Environmental Assessment (DOI-BLM-ID-T020-2010-0001-EA)

Oakley East Allotments Permit Renewal

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Darrell Washburn
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BLM

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Chapter 1 – Purpose and Need

Background

There are several authorities[1] which mandate or allow the Bureau of Land Management (BLM) to authorize livestock grazing on public lands as part of multiple-use management of natural resources. Goals, objectives, and decisions which guide livestock grazing within the Churchill-Matthews, Fairchild Canyon, Two Knobs, Goose Creek-Fairchild, Mill Creek, Bedke-Churchill and Callahan allotments, known collectively as the Oakley East Allotments, are found in the Cassia Resource Management Plan (Cassia RMP, 1985). A copy of the Cassia RMP is available for review in the Burley Field Office.

The BLM issues grazing permits and leases, hereinafter referred to as permits, for a term not to exceed 10 years. Grazing permits allow a permittee to graze one or more individual allotments or graze in common with other permittees in one or more allotments. This Environmental Assessment (EA) was completed pursuant to the National Environmental Policy Act (NEPA) to determine whether there are significant environmental consequences of the proposed action or any alternatives and to ensure that environmental information is available and considered before decisions are made and actions are taken.

The BLM has prepared this EA in compliance with NEPA and other relevant Federal and State laws and regulations. This EA discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed action and alternatives.

This EA is based on existing information found in the study and allotment files for the applicable allotments and the 2013 Standards and Guidelines Rangeland Health Assessments (RHA) for the Churchill-Matthews, Fairchild Canyon, Two Knobs, Goose Creek-Fairchild, Mill Creek, Bedke-Churchill and Callahan Allotments.

In addition to the documents cited above, on-site field investigations were made on the allotments during 2008, 2009 and 2012 to provide additional information for the EA. These investigations included sage-grouse habitat evaluations, allotment utilization studies, photographs, GPS transect locations and subsequent validation of the RHAs. The draft RHA for the allotments were sent out for public review and comment during November, 2005.

[1] (a) The Taylor Grazing Act of June 28, 1934, as amended (43 U.S.C. 315, 315a through 315r); (b) The Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.), as amended by the Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); (c) Executive orders transfer land acquired under the Bankhead-Jones Farm Tenant Act of July 22, 1937, as amended (7 U.S.C. 1012), to the Secretary and authorize administration under the Taylor Grazing Act: (d) The Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); and (e) Public land orders, Executive orders, and agreements authorize the Secretary to administer livestock grazing on specified lands under the Taylor Grazing Act or other authority as specified. [43 FR 29067, July 5, 1978, as amended at 49 FR 6449, Feb. 21, 1984; 49 FR 12704, Mar. 30, 1984; 50 FR 45827, Nov. 4, 1985; 61 FR 4227, Feb. 5, 1996].

Based on the Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management (USDI, 1997), and in accordance with 43 CFR 4180 (Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration), rangelands need to meet the applicable Standards for Rangeland Health or make significant progress toward meeting these standards. Meeting the standards provides for the habitat requirements of special status species, proper nutrient cycling, hydrologic cycling, and energy flow within the allotment's watersheds.

The BLM completed a rangeland health evaluation for the Oakley East Allotments (OEA) during 2012. The eight standards for Rangeland Health in Idaho are Watersheds #1, Riparian Areas and Wetlands #2, Stream Channel/Floodplain #3, Native Plant Community #4, Seedings #5, Exotic Plant Communities, Other than Seedings #6, Water Quality #7, and Threatened and Endangered Plants and Animals #8. The OEA Analysis concluded that the vast majority of the area was achieving all applicable standards including standards 1, 4, 5 and 8. Standards 2, 6 and 7 were not applicable to the OEA. Each of the individual allotments were meeting all applicable standards with the exception of the Goose Creek Fairchild Allotment. The rangeland health assessment and evaluation noted that the Goose Creek Fairchild Allotment was not meeting standard 4 for native plant communities, however, the determination found that the allotment was making significant progress toward meeting standard 4.

TABLE 2
PERMIT EXPIRATION DATES

Permittee	**Permit Expiration Date**
Colt Robinson	February 28, 2018
Basil Fairchild	February 28, 2018
Darrell Washburn	February 28, 2014
Robert and Deanne Manning	February 28, 2018
Craig and RaNae Hawker	February 28, 2015
Eugene and Heidi Matthews	February 28, 2018
Basil Fairchild & Thurlow R. Smith	February 28, 2019

Purpose and Need for Action

The Cassia RMP established appropriate grazing use levels for the Churchill-Matthews, Fairchild Canyon, Two Knobs, Goose Creek-Fairchild, Mill Creek, Bedke-Churchill and Callahan Allotments (see Map 1) including the amount of Animal Use Months (AUMs) that could be allowed. Where consistent with the goals and objectives of the RMP, and Idaho's Standards and Guidelines for Livestock Grazing Management (1997), it is BLM policy to authorize livestock grazing to qualified operators (CFR 4130.2a). The purpose of the Proposed Action is to authorize livestock grazing consistent with BLM policy and in a manner that maintains or improves project area resource conditions and achieves the objectives described in the RMP. The analysis and authorization are needed here and now because:

- The permittees on the above named allotments have submitted applications to renew their grazing permits.

- There is a need to incorporate additional flexibility in management of the allotments in order for the BLM and permit holders to be able to adapt to changing resource conditions (i.e. drought, fire, climatic variability) and management objectives.
- BLM's policy is to fully process (renew grazing permits through environmental analysis) utilizing information from the land health evaluations. The Rangeland Health Assessments and associated Evaluations have been completed on these allotments.

Based on the above discussion of mandates for continued grazing in these allotments and the underlying need for action is to authorize grazing on public lands in these allotments in accordance with all applicable statutes and regulations and in conformance with the objectives and decisions of the Cassia RMP (USDI, 2005; USDI, 2001; Cassia RMP, 1985; 43 CFR 1610.5-3(a), Taylor Grazing Act of 1934, Federal Land Management Policy Act of 1976, Public Rangeland Improvement Act of 1979, and 43 CFR Part 4000, Group 100).

Conformance to the Cassia Resource Management Plan

The Cassia RMP was approved on January 24, 1985 and amended by the Fire, Fuels and Related Vegetation Management Direction (FMDA) signed in 2008. The RMP guides public land management, including the livestock grazing management program, in the area where the subject allotments are located. The Proposed Action is in conformance with the Cassia RMP, as required by 43 CFR 1610.5-3(a). Specifically, the Proposed Action would not exceed the forage allocations section of the *Resource Management Guidelines*, which states under the Rangeland Management section on page 7, "Within each grazing allotment or group of allotments the available forage is allocated among domestic livestock, wildlife, and wild horses and burros. Sufficient vegetation is reserved for purposes of maintaining plant vigor, stabilizing soil, providing cover for wildlife and other non-consumptive uses." The proposed action includes measures to ensure sufficient vegetation remains after livestock use.

The Proposed Action is also in conformance with guidelines for the *Fish and Wildlife* section and the *Watershed* section, which are found on pages 5 and 9, respectively. The former section states that, "A *variety of methods may be employed*, including management actions designed to maintain or improve wildlife habitat, inclusion of stipulations or conditions in BLM leases, licenses and permits, and development of detailed plans for fish and wildlife habitat management." (Italics added.) The latter watershed section states that, "*A variety of methods may be employed* to maintain, improve, protect and restore watershed conditions." (Italics added.)

This EA is tiered to the Final EIS for the 1985 Cassia RMP. The Cassia RMP/EIS broadly analyzes environmental issues relating to public land uses and resource allocations. This EA focuses on the environmental issues specific to renewing the livestock grazing permits. The applicable "Standards for Rangeland Health" evaluation for the allotments can be found in the project record.

Consistent with the provisions of 40 CFR 1502.20, the NEPA analysis included in the Cassia RMP/EIS is incorporated herein by reference, and this EA focuses on the environmental issues

specific to renewing these livestock grazing permits. The applicable "Standards for Rangeland Health" evaluations for these seven allotments are also incorporated by reference.

Therefore, re-issuance of a grazing permit on these allotments under the proposed action would be in conformance with the Cassia RMP because it complies with all the applicable guidelines specified in the RMP.

