Environmental Assessment

Seminoe Mountains Prescribed Fire

DOI-BLM-WY-030-2011-0071-EA

March 2011

BLM

High Desert District – Rawlins Field Offices

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.

DOI-BLM-WY-030-2011-0071-EA

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
HIGH DESERT DISTRICT

RAWLINS FIELD OFFICE

ENVIORNMENTAL ASSESSMENT TITLE PAGE

EA Number: DOI-BLM-WY-030-2011-0071-EA

Proposed Action Title/Type: Seminoe Mountains Prescribed Fire

Location of Proposed Action: Seminoe Allotment 10218, Black Canyon Allotment 00323, Long Creek Allotment 10212, Morgan Creek Habitat Unit

File Name, No., and Location: Seminoe Mountain Prescribed Fire, RI# 008721
Rangeland Improvement Files,
Rawlins Field Office

Project Legal Location: Township 25 North, Range 84 West, Sec(s) 4-9, 16-20, 30.
Township 25 North, Range 85 West, Sec(s) 1-6, 9-15, 22-26.
Township 26 North, Range 84 West, Sec(s) 27-34
Township 26 North, Range 85 West, Sec(s) 24-36
County Carbon (See Attached Maps)

Bureau of Land Management Field Office: Rawlins Wyoming, WY-030

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FINDING OF NO SIGNIFICANT IMPACT (FONSI)

For

SEMINOE MOUNTAIN PRESCRIBED FIRE

DOI-BLM-WY-030-2011-0071-EA

Based on the analysis of potential environmental effects contained in the attached EA, I have determined that effects are not expected to be significant and that an environmental impact statement is not required. The proposed action will not result in any effects which will have sufficient context and intensity, as defined in section 7.3 of the BLM National Environmental Policy Act Handbook (Manual H-1790-1; Page 70), to be considered significant.

The considerations listed in 40 CFR 1509.27(b) (1-10) were used to evaluate the intensity of the environmental effects described in the EA:

1. There would not be an offset of potential significant adverse effects as a result of beneficial effects by approving the proposed action.

2. Neither the Rawlins Resource Management Plan (RMP) review nor interdisciplinary review found unique characteristics in the geographic area which would be adversely affected by prescribed burns or management of unplanned ignitions within the Seminoe Mountain Prescribed Fire project area.

3. The effects of fire in the ecosystems found within the Seminoe Mountains project area are well known. There would not be high uncertainty of the effects, nor any unique or unknown risks.

4. There would be no adverse effects to resources with scientific, cultural, or historic value, as they have been cleared and will be completely avoided or described mitigation actions implemented.

5. There would be no effect to habitat for threatened or endangered species. Timing restrictions would minimize or prevent adverse effects to other wildlife species and their habitat.

6. Approving either the Proposed Action or the No Action alternative would not violate any Federal, State, or local laws or regulations imposed for the protection of the environment.

7. There would be no effect that is likely to be highly controversial by approving the Proposed Action. Unplanned ignitions would be allowed to continue to burn so long as there are no anticipated containment issues, threatened structures, and the BLM is at a National Preparedness Level that supports this activity. Wildland Fire Use: in accordance with the Rawlins RMP as found in Ch 2.3.3 Fire and Fuels Management pages 2-14, 15; in addition to the HDD FMP as found in Ch 3.1.1, page 8.

8. There would be no establishment of precedence for future actions with significant impacts by approving the Proposed Action.

9. To the BLM's knowledge there are no other actions related to the Proposed Action with cumulatively significant impacts in the Proposed Project Area.

10. Health and safety would not be adversely affected. Solid wastes would be disposed of properly; while air and water quality would not be adversely affected (monitoring would continue and would identify any exceedences of standards).

Authorized Official: _____ Date: _____

Rawlins Field Manager – Dennis Carpenter

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
High Desert District
Rawlins Field Office

Environmental Assessment (EA), Decision Record

EA Number: DOI-BLM-WY-030-2011-0071-EA
Fuels Project Code: LF31010WU.JW0000.LFHFTB350000

BLM Office: Rawlins Field Office (WY-030) **Lease/Serial/Case File No.:** RI# 00871

Proposed Action Title/Type: Seminoe Mountains Prescribed Fire

Location of Proposed Action: Morgan Creek Habitat Unit, Seminoe Allotment (10218), Long Creek Allotment (10212), Black Canyon Allotment (00323)

The project area, which is located 26 miles North of Sinclair Wyoming on County Road 351(Travel Map #7), includes the Seminoe Mountains West of Seminoe Reservoir to Bradley Peak. The entire project area consists of the Morgan Creek Habitat Unit, and portions of the Seminoe, Long Creek and Black Canyon grazing allotments. (See Tables 1 & 2 below for project areas acreage and land ownership). The proposed project, consisting of 25,568 acres, lies entirely within Carbon County, and the Bureau of Land Management (BLM) Rawlins Field Office (RFO) boundary. The specific project area is East of Bradley Peak along the Seminoe Mountains and West of the North Platte River and Kortes Reservoir (see Project Unit Map#1).

The entire project area boundary is defined by two-track roads, county roads, and/or the North Platte River. The proposed project area includes public lands managed by the BLM RFO, Bureau of Reclamation (BOR), State Trust Lands (State), and privately owned deeded lands (see Table 1: Land Ownership). The elevation within the project area varies from 8,300 feet near the Sunday Morning Creek Mine to 5,900 feet along the North Platte River below Kortes Dam. The proposed project area landscape is dominated by rough terrain with long draws, intermittent and perennial drainages, large bowls and steep ridge lines. Dominant vegetation types within the project area consist of approximately 82% upland grass/shrub/forb, 15% timber (conifer/aspen/cottonwood), and 3% riparian.

Three livestock grazing allotments are included within the project area and are administered by the BLM Rawlins Field Office. The grazing allotments include: Seminoe #10218; Long Creek #10212; and, Black Canyon #00323 (see Grazing Allotment Map #2 and Table 2: Allotment and Habitat Unit Acreages within Project Unit). Grazing preference within the allotments are permitted to the following livestock operators: Miller Estate Company (Seminoe), Three Man Ranch Grazing LLC (Long Creek), and Andrew Kortes and Sons, Inc (Black Canyon). The Morgan Creek Habitat Unit is also included within the project area. The Morgan Creek Habitat Unit is excluded from livestock use. The Wyoming Game and Fish Department (WGFD) manages the wildlife habitat within the Morgan Creek Unit and the BLM RFO is responsible for fire suppression and presuppression activities (Memorandum of Agreement Dated: December 1963).

Table 1: Land Ownership

Treatment Unit 25,568 Acres	Acreage			
	Private (Ac.)	BLM (Ac.)	State Trust (Ac.)	BOR (Ac.)
Seminoe Mountain	4,284	13,805	1,063	6,416

Prescribed Fire Unit				

Table 2: Allotment and Habitat Unit Acreages within Project Unit

Grazing Allotment	Acreage			
	Private (Ac.)	BLM (Ac.)	State Trust (Ac.)	BOR (Ac.)
Seminoe #10218	3,467	9,028	234	386
Long Creek #10212	700	3,420	456	368
Black Canyon #00323	114	1,286	191	1,040
Morgan Cr. Habitat Unit	4	70	180	4,622

Table 3: Licensed Grazing Preference

Allotment Name	**AUM's**			**%PL**	**Type Use**	**Season of Use**
	Total	**Suspended**	**Active**			
Seminoe #10218	1,1066	-0-	11,066	51%	Cattle Horse	03/01 – 02/28
Long Creek #10212	1,453	-0-	1,453	68%	Cattle	04/01 – 12/20
Black Canyon #00323	2,106	-0-	2,106	97%	Cattle	04/26 – 11/25
Morgan Cr. Habitat Unit	-0-	-0-	-0-	NA	NA	None

General Project Area Description

The Seminoe Mountain project area consists of mainly intermittent timbered slopes with many upland areas dominated by sagebrush/grass/mountain shrub components. Timber stands within the project area consist of limber pine (*Pinus flexillis);* and ponderosa pine (*Pinus ponderosa);* with various slopes containing encroachment with Rocky Mountain juniper (*Juniper scopulorum).* Drainages containing perennial water sources tend to be dominated by Quaking Aspen (*Populus tremuloides*). Aspen communities are a substantial vegetative component in the following drainages of the project unit: Cottonwood Creek, Marking Pen Creek, Morgan Creek, Steep Creek, Long Creek, and Deweese Creek.

Picture Left: Upper reaches of the Marking Pen Creek drainage.

While the project area is considered summer range for elk, antelope, mule deer and bighorn sheep, it also contains designated crucial winter habitat for the previously listed species (see Big Game Crucial Winter Range Map #3). Four raptor nests exist within the project unit of which three are Golden eagle nests requiring a one mile disturbance buffer from February 1-July 15 (Rawlins RMP 2.3.18 Wildlife and Fisheries pg 2-53) (see Raptor Nest Locations w/ One Mile Buffer Map #4). The forth nest is that of a prairie falcon which requires a .75 mile disturbance buffer from April 1 -July 31(Rawlins RMP 2.3.18

Wildlife and Fisheries pg 2-53). There are no identified Greater Sage-grouse leks within the project boundary; however, 2,309 acres within the project boundary have been identified as core Greater Sage-grouse habitat. (see Map #5)

Recreational opportunities in the area include wildlife viewing; and big game, mountain lion, upland bird, varmint, rock, and antler hunting. Access to the project unit is available through the Morgan Creek Habitat Unit and by crossing federally owned BLM and BOR lands.

Purpose and Need for Action

The purpose of the Seminoe Mountains vegetation treatment is to diversify and manipulate existing vegetation community characteristics within the proposed project area, and mitigate present WUI issues.

Existing vegetative communities across the project area have become decadent and stagnant (with poor vegetative diversity and structure) due to the lack of disturbance and/or herbivory; specifically the Morgan Creek Habitat Unit which has been excluded from livestock grazing for the last 47 years. Aspen communities within the project area have decreased in vigor, age diversity, and overall acreage across the project area. Wildlife habitat quality has decreased over the project area due to shrub over-maturity and/or decadence, and the lack of structural and age stratification throughout the vegetative community. Competition from shrubs for water and nutrients has reduced the amount, vigor, and nutritional quality of grasses and forbs important for wildlife and livestock. Watershed health has declined due to the loss of herbaceous (grass) under-story and overall ground cover on some upland sites within permitted grazing allotments.

Picture Left: Dead & diseased limber pine and aspen communities with timber encroachment into a riparian drainage within the Seminoe Mounting Project Area.

In addition, Wildland Urban Interface (WUI) issues have been identified within the project area. A lack of fire and/or mechanical disturbance (timber harvesting) has resulted in an increased level of fuel loading to the area. Values at risk as a result of increased fuel loading and the occurrence of a wildland fire to the area include: pipelines, powerlines, recreational cabins, primary residences, Seminoe Dam town site, ranch outbuildings, sites of cultural significance, and grazing allotment infrastructure (i.e. fencelines, and water developments).

Picture Left: Recreational cabin with adjacent fuel loading located within the proposed project area.

Scoping and Issues

This project was entered into the RFO on-line NEPA register on January 13, 2011. Public/external scoping was conducted March 17, 2010 (Rawlins) and March 30, 2010 (Casper) during WGFD - Big Game Season Setting Meetings. A project specific public/external scoping and open house was conducted at the BLM RFO March 25, 2010. One public comment showing concern for the project was received as a result of the scoping process. The individuals concerns (fire control issues with burning under high wind conditions) will be addressed in the project burn plan. Internal and cooperative agency scoping resulted in project support letters from both the BOR and the WGFD (see attachments). Interdisciplinary review identified the following resources with issues of concern that will be addressed in this Environmental Assessment:

Resource Issues Check List:

Resources	Issues Present/Identified	No Issues Identified	Resource Not Present
Air Quality	✓		
Cultural	✓		
Vegetation Management	✓		
Invasive/Nonnative Species	✓		
Visual Resource Management	✓		
Lands With Wilderness Characteristics (LWC)	✓		
Water Quality	✓		
Watershed and Soils Management	✓		
Wilderness and Wildlife Habitat Management	✓		
Forest Management	✓		
Fire and Fuels Management	✓		
Wildland Urban Interface	✓		
Livestock Management	✓		
Areas of Critical Environmental Concern (ACEC)			✓
Environmental Justice			✓
Floodplains			✓
Hazardous or Solid Waste			✓

Drinking/Ground Water Quality			✓
Land and Reality			✓
Minerals		✓	
Native American Religious Concerns		✓	
Prime or Unique Farm Land			✓
Paleontology/Geology Management			✓
Socioeconomics		✓	
Transportation and Access Management		✓	
Wild and Scenic Rivers		✓	
Wild Horse Management			✓

Description of Proposed Action and Alternatives:

Proposed Action

The proposed action is for the BLM and cooperating agencies to conduct multiple prescribed fire treatments on 25,568 acres within the identified project area over a period of approximately ten years. Goals and objectives for each prescribed fire targets reduced fuel loading; improved riparian, timber, and/or upland vegetative health depending on the areas vegetative component and topographic features. Individual treatment units (see Treatment Units Acreage Table #4 and Treatment Units Map #6) would be identified in each burn-plan and separated by the watersheds and drainages in which they are located within the project area. In order to provide more flexibility and broader treatment windows, the proposed action analyzed in this document includes both spring and fall treatment seasons, with the majority of the treatments taking place during spring months. Additionally, any naturally occurring unplanned ignition (i.e. lighting) within the project area that would achieve evaluated resource objectives and not exceed the evaluated impacts of this action, would be allowed to burn so long as there are no anticipated containment issues, threatened structures, and the BLM is at a National Preparedness Level that supports this activity.

