 (as amended)
Fish and Wildlife Management Act of 1956
Neotropical Migratory Bird Conservation Act (PL 106-247)
Cave Resources Protection Act (16 USC 4301 et seq.)
Interagency Cooperation: Endangered Species Act, CFR 50 402
BLM Manual 6840, Special Status Species Management (BLM 2001c)
BLM Manual 4180 Rangeland Health Standards (BLM 2001b)
BLM regulations contained in 43 CFR 8200
Executive Order 12962: Recreational Fisheries (June 7, 1995)
Executive Order 13186: Conservation of Migratory Birds (January 10, 2001)
Instruction Memorandum No. WY-2010- 012: Greater Sage-Grouse Habitat Management Policy on Wyoming Bureau of Land Management (BLM) Administered Public Lands including the Federal Mineral Estate (BLM 2009a)
Cultural Resources
National Historic Preservation Act
Protecting Cultural Resources, BLM Handbook 8140 (BLM 2004a)
Visual Resources Management

Table 1-1 Plans, Policies, and Regulations
43 CFR 8400 – Visual Resource Management
BLM Information Bulletins 98-135, 98-164, and 2000-096
BLM Handbook 8410-1, Visual Resource Inventory (BLM 1986)
Fuels and Fire
Healthy Forest Restoration Act of 2003
BLM Prescribed Fire Handbook (H-9214-1) (BLM 1998a), supported by the Office of Fire and Aviation Instruction Memorandum 2002-027 (BLM 2002a)
Federal Wildland Fire Management Policy and Program Review (U.S. Department of the Interior [USDOI] 1995 and 2001)
National Fire Management Analysis System (U.S. Department of Agriculture [USDA] Forest Service, et al 2006)
U.S. Department of the Interior/U.S. Department of Agriculture Western Governors' Association, 2001; A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy and Implementation Plan (USDOI and USDA 2001)
Interagency Standards for Fire and Aviation Operations (published annually) (USDOI 2006a)
Strategic Plan and National Fire Plan Actions (USDOI 1999)
Interagency Fire Plan Template (USDOI 2006b)
Restoring Fire-Adapted Ecosystems on Federal Lands – A Cohesive Strategy (USDOI/USDA 2000a)
National Fire Plan (USDOI and USDA 2000b)
Instruction Memorandum 2003-38, Interim Guidance for Completion of Fire Management Plan Revisions (BLM 2003b)
Washington Office Instruction Memorandum 2004-007, Land Use Plan and Implementation Plan Guidance for Wildland Fire Management Guidance (BLM 2004b)
Rangeland Resources
Taylor Grazing Act of 1934
Public Rangelands Improvement Act of 1978 (PL 95-514)
Executive Order 12548 (1986): Establishment of annual fees for domestic livestock grazing on public rangelands
FLPMA, Sections 102, 201, 202, 302, 304, 307, 309, 310, 401, 402, and 403
BLM regulations contained in 43 CFR 4100 et seq.
BLM Manual 4180 – Rangeland Health Standards (BLM 2001b)
BLM Wyoming Standards for Healthy Public Rangelands (BLM 1995a)
Recreation
43 CFR 2930, Permits for Recreation on Public Lands

Table 1-1 Plans, Policies, and Regulations
Transportation
Transportation Safety Act of 1974
Hazardous Materials Transportation Act and Amendments
40 CFR 2740, 2912, 2911, and 2920, Land Use Authorizations
BM Manual 9113, Roads
BLM Manual 9112, Culverts and Bridges
Lands and Realty
43 CFR 2091, 2300, 2400, and 2710
Taylor Grazing Act of 1934
Federal Land Transfer Facilitation Act
Fluid Minerals
Federal Onshore Oil and Gas Leasing and Reform Act of 1987
Federal Oil and Gas Royalty Management Act of 1982
Federal Oil and Gas Royalty Simplification and Fairness Act of 1996
43 CFR Parts 3100 and 3200
BLM Onshore Oil and Gas Orders
BLM National Notice-to-Lessees
Unitization Manual 3180 (Exploratory)
Unitization Handbook H-3180-1 (Exploratory)
2006 Oil and Gas Surface Operating Standards and Guidelines (Goldbook, 4th edition) (BLM 2006)
Integration of Best Management Practices (BMPs) into Applications for Permit to Drill Approvals and Associated Rights-of-Way (ROWs; WO IM 2007-021)
Special Designations
BLM Manual 1613, Areas of Critical Environmental Concern (BLM 1988a)

1.7.1.1. Related Plans

The 1985 BRA RMP (BLM 1985a) was amended in 2001 with the BFO RMP (BLM 2001a). Management direction for land and mineral resources administered by the BFO are described in these two documents. Along with the two RMPs for the BFO, there are additional oil and gas and wildlife plans including the 2003 PRB O&G FEIS (BLM 2003a). The BRA Resource Area Oil and Gas Surface Protection Plan for the Fortification Creek Area (BLM 1982) provides guidance for oil and gas exploration and development within the FCPA.

1.7.2. Collaboration

BLM Land Use Planning Handbook H-1601-1 (BLM 2005a) encourages BLM to use a "Collaborative Planning Process," whereby interested parties, often with widely varied interests, can work together to seek solutions with broad support for managing public lands. This section describes specific actions undertaken to consult and coordinate with government agencies, special interest groups, Native American tribes, and the public in the development of this Draft RMPA/EA. Additional information on public involvement and scoping is addressed in Section 1.3.