Relationship to Statutes, Regulations or Other Plans

On August 12, 1997 Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management were approved by the Secretary of the Interior. The applicable Standards and Guidelines Assessments for the allotments identified in the Proposed Action were completed as shown in Tables 1 and 2. Subsequent livestock management practices must be in conformance with the approved standards and guidelines.

The issuance of grazing permits for these allotments is in conformance with all other applicable statutes, regulations and plans (Taylor Grazing Act of 1934, Federal Land Management Policy Act of 1976, Public Rangeland Improvement Act of 1979, and 43 CFR Part 4000, Group 100).

Section 7 of the Endangered Species Act (ESA) of 1973 outlines the procedures for federal interagency cooperation to conserve federally listed species and designated habitat. Section 7(a)(2) states that each Federal agency shall, in consultation with the Secretary of Interior, insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of their habitats.

Specific guidance regarding the BLM's responsibilities to conserve ESA listed and candidate species is provided in BLM Manual 6840 – Special Status Species Management (BLM, 2008). The objectives of the BLM Special Status Species policy is to conserve and/or recover ESA-listed species and the ecosystems on which they depend so that ESA protections are no longer needed for these species, and to initiate proactive conservation measures that reduce or eliminate threats to Bureau sensitive species to minimize the likelihood of and need for listing of these species under the ESA. To comply with this policy, the Idaho list of BLM Special Status Species was reviewed for potentially affected species. Habitat evaluations were included in the RHA's to determine habitat suitability for these species. It was determined that no ESA Threatened or Endangered species could be affected, however, several other Special Status Species could including Greater Sage Grouse. It was determined through the RHA and Evaluation that habitat is suitable for potentially affected species and that these species will suffer little harm, therefore this action is in conformance with the above 6840 policy.

The Proposed Action is in accordance with the Migratory Bird Treaty Act, as amended. No harm to migratory birds is expected to result from the alternatives. It is also in accordance with Executive Order 13186, dated January 11, 2001, which directs federal agencies to work with the U.S. Fish and Wildlife Service to develop an agreement to conserve migrating birds.

The Proposed Action is in accordance with BLM IM 2012-043 Greater Sage Grouse Interim Management Policies and Procedures.

Public Involvement

RHAs were completed and mailed to the public on November 9, 2005. Comments were received from the Idaho Department of Fish and Game (IDFG). IDFG stated that the RHAs lacked enough information to identify issues and make recommendations. The RHAs were updated as a result of the comments to include more information on special status species habitat assessments and more recent utilization studies. The grazing permit renewals for the seven allotments have been listed on the Burley Field Office's NEPA Database on the internet since January 2010. A scoping letter, dated February 9, 2010 asking for information and potential issues to be addressed in the permit renewal EA, was sent to permittees, local tribes, affected agencies and other interested publics. The BLM received one letter during the scoping process from the IDFG. This letter provided wildlife information and data and is part of the project record.

Chapter 2 – Proposed Action and Alternatives

Proposed Action

BLM is proposing to renew the grazing permits on the seven allotments for a period of 10 years with the same season of use, cattle numbers and Animal Units Months (AUMs), except for the Goose Creek-Fairchild Allotment (see Tables 4 and 5).

TABLE 4
PROPOSED LIVESTOCK GRAZING USE LEVELS

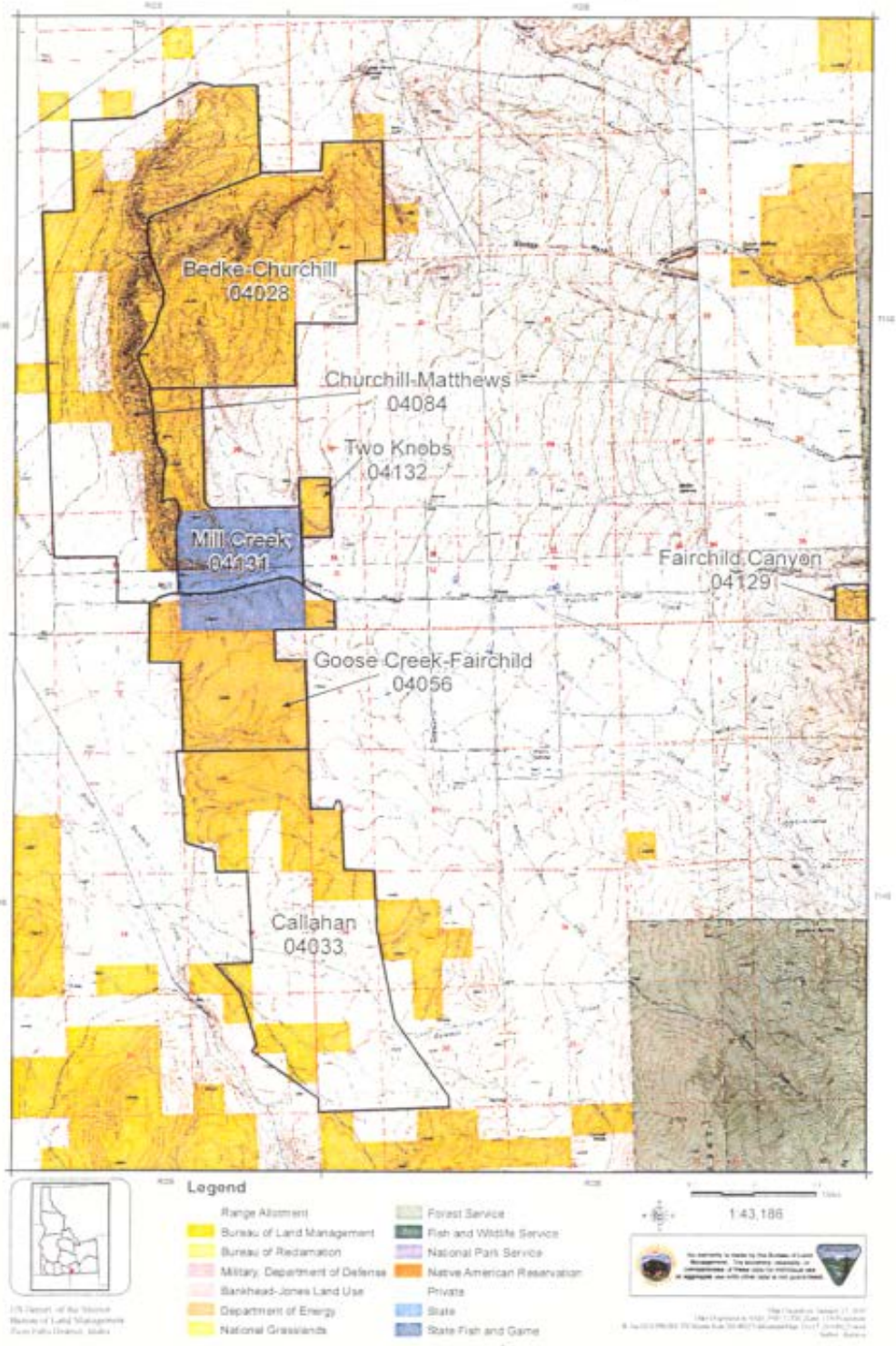
Allotment	Number of Livestock	Kind of Livestock	Season of Use	* Percent of Public Land	Public Land Acres	AUMs
Churchill-Matthews	103	cattle	04/10-05/09	59	1,476	60
Fairchild Canyon	16	cattle	06/01-06/30	25	40	4
Two Knobs	32	cattle	05/01-05/15	75	80	12
Callahan	251	cattle	05/03-6/11	23	809	76
Callahan	72	cattle	10/10-11/18	23	809	22
Mill Creek	40	cattle	04/16-06/27	13	240	12
Bedke-Churchill	32	cattle	04/01-04/30	96	1,801	30
Bedke-Churchill	52	cattle	11/01-11/30	96	1,801	49
Goose Creek-Fairchild (*Craig & RaNae Hawker*)	70	cattle	06/07-06/26 (or) 10/07-10/26	72	720	33
Goose Creek-Fairchild (*Basil Fairchild*)	47	cattle	06/07-06/26** (or) 10/07-10/26	100	720	31

***** The *Percent of Public Land* column displays the proportion of AUMs that are available within the allotment under the BLM's control and which are grazed in conjunction with the private or state lands. For example, the Churchill-Matthews Allotment has 59% of the grazing capacity of the allotment located on public lands. The remaining 41% of the grazing capacity is located on lands owned or controlled by the permittee. During the OEA analyses, it was discovered that the State Land AUM's changed for the Goose Creek Fairchild and Mill Creek Allotments and private land AUMs changed in the Callahan Allotment such that a change in the numbers of livestock and percent public land was required. For the Goose Creek Fairchild Allotment the change will effectively reduce livestock numbers by 21 as a result of the increased percent public land. This change will be applied prior to the 2013 grazing season. For the Mill Creek Allotment the change increased livestock numbers by 35. For the Callahan Allotment the change increased livestock numbers by 150. Grazing capacity (AUMs) on BLM lands has not changed in any of these allotments. Grazing management will change on the Goose Creek Fairchild Allotment since the adjustment reduces current livestock numbers by 15%. Grazing management on the Callahan and Mill Creek Allotment has not changed since these adjustments reflect current grazing management.