Table 4: Treatment Unit Acreages

Treatment Unit	Acreage			
	Private (Ac.)	BLM (Ac.)	State (Ac.)	BOR (Ac.)
Cottonwood Creek	-0-	.17	-0-	1220.48
Deweese Creek	1049.07	1398.42	-0-	-0-
Hurt Creek	1745.73	4623.03	234.34	287.47
Junk Creek	36.69	930.78	-0-	-0-
Little Long Creek	198.04	586.92	-0-	-0-
Long Creek	521.75	1926.49	-0-	190.34
Marking Pen Creek	-0-	-0-	-0-	1322.66
Meadow Creek	8.26	980.85	.22	-0-
Misc. Drainage	-0-	19.10	-0-	444.13
Morgan Creek	155.94	3.13	551.04	1660.31
Platte River Hamilton Cr	114.04	1406.98	229.30	1074.16
Red Hills	-0-	639.53	-0-	213.36
Steep Creek	4.48	365.22	47.16	3.88
Sunday Morning Creek	346.18	647.21	-0-	-0-
Tin Cup Creek	103.97	277.97	-0-	-0-
Totals	**4284.15**	**13805.8**	**1061.84**	**6416.79**

Any fire outside of the project area would be unacceptable and, (if on-site and contingency suppression forces are unable to extinguish the escaped fire within one operational period), would trigger the declaration of a wildfire, initiating suspension of the project and appropriate suppression response. In any case, ignitions would be suspended until the burn boss declares that the escape is suppressed. Ignitions would be accomplished by use of a vehicle-mounted terra-torch where possible (along roads), by hand carried drip-torches (areas of limited access such as steep draws, bowls, ridges, and where control may be difficult), and by helicopter w/ a heli-torch (see picture below) or plastic sphere dispenser (PSD) (areas difficult to access and deemed unsafe for hand ignitions). The majority of the treatment units within the project area would be ignited by aerial ignition from a helicopter due to the topography of the project area and the limited vehicle access.

Picture Left: Heli-torch prescribed burn operation.

Specifically, the resource objectives of the proposed action are:

Treat (burn) 50% (with a range of 30%-70%) of the dense, even-aged (and even structured) sagebrush and mixed sagebrush/mountain shrub communities within the identified treatment units. Stands targeted for treatment should contain ≤ 40% aerial cover sagebrush, and/or bitterbrush, mahogany, serviceberry, and/or snowberry (composite).

Treat (burn) decadent/diseased timber stands for the purpose of timber health and the enhancement of wildlife habitat.

Treat (burn) timber stands and areas of timber encroachment to increase visual and travel corridors for bighorn sheep.

Avoid treatment on slopes identified as having weeds concerns and or existing cheatgrass communities. (Identified Weeds, Nonnative's / Invasives Location(s) Map#8)

Avoid treatment of sage brush communities within identified greater-sage grouse core habitat.

Provide buffer strips of un-burnt vegetation along the perennial creek drainages that flow directly into Morgan Creek above the Seminoe Dam Housing water collection site. The purpose of theses buffer strips are to help reduce point-source sediments into Morgan Creek as a result of increased erosion caused by the temporary loss of ground cover as a result of the proposed action. The identified perennial creeks include: the lower portions of Cottonwood Creek, Misc Drainage, Marking Pen Creek, and Morgan Creek. (Perennial Creek Buffer Map #9)

Utilize ignition patterns and burning techniques to increase edge effect and reduce broad portion landscape treatments in continuous areas (i.e. treatments (blackened areas) should be in a mosaic pattern across the project area as topography, wind, and fuel loading allow).

Treat (burn) decedent aspen stands to help stimulate suckering of new communities and clones.

Stands of vegetation that meet the criteria (decedent, diseased, even age classed, and over 40% canopy cover) are located throughout the project area. After reconnaissance of the treatment area approximately 70% of the entire project area could actually be treated (in other words, contains vegetation that would sustain fire spread: i.e. treatment units), in which 30% to 70% of the treatable acres would be targeted for treatment in a mosaic pattern. Therefore, in order to achieve the resource objectives, the **burn objectives** (acres treated) would consist of:

> *Treating (burning) vegetation on approximately 9,000 acres of mixed federal, private, and state lands within the treatment perimeters(s), with an acceptable range of 5,400 to 12,600 acres treated.*

Wyoming State BLM policy calls for a period of two years growing season deferment from livestock presence on treated areas following treatment, it does allow for deviation from the policy, provided that justification is provided. Current grazing schedules by permitted livestock operators within the project area would allow for growing season rest on treated areas.

Standard Operating Procedures/Mitigation Measures:

The majority of the proposed action treatments would be scheduled for spring months when existing snow load drifting on leeward slopes can be utilized (see picture below) for fire spread control lines. Constructed control lines would be created with hand tools, black lines (burning), water/foam (wet-lines), or the use of a "Bob Cat" skidsteer with a mowing attachment. A cultural clearance has been completed for the project area, and any soil disturbing control lines constructed under a controlled fire situation, that have not been previously identified, would require further clearance.

Picture Left: Spring snow loading on leeward slopes in the Seminoe Mountains.

Grazing allotment boundaries, pasture fencelines, and water developments damaged or destroyed as a result of this proposal would be the responsibility of the BLM.

The proposed action and its' impacts would be monitored by the BLM, BOR, WGFD, and livestock operators. Monitoring would include pre-burn shrub canopy cover, sagebrush density transects, and post-burn vegetation response. Photo points would be established prior to the prescribed burn to help document baseline information. Vegetation monitoring would document livestock grazing utilization of key species within treatment areas. Should livestock utilization exceed 50% on key herbaceous species (Idaho fescue, western wheatgrass, prairie Junegrass, indian rice grass, and Sandberg bluegrass) then seasonal application would be modified (i.e. livestock numbers, timing of use, and duration) to reduce utilization.

In order to protect areas of high value wildlife habitat (i.e. bitter brush; *Purshia tridentate*, and Idaho fescue; *Festuca idahoensis)*, the burn plan calls for burning in a mosaic pattern to ensure areas of unburned

vegetation remain. Burning in a mosaic pattern helps provide a natural edge effect between treated and untreated polygons within the project area.

Picture Left: Mosaic spring burn pattern in sage/grass fuel type.

Identified Wildlife Stipulations:

Big Game:
Activities potentially disruptive to wintering wildlife (i.e. treatment implementation) are prohibited during the period of November 15th to April 30th for the protection of big game winter habitat (mule deer/antelope/ elk/ bighorn sheep crucial winter range.)

Raptors:
Activities potentially disruptive to nesting raptors are prohibited during the period of February 1st through July 31st for the protection of raptor nesting areas.

Greater sage-grouse:
There are no identified greater sage-grouse leks located within the project area; however, a portion of the project area has been identified as core habitat for greater sage-grouse There is nesting habitat in the sagebrush habitats and surface disturbing and disruptive activities will not occur between March 1st trough July 15th to protect nesting grouse.

Picture Left: A Greater Sage-grouse in the recently treated area, post-implementation of the Riddle Creek spring prescribed fire.

The area has been assessed as per Wyoming Instruction Memorandum (IM) WY-IM-2010-012 (Greater Sage-Grouse Habitat Management Policy on Wyoming Bureau of Land Management (BLM) Administered Lands including the Federal Minerals Estate). The IM directs the BLM to analyze sage grouse habitat out to a minimum of 4 miles for a relatively small project (i.e. exploratory well, individual rights-of-ways, ect.) and out to a minimum of 11 miles for large projects (i.e. oil and gas full field development, large power lines, etc.). In addition this analysis is to occur both within and outside of the sage grouse core areas, as

designated by the Governor's Executive Order (EO 2008-2). The results of the analysis are included in the Environmental Impacts Section below.

Amphibians:
Although recent surveys conducted within the project area found no boreal toads, the potential does exist. Should boreal toads be discovered within the project area during future surveys, burn treatments would not occur within 500 feet of identified riparian habitat between the periods of April 15th – June 30th.

Spring treatments (April-May) within identified treatment units of the project area could be accomplished so long as an exception request is approved prior to implementation of the treatment.

Notifications to local land owners, home owners, recreationalist, and the general public would be made to ensure public safety and awareness during and prior to project implementation. News articles placed in local papers, radio broadcasts, and/or on agency web pages would also help notify the public of the proposed project. During actual project implementation road guards and signage would be placed along all major travel routes to help notify the public and maintain travel safety.

A contingency plan for managing accidental releases, spills, and fires involving hazardous materials would be handled according to the BLM High Desert District, RFO Hazardous Materials Incident Contingency Plan and would abide by all applicable federal, state, and local laws and/or regulations.

Conformance with Land Use Plans, Laws, and Regulations

Seminoe Allotment Management Plan (AMP) Date Approved: May 3rd 2006

Memorandum of Agreement (MOA); James Irene, Miller Estate Co., Donald Kortes, State of Wyoming, Wyoming Game and Fish Commission, United States of America, Department of the Interior, Bureau of Reclamation; Agreement Number 14-06-700-1703, Dated: February 26, 1963.

Vegetation Treatments on Bureau of Land Management Lands in 17 Western States, Programmatic Environmental Report, Record of Decision, BLM, 2007,

Interim Management Guidelines for the Greater Sage-grouse and Sagebrush-Steppe Ecosystems for BLM Administered Lands in Wyoming, 2000,

Federal Land Policy and Management Act, 1976

Wyoming Standards for Healthy Rangelands

This proposal is subject to the following applicable land use plan (LUP):

Name of Plan: **Rawlins Resource Management Plan (RMP)** Date Approved: **December 24th 2008**

This plan has been reviewed to determine if the proposed action conforms to the land use plan as required by 43CFR 1610.5-3. The proposed action conforms to multiple Management Goals, Objectives, and Actions starting on Page 2-10 of the Record of Decision and Approved RMP.

2.3.6 Livestock Grazing Section – Management Goal

"Maintain and/or enhance livestock grazing opportunities and rangeland health."

2.3.6 Livestock Grazing Section – Management Objectives

" #5 Identify opportunities and implement range and vegetation improvement projects to sustain and enhance livestock grazing and meet Wyoming Standards for Healthy Rangelands in cooperation, consultation, and coordination with the grazing permitees and interested public (Appendix 19)."

2.3.14 Vegetation Section - Management Objectives:

"#3 Maintain, restore, and enhance the health and diversity of plant communities through the use of management prescriptions (such as prescribed natural fire, burning, plantings, seedings, and chemical, mechanical, biological, and grazing treatments or other treatments) in coordination with other local, state, and federal management plans and policies." (page 2-46);

2.3.18 Wildlife Habitat and Fisheries Section - Management Objectives:

"#4 Maintain, restore, or enhance habitat function in crucial winter range."(page 2-52)

2.3.3 Fire and Fuels Section Management Actions:

"#4 Fuel treatments, including prescribed fire, mechanical, chemical and biological treatments will be used for fuels reduction and to meet other multiple-use resource objectives, including returning fire to its natural role in the ecosystem (also see Section 2.3.14). Wildland-urban interfaces (WUI) and communities at risk will receive priority for fuels reduction." (page 2-14)

2.3.4 Forest Management Section - Management Goals:

"#2 Manage woodland communities (such as aspen, limber pine and juniper) for a healthy mix of successional stages within the natural range of variation that incorporates diverse structures and composition into each forest stand type." (page 2-15)

This proposal is also in conformance with the High Desert District Fire Management Plan (FMP) approved in 2011 and available at the BLM RFO upon request. This FMP meets the policy and direction in the National Fire Plan because it emphasizes several primary goals, including reducing hazardous fuels and restoring fire-adapted ecosystems. It also states under resource management on page 4:

"An overriding resource goal is the restoration or maintenance of natural ecosystems....Fire is a critical natural process and will be integrated into land and resource management plans and activities on a landscape scale….This FMP meets USDI policy by using management response to unplanned ignitions and planned ignitions both as a natural process and as a tool in the planning process."

The FMP is split into Fire Management Units (FMU) within each Field Office. It states under Common Fire Management Goals for all FMUs on page 8:

> *"Planned and unplanned ignitions will be used to achieve resource objectives to reduce accumulations of fuels outside the normal range of variability."*
>
> *"Planned and unplanned ignitions, mechanical, chemical, and/or biological treatments will be used to manage vegetation types and to maintain or improve biological diversity and the health of public lands. In particular, plant species and age class diversity will be priority."*
>
> *"Managing wildland fire for resource benefit will be used as appropriate."*

For the Seminoe/Pedro/Shirley Mountain FMU the specific fire management objectives stated on page 74 are:

"In mixed mountain shrub communities, create and maintain a mosaic of shrub age classes across the landscape. Sagebrush ecosystems will be managed with the recommendations found in the Wyoming Guidelines for Managing Sagebrush Communities and the Wyoming Greater Sage Grouse Conservation Plan 2002 unless other objectives have been set forth in Activity Plans within the FMU. Manage aspen stands to increase distribution and improve seral structure. To restore healthy ponderosa pine

communities by reducing tree density and basil area through both mechanical and by the reintroduction of fire. Manage all rangelands/forests in accordance with the Healthy Forest Restoration Act 2003."

The proposed action conforms to BLM's prescribed fire policy as stated in the following BLM Instruction Memoranda:

- Instruction Memorandum No. OF&A 99-010, dated April 20, 1999, Standards for Fire Operations, Chapter 6-Prescribed Fire.
- Instruction Memorandum No. OF&A 98-003, dated November 14, 1997, Prescribed Fire Management Handbook, H-9214-1.
- Instruction Memorandum No. WY-030-99-005 dated August 24, 1999, Prescribed Fire Planning and Implementation Policy.
- Instruction Memorandum No. OF&A 2000-020 dated July 12, 2000, Prescribed Fire "Interim Direction."

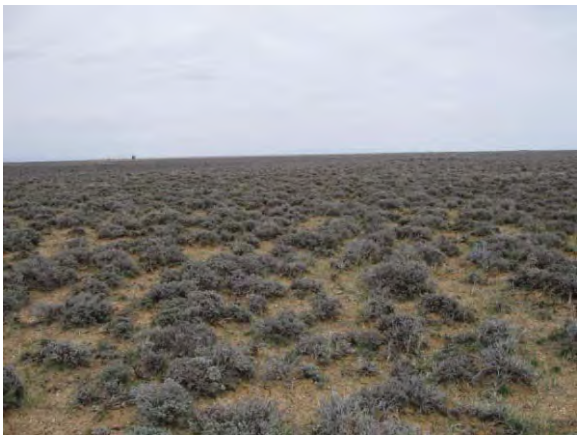
The proposed action is consistent with state and local government programs, plans, zoning and applicable regulations.

Mechanical Treatment Alternative

Mechanical treatments such as disking, chaining, roller chopping, brush-beating, or the use of chainsaws are suitable for shrub and timber manipulation. However, these methods are most appropriately utilized on level ground and gentle terrain. Because of the high cost per acre and the elevated levels of surface disturbance associated with these treatments, along with the extremely steep terrain in the project area, mechanical treatments are dropped from consideration in this environmental assessment.

Herbicide Treatment Alternative

Aerially applied tebuthiron herbicide (Spike), sprayed on the treatment area at a determined rate of active ingredient per acre would result in a kill rate of 20% to 50% on sagebrush. The principle effect of a thinning rate application of Spike is to kill primarily sagebrush, over a period spanning several years. Spike is one of the most species specific types of shrub treatments, and other plant species found within treated sagebrush communities are generally not affected by the chemical. Important wildlife browse species such as bitterbrush, mahogany, serviceberry, aspen, and snowberry are not affected by Spike at the thinning rate, thus, reducing the effectiveness of this alternative to stimulate shrub regeneration. The use of Spike also does little to stimulate early successional habitat in timber communities, and fails to create open areas that improve visual security and travel corridors for wildlife. These factors, combined with the varied treatment results on individual plants, the lack of resulting vegetation community mosaic and habitat "edge", and the uniformity of overall resulting vegetative community characteristics, makes the achievement of project objectives via this method difficult to impossible to achieve. A successful herbicide treatment also fails to mitigate existing fuel loading and WUI concerns throughout the project area. These factors eliminate consideration of this alternative any further in this environmental assessment.



Picture Left: Herbicide (Spike) treatment on Wyoming big sagebrush community. Picture shows lack of mosaic treatment pattern and remnant vegetation stocks.

No Action Alternative

Under the No Action Alternative identified resource issues (i.e. vegetation health, fuel loading, wildlife habitat, and WUI) would not be addressed and managed with the use of prescribed or natural fire. Existing conditions would continue until other management actions could occur.

Affected Environment

The Code of Federal Regulations (CFR's) contains the fundamental regulations and direction that guides the Bureau of Land Management (BLM) in its administration of public rangelands. 43 CFR 4180.1 details four fundamentals of rangeland health. They are:

- Watersheds are in or are making progress toward properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage, and the release of water that are in balance with climate and landform and maintain or improve water quality, water quantity, and timing and duration of flow.

- Ecological processes including the hydrologic cycle, nutrient cycle, and energy flow are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.

- Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving established BLM management objectives such as meeting wildlife needs.

- Habitats are, or are making significant progress toward being, restored or maintained for federal threatened and endangered species, federal proposed, federal candidate and other special status species.

The Six Wyoming Standards for Healthy Rangelands are:

Standard 1: Within the potential of the ecological site (soil type, landform, climate, and geology), soils are stable and allow for water infiltration to provide for optimal plant growth and minimal surface runoff.

Standard 2: Riparian and wetland vegetation have structural, age, and species diversity characteristics of the state of channel success and is resilient and capable of recovering from natural and human disturbance in order to provide forage and cover, capture sediment, dissipate energy, and provide for ground water recharge.

Standard 3: Upland vegetation on each ecological site consist of plant communities appropriate to the site which are resilient, diverse, and able to recover from natural and human disturbance.

Standard 4: Rangelands are capable of sustaining viable populations and a diversity of native plant and animal species appropriate to the habitat. Habitats that support threatened species, endangered species, species of special concern, or sensitive species will be maintained or enhanced.

Standard 5: Water Quality meets state standards.

Standard 6: Air Quality meets state standards.

The Affected Environment is described using the Standards for Rangeland Health as follows:

Standard 1	Soils/Watershed Health

The Seminoe Mountain project area lies within the North Platte River Basin and has a total of fifteen identified drainages within its project boundary. (Table 4: Treatment Unit Acreages and Map #6 Treatment Units). Each one of the identified drainages represents a separate treatment unit within the project area. Due to the topography and ruggedness of the terrain within the Seminoe Mountains many of the creeks have steep gradients consisting of small to medium substrate with little to no sinuosity. Flows in most identified drainages are intermittent and/or ephemeral during spring/fall months and/or during precipitation events only. Perennial creeks within the project area that maintain flows year round during normal precipitation years are: Morgan Creek, Marking Pen Creek, Hurt Creek, Deweese Creek, Sunday Morning Creek, and Long Creek. Many of the other drainages flow substantial amounts of water during spring months, or have perennial sections within their channels, but the listed perennial streams maintain surface flows for extensive distance year round. The majority of the identified drainages are protected by rocky substrates and large coarse woody debris helping to protect banks from high energy flows and decreasing erosion potential. Many of the listed creeks are confined to steep drainages and demonstrate little to no sinuosity until they reach lower elevation away from the Seminoe Mountains. Two identified creeks within the project area that demonstrate higher degrees of sinuosity are Hurt Creek and Deweese Creek as they occur in areas with gentler elevation changes and less confined drainages.

The majority of the soils within the project area are classified as Leavitt and Hoodle Variant, with Rock Outcrops. There are other series mapped, but these are the main soils. Leavitt soils are on relict fan aprons, coalescing fans, terraces, hills, mountain slopes and valley-filling side slopes. These soils formed in alluvium and alpine till derived primarily from crystalline and sedimentary rock. Hoodle soils are on dissected pediments veneered with volcanic alluvium on moderately slopping convex long narrow ridge tops. Slope gradients are 0 to over 60 percent. Most of the soils are of varying depths, sandy, well drained with slow to medium runoff and moderate to high permeability.

Standard 2	Riparian/Wetland Health

The project area is located within the Pathfinder-Seminoe Reservoir Hydrological Unit. A large number of riparian areas exist throughout the project area. Each identified treatment unit contains at some extent a portion of riparian or wetland habitat. The identified creeks: Marking Pen Creek, Morgan Creek, Long Creek, Deweese Creek, Sunday Morning and Hurt Creek, all feed live water through their drainages year round supporting various riparian habitats. These creeks are fed via subsurface flows, spring snow melt, springs, seeps, and from precipitation events.

There are two established rain gages within the project area; Seminoe Dame (BOR), and Miracle Mile (BLM). The two listed rain gages are located within three miles of one another, and over the last three years, based on the Miracle Mile rain gage the area has received on average 9.6 inches of annual precipitation. The Seminoe Dam gage station, located at a higher elevation near the Seminoe Dam housing site, shows on average 11.75 inches annual precipitation for the last two years.

Woody riparian vegetation species include: cottonwood, aspen, various willow species, alder, waterbirch, choke cherry, dogwood, hawthorn, snowberry, currant, rose, and cinquefoil. Herbaceous species include: various forbs, sedges, rushes, and grasses. The majority of existing riparian areas within the project area are in functioning condition, although, some systems are exhibiting a downward trend. Lack of disturbance (natural fire) in some riparian areas has resulted in existing communities become decadent and consisting of a climax stage vegetative community (i.e. basin sagebrush and aspen). Some aspen stands existing within the project area have specifically been identified for treatment because they lack age diversity and fecundity.

Standard 3	Upland Vegetation

Upland vegetation across the project area consists of plant communities appropriate to the site which are resilient, diverse, and able to recover from animal herbivory and natural and human disturbance. Plant species frequenting upland sites within the project area include: Western and bluebunch wheatgrass, little and mutton blue grass, prairie Junegrass, Indian ricegrass, needleandthread grass, green and Columbia needlegrass, Idaho fescue, Kingspike fescue, basin wildrye, juniper, limber pine, ponderosa pine, aspen, cottonwood, basin big sagebrush, mountain big sagebrush, rubber rabbitbrush, Douglas rabbitbrush, snowberry, mountain mahogany, serviceberry, chokecherry, ocean spray, prickly-pear cactus, phlox, mustards, lupine, larkspur, yarrow, Indian paintbrush, violet, bluebells, and various aster family species. These plant species help to support wildlife and livestock by providing thermal and hiding cover, and most importantly, as sources of dietary intake. Upland plant communities throughout the project area demonstrate good diversity, yet the lack of disturbance has allowed for the encroachment of Limber pine and juniper across the project area landscape. Timber encroachment ultimately increases the amount of bare ground by outcompeting understory vegetation for sunlight and intercepting moisture during precipitation events. Timber encroachment also impacts wildlife habitat by decreasing animal travel corridors, landscape visibility, and important seasonal habitats (i.e. bighorn sheep lambing grounds). Timber communities are native to the Seminoe Mountains and do provide many benefits to wildlife (i.e. hiding, escape, and thermal cover), but as a result of lack of disturbance and wildfire to the area, many once open slopes are now timbered. Limber pine, though recently added to the "State Sensitive Species List" (see below), is one of the major timber components throughout the project area. This species is located throughout the entire project area and has been a major plant species component in converting once open slopes into now timbered communities.

Cheatgrass communities exist throughout the project area. These communities are typically located on or near South facing slopes adjacent to existing roads or soil disturbances with thin soil layers and abundant rock material. A number of different weeds species have been identified within the project area. Identified weed/invasive species include but are not limited to: dalmation toadflax, Russian knappweed, bull thistle, Canada thistle, hoary cress (Whitetop), diffuse knapweed, musk thistle, and spotted knappweed. The largest infestations in the area include Dalmation Toadflax and Russian Knappweed. All of the identified and mapped weed locations (Identified Weed Location Map #8) are within the East most portion of the project unit along main travel and access routes. Dalmatian toadflax is currently being treated successfully by the BOR via biological control within the Morgan Creek drainage.

Standard 4	Wildlife/TE&S Species

BLM Wyoming State Sensitive Species

Many wildlife and plant species populations are declining, and though there may be many reasons for this, one of the causes of this decline is loss of habitat from the landscape. The objective of the sensitive species designation is to ensure consideration of the overall welfare of these species when undertaking actions on public lands, and not to contribute to the need to list the species under the provisions of the Endangered Species Act (ESA). The lack of demographic, distribution, and habitat requirement information compounds the difficulty of taking management actions for many species. While there are specific actions identified at this time, this project is designed to continue improvement of all habitats within the project area.

The BLM's management mandate is less regulatory, and more administrative and generic for sensitive species.

It is the intent of the sensitive species policy to emphasize the inventory, planning consideration, management implementation, monitoring, and information exchange for the sensitive species on the list in light of the statutory and administrative priorities mentioned above. In most instances, the following types of actions/activities would be appropriate and expected for sensitive species management: Inventory, Land Use Planning, Conservation Strategies, NEPA Analysis, Best Practices, Monitoring and Information Interchange.