****** Under the Proposed Action Basil Fairchild's livestock grazing season of use for the Goose Creek-Fairchild allotment will change ***from*** May 15 through June 4 ***to*** June 7 through June 26, and would hereafter correspond to the livestock grazing season of use for the Craig and RaNae Hawker grazing permit. Both operators would also be allowed an option to graze together during 10/7-10/26 in years when the allotment has not been used in the spring. AUMs would remain the same.

The grazing permits can be modified at any time during the 10-year permit period if information collected subsequent to the expiration indicates changes in management or terms and conditions are needed to ensure that these allotments are meeting or making significant progress towards meeting livestock grazing standards and conforming to the guidelines. As the new permits are reissued, minor modifications to the previous set of terms and conditions may occur when the need for minor changes arise during the 10 year permit period due primarily to the passage of time or changes in existing regulations.

Map 1 Oakley East Allotments



Management Actions Consistent With the Proposed Action and Alternative 1:

Management Flexibility – Flexibility would be allowed for annual changes in management due to natural occurrences, such as drought, unusually wet years, wildfire, or other circumstances so long as it is approved in advance by the authorized officer. Flexibility in all allotments with the exception of the Goose Creek Fairchild Allotment would include making adjustments to the on and off dates (2 weeks on either side of the permitted dates) or numbers as long as permitted AUMs are not exceeded. Flexibility in the Goose Creek Fairchild Allotment would include the flexibility indicated above except that only five days flexibility would be allowed at the beginning of the spring season. Flexibility in livestock numbers for all allotments would be limited to no more than 10 % greater than the number of livestock allowed on the permit and the number of days allowed would be adjusted to ensure AUMs utilized are not exceeded.

Crossing Permits May be Issued: Under the Proposed Action and Alternative # 1, crossing permits would be issued if needed and justified. Such permits would be issued in accordance with 4130.6-3. Before issuing crossing permits (also known as trailing permits), BLM would coordinate with the permittees. Collectively, crossing permits issued would restrict numbers of livestock to 500 cattle or 2000 sheep annually. No overnight use would be allowed pursuant to a crossing permit because such use would not be necessary to cross these small isolated allotments. Trailing would not be authorized in the Two Knobs, Mill Creek or the Goose Creek Fairchild Allotments since a public road is in close proximity to these allotments.

Fence Marking – (Included in all alternatives)
In accordance with BLM IM 2012-043, fence marking was considered for the potential reduction of fence collision effects to sage-grouse. Based on our review, all BLM owned interior fences would be marked to reduce sage grouse fence collision risk. The BLM has determined that due to the proximity of the allotments to sage grouse lek and other seasonal habitats, and the topography of the allotments, that sage grouse in the area may benefit from the marking of all of the interior fences which consist of those which separate adjoining BLM allotments and pastures.

Monitoring:

Resource objectives will be monitored using the following protocols:

- *Implementation Monitoring*

  • Upland utilization would be collected at the end of the growing season and periodically during the grazing season, as necessary, and conducted using approved methodology described in the *Interagency Technical Reference 1734-03 Utilization Studies and Residual Measurements* and subsequent updates.\

  • Utilization data will be collected at key areas. Selected key areas will be representative of the effects of grazing management within the pasture/use area. The Fairchild Canyon, Two Knobs, Mill Creek, Goose Creek Fairchild and Callahan Allotments which contain predominantly native vegetation will be managed for light utilization (21-40%) on key forage species. The Bedke Churchhill and Churchhill Mathews Allotments contain both

native and seeded non-native species intermixed within pastures. These allotments will be managed for light utilization (up to 40%) on key native forage species and moderate utilization (up to 60%) on key non-native seeded forage species.

*It is recognized that attainment of specific use levels on a year to year basis is difficult due to unpredictable climate variables (Holechek et al. 2004 pg 235). The use levels described above are targets across a 5-10 year time period.

Grazing use criterion combined with other monitoring data e.g. actual use, climate, trend, photo points etc., would be periodically assessed as needed to determine achievement of resource goals and objectives described below. Assessment of criterion may also be used to adjust grazing use the following year.

- *Effectiveness Monitoring*

  - Upland trend monitoring would continue to be conducted utilizing methodology contained in *Interagency Technical Reference 1734-04 Sampling Vegetative Attributes*.

Resource Management Objectives

Resource Management Objectives for the Oakley East Allotments are addressed on pages 25-26 of the Cassia RMP, specifically Management Area 7 – Albion. The Idaho Standards for Rangeland Health provide resource objectives, i.e. standards, for the Oakley East Allotments.

The applicable objectives (i.e. standards) are as follows:

- Standard 1 – Watersheds provide for the proper infiltration, retention, and release of water appropriate to soil type, vegetation, climate, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow. This standard is applicable to all seven allotments.

- Standard 4 – Healthy, productive, and diverse native animal habitat and populations of native plants are maintained or promoted as appropriate to soil type, climate, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow. This standard is applicable to all seven allotments.

- Standard 5 – Rangeland seeded with mixtures, including predominately non-native plants, are functioning to maintain life form diversity, production, native animal habitat, nutrient cycling, energy flow, and the hydrologic cycle. This standard applies to the Churchill-Matthews and Bedke-Churchill allotments.

- Standard 8 – Habitats are suitable to maintain viable populations of threatened and endangered, sensitive, and other special status species. This standard is applicable to all seven allotments.

Alternative 1 (No Action – Current Management)

This alternative is the same as the Proposed Action, except the proposed change in the season of use for the Goose Creek-Fairchild Allotment would not occur (see table 5). Actual use, as reported from billed use, for the past ten years on these allotments is consistent with those AUMs presented in Table 5 and therefore is both the No Action and Current Management Alternative.

TABLE 5
PRESENT LIVESTOCK GRAZING USE LEVELS

Allotment	Number of Livestock	Kind of Livestock	Season of Use	Percent of Public Land	Public Land Acres	AUMs
Churchill-Matthews	103	cattle	04/10-05/09	59	1,476	60
Fairchild Canyon	16	cattle	06/01-06/30	25	40	4
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Callahan	72	cattle	10/10-11/18	23	809	22
Mill Creek	40	cattle	04/16-06/27	13	240	12
Bedke-Churchill	32	cattle	04/01-04/30	96	1,801	30
Bedke-Churchill	52	cattle	11/01-11/30	96	1,801	49
Goose Creek-Fairchild (*Craig & RaNae Hawker*)	70	cattle	06/07-06/26	72	720	33
Goose Creek-Fairchild (*Basil Fairchild*)	47	cattle	05/16-06/04	100	720	31

Alternative 2 (No Grazing)

Under the "No Grazing" alternative the grazing permits for the seven allotments would not be renewed and livestock grazing on public lands within these allotments would not be authorized. In essence, the permittees would retain their preference in the allotment, but would not be authorized to graze their livestock for 10 years. Existing range improvements would not be maintained by the grazing operators (except where fences separate the allotments from private land) nor would annual grazing bills be issued.