A biological evaluation identified the following sensitive species as possible occurring within the defined project area:

Species Common Name	Scientific Name	Habitat
MAMMALS (6)		
Rabbit, Pygmy	*Brachylagus idahoensis*	Basin-prairie and riparian shrub
Bat, Townsend's Big-eared	*Corynorhinus townsendii*	Forests, basin-prairie shrub, caves and mines
Bat, Spotted	*Euderma maculatum*	Cliffs over perennial water, basin-prairie shrub
Myotis, Long-eared	*Myotis evotis*	Conifer and deciduous forests, caves and mines
Myotis, Fringed	*Myotis thysanodes*	Conifer forests, woodland-chaparral, caves and mine
Pocket Gopher, Wyoming	*Thomomys clusius*	Meadows with loose soil
BIRDS (5)		
Sparrow, Sage	*Amphispiza belli*	Basin-prairie shrub, mountain-foothill shrub
Sage-Grouse, Greater	*Centrocercus urophasianus*	Basin-prairie shrub, mountain-foothill shrub
Shrike, Loggerhead	*Lanius ludovicianus*	Basin-prairie shrub, mountain-foothill shrub
Thrasher, Sage	*Oreoscoptes montanus*	Basin-prairie shrub, mountain-foothill shrub
Sparrow, Brewer's	*Spizella breweri*	Basin-prairie shrub
AMPHIBIANS (3)		
Toad, Boreal (Northern Rocky Mountain population)	*Bufo boreas boreas*	Pond margins, wet meadows, riparian areas
Frog, Northern Leopard	*Rana pipiens*	Beaver ponds, permanent water in plains and foothills
Spadefoot, Great Basin	*Spea intermontana*	Spring seeps, permanent and temporary waters
PLANTS (5)		
Rocky Mountain Twinpod	*Physaria saximontana* var. *saximontana*	Sparsely vegetated rocky slopes of limestone, sandstone or clay 5,600-8,300'
Persistent Sepal Yellowcress	*Rorippa calycina*	Riverbanks & shorelines, usually on sandy soils near high-water line

Laramie False Sagebrush	*Sphaeromeria simplex*	Cushion plant communities on rocky limestone ridges & gentle slopes 7,500-8,600'
Limber Pine	*Pinus flexillis*	Timberline and at lower elevation with sagebrush. Associated species are Rocky Mountain lodgepole pine, Engelmann spruce, whitebark pine, Rocky Mountain Douglas-fir, subalpine fir, Rocky Mountain juniper, Mountain Mahogany, and common juniper.
Whitebark Pine	*Pinus albicaulis*	Montane forests and on thin, rocky, cold soils at or near timberline at 1300 – 3700 m

Endangered, Threatened, and Proposed Species:

There are 7 endangered, threatened, proposed and/or candidate species that may be found, or have the potential to be found, within the Rawlins Field Office area. There are four species within the Colorado River system and 5 species within the North Platte River system that may be affected by projects causing water depletions in the RFO. Informal consultation with the U.S. Fish and Wildlife Service (Service) in Cheyenne, Wyoming, is not required at this time. **The species listed below are not located within, or do not have habitat within, the proposed project area, therefore, there will be no effect to T&E species as a result of implementing the proposed project.** There is a small area of potential habitat for Blowout penstemon located in the far north-western portion of the project area; however, no associated habitat (sand dune depressions) would be treated (burnt) under the proposed action, therefore there would be a no effect to the species.

Mammals	
Species Common Name	Associated Habitat
Black-Footed Ferret	Prairie dog colonies with black-tailed prairie dog complex >80 acres and white-tailed prairie dog complex >200 acres
Canada Lynx	Early and late conifers forest >6500 feet in elevation, rangelands

Birds	
Species Common Name	Associated Habitat
Yellow-Billed Cuckoo	Cottonwood/Willow riparian habitat west of the Continental Divide

Plants	
Species Common Name	Associated Habitat
Blowout Penstemon	Sparsely vegetated shifting sand dunes or wind carved depressions
Ute Ladies' Tresses	Endemic to moist soils in mesic or wet meadows near springs, lakes, seeps, and riparian areas within 100 year flood plain of perennial streams ranging from 4,300-7,00 feet in elevation
Western Prairie Fringed Orchid	North Platte River System
Colorado Butterfly Plant & Critical Habitat	Endemic to moist soils in mesic or wet meadows of floodplain areas in Laramie County, WY

Amphibians, Reptiles, Fish, & Toads	
Species Common Name	Associated Habitat
Least Tern	North Platte River System
Eskimo Curlew	North Platte River System
Piping Plover	North Platte River System
Western Boreal Toad	Riparian areas >7500 feet in elevation
Wyoming Toad	Known distribution is restricted to within 30 miles of Laramie, Wyoming within the Mortenson Lake and Hutton Lake National Wildlife Refuges

Watershed Depletions	
River	Associated Habitat
Colorado River Species Habitat: Colorado Pikeminnow, Humpback Chub, Bonytail Chub, Razorback Sucker	Colorado River Basin
North Platte River Species Habitat: Pallid Sturgeon	North Platte River System

The project area meets the requirements for standard #4. Current upland and riparian sites within the project area are utilized by wildlife. However, these sites are less productive due to the even-aged stands of late serial vegetation and increased canopy cover which have resulted in increased bare-ground and decreased plant species diversity.

Standard 5	Water Quality

Water from creeks, springs, and seeps differ in their quantity and quality of water produced within the project area. Water quality at existing sources is generally good, in terms of supporting use by wildlife, livestock, and riparian habitat. However, around these sources water quality is often highly impaired due to animal impacts and defecation. None of the existing waters within the project area are listed on the state of Wyoming's 303-D list, and therefore, standard #5 is being met. The Morgan Creek drainage is identified as the main water source for the Seminoe Dam housing area. The BOR has a protected water collection area (see photo below) located below the town site just upstream from where Morgan Creek flows into the North Platte River.

Picture Left: Seminoe Dam housing site protected water collection area on Morgan Creek.

Standard 6	Air Quality

Air quality in the area is considered excellent. Wind borne dust from disturbed areas such as roads and smoke from seasonal wildfires are the only major pollutants in the area. Wind is common and usually originates from the west/south-west. The Seminoe Mountains and the surrounding area is not on the state air-quality list as deficient, therefore, standard #6 is being met.

Recreation, Visual Resources

Recreation in the project area covers a wide range of interests. Though limited by lack of vehicle access, people enjoy the solitude, scenic beauty, and a variety of non-motorized and motorized activities including hiking, camping, hunting and fishing, rock hounding, bird watching, horseback riding, four-wheeling, biking, sightseeing, and antler collection among others. Primary attractions to the area are the Seminoe to Alcova Scenic By-way, the Platte River and Seminoe State Park.

The project area is located within both VRM class II to the east and extreme southern portions and VRM class III to the west and northwest. Viewsheds within the RFO are ranked into four visual resource

management classes; Class I areas include wilderness study areas and wild and scenic rivers, where surface disturbing activities may be restricted and/or require extensive mitigation. Class II visual resource management areas represent locations where landscape modifications should blend with surrounding environmental characteristics so as not to disturb visual quality (i.e. forest boundaries, high recreation use areas, and historical sites). Areas with existing and/or evident modification to landscape characteristics would be categorized as Class III or IV visual resource management areas, depending on the original composition and characteristics of the landscape (i.e. industrial areas, mineral activity, transportation routes, and disturbed areas). The proposed project area falls into both the Class II – Retain the existing character of the landscape, and Class III – Partially retain the existing character of the landscape, management categories.

Lands with Wilderness Characteristics

Under recent direction, Executive Order – 3310, the Seminoe Mountain project area was evaluated for Land with Wilderness Characteristics (LWC). The evaluation process included an ID tem approach with the project area being evaluated on size, naturalness, solitude or a primitive and unconfined type of recreation, and supplemental values (documented on Form 2 in accordance with BLM–Manual 6301–Wilderness Characteristics Inventory). The Seminoe Mountain project area, consisting of over 5,000 acres of contiguous public land ownership offers an abundance of opportunity for recreation and solitude. Supplemental values to the area include the Morgan Creek Habitat Unit, and the presence of unique geological features in and around the uplifts of the Seminoe Mountains. However, the Seminoe Mountains area is utilized by motorized recreationist, and the entire project area is latticed by existing roads and/or ATV trails. The project area has approximately four powerlines, several historical mining scars, and one communication tower. A number of additional human disturbances can be seen from any elevated portion of the Seminoe Mountains (i.e. paved roads, houses, ranching structures, camp grounds, vault toilets, manmade reservoirs, and the Seminoe Dam power generating facilities).

Cultural Resources

A cultural resource inventory was conducted for the project area to identify and evaluate cultural properties that may be affected by the proposed project. Cultural properties that were located within the project area include historic buildings and structures related to ranching, homesteading, and mining. Additionally, historic power lines and structures associated with the Seminoe and Kortes dams and power plants are located within and near the project area. No rock art or other fire sensitive sites that may be important to Native American tribes were identified within the project area.

Grazing Resources

The proposed project area includes three livestock grazing allotments, all of which are administered out of the BLM RFO. The grazing allotments included within the project area include: Seminoe #10218, Long Creek #10212, and Black Canyon #00323 (see Grazing Allotment Map #2 and Table 2: Allotment and Habitat Unit Acreages within Project Unit). Grazing preference within the listed allotments is permitted to the following livestock operators: Miller Estate Company (Seminoe), Three Man Ranch Grazing LLC (Long Creek), and Andrew Kortes and Sons, Inc (Black Canyon). Included within the project unit is the Morgan Creek Habitat Unit. The Morgan Creek Habitat Unit is excluded from livestock use; the Wyoming Game and Fish Department (WGFD) administer wildlife management within the Morgan Creek Unit and the BLM RFO is responsible for fire suppression and presuppression activities (Memorandum of Agreement Dated: December 1963). The listed grazing allotments contain the necessary infrastructure to maintain viable working cattle operations. Grazing allotment boundaries consist of of steel posts, wood braces, and barbed wire fence lines with topographic barriers utilized in some areas of the Seminoe Mountains which are too steep or rocky to fence. Licensed use on existing grazing preference varies (see Table 3: Licensed Grazing Preference) allowing for season long use by cattle in different location of the project unit. Operators generally make spring, summer, and/or fall use in these allotments, as during winter months, weather conditions and snow accumulations make livestock use difficult within the project area.

Mining

While the project area has some history of mineral exploration, there are no active mining operations, other than small personal claims, within the project area. Historically the area was mined for gold, silver and copper. The landscape still shows some residual scars (dozer berms, scrapes, pits, closed shafts) from historic mining activity, but most areas have re-vegetated and blend in with surrounding landscapes.

Global Warming and Carbon Sequestration

The proposed project area is not considered a major contributor to global warming as it is in a naturally occurring vegetative state functioning under a normal carbon cycling/sequestration process.

Environmental Effects

Proposed Action

Under the **proposed action** the following impacts would occur:

Under the proposed action alternative, changes would occur to the resources described in the Affected Environment section of this document. Livestock use patterns would shift as cattle select accessible upland areas that have been treated, resulting in a decrease in late season use to riparian habitats. Dense stands of decedent sagebrush, mountain shrub, and timber would be replaced with younger/earlier successional stages of herbaceous vegetation and shrubs within treated units. Wildlife habitats consisting of mature, dense, evenly-aged, and late serial shrub communities, would be replaced with early successional shrub communities, with improved herbaceous cover, increased forb production, decreased bare ground, and increased wildlife visual corridors. Nutrient values in new vegetation growth would be higher than those currently found in decadent vegetation communities, increasing heath and herd trends among present bighorn sheep populations. WUI issues and threats would be mitigated as a result of this alternative. Fuel loading throughout the project area would be decreased, and the potential threat of an uncontrolled landscape scale wildfire would be reduced.

Standard 1	Soils/Watershed Health

The proposed action would improve plant and litter cover, resulting in healthier rangeland soils and watershed conditions. The following impacts would also occur as a result of the proposed action: burned areas would exhibit decreased water and soil retention for the first 1-2 years following treatment. As treated sites revegetate, water holding capacity would increase to levels above pre-burn conditions, due to increased ground cover, surface roughness, and soil permeability. Short term removal of vegetation would increase the potential for sediment movement into draws and streams located within specific treatment units of the project area. This impact is expected to last for one to two years until herbaceous vegetation re-established itself on the burned sites.

The primary burn windows utilized under this proposal would be during spring months (April-May). Spring prescribed burns result in vegetation immediately reestablishing following treatment; therefore, soils would be exposed to increased potential for water and wind erosion for a very short period of time. Plant roots would still provide soil stabilization, and new “green” plant crowns would remain to provide partial plant cover and minimize soil movement. Utilization of herbaceous vegetation (the grasses which comprise the bulk of overall ground cover) following the burn would be adequate to maintain ground cover and stabilize upland soils. Livestock use would be managed (timing and duration), within treatment units with permitted use, so that utilization levels throughout pastures are low. In some cases, livestock and wildlife may select for more palatable, younger forbs which “green-up” earlier and remain green longer, leaving grasses until later in the season when they are reaching or have passed into seed-ripe and dormancy, allowing for increased growth. Wildlife use levels are expected to be low on new grass growth due to low availability of herbaceous forage during the principal use period (i.e. snow covering the majority of re-established grasses during the period when elk and deer congregate on the winter range.) If snow

levels are low and the draws and slopes are not drifted over during winter months following burns, use of herbaceous vegetation by wildlife could reach higher levels, reducing ground cover amounts in some areas. This impact would tend to be minimized by the large amounts of untreated vegetation or previously treated units adjacent to recently burned treatment units over the entire project area. Snow cover following the treatment would recharge groundwater moisture for the following growing season. In the case of a fall treatment, overland runoff on the burn unit would be elevated the following spring, but subsequent vegetation growth would be enhanced by snow-melt and increased ground moisture.