Even though livestock grazing would not be authorized on public lands within the allotment, a series of management actions would still occur. These actions would likely include continuing long-term trend studies, authorizing other livestock to continue trailing through the allotment, winterizing range improvements such as springs and trough systems since there will be no requirements to maintain them.

Under Alternative # 2, crossing permits would still be issued if needed and justified. Such permits would be issued in accordance with CFR 4130.6-3. Crossing permits (also known as

trailing permits) would be coordinated with the permittees prior to issuance. Any crossing permit issued would restrict numbers of livestock to 500 cattle or 2000 sheep annually. No overnight use would be allowed.

After the 10-year period, the allotment could be reconsidered for livestock grazing.

ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

The BLM considered one additional alternative to address the reduced diversity and overabundant sagebrush cover issue which occurs in the Goose Creek Fairchild Allotment. This proposal would have been added to the proposed action to include an aggressive harrow treatment (to break up the Sandberg's bluegrass sod which would allow for seedling establishment and to reduce the overabundant sagebrush cover) and an interseeding of native grasses and forbs. Although this alternative may successfully improve diversity and would reduce the sagebrush cover, the BLM is concerned that the treatment may also introduce invasive species into a plant community that is currently stable and appears to be resistant to invasions. Furthermore, although the sagebrush cover is high, it still provides habitat for sage-grouse and links relatively contiguous sagebrush cover within an island of public land surrounded by private land that is occupied by sage-grouse. Therefore, the BLM determined that the potential benefits of this alternative are unlikely to exceed the potential harm, and so decided that this alternative will not be analyzed in any further detail.

Chapters 3 and 4 – Affected Environment and Environmental Consequences (Including Cumulative Impacts)

General Setting

Three of the seven allotments are located east of Oakley, Idaho (Goose Creek-Fairchild, Fairchild Canyon and Two Knobs), three are located northeast of Oakley (Churchill-Matthews, Bedke-Churchill and Mill Creek) and one is located southeast of Oakley (Callahan). The seven allotments comprise about 5,166 acres of public lands, 1,969 acres of private lands and 640 acres of state land. All seven allotments are located within Management Area 7 of the Cassia RMP. Management Area 7 has 31 allotments that include approximately 21,164 acres of public lands, 994 acres of state lands and 8,305 acres of private lands. Consequently, the seven allotments comprise about 24% of the public lands in Management Area 7.

The allotment's elevations range from 4430 feet within the northwest corner of the Churchill-Matthews Allotment to 6340 feet in the southeast corner of the Fairchild Canyon Allotment. Vegetation is dominated by big/low sagebrush types, mixed brush types, juniper and seeded grass species.

Vegetation

Vegetation types, communities and the rangeland resource including noxious weeds and invasive plants.

Vegetation within the Oakley East Allotments is diverse. The lower to mid elevations sites (Callahan, Two Knobs, Goose Creek Fairchild, Bedke Churchhill, Churchhill Mathews and Mill Creek) consist of a bluebunch wheatgrass/Wyoming sagebrush community that includes the following species: Wyoming big sagebrush, low sagebrush, black sagebrush, antelope bitterbrush, broom snakeweed, green rabbitbrush, greasewood, spiny hopsage, Utah juniper, bluebunch wheatgrass, Thurber's needlegrass, western wheatgrass, Sandberg bluegrass, Indian ricegrass, basin wildrye, bottlebrush squirreltail, cheatgrass, death camas, prickly pear cactus, penstemon, arrowleaf balsamroot, tapertip hawksbeard, phlox spp., lupine, rockcress, milkvetch, pepperweed, erigeron, flax, mycrosteris and various other forbs. There are no noxious weeds located in the project area.

The higher elevation sites (Fairchild Canyon) consist of the following species: mountain big sagebrush, low sagebrush, juniper, antelope bitterbrush, serviceberry, chokecherry, snowberry, green rabbitbrush, bluebunch wheatgrass, Idaho fescue, western wheatgrass, Sandberg bluegrass (poa) , basin wildrye, Columbia needlegrass, Nevada bluegrass, cheatgrass, arrowleaf balsamroot, yarrow, goldenweed, phlox, penstemon, tapertip hawksbeard, lupine and various other forbs.

Allotment Specific Vegetative Discussion

The following section describes the condition of upland vegetation in the allotments based upon the Rangeland Health Assessments and the associated Evaluation Report for the OEA area.

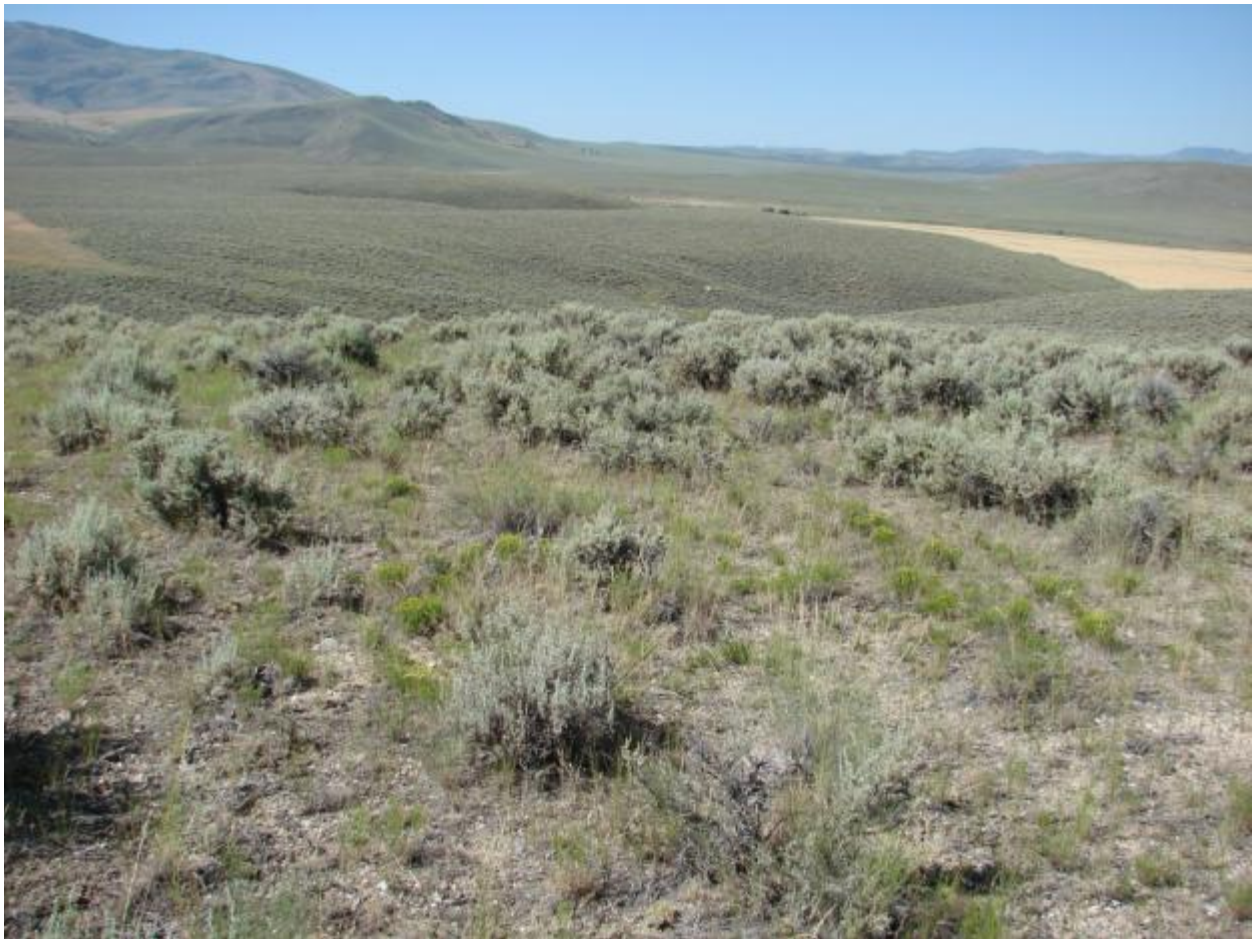
Churchill-Matthews Allotment - Vegetation within the Churchhill Mathews Allotment consists of both native and seeded rangelands intermixed within 3 pastures. The seeded areas include most of the lower flatter areas which have deep soils and were seeded primarily with crested wheatgrass. Native vegetation consists of relatively dry upland habitats dominated by Wyoming sagebrush with greasewood dominating some of the lower to mid-slope areas where there is less precipitation and more saline soils. The community structure for the native range in the Churchhill Mathews Allotment has good diversity in height and size with shrub cover of varying size as well as grasses and forbs. There is some deviation in small areas grazed more heavily where there are fewer mid-range bunch grasses. The ridge above the rim-rock is similar to the vegetation in the Bedke Churchhill Allotment. Overall, this allotment had adequate mechanisms for maintaining the nutrient cycle with an appropriate amount of litter, microbiotic crust and legumes.

The average utilization rates on the key native grass species on public lands have been 25% since 1988. There were no utilization transects conducted on the native grass species prior to 1988. The RHA also states, "Utilization of the seeded species, crested wheatgrass, averaged 62% from 1978-1986. Since 1986 the utilization has averaged 39%."

Churchill-Matthews Allotment seeding on July 24, 2008

Callahan Allotment – Vegetation on public land in the Callahan Allotment consists of Wyoming and low sagebrush dominated rangelands. This allotment has the appropriate species and structural diversity for the site. It also has the appropriate amount of production and vigor of its grasses.

The average utilization rates on the native grass species on public lands averaged 71% prior to the 1985 CRMP. From 1986-2009 the average utilization of the key native species, i.e. bluebunch wheatgrass and needlegrass, has averaged 38%. Two grazing reductions have been implemented on the allotment since 1990 to bring livestock grazing into balance with the carrying capacity of the public lands." The RHA also states, "Furthermore, the utilization rates have decreased to an average of 34% between 1990-2009 when two livestock grazing adjustments, amounting to a 30% livestock reduction, were instituted on the allotment."



Callahan Allotment native range on July 22, 2009

Goose Creek Fairchild Allotment - The Goose Creek Fairchild Allotment was not achieving Land Health Standard 4. The cause for not achieving this standard was excessive historic grazing. Records indicate that a large portion of the allotment was seeded with crested wheatgrass in attempt to reverse loss of key forage species. After the seeding occurred, excessive grazing was blamed for poor success of the seeding. Excessive grazing continued until the approval of the Cassia Resource Management Plan (RMP) (1985). The RMP approved grazing reductions in the allotment from 249 AUMs to 98 AUMs and thereafter in 1990; AUMs were further reduced from 98 AUMs to 64 AUMs to improve the vegetation.

Since the final livestock grazing reduction was implemented in 1991, the utilization rates for the key, native grass species, i.e. bluebunch wheatgrass and squirreltail, have averaged 43%. There were no utilization data for the key, native grass species prior to 1990 but it can be assumed it was much greater than 43% because there were four times as many AUMs authorized prior to the reduction in 1986. The change in percent public land and reduction of livestock numbers (from 138 to 117) by 21 will reduce the overall use by livestock in the allotment. It is therefore expected that based on the 15% reduction in numbers that the average utilization will lower and will fall below the proper use level of 40%.

While the current condition of the native vegetation is lacking mid-sized bunchgrasses and native grass vigor remains somewhat lower than expected , the current condition of the vegetation when compared to historic data and photos shows continued improvement since the final reduction was implemented in 1991 (see figures 1-4). Historically, there was little ground cover in the form of litter and biological crust, native grass abundance and native species were scarce, the sagebrush and other shrubs appeared trampled and were not abundant. Also, cheatgrass was abundant. Currently, the ground cover has adequate litter and abundant biological crust, there remains a lack of sufficient mid-range deep rooted bunchgrasses but the shallow rooted grasses (poa) are now abundant. Very little cheatgrass occurs on the allotment. Also, there is abundant sagebrush on the site. The current abundance of sagebrush and Sandberg's bluegrass also indicates that the community has sufficient reproductive capabilities and has overall improved in plant vigor. Therefore, the allotment is making significant progress towards achieving land health.

Although significant progress has occurred, problems are expected to remain for this allotment which may inhibit achieving land health in the absence of a disturbance. There is very limited seed source for the deep rooted bunchgrasses to recover. Also, the abundant poa and Wyoming sagebrush cover are expected to inhibit germination and establishment of any seeds that manage to deposit on the site. Therefore, the allotment has crossed an ecological threshold, is stable and recovery of the midrange bunchgrasses is not expected without a shrub reducing disturbance and seeding.