Treatment objectives specify burning dense/mature sagebrush, mountain shrub, and identified timber stands, riparian zones containing willows, cottonwood and/or short, grass-like species (sedges and rushes) and associated stream-side grasses would not be targeted for treatment unless identified for wildlife enhancement. Riparian draws receive larger amounts of moisture than those dominated by upland species and usually would not burn. By leaving existing riparian areas throughout the project area unburned, buffer zones would be created between the burn and the bottoms of these draws, helping trap the majority of sediment movement (if it occurs) before it enters any perennial water bodies. Of course, many of the non-riparian draws in the burn area contain (a majority of) dense sagebrush and wild rye which would be partially removed by burning. Water flow down these draws would not be restricted by vegetation following treatment until herbaceous vegetation and shrub seedlings re-establish to restrict flow patterns. Identified draws of this nature (dry draws capable of mass sediment movement), that may result in additional sediment loads to Morgan Creek (above the Seminoe Dam Housing water collection site) would require either leaving some stretches unburned or the use of temporary straw dams. These temporary structures would prevent additional sediment/ash loads into Morgan Creek. Additionally, other areas along riparian zones may also require these same mitigation measures to aid in the prevention of mass movement of any sediment/ash directly into Morgan Creek above the Seminoe Dam Housing area water collection site. While these types of impacts are anticipated, none of the previously conducted control burns within the RFO have resulted in these types of impacts.

Soil sterilization is typically avoided when conducting spring burns due to the lower overall air temperatures and the higher soil and live fuel moistures. Temperatures and flame intensities during spring treatments are low enough that soil nutrients and microorganisms are not lost. It is also expected that, although the burn would remove all of the herbaceous under-story grasses as well as most of the above-ground woody vegetation, stubs and root systems would remain to help stabilize the soil. A spring burn would also produce a more pronounced “mosaic” burn pattern, leaving more intact islands where the soil and vegetation are not affected.

A fall burn, due to drier conditions and higher temperatures, would produce higher fire-line intensities, which could sterilize or otherwise harm soil surfaces and components. In order to minimize the possibility of this, a fall burn would be designed to incorporate higher mid-flame wind speeds to create a faster moving fire front. Flame fronts would pass over a given area in less time, leading to lower overall amounts of soil heating. Although a faster, wind-driven fire allows less of a mosaic pattern from the treatment (a greater percentage of ground will be “blackened”), trend monitoring of previous burns in similar vegetation types has shown that a quicker burn leaves a more productive seed-bed and overall soil surface. In the case of either a spring or fall treatment, ash, plant litter, and nutrients would be released into the soil due to the burn and increased solar warming of the soil surface (with shading initially removed) would increase nutrient breakdown and decomposition.

The event of a natural ignition within the project area is most likely to occur during dryer summer months (June-August). Should a natural ignition be allowed to burn within the project area the impacts and fire prescription would be very similar to a fall season burn. Fire fronts would advance at increased speeds as they would be driven by topography, decreased fuel moisture, and wind. These types of ignitions would have a slightly decreased mosaic pattern, but would be the most effective at treating timber communities because of decreased fuel moisture and the occurrence of taller flame lengths and faster moving flame fronts. Burning during summer and fall months would allow for some plant growth, but the opportunity for soil movement would be elevated until the following growing season. Riparian areas and aspen stands would still show resistance to fire during this period of the year as vegetation in these areas tend to have

higher live fuel moistures. This would result in un-burnt riparian areas maintaining a buffer between soil movement and existing perennial watersheds.

Standard 2	Riparian/Wetland Health

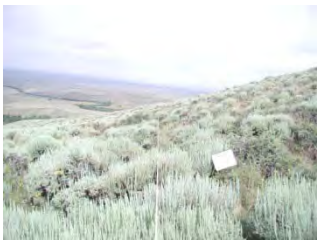
The proposed action would benefit riparian areas evaluated previously as functioning-at-risk, move towards meeting standard #2 through secondary effects on animal distribution and use patterns. Increased availability, productivity, and quality of herbaceous forage on upland slopes, bowls, and draws away from water sources would lead to decreased grazing use to riparian vegetation. This would result in riparian vegetation exhibiting higher vigor, greater density, and higher stubble heights during and after grazing use. This would help to expand existing riparian areas and increase their water holding capacities, allowing for more moisture to be released over a longer period of time throughout the growing season and late summer. Expanding riparian areas would allow for an increase in moisture tolerant grasses and grass-like species (i.e. sedges and rushes) on sites where upland species have colonized as a result of degraded riparian condition. Treatments would also help stimulate sprouting and suckering of woody riparian species (i.e. willow) that currently show decadence within the project area. Other benefits to riparian health would include a temporary increase in soil moisture as a result of less sublimation by vegetation. This would also result in a temporary period of groundwater recharge, and increased stream flows until vegetation communities are reestablished.

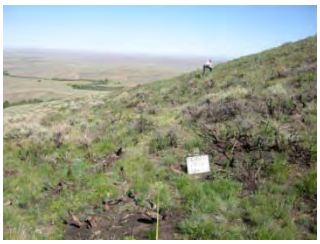
If these responses cannot be accomplished via a spring fire treatment then fall prescriptions may be required, as riparian areas are difficult to burn in spring months because of early green-up and elevated fuel moistures. It would be the intention of the BLM to treat identified riparian habitats (those systems containing aspen and willow communities) that would benefit from fire impacts, helping improve existing wildlife habitat and vegetative community health. A natural ignition occurring outside of the spring or fall window would provide a combination of the impacts listed above. Depending on fuel moisture it would be difficult to treat riparian habitats during this time of the year as riparian species area actively growing and have increased fuel moistures. However, fire activity is more intense during these periods because of lower relative humidity (RH) caused by increased air temperatures. During these conditions it is possible to treat riparian areas, but typically only during extreme drought conditions.

Standard 3	Upland Vegetation

There would be both primary and secondary impacts to upland vegetation as a result of implementing the proposed action. Impacts would center first around the obvious removal of vegetation due to the fire (woody species and herbaceous cover) and recovery of certain vegetative species after fire (first and second order fire effects), and the secondary responses that are expected to occur to both riparian areas and uplands due to changes in ungulate grazing patterns post burn. In general, the proposed action would remove portions of mature to decadent sagebrush and replace them with grasses, forbs, and new, young shrub seedlings. Burning existing shrubs would remove them and allow the establishment of new shrub seedlings, changing and varying their overall age structure in the project area. Removal of portions of dense shrub stands would also allow increased herbaceous vegetation establishment, which increases ground cover and improves watershed health. By creating a mosaic of burned and unburned areas, forage production, vegetative diversity, “edge effect”, and wildlife/livestock distribution would be improved.

Specifically, the direct result of the burn would be the removal of varying portions of dense stands of sagebrush, timber, and mountain shrubs from within portions of the treatment area. The effects of the proposed action would be removal of most, if not all, above-ground plant biomass from burned areas. Herbaceous vegetation would be completely removed from scorched areas, and clumps of grasses or individual grass stalks at the edges of burned areas would be heated and killed if not removed. Shrubs within the burn zones would be partially to completely denuded. In many cases, dependant on burn intensity and duration, portions of trunks and limbs would remain as blackened skeletons within the burned area. Individual shrubs at the edges of burned areas would be partially removed, and many would be heated to the extent that the previous and current years’ growth is killed.





Pictures Above: Vegetation monitoring photos (Left: pre-treatment Center: post-treatment Right: 1 year post-treatment) from the Pennock Mountain Spring Rx Fire. These three pictures represent the post treatment vegetative response of mountain big sagebrush at or near the same elevation and precipitation zone as the proposed Seminoe Mountain Project Area.

Secondary effects of the proposed action, to vegetation, center on new plant growth following the treatment. Burning affects sagebrush by completely killing the plant, and because it is a non-sprouter, it would not quickly re-establish within the burn zone. Mountain/basin big sagebrush re-inhabits burned sites primarily by off-site seed or seed from plants which survive in unburned patches. Because of this characteristic, herbaceous vegetation would replace the sagebrush in areas where burned and it is expected to take anywhere from 30 to 50 years for the sagebrush to re-establish to pre-burn levels of density, cover, and age-class. Mountain shrubs, including snowberry, serviceberry, and mountain mahogany reproduce to varying extents by sprouting around and from the stubs of the burned plants and should increase in cover and density relatively quickly after the burn. Timber species would respond in much the same way as sagebrush, requiring reestablishment from seed.

Some timber stands within the project area are more adapt to the impacts of fire, and if treatments do not remove canopy vegetation, would only benefit from the natural thinning process fire provides. Two such species throughout the project area are ponderosa pine and limber pine which require fire to establish healthy vegetative communities. Limber pine has recently been added to the BLM sensitive species list for Wyoming (see Affected Environment portion of this document Standard #4 "**BLM Wyoming State Sensitive Species")**. The objective of the sensitive species designation is to ensure consideration of the overall welfare of this species when undertaking actions on public lands, and to not contribute to the need to list the species under the provisions of the Endangered Species Act. Fire has a negative and positive effect on limber pines. They are negatively affected because they are thin-barked and are at risk of being destroyed by intense wildfires. With observed and predicted increases in fire severity, and increased fuel loads in forest habitats where limber pine are late seral, these species are at risk of local extinction. On lower treeline sites with grass-shrub ecotones and lower fuel loads, fire intensities may be lower, but this is site specific. The positive role of fire is two-fold: 1) high intensity fires create open areas where limber pine can successfully regenerate and 2) fire sets back the successional trajectory by killing shade tolerant species that would otherwise replace the shade intolerant pines. Clark's nutcracker's often cache (pine seeds) in large areas created by wildfire (Tomback, D. F. 2001 and recruitment success is likely enhanced because of the long distance from competing conifer seed sources. Shade tolerant species such as subalpine fir are easily killed by fire, reducing competition and increasing light, water and nutrients to slow growing limber pines. Other threats to limber pine include white pine blister rust, dwarf mistletoe species, increase in mountain pine beetle, climate change, and their synergistic effects. It is not identified under the proposed action that limber pine be specifically targeted for treatment within the project area, but it is likely that a portion of these species would be impacted in areas requiring fire for timber health and habitat enhancement. Due to the size of the project area and the intermittent existence of limber pine throughout the landscape, the majority of existing limber pine communities within the project area, would not be treated.

Although there could be differences in plant mortality between spring and fall treatment windows, they would be minimal in nature due to the type of habitat being treated (other than sagebrush discussed above). Variations in fire-line intensity and heat per unit-area can lead to differences in how "hard" portions of individual plants (leaves, limbs, roots, and in particular, growth nodules) are scorched, which may in turn affect the amount of time that must occur in order for the plant to renew growth (i.e. for the shrubs to begin

recovery.) Monitoring of prescribed burns conducted in similar mountain shrub/sagebrush stands during the last decade has shown that fall burns employing slow-moving, hot flame fronts can lead to high overall sprouting shrub mortality and slow recovery (herbaceous plant recovery appears to be harmed as well with these slower moving, backing and/or flanking flame fronts.) Spring burns, conducted when live fuel and soil moisture is relatively high, and temperatures are moderate to low, appear to allow low enough burn intensities (regardless of wind speed and/or rate of spread) which tend to result in intended shrub mortality and high recovery rates.

Sites have been identified within the project area where cheatgrass has established in sagebrush understories, and on southern aspect slopes. These appear to be residual populations which are not expanding. Although burning completely removes existing stands, they would most likely re-establish via the soil seed-bank and surrounding plants or stands in the general area. Due to the immediate absence of competing vegetation and the creation of a virtually open seed-bed through the fire's disturbance, it is possible that cheatgrass would increase on treatment sites during the growing season following the burn. The Seminoe Mountain wildfire occurring in 2007 on the East side of the reservoir demonstrates this potential impact. South facing slopes that burnt with established cheatgrass communities revegetated with extensive cheatgrass population following the wildfire. However, vegetation communities that did not have an established cheatgrass component revegetated with an abundance of desired forb, shrub, and grass species (see pictures below). Increased competition from desirable bunchgrasses and forbs, resulting from post-burn grazing management and heightened growth, should out-compete some limited stands. Although the species would probably never be completely removed from the project area, it should remain at manageable levels.

Pictures Above: Left (Post Seminoe Wildfire) Right (1 year Post Seminoe Wildfire) Pictures document the post vegetative response on sage/grass/timber fuel type located in the same topographic area as the proposed Seminoe Mountain Prescribed Fire. These photos document good herbaceous and forb response following the hot season wildfire.