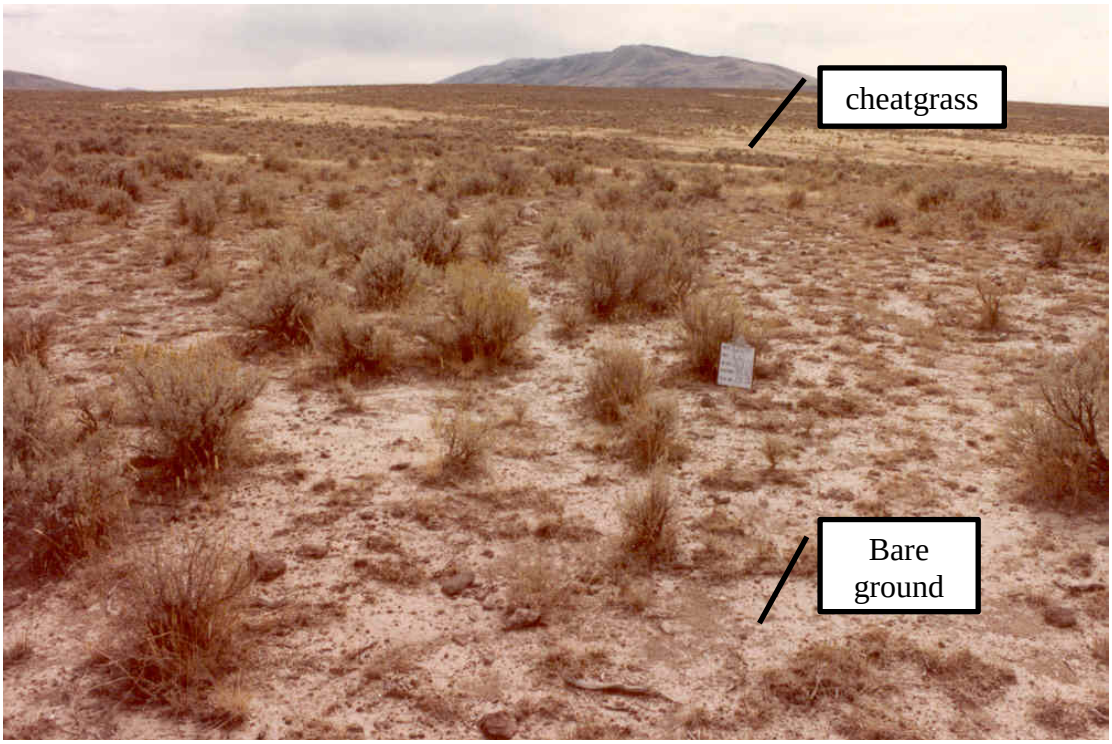


Figure 1 Goose Creek Fairchild Landscape 1983

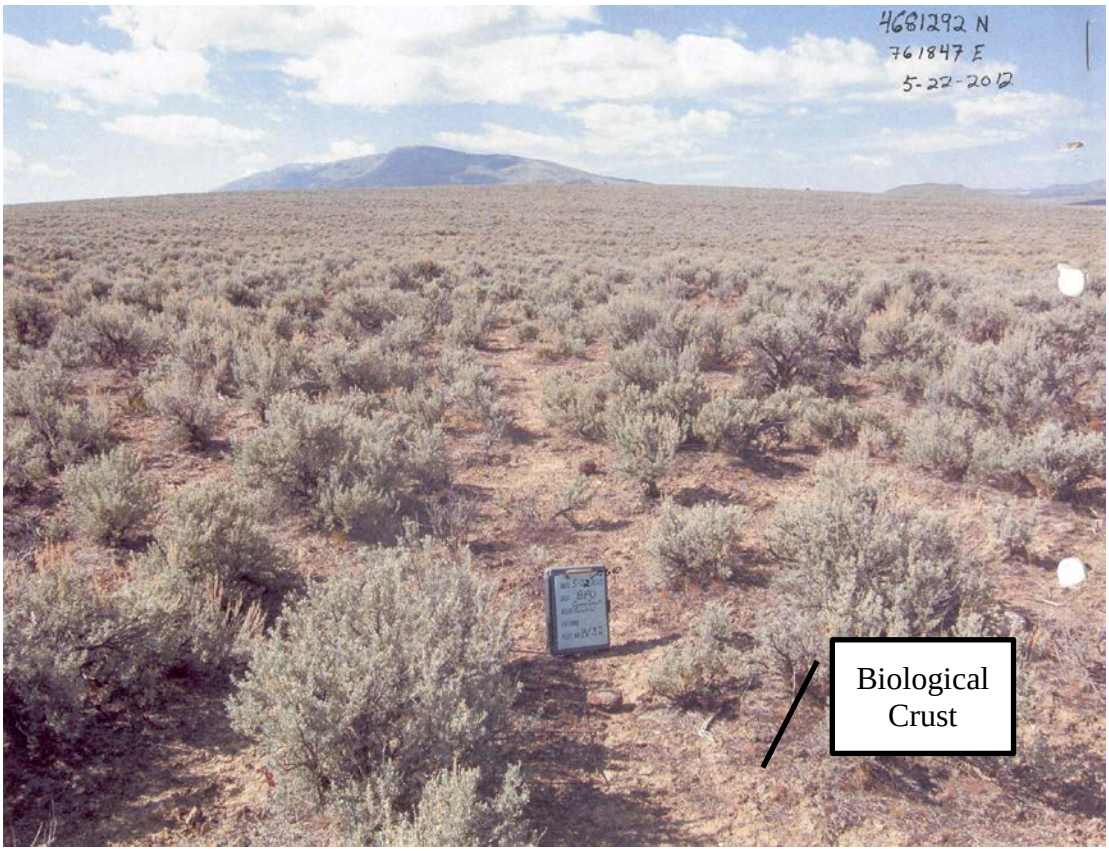


Figure 2: Goose Creek Fairchild Landscape 2012 (Note improved sagebrush cover, decreased bare ground, decreased cheatgrass and increased biological crust)

Figure 3 Goose Creek Fairchild Trend Plot 1983

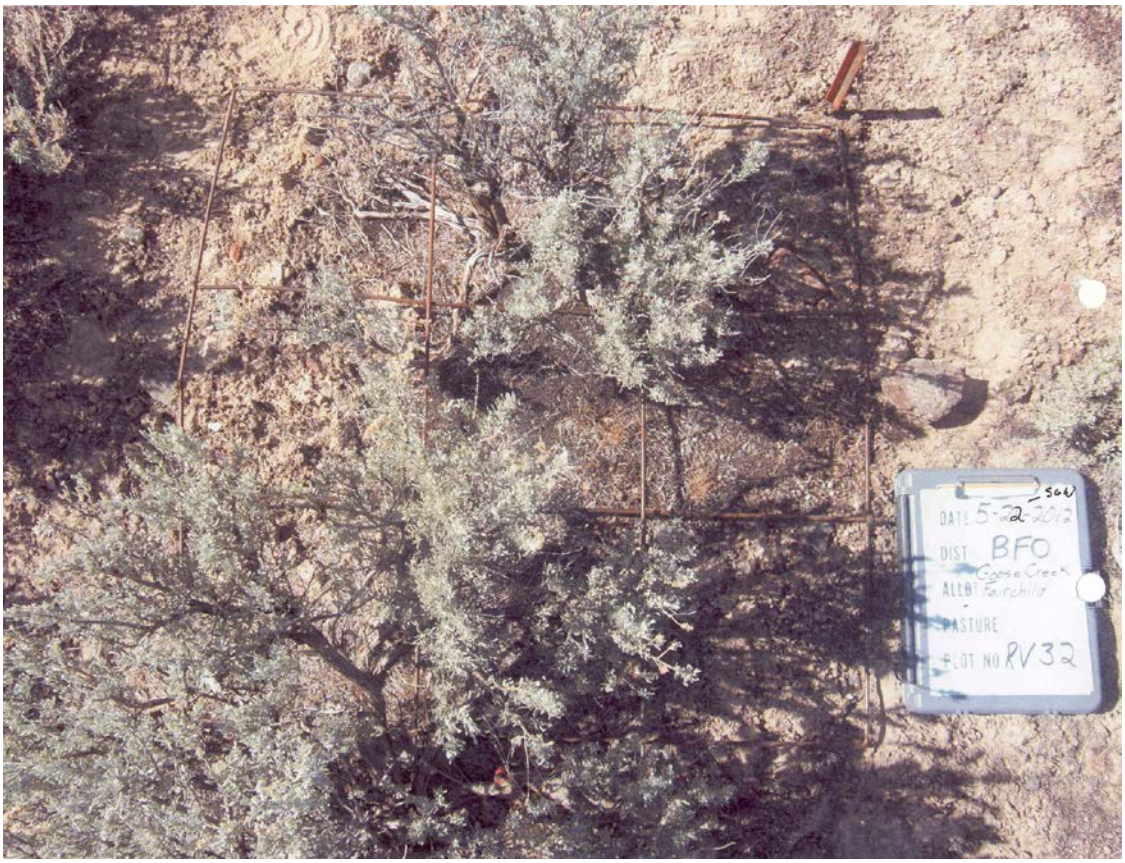
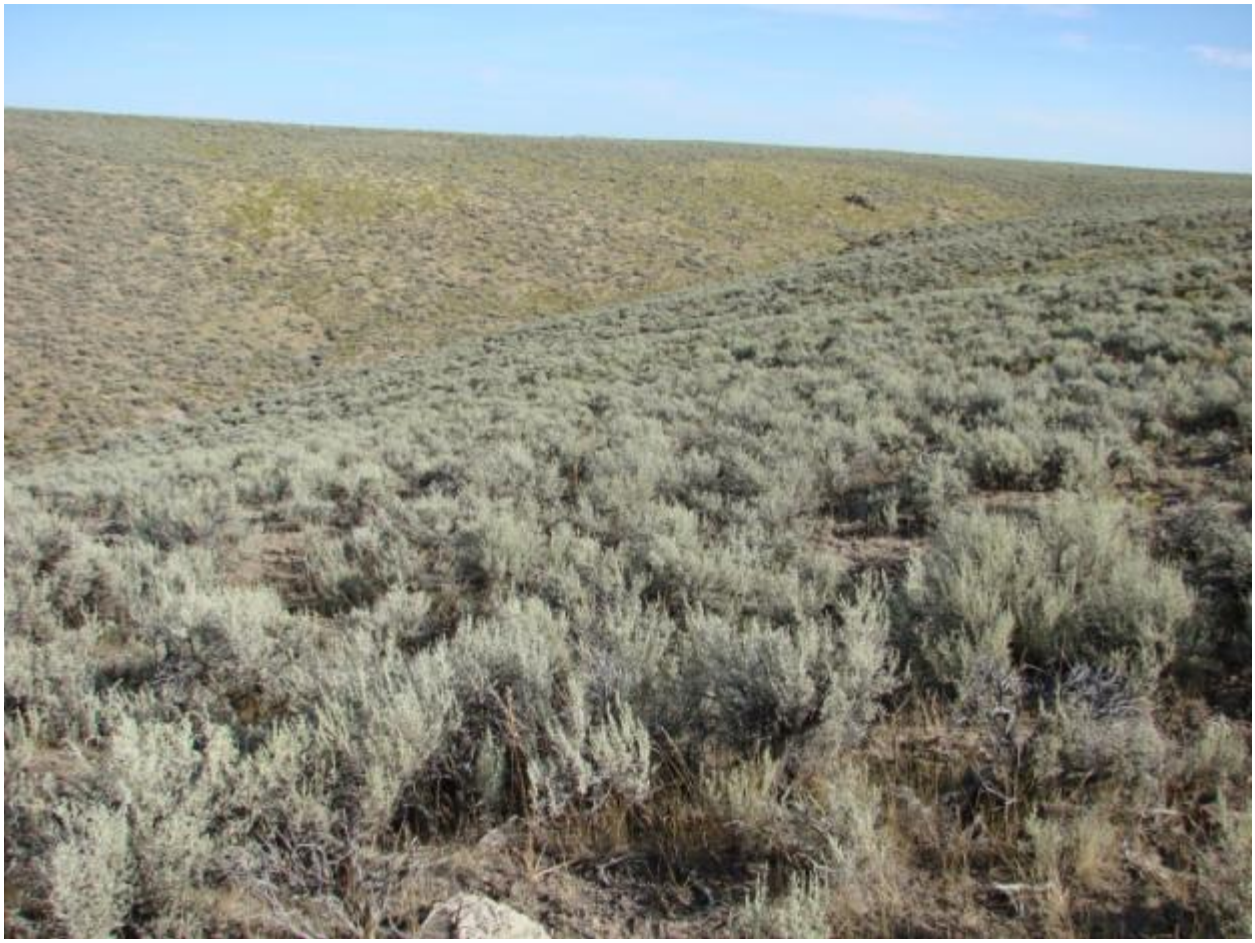


Figure 4 Goose Creek Fairchild Trend Plot 2012



Goose Creek-Fairchild Allotment native range on August 18, 2009

Bedke-Churchill Allotment -
Native vegetation on public land in the Bedke-Churchhill Allotment consists of Wyoming and low sagebrush dominated rangelands with a bluebunch wheatgrass understory. This allotment has the appropriate native species and structural diversity for the site. It also has the appropriate amount of production and vigor of its grasses. From 1981 through 2009 the average utilization on the key, native grass species (bluebunch wheatgrass) has been 15%.

In regards to the seeded portion of the allotment the RHA states, "The crested wheatgrass seedings on the allotment (approximately 357 acres) are in very good condition and the seeded species, i.e. crested wheatgrass, appear healthy and vigorous. The utilization rate of the seeded species over the past 25 years has averaged approximately 33%.

Bedke-Churchill Allotment native rangeland on September 14, 2010

Bedke-Churchill Allotment seeded rangeland on September 14, 2010

Mill Creek Allotment - Native vegetation on public land in the Mill Creek Allotment consists of Wyoming sagebrush dominated rangelands with a bluebunch wheatgrass understory. This allotment has the appropriate native species and structural diversity for the site. It also has the appropriate amount of production and vigor of its grasses. As stated in the Mill Creek RHA, "Based on past range condition studies, past observed apparent trend studies and the 2004, 2005, 2008 and 2009 site specific reconnaissance's of the allotment, the native grass species appear vigorous and in a static to upward trend. Utilization studies have been conducted periodically on the Mill Creek Allotment between 1981 and 2009. These studies indicate utilization of the key, native grass species (bluebunch wheatgrass) has averaged about 22% and have ranged from a 9% "slight use in 2008 to a 32% "light" use in 1983."

There are no seedings located on the public lands within the Mill Creek Allotment.

Mill Creek Allotment native vegetation on July 21, 2008

Two Knobs Allotment - The Two Knobs Allotment is a small, 80-acre allotment that consists of both native and seeded species. It is mostly surrounded by private land that was seeded to crested wheatgrass. As stated in the Two Knobs RHA Native Plant Communities section, "Existing data, including past range condition inventories, do not indicate any issues from current livestock grazing on the allotment. Utilization studies available prior to the 1985 CRMP indicate an average 88% utilization rate on the key, native grass species, bluebunch wheatgrass. Since the changes made resulting from the 1985 CRMP, the utilization rate for bluebunch wheatgrass has averaged 16%.

Though historically unallocated, this allotment had a long history of abuse. In 1985 the allotment was mostly void of shrubs and was overgrazed as evident from trend photos. The 1985 CRMP allocated the allotment at a reasonable rate and it has since progressed towards a late seral state mostly dominated by Wyoming big sagebrush.

In regards to the seeded portion of the allotment, the RHA states, "Existing data, past and present, do not indicate any significant issues due to current livestock grazing on the allotment regarding the crested wheatgrass seeding. Utilization of crested wheatgrass has averaged 32% since the 1985 CRMP was implemented. Although some crested wheatgrass plants persist, the allotment has reverted back to a mostly native state and utilization levels of 32% on crested

wheatgrass shows that the allotment is being used lightly regardless of which key species is monitored.

Two Knobs Allotment native vegetation on August 17, 2009

Fairchild Canyon Allotment - The Fairchild Canyon Allotment is a small, 40-acre parcel of native rangeland. The allotment's RHA states, "Existing data, including the past range condition inventory, the recent ocular reconnaissance of the allotment and the rangeland trend plot studies, indicate that the native plant community has the appropriate species. Based on recent ocular reconnaissance of the allotment, vigor of the native grass species is high. Prior to the 1985 CRMP, the utilization rates for the native key species, i.e. bluebunch wheatgrass and Idaho fescue, were 67%. Between 1985 and 2009 the utilization rates for the native key species have averaged 17%."

Fairchild Canyon Allotment native range on July 23, 2008.

General Oakley East Area Vegetative Discussion

Native Vegetation –Since 1985 several livestock grazing use adjustments have occurred on the allotments within the OEA to improve vegetation on public lands. The OEA has been monitored periodically over the past 20 years while conducting range trend studies, utilization studies and livestock use compliance inspections. As discussed above, the majority of the native vegetation is healthy and vigorous and appears to be steadily improving in range condition since the 1980-1981 range survey was completed. Based on past livestock use adjustments instituted since the Cassia RMP was completed in 1985, the present livestock grazing use appears to be in balance with the stocking rate of the native range. And although there are still small areas that are being used heavier than others, the average utilization level for the area is 24%.

Seeded Vegetation - The seeded rangelands in the OEA that have persisted are in a healthy condition with the appropriate diversity (sagebrush) and vigor. Whereas the seeded areas were once mono-cultural in appearance, sagebrush has now re-established throughout much of the seedings over the past 30 years. Based on past livestock grazing use adjustments instituted since the Cassia RMP was completed in 1985, livestock grazing use is now in balance in areas where grazing was previously heavy.

The OEA has been monitored several times a year over the past 20 years while conducting range trend studies, utilization studies and livestock use compliance inspections.

Environmental Impacts

Proposed Action

Overall, both native and seeded vegetation (where they occur) on the Mill Creek, Two Knobs, Callahan, Bedke Churchill, Churchhill Mathews and Fairchild Canyon Allotments is healthy and meeting standards for rangeland health. The proposed action to continue grazing these allotments under current management is expected to maintain the vegetation in the same healthy condition or continue to allow improvement such as has been demonstrated in the Goose Creek Fairchild allotment (decreased bare ground, decreased cheatgrass, increased biological crust cover, increased poa and increased sagebrush). The re-establishment of sagebrush and Sandberg's bluegrass in the Goose Creek Fairchild Allotment also indicates that the community has sufficient reproductive capabilities and has overall improved in plant vigor. The minor changes in the flexibility in livestock numbers (up to 10%) and season are not expected to measurably change vegetation on these allotments because the AUMs will be the same as will the season during which grazing would occur. Since only minor changes are proposed for these allotments and current management is maintaining or improving to healthy conditions, impacts to vegetation would be limited to annual forage removal.

Impacts to vegetation can result from herbage removal from foraging animals and disturbance by trailing animals. The amount and timing of forage removal affects the plants' ability to maintain productivity and vigor (Holochek, et al., 2004). When the amount of forage removal, or timing of forage removal, occurs to the point where the vegetation becomes less productive, a change in vegetative composition can occur over time. Plant growth physiology is critical during the month of May on rangeland having a summer dry period with a cold winter, e.g. Idaho (Holochek, et al., 1989). The rate at which the plant uses up its energy reserves is high during May and grazing intensity at this time should be carefully monitored to maintain good plant vigor. Vallentine (1990) states that the reduction in the total available carbohydrates in plants can be mitigated by delaying initial spring grazing and by keeping early defoliation periods short.