To ensure that existing cheatgrass and/or identified noxious and invasive weeds communities do not establish and increase throughout the project area, treatments within or near existing cheatgrass/weeds stands would be avoided were possible. Specific areas to be avoided from treatment include the Eastern portion of the project area along and adjacent to the Seminoe Alcova Byway and the Marking Pen Loop road which have identified weed populations. However, should these location need to be treated in order to provide adequate control lines during operational periods, these areas will be intensely monitored and treated (chemically and/or biologically) to prevent these populations from spreading. The entire project area will continue to be monitored for weeds as additional areas are treated over the life of the project. Newly identified areas of concern would be monitored and should they require treatment, managers would utilize chemical and/or biological application to prevent their spread within the project area. Chemical and biological application would be in accordance with the Department of the Interior Vegetation Environmental Impact Statement, Rawlins Resource Management Plan, Rawlins Field Office BLM Environmental Assessment EA -08-150, and specific label requirements of all applied chemicals.

The BOR currently has an established biological treatment in place within the Morgan Creek drainage of the Seminoe Mountain project area for control of dalamation toadflax. Fire has the potential to reduce the successfulness of this treatment, as it would consume established insects within treated (burnt) areas. The BLM would work with the BOR to identify these areas, if treated, and efforts would be made to reestablish successful biological controls for dalmatian toadflax within the Seminoe Mountains Morgan Creek drainage post treatment.

The mosaic pattern which the proposed action would attempt to create would lead to overall better vegetation distribution and age structure throughout the project area, with mature stands maintained in unburned areas, and younger plants re-establishing in burned sites. As noted previously, the amount of mosaic would differ between spring and fall treatments. Spring burn treatments would allow a more varied landscape mosaic treatment pattern with more islands and fingers of untreated vegetation. A fall burn, designed to be driven by relatively higher wind speeds, would result in larger treatment units (burnt areas of vegetation) and less mosaic and edge effect across the project area. In either case, the prescription(s) developed for treatment would treat (burn) the same amount of vegetation specified within the resource objectives set forth in the proposed actions goals and objectives.

A fall treatment would eliminate any immediate growing season pressure from wildlife and livestock, but would also limit vegetation growth during the initial year of the treatment as it would take place during the dormant plant growing season. Wildlife use on new vegetation immediately after the burn would be limited in the case of a fall treatment, as snow would soon cover new growth. Wildlife utilization of remaining unburned vegetation in the treatment unit, however, would be increased and more concentrated. If the unit is treated in the spring, ensuing wildlife use would not be restricted on newly growing grasses, shrubs, and forbs, and would probably be magnified on the new growth due to its high palatability and availability. Although summer wildlife use on growing vegetation would occur throughout its peak growth, damage to individual plants should be minimized by the dispersed, nomadic nature of their grazing patterns. Conversely, creating larger openings within shrub communities consisting predominantly of understory bunchgrasses and forbs would concentrate wildlife use on treatment areas by wintering elk herds, which would select for the newly available herbaceous vegetation. Increased winter use would not harm individual plants or the overall habitat because it would result in the removal of dead/dormant vegetative material at a period when plants have stored energy reserves below ground.

A natural ignition prescription would result in a combination of the impacts described above. A fire occurring during the warmest months of the year is likely to be hotter and more intense resulting in broader treatment units and leaving little remnant plant material in burned areas. There would be some opportunity for new plant growth should the burn occur during early summer months, otherwise vegetation impacts would be similar to those resulting from a fall burn, with vegetation regrowth or new seedlings sprouting the following growing season. It is important that treatment size be large enough to spread out wildlife use across a landscape and not create “ice-cream” areas for wildlife to concentrate use. For this reason treatment units would consists of thousands of acres to help and distribute wildlife impacts.

Standard 4	Wildlife/TE&S Species

The proposal would help improve the condition of seasonal wildlife habitat within the project area. Much of our wildlife habitat was created by natural processes including succession after fire. Proper timber-harvest practices and controlled burning can be used to improve elk habitat on winter ranges that are gradually becoming climax forests (Schmidt and Gilbert 1978). Habitat alteration that have been interpreted as beneficial to mule deer, including those applied specifically in deer management, are too numerous to list here. They are based generally on three axioms:

1. Early stages of plant succession are more beneficial than climax vegetation;
2. A mixture of plant communities provides better habitat than any single community; and
3. More browse is preferable to less browse.

With regard to the first axiom, fire and logging generally are considered to be favorable influences-the improvement being attributed to the abundance and diversity of forage that occurs in the secondary

succession (Schmidt and Gilbert 1978). In this instance impacts to wildlife would be both short and longer term in nature. Short term impacts would center on the displacement of wildlife from the treatment unit as the operational activities of implementing the burn are conducted, and the immediate loss of forage across project area. Wildlife would be displaced by the burn activities and big game would most likely avoid the area in the days immediately following the treatment.

Big game avoidance or increased use of the area would be dependent on the season in which the treatment is conducted. If treatments are conducted in the fall, deer, antelope, elk, and bighorn sheep that normally use habitat in the area for seasonal and/or crucial winter range would shift to surrounding habitat to take advantage of forage and cover adjacent to the treatment unit or project area. This would shift overall fall/winter/spring wildlife use to surrounding areas, but should only moderately affect distribution of ungulate herds due to the large amount of unaffected habitat within and bordering the project area. This could, however, lead to increased amounts of forage utilized on adjacent federal, private, and state lands. Additionally, unburned islands within the mosaic pattern of the burn would still be available for use. A spring burn would produce a large amount of new herbaceous growth and forbs, and many new woody seedlings and sprouts immediately following treatment. The very palatable and nutritious early growth would draw animals into the project area, especially during late spring and early to mid summer when animals select for new green-up. A spring burn would also tend to produce large amounts of herbaceous grasses which remain through the winter, drawing wintering elk herds into the project area for longer periods of time. As with other impacts to habitat on the burn site, surrounding available forage should minimize this impact during the first several years following treatments. In subsequent years, use by elk, deer, antelope, and bighorn sheep would likely increase due to the greater availability of herbaceous forage.

Short term fall and winter mule deer use in treatment units within the project area is expected to drop slightly in years immediately following treatment due to lower amounts and availability of browse species such as serviceberry, snowberry, mountain mahogany, and bitter brush as well as hiding cover in stands of shrubs and timber. Additionally, new mountain shrubs would be much lower than on untreated sites, and can be covered up by relatively shallow drifted snow, making them unavailable for browse. In the long-term, the overall project area (modified to a mixture of older/mature and rejuvenated/younger stands of shrubs) would provide much higher nutritional value and become more palatable due to the presence of younger shrub. The removal of older, mature to decadent shrubs and sagebrush stands would create better overall mule deer habitat by creating a greater mixture of age class and structural diversity within the shrub communities, in addition to a larger amount of “edge” type habitat.

Bighorn sheep habitat within the project area would be increased as specific units identified within the project area are treated. The key to management of all races of bighorn sheep is habitat protection, maintence, and enhancement (Schmidt and Gilbert 1978). Fire would increase and restore travel corridors and visual security by thinning out existing timber stands, helping open up available slopes and habitat for bighorn sheep use. Seasonal habitats (i.e. bighorn sheep lambing grounds) would be restored as timber encroachment is reduced and or removed from existing slopes that were once utilized by bighorn sheep in the Seminoe Mountains. These areas would be identified by wildlife managers and via data gained from tracking collars currently attached to bighorn sheep within the Seminoe Mountains. The tracking collars are scheduled to release from existing animals within the next 18 months, with data interpretation following the retrieval of the collars. Bighorn sheep would be temporarily displaced from treatment units within the project area as treatments are being applied, but these impacts would be short lived and animals would be expected to return to these treatment areas following project implementations. Existing vegetation communities within the project area that are manipulated by the use of fire would exhibit increased diversity as new forbs, shrubs, and grasses establish across burned sites. These newly established communities would have increased palatability and nutrient content, resulting in improved animal health and reproductive success.

Picture Left: Seminoe Mountain bighorn sheep w/ telemetry collars.

There exist approximately 2,309 acres of core grouse habitat within the proposed project boundary (see Map #5 Sage Grouse Core Habitat). However, a large portion of the State of Wyoming identified core grouse habitat within the project area consists of steep slopes were vegetation transitions from sagebrush communities into mountain shrub and timber communities, with the low lying areas consisting of sandy soils with a sage and rabbit brush vegetative component. The intent of the proposed project is to treat the transitional areas consisting of mountain shrub and timber communities and to not treat the low lying sagebrush communities within identified core grouse habitat.

The Project Impact Analysis Area (PIAA) delineation that was calculated for the entire proposed project area shows a total current disturbance value of 0.36% or 176.28 acres within identified core habitat. However, disturbance values were elevated when the PIAA was evaluated on a lek by lek basis across the entire project area. Five leks were evaluated as they exist within the four mile buffer of the proposed project area. The following lek was below the 5% disturbance cap: Saltiel 1.70%. The following leks would show disturbance values above the 5% cap if the entire project area was to be treated: Coal Spring 8.16%, Rankin 8.29%, ID Airstrip 8.22%, and Junk Hill 5.47%. Each of the evaluated leks above the 5% cap is located south of the project boundary w/ a lek center from the project boundary of: Coal Springs 1.4 miles, Rankin 1.2 Miles, and ID Airstrip 1.7 miles. However, the final analysis of the project area shows that if the entire portion of core habitat within the project area was to be treated (burnt) the total disturbance value within core would still remain below the 5% cap. The calculated value of disturbance within core habitat would be 4.7%.

The goals and objectives for this project require treating 30% - 70% (5,400 – 12,600 acres) of the burnable vegetation across the entire project boundary (25,568 acres) thus resulting in a mosaic burn pattern across the entire project unit. A mosaic burn pattern, combined with targeting only mountain shrub and timber communities within identified core grouse habitat would ensure that the 5% disturbance cap is not exceeded for the area as a whole or for any identified active grouse lek. Post treatment data would be collected within identified core grouse habitat so as to determine the exact amount of acres treated (burnt). These values would be utilized to recalculate the actual PIAA for impacted leks.

Impacts to other wildlife species in the project area, including songbirds, small reptiles, ground squirrels, pocket gophers, mice, voles, rabbits, badgers, foxes, etc., would be the same as those described above. Of course, a number of smaller animals could be killed outright by the burning process, as with any other natural occurrence, but most would escape unharmed. A portion of habitat would be lost immediately after the burn, followed by gradual re-vegetation in the ensuing years. Habitat would be altered from primarily older aged-class late serial shrub stands to a heavier herbaceous component with younger shrub seedlings and sprouts, which would gradually mature towards a later seral stage, interspersed with islands and fingers of unaffected older aged shrubs and vegetation. Habitat conditions would improve for all resources user resulting from an increase in plant species composition, age class, structure, and diversity.
Vegetation treatment ultimately impacts wildlife within a project area. Thus, it is recommended by wildlife habitat specialist that when these treatments are initiated, that the landscape be treated in a pattern as not to concentrate wildlife use on specific treatment sites. In other words, treated acres (burned vegetation)

within treatment units need to be large enough as to spread wildlife impacts across the treatment area so as not to concentrate use on small treatment sites (i.e. create small areas of lush vegetation that attract wildlife use). This can be accomplished by treating large scale acreages across a project area in a mosaic pattern, and or coordinating vegetation treatments with other vegetation treatments within the same geographical location or wildlife herd unit.

Threatened, Endangered, Candidate, and Proposed Species

There currently are no known T&E, candidate, or proposed species existing within the project area. Consultation with local staff wildlife biologist resulted in a no effect situation as a result of approving the described action. Initiation of informal consultation with the Fish and Wildlife Service is not recommended. As these conditions and species listings may change over the proposed ten year period of project implementation, consultation with BLM and Department specialists would be performed annually prior to project implementation to assure the most current information is accurate.

Fisheries

Although ash and sediment loads would potentially be increased in draws/drainages/watersheds within the project area immediately following treatments, long-term impacts on downstream fisheries would be positive. Positive impacts would result from increased upland herbaceous vegetation helping to slow erosion and decrease water use by heavy stands of sagebrush and mountain shrubs. These impacts would help to increase existing water tables and help expand riparian zones. Increased ungulate grazing distribution, as a result of improved upland condition, would also help in decreasing grazing pressure in and around riparian areas.

Standard 5	Water Quality

Water quality may be temporally reduced immediately following burning, as a result of removing above ground vegetation from portions of the project areas landscape. The majority of these impacts would be mitigated by buffer strips left along riparian areas and or by the natural re-vegetation process post treatment, reducing sediment movement. Water quality may be impacted in the short term by ash spread across the project area by wind and deposited into perennial water systems. Again, these impacts would be short lived as they would be mitigated by increased ground cover as re-vegetations occurs and by riparian vegetation buffer strips. Temporary straw dams could be placed within drainages that may increase sediment loads into Morgan Creek above the Seminoe Housing water collection site. These structures would remain in place until revegetation within the system reduces these impacts naturally. Secondary benefits to water quality would be experienced as re-vegetating upland sites endure increased utilization from wildlife and livestock. An increase in utilization to upland areas would help relive existing riparian areas of heavy grazing pressure. Decreased animal pressure to riparian sites would result in improved bank stability, decreased soil erosion, increased vegetative cover, and a reduction in animal defecation helping to improve overall water quality and decrease annual sediment loads.