Based on the issues identified through site-specific studies conducted on the Goose Creek-Fairchild Allotment and the Evaluation Report findings, the Proposed Action was designed to provide an additional three weeks growth for the key grass species on this allotment before they are grazed by livestock. This change in the timing of forage removal is expected to allow the key grass species to become more vigorous over the long term by allowing the grasses additional deferment from grazing until the plants are able to start replenishing their carbohydrate reserves. The Proposed Action also reduces the duration of grazing on the Goose Creek Fairchild Allotment by nearly three weeks by changing the current season from May 16-June 26 to June 7-June 26. In addition, the change in percent public land (reduction of livestock numbers from 138 to 117) will reduce the overall use by livestock in the allotment. Total deferment (fall use during 10/07-10/26) would allow vegetation to be utilized when it is dormant thereby reducing effects to plant health even further. The fall use scenario would not likely occur very often due to lack of available water at that time of year.

The result of the shortened grazing season (three weeks) on the vegetation would be more time for the plants to grow in the absence of livestock caused disturbances. The combination of the delayed turnout, reduced season and reduced livestock numbers would further improve plant vigor. Additionally, there would be more foliar and litter cover. However, this alternative is not expected to improve plant diversity in a measurable way in the Goose Creek Fairchild Allotment since this allotment has abundant shrub and poa cover which is expected to inhibit expansion of non-shrub desirable vegetation due to competition. Plant diversity is appropriate in all of the other OEA allotments and little change is expected as a result of this alternative.

In addition to general grazing intensity, there are areas where livestock concentrate such as at gates or troughs. These areas have reduced vegetation and higher rates of trampling however the amount of disturbance is limited to the local areas (approximately 1-2 acres) around these features. While each allotment has gates, troughs (or other livestock watering facilities) are only found on public land within the Goose Creek Fairchild Allotment where there is a trough and a water catchment. All other sources of water occur on State Land or private land. Consequently, the Proposed Action is expected to improve conditions on the Goose Creek Fairchild Allotment and continue to move it in the direction of meeting standards. The other allotments are expected to continue to meet standards or improve under the Proposed Action because there are only minor changes proposed and conditions are meeting standards.

Trailing through the Oakley East Allotments may occur but is not expected because there are no known trailing routes which occur in this area. If it were to occur, it may result in minor amounts of herbage removal (approximately 1 AUM) from foraging animals. Also, limits on numbers of livestock and duration of the trailing event (no overnighting) would minimize this potential effect. This herbage removal is not expected to decrease plant productivity and the applicable standards for rangeland health would continue to be met in the Oakley East Allotments in which trailing is allowed.

Alternative 1 (No Action)

Since the No Action Alternative is a continuance of the existing situation, the impacts to the vegetative types, communities and the rangeland resource would essentially be the same as described for the impacts to the Proposed Action, except the reduction of number of animals starting in 2013 is expected to lower utilization rates and further improve plant vigor. Additionally, there would likely be increased foliar and litter cover. Therefore, the allotments which were achieving standards are expected to continue to achieve standards, and the Goose Creek Fairchild Allotment is expected to continue to make progress towards achieving standards. Since the season of use will stay the same, grazing will occur over a longer period of time and will also occur earlier in the season so improvement may be slower than through the proposed action. However, significant progress is expected to continue.

Alternative 2 (No Grazing)

Under this alternative livestock grazing would be discontinued within the seven allotments for a 10-year period. The uplands across the seven allotments are expected to continue to meet standards or move in the direction of meeting standards for rangeland health. The greatest change in upland herbaceous condition under the "No Grazing" alternative would occur within the Goose Creek-Fairchild Allotment, which is currently in lower vigor than the other allotments, as described above. In the case of the Goose Creek-Fairchild Allotment, plant vigor is expected to improve since livestock would not be removing herbage during the growing season.

Under this alternative residual foliar and litter cover would be the highest among alternatives across all seven allotments. The greatest difference would be in the Goose Creek Fairchild Allotment which currently has the least foliar and litter cover. The effect of no grazing is not expected to improve plant diversity in a measurable way in the Goose Creek Fairchild Allotment within the 10 year period of no grazing since this allotment has abundant shrub and poa cover which is expected to inhibit expansion of non-shrub desirable vegetation due to competition. Plant diversity is appropriate in all of the other OEA allotments and little change is expected as a result of this alternative.

Additional litter and foliar cover expected as a result of no grazing could increase the chances that a higher severity or larger fire might occur due to increased amount and continuity of fuel which would be noticeable primarily in the Goose Creek Fairchild Allotment. Fire would result in a loss of sagebrush, an increase in rabbitbrush and a likely increase in cheatgrass without effective post fire rehabilitation. This chances of this effect may be somewhat reduced in the other alternatives since a portion of the forage (fuel) is removed annually prior to the fire season.

Areas having higher intensity grazing (approximately 1-2 acres) such as gates or the trough in the Goose Creek Fairchild Allotment would likely be invaded by weeds which are normally controlled by livestock at these locations.

Cumulative Impacts

The vegetation resource cumulative impacts analysis area (CIAA) was set to the Oakley East Allotment boundaries (Map 1). Past, present, and reasonably foreseeable future actions within the CIAA are summarized in Table 6. Past, present, and reasonably foreseeable future actions outside the Oakley East Allotment boundaries will have little direct or indirect impact on vegetation resources in the allotment. Plants, rooted in the soil, are not transient over long distances, with the exception of wind-distributed seeds. Indirect effects of actions affecting vegetation are spatially confined to a short distance from the action.

TABLE 6
PAST, PRESENT AND REASONABLY FORESEEABLE ACTIONS AFFECTING VEGETATION

Name of Project	Land Ownership	Project Description	Size of Project
Gateway West Project	BLM/Private/USFS/ Idaho State Land	Reasonably foreseeable Transmission Line	Not identified but not expected to be more than a few acres of disturbance within the Oakley East project area.
Vegetation Treatments	BLM	Juniper cutting	*Burley Landscape*: 10 acres
ESR	BLM		Future treatments with no identified project size.
Troughs	Idaho State Land/ Private	Livestock watering troughs	Intense grazing surrounding troughs limited to local areas around these features. (approximately 1-2 acres each)
Roads	BLM/ State Land/ Private	Past road construction	Approximately 25 miles of roads with approximately 17 acres of removed vegetation.
Fire Suppression	BLM	Future Action	Future treatments with no identified project size.

Within the Oakley East Allotments approximately 10 acres of the encroaching juniper which occurs in the Callahan Allotment will be removed as planned under the Burley Landscape Sage Grouse Habitat Restoration Project (DOI-BLM-ID-T020-2010-0002-EA). Removing juniper would help to maintain healthy, diverse vegetation communities. One additional activity in the CIAA for vegetation that could affect the vegetative resources within the Oakley East Allotments is the potential construction of a power transmission line. An alternative of the proposed 500kV transmission line (Gateway West) could potentially cross through a part of the Oakley East Allotments. If built, the environmental impacts from this transmission line would entail a small amount of temporary soil and vegetation disturbance during construction and a small loss of vegetation where towers and an access road are located. This alternative is considering a 2 mile wide corridor so it is unclear exactly where the towers would be placed. The CIAA contains lands which may be restored in the advent of a fire through the Emergency Stabilization and Rehabilitation program. Restoration activities could potentially include seedings and closures to livestock grazing.

Private land fenced together within BLM allotments generally is expected to have similar use and be in the same condition as the BLM managed lands. There are approximately 8 troughs which occur on private or State Lands which are either located within allotment boundaries or are adjacent to them and provide water to livestock grazing public lands. Vegetation surrounding the troughs (approximately 1-2 acres per trough) is expected to experience higher grazing intensity than the surrounding area.

Roads have been constructed through some of the allotments in the past. There are approximately 25 miles of road that occur on public, private and state lands. Most of the roads occur on public lands. Roads affect vegetation during their initial construction through removal and blading of soils. Roads continue to affect vegetation when road users drive on them and occasionally trample or crush vegetation along the road edges. Most of the roads occurring in the CIAA are two track roads receiving little use. The overall width of these roads is approximately 10 feet but the disturbance is generally only limited to the width of two tires. The continued use of these roads could also accelerate the invasion of non-desirable vegetation (such as noxious and invasive weeds) however there have not been any noxious weeds discovered in the CIAA.

Fire could occur within the Oakley East Allotments so fire suppression