Standard 6	Air Quality

The proposed action would result in a short-term reduction in visibility caused by an increase in particulates in the air (smoke). These conditions should be dispersed by winds in the area and are not expected to last longer than a few days. The project burn plan would address and contain further information on burn conditions and smoke dispersal. Smoke/emissions permitting would be coordinated with and approved by the Wyoming Department of Environmental Quality, Air Quality Division. Downwind receptors are mostly limited to small ranches, small housing communities and camping and recreation facilities within Seminoe State Park and Miracle Mile. These include North Red Hills, South Red Hills, Sunshine Beach, Seminoe Boat Club, the town of Hanna, Miracle Mile area, and the town of Leo. The closest Class I air-shed that could be affected by the proposed project is the Savage Run Wilderness Area located South and East of the proposed action. In order to assess amounts of emissions generated by the proposed action and possible downwind impacts, a smoke modeling program will be utilized to predict smoke impacts and would be included in the project burn plan.

Recreation, Visual Resources

The visual resource rating worksheet completed for the proposed action resulted in a short-term temporary change to the visual resources in the area. No long-term change to the VRM class would occur as a result of this action. Once regrowth of the vegetation occurs, the contrast between the unburned vegetation and the burned landscape would disappear.

Short-term impacts to recreation would include loss of hunting opportunities if the burn is conducted immediately prior to or during one of the areas big game hunting seasons. This impact is expected only during fall treatments. Wildlife are expected to return to the area in subsequent years to utilize improved forage. The project area is a limited draw unit for all available big game hunting tags. Should a fall prescription be planed, hunters would be notified via their limited quota licenses when they are received in the mail. Other methods of notification would include local new articles, radio broadcasts, signage to the area, and agency web pages.

Lands with Wilderness Characteristics

Under the proposed action alternative no additional control lines (meowing, cutting, and blading) are anticipated. The proposed action would utilize existing landscape features and fuel breaks were possible (i.e. ridge lines, rock out-croppings, snow banks, riparian areas, aspen stands, roads, fencelines, atv trails, and livestock/game trails) to control fire spread. The goals and objectives of the proposed action specifically identify burning in a mosaic pattern, which should maintain the natural viewshed of the area. Fire is a naturally occurring event within the Seminoe Mountains, and remnant fire scars are present throughout the project area and its associated vegetation types.

While the proposed action would have little impact on existing landscape characteristics within the Seminoe Mountains project area, an LWC inventory was conducted by BLM RFO specialists. The resulting inventory concluded that the project area is currently missing the required characteristics for LWC's.

Cultural Resources

Prescribed burns have the potential to damage and destroy cultural properties such as buildings and structures. A cultural resource inventory was conducted for the project area to identify and evaluate cultural properties that may be affected by the proposed project. Historic buildings and structures that could be destroyed by fire were identified within the project area. Avoidance or protection measures for these properties would be incorporated into the project burn plans so as to prevent any damage or loss to cultural resources. Protection measures may include avoidance, black/wet lining, sprinkler systems, staging suppression resources on location, and/or other measures as appropriate. If any previously unidentified cultural properties are discovered during project implementation, they would be protected, the BLM authorized officer would be notified and appropriate protection or mitigation measures would be determined.

Grazing Resources

Due to the extreme topographic characteristics of the project area, livestock are expected to make little use on treated (burnt) units. While currently permitted livestock users within the project area have permit dates that would allow early growing season use within the project area, they typically defer their mountain or higher elevation pastures for later in the summer months. This practiced deferred rotation would give any livestock accessible portions of pastures that are treated (burnt) growing season rest, as these pastures would typically not see use until late summer months as vegetation is turning dormant. However, treated units within the project area could see increased use by livestock, as these areas would have new vegetation that is more palatable and of higher nutritional value. As livestock key in on these location, riparian areas within these pastures would see much needed rest as utilization in and around them is decreased. As

livestock distribution is increased across upland sites, these animals would be selecting for new grass and forb growth, thus, helping stimulate the reestablishment of existing shrub species across treated sites. On treated areas accessible to livestock, proper grazing management would also encourage desirable bunchgrasses which should help to out-compete annual invader type species such as cheatgrass or undesirable weeds including thistles in the lower draws.

Grazing deferment would be addressed on annual grazing application, and all permits within the project area would remain the same. There would be no change to the livestock non-use status within the Morgan Creek Habitat Unit.

If monitoring information indicates that deferred livestock grazing use is a factor towards not meeting post fire objectives, measures will be made to modify livestock grazing management practices including duration, season of use, and/or the number of authorized livestock annually.

Mining

While the project area has some history of mineral exploration, there are no large scale active mining operations, other than small personal claims, within the project area. There are no anticipated impacts to historical mining operations as a result of the proposed action. All identified culturally significant sites within the project area would be mitigated in the burn plan. Historical mining disturbances (small pits, scrapes, and shafts) in the area have re-vegetated and, if treated, should provide no major impacts other than those previously discussed under the proposed action.

Global Warming & Carbon Sequestration

Global warming is the result of released atmospheric carbon dioxide in to the earth's atmosphere. Carbon sequestration is the process of removing carbon from the atmosphere and depositing it in a reservoir (i.e. water bodies, soils, vegetation, and geologic formation). Carbon sequestration describes long-term storage of carbon dioxide or other forms of carbon to either mitigate or defer global warming. Burning is one such activity that results in a release of carbon dioxide into the atmosphere, thus contributing to global climate change. However, it is the intention of the proposed action to increase vegetative cover and decrease bare ground across treatment units, thus, increasing the amount of carbon sequestration by vegetation in the project area. Treated areas should also show an increase in soil nutrient values helping to promote vegetative growth, biomass decomposition, and overall carbon cycling within the system.

Cumulative Effects of the Proposed Action

Vegetation Treatments:
During the spring of 2007 the Riddle Creek prescribed fire was conducted in the Gp-16 pasture of the Seminoe grazing allotment. The Riddle Creek project area (2700 acres) is located five miles west of the proposed Seminoe Mountains project area. The Riddle Creek prescribed fire targeted upland sagebrush communities that had become decadent and even in age class. Post treatment analysis of the Riddle Creek prescribed fire determined that 452 acres were treated (burnt) in a mosaic pattern as a result of the project.

Wildfire:
In July of 2007 a 700 acre wildfire (Seminoe Fire) ignited and burnt in the Bennett Mountains two miles east of the proposed project area. The Seminoe wildfire, started by lighting, was designated a "wildfire use" fire and was allowed to burn, uncontrolled, for three days. On the fourth day management decided to go full suppression on the Seminoe Fire because of the difficulty in ordering additional resources to the incident, due to the large resource draw to other wildfires in the region.

Fire History
Large fire potential is moderate to high due to rough topography, high fuel loading, diseases, insect epidemics and long distance from DL. From 1999 through 2008, approximately 27 fires have occurred within the FMU, for a total of 802.6 acres. This represents an average of 2.7 wild fires per year, an average of 29.73 acres per fire, and an average of 80.26 acres burned per year. Suppression fires typically occur

between June 1 and September 1. Historical weather data indicates that frost can occur above 8,000 feet every month of the year. Maximum temperatures can reach 100°F during July and August in the lower elevations. Thunderstorms and associated lightning occur frequently throughout the summer months

Wildlife:
The proposed action would be large enough in scale as to evenly distribute wildlife impacts across treatment units, and would occur in coordination with proposed treatments within the same geographical area and/or wildlife herd units (see Ferris Mountain Project Area Location Map #10). The proposed Ferris Mountain prescribed fire project (186,801 acres) is scheduled to begin implementation the fall of 2011, with a minimum of three proposed treatments over a ten year period. This proposal would help distribute wildlife impacts across the landscape. The Ferris Mountain project is primarily a timber treatment designed to enhance timber health and provide for an increase in timber/vegetative age class diversity and composition within the Ferris Mountain area. It would also include smaller scale treatment at the foothills of the mountain to enhance shrub health, and herbaceous cover. These two projects, while broad in scale and occurring over multiple year windows, would benefit one another by helping to distribute wildlife impacts across both proposed project areas (212,369 acres).
The BLM RFO currently has plans to construct a new wildlife guzzler (upland water source), for bighorn sheep, within the Bennett Mountain. The proposed guzzler is intended to water bighorn sheep currently utilizing the 2007 Seminoe Mountain wildfire area, and to prevent the need for wildlife to travel to the bottom of the Seminoe Reservoir canyon for water. Construction activities for the proposed wildlife guzzler are planned for the 2011 field season.

Oil and Gas:
While there has been some oil and gas development within the Seminoe area, there are no actively producing oil/gas wells close to the project area. The closest oil/gas field is the Dudley Pilot Project, located six miles south of the project area, which is currently a none producing field.

Grazing and Rangeland Improvements:
The Rawlins BLM FO administers grazing on approximately 3.5 million acres of public land. The entire Seminoe Mountain Project Area is bordered by grazing allotments (see Table #3: Licensed Grazing Preference). Grazing activity in the general project area is limited to cattle use, with some working livestock (horses). Each allotment has associated with it a number of rangeland improvements (i.e. fencing, spring developments, pipelines, riparian exclosures, corrals, and reservoirs) which help to facilitate livestock grazing. The project area is located within the "Great Divide Basin/Ferris and Seminoe Mountain Watershed Standards and Guidelines Report" which was completed September 2003. This same area, which includes approximately 50 grazing allotment (2,042,675 acres), is scheduled for re-assessment in 2013.

No Action Alternative

Under the **no action** alternative the following impacts would occur:

Under the no action alternative, no immediate changes would occur to the resources described in the Affected Environment section of this document. Livestock use would continue as it is presently permitted and has taken place in the past. Dense stands of decedent sagebrush, mountain shrub, and timber would continue as the dominate vegetation cover types throughout the project area. Wildlife habitat would continue to consist of primarily mature, decedent, dense, evenly-aged, and late serial stands of vegetation, and would continue under present trends; losing nutritional value for year-round wildlife needs. WUI issues and threats would not be mitigated as a result of this alternative. Fuel loading throughout the project area would continue, and the threat of uncontrollable wildfire would not be mitigated as a result of this action.

Standard 1	Soils/Watershed Health

Watershed health would continue to follow current trends, with decreasing ground cover allowing more soil movement and sedimentation downstream. Livestock and wildlife would continue to utilize riparian areas,

due to decreased forage availability on upland sites. If trends continue the landscape would exhibit a decrease in herbaceous cover and established root systems resulting in diminished bank stability. Although currently meeting the standard, there is the potential to not meet the standard if actions are not taken to enhance ground cover and decrease bare ground over the project area.

Standard 2	Riparian/Wetland Health

Concentrated livestock and wildlife use around existing riparian areas would continue, and wetland and riparian health would become increasingly degraded. Standard #2 would continue to fail proper functioning condition (PFC) assessments and over time would exhibit downward trends in health and condition. Under the CFR's and the Wyoming Standards for Healthy Rangelands it is unacceptable for public rangelands to exhibit downward trends. Thus, these specific sites would require future management changes and or mitigation measures to improve degrading conditions and improve existing land health trends.

Standard 3	Upland Vegetation

Current management on existing grazing allotments and the Morgan Creek Habitat Unit would continue, as would the associated impacts to the area. Densities of mature/decadent sagebrush, timber, and mountain shrubs with little to no age class variability or structure, relatively low upland production of herbaceous vegetation, problems with livestock distribution and resulting utilization would continue. There would be no modification of plant communities and permitted livestock grazing practices would continue as present. Herbaceous vegetation within shrub stands would continue to decline as competition from shrubs increases and grasses are increasingly shaded out. Long term benefits from vegetation age-class structure and composition stratification would not occur. Under the no action alternative, the vegetation and habitat in the project area would continue to become more susceptible to wildfires which could potentially remove large percentages of forage and habitat in the area due to the continuity of fuels and limited fire-breaks. Although currently meeting standard #3, by not choosing to implement landscape improvements the project area risks failing this standard as upland plant health and diversity continues to decrease. Under the CFR's and the Wyoming Standards for Healthy Rangelands it is unacceptable for public rangelands to exhibit downward trends. Thus, these specific sites would require future management changes and or mitigation measures to improve degrading conditions.

Standard 4	Wildlife/TE&S Species

Current use patterns by seasonal wildlife would continue as they presently do within the project area. There would be no potential short-term loss in wildlife habitat. There would be no temporary reduction in mule deer, antelope, elk, and bighorn sheep forage within the project area. As alluded to previously, under the "Description of the No Action Alternative" there could be a continued decline in mule deer, elk, antelope, and bighorn sheep habitat across the project area as an increasing number of mountain shrub/timber stands reach over-mature or decadent age-classes. Under the no action alternative, seasonal migration and use patterns would slowly change as habitats across the project area continues to slowly decline, although these shifts would not be evident initially. Wildlife habitat in the project area continues to meet standard #4, but the no action alternative would prevent it from moving towards a healthier condition, over time resulting in the area being unable to support existing wildlife population levels, or future population objectives for bighorn sheep and/or other big game species. The capability of range to support bighorns sheep is governed by the amount and quality of foods available during seasons of greater scarcity (Schmidt and Gilbert 1978).

Standard 5	Water Quality

Under the no action alternative water quality trends would continue as a result of existing impacts to and adjacent to riparian areas. There are currently no designated 303-D listed waters within the proposed project area; thus, standard #5 is being met.

Standard 6	Air Quality

Under the no action alternative air quality would not be affected. Air quality would continue under current trends and conditions. However, the likelihood of a catastrophic wildfire increased under this alternative, which may result in potential impacts to air quality.

Recreation, Visual Resources

Under the no action alternative there would be no immediate impacts to current recreational opportunities or the VRM Class of the landscape. As a result of this alternative the occurrence of large wildfire would increase across the project landscape; over time increasing the possibility of recreational and visual resource impacts.

Land with Wilderness Characteristics

Under the no action alternative the Seminoe Mountain Project Area will continue to exhibit present-day landscape characteristics and trends.

Cultural Resources

Under the no action alternative there would be no impacts to cultural resources.

Grazing Resources

Under the no action alternative existing grazing management within the Seminoe, Long Creek , and Black Canyon allotments would continue until mitigation measures, other than vegetation manipulation from controlled burning, could be implemented to improve upland vegetation and riparian heath and condition.

Mining

Under the no action alternative there would be no new impacts to current or historic mining operations within the project area.

Global Warming & Carbon Sequestration

Current global warming and carbon sequestration trends would continue as a result of the no action alternative.

Description of Mitigating Measures and Residual Impacts

Additional mitigation measures required beyond those provided or requested by wildlife, recreation, and/or cultural specialist under the proposed action would include making all necessary arrangements to avoid damage to existing power lines, pipelines, and privately owned structures within the project area. Residual impacts, other than those previously mentioned in this EA, would not occur.

Monitoring

The pre and post treatment vegetation conditions would be monitored by the Rawlins Field Office BLM, Wyoming Game & Fish Department, Bureau of Reclamation, and livestock operators. Monitoring of resource objectives on permitted grazing allotments would primarily be carried out by the BLM resource management/range staff, while determination of treatment objective accomplishment would be carried out by the fuels staff with assistance from the resources staff. Initial monitoring of treatment objectives would consist of simply mapping burned areas to determine how many acres of the target communities were treated and determining if the acceptable range of treatment was met. Additionally, data influencing first order fire effects including live fuel moisture, wind-speeds and directions, soil moisture, ambient air temperatures, etc., at the time of the treatment would be recorded for reference. Resource monitoring

would include pre-burn shrub canopy cover and sagebrush/mountain shrub density transects and post-burn vegetation response. Vegetation transects would be read to determine baseline data relative to overall ground cover and species composition, and would be re-read to document post-treatment response. Photo points would also be established prior to project implementation to document baseline vegetation information. Cover and density transects would be re-read periodically following the burn to monitor reestablishment of sagebrush and mountain shrubs. Riparian area response from improved animal distribution would also be monitored. Monitoring would also include observations of utilization and stubble heights in order to determine proper use levels and appropriate scheduling and/or implementation of stock rotation throughout permitted grazing allotments within the project area.

Picture Left: Seminoe Dam Canyon wildlife browse transect witness post photo.

Other Personal/Agencies Consulted:

Before an ignition is initiated, the following agencies would be contacted: Wyoming Highway Patrol, Carbon County Fire Department and Sheriff's Office, FAA, and Wyoming Department of Environmental Quality-Air Quality Division, Bureau of Reclamation, and Seminoe State Park.

The following individuals/agencies have been contacted regarding this proposal:

Ash Corlette	I.D. Ranch Manager
Bill Shaffer	I.D. Ranch/Miller Estates Co. President
Vaughn Swanson	Three Man Ranch LLC.
Gerald Kortes	Andrew Kortes and Sons
Dale Forsberg	Forsberg Ranch
Carrie Dobey	Lander Region, Terrestrial Habitat Biologist Wyoming Game & Fish
Greg Hiatt	Lander Region, Wildlife Biologist Wyoming Game & Fish Dept.
Bill Brinegar	Rawlins Area Game Warden, Wyoming Game & Fish Dept.
Mary Hopkins	Wyoming State Historic Preservation Officer
Glen Leavengood	Saratoga, Encampment, and Rawlins Conservation District
Mike E Winder	ConocoPhillips, Lead Operator Western Transportation
Frank Keeler	BLM, HDD Fire Management Officer
Richard Putnam	BLM, HDD Fuels Specialist
Jacob Vialpando	BLM, HDD Resource Advisor
Mary Read	BLM, RFO Wildlife Biologist
John Spehar	BLM, RFO Planning & Environmental Coordinator
Andy Warren	BLM, RFO Supervisory Rangeland Management Specialist
Chris Otto	BLM, RFO Fuels Specialist, Burn Plan Author
Patrick Walker	BLM, RFO Archeologist

Kelly Owens	BLM, RFO Hydrologist
Susan Foley	BLM, RFO Soils/Weeds Coordinator
Brian Smith	BLM, RFO Recreation Specialist
John Lawson	BOR, Great Plains Region, Wyoming Area Office, Area Manager
George P. Neuberger	BOR, Great Plains Region, Wyoming Area Office
Tim Switzer	Landowner
John Rudd	Landowner
Darin W. Homer	Landowner
Bill & Donna McCollum	Landowner
Kirk & Terry Smith	Landowners
James & Et.al Rudd	Landowners
James & Eileen Rudd	Landowners
Jerry & Wanda Mathews	Landowners

Preparer: Mike Murry Rangeland Management Specialist **Dates:**

References

Literature reviewed &/or cited during the preparation of this document

Hill, R. R. 1956. *Forage, food habits, and range management of the mule deer*. In W. P. Taylor, ed., The deer of North America: The white-tailed, mule and black-tailed deer, genus Odocoileus, their history and management, 393-414. Harrisburg, PA and Washington, DC: The Stackpole Co. and Wildlife Management Institute.

Knight, D.H., G.P. Jones, Y. Akasji, and R.W. Myers. 1987. Vegetation ecology in the Bighorn Canyon National Recreation Area. Final report to National Park Service and University of Wyoming National Park Service Research Center. Laramie, WY: University of Wyoming.

Krausman, P. R. and R. T. Bowyer. 2003. *Mountain sheep, Ovis canadensis and O. dalli*. In G. A. Feldhamer, B. C. Thompson and J. A. Chapman, ed., Wild mammals of North America: Biology, management, and conservation. 2nd ed. Baltimore, MD: The Johns Hopkins University Press.

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Schmidt, L. John; Gilbert, L. Douglas; Schwartz, Charles W. 1978 Big Game of North America –Ecology and Management, Harrisburg, PA; The Stackpole Books and Wildlife Management Institute.

Tomback, D. F. 2001. Clark's nutcracker: Agent of regeneration. Pages 89-104 *in* D. F. Tomback, S. F. Arno, and R. E. Keane, editors. Whitebark pine communities: ecology and restoration. Island Press, Washington DC, USA

Seminoe Mountain Prescribed Burn (008721)
EA Number: DOI-BLM-WY-030-2011-71-EA

DECISION RECORD

Recommendation:

My recommendation is to select the Proposed Action Alternative, as found in EA # **DOI-BLM-WY-030-2011-0071-EA,** to implement prescribed fire vegetation treatments in the Seminoe Mountains project area.

Location:

Township 25 North, Range 84 West, Sec(s) 4-9, 16-20, 30.
Township 25 North, Range 85 West, Sec(s) 1-6, 9-15, 22-26.
Township 26 North, Range 84 West, Sec(s) 27-34
Township 26 North, Range 85 West, Sec(s) 24-36
County Carbon (See Attached Maps)

Rationale for Recommendation:

Compared to the no action alternative, the proposed action best meets the standards and direction of the various guiding laws, regulations, and directives that apply in this matter, including the *Federal Land Policy and Management Act* (43 USC 35). The Proposed Action is in conformance with the Rawlins Field Office Resource Management Plan, Record of Decision December 24, 2008, and the HDD FMP dated 2011, and the Healthy Forest Restoration Act 2003. Cooperating agency consultation resulted in letters of support for the proposed action from both the BOR and the WGFD.

The proposed action will benefit all resources, specifically the identified wildland urban interface issues presented in the Seminoe Mountains Prescribed Fire EA. The reduction in fuel loading to the immediate area will decrease the possibility of large scale wildfires to the Seminoe Mountains, and provide an increase in natural fuel breaks should a wildfire occur. The proposed action will also increase vegetative health to the areas sagebrush/grassland, mixed sagebrush/mountain shrub range types, and decadent/diseased timber communities. The proposed action will help diversify the age-class and structure of the predominant vegetation types within the project area. Additionally, the proposed action will result in benefits to riparian area health and vigor, and improved water quality and yield. The proposed action will mitigate identified big game habitat concerns and increase habitat quality and quantity for established antelope, elk, mule deer, and bighorn sheep populations. The implementation of the proposed action will have little impact on established greater sage-grouse populations, and total core habitat disturbance values would remain below the established 5% cap.

Air resources, soils, vegetation, wildlife, recreation, lands with wilderness characteristics, cultural, and visual quality, are described in the affected environment section and effects to these resources are analyzed in the environmental effects section. The entire prescribed burn project area has been cleared archaeologically and all wildlife-related issues resolved. A wildlife consultation form has been completed and is contained in the project file. The project area was evaluated for Lands with Wilderness Characteristics, and an ID team identified the project area as void of the required characteristics. No

additional stipulations are needed. The proposed action will not cause any undue or unnecessary environmental degradation and will provide for improvement to existing vegetation communities.

Adoption of this action will improve livestock and wildlife use distribution and habitat conditions within the analysis area. This action will also result in improved watershed health by increasing vegetative ground cover, decreasing bare ground, and diversifying existing vegetative age classes. The proposed action is in conformance with and will meet standards and guidelines for "Healthy Rangelands," in the Great Divide Basin/Ferris and Seminoe Mountain watersheds. Public safety will be addressed and a burn plan will be developed to identify project specific implementation requirements (i.e. logistical operations and environmental characteristics required for completing the proposed action).

Compliance and Monitoring:

Compliance and monitoring of the effects of the proposed action are described in the attached environmental assessment. These monitoring studies conform to the Rawlins Field Office Resource Area monitoring standards.

_____ _____

Rangeland Management Specialist: **Date:**

Decision:
Based on the environmental analysis and attached Finding of No Significant Impact (FONSI), it is my decision to implement the proposed action for the **Seminoe Mountains Prescribed Fire** EA # DOI –BLM-WY-030-2011-0071-EA.

Authority:
H. R. 1904 – The Healthy Forest Restoration Act, 2003. An Act to improve the capacity of the Secretary of Agriculture and the Secretary of the Interior to conduct hazardous fuels reduction projects on National Forest Systems lands and Bureau of Land Management lands aimed at protecting communities, watersheds, and certain other at-risk lands from catastrophic wildfires, to enhance efforts to protect watersheds and address threats to forest and rangeland health, including catastrophic wildfire, across the landscape, and for other purposes.

As per 43 CFR 5003.1(b) … the BLM may make a wildfire management decision made under this part and parts 5400 through 5510 effective immediately or on a date established in the decision. Wildfire management includes but is not limited to: (1) Fuel reduction or fuel treatment such as **prescribed burns** and mechanical, chemical, and biological thinning methods (with or without removal of thinned materials).

In accordance with 43 CFR 5003.2 (a), this decision will be effective immediately following publication of a notice of decision in a newspaper of general circulation in the area were the lands affected by the decision are located.

This decision may be protested within 15 days of the publication of a notice of decision in a newspaper of general circulation (43 CFR 5003.3). Protests should be filed with the authorized officer and shall contain a written statement of reasons for protesting the decision.

Field Manager
Bureau of Land Management
Rawlins Field Office
P.O. Box 2407
Rawlins, Wyoming 82301

Alternatives Considered:
Proposed Action – Conduct multiple prescribed fire vegetation treatments within the proposed Seminoe Mountains project area.

No Action – no prescribed fire vegetative treatments would be conducted within the proposed Seminoe Mountains project area.

Appeals:
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 Part 4. If an appeal is taken (see 43 CFR 4.410), your notice of appeal must be filed within 30 days (see 43 CFR 4.411) from receipt of this decision to:

Field Manager
Bureau of Land Management
Rawlins Field Office
P.O. Box 2407
Rawlins, Wyoming 82301

The appeal shall state the reasons, clearly and concisely, why you think the final decision is in error (see 43 CFR 4.412).

If you wish to file a petition pursuant to regulations at 43 CFR 4.21 for a stay 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. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

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

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

If you decide to submit a petition for stay of the decision, a copy of the notice of appeal, statement of reasons, and petition for stay should be simultaneously filed with the Office of Regional Solicitor, Rocky Mountain Region, U.S. Department of the Interior, 755 Parfet Street, Suite 151, Lakewood, CO 80215.

If you have questions concerning this decision please contact Mike Murry at the BLM Rawlins Field Office at (307) 328-4253.

Rawlins Field Manager: Dennis Carpenter **Date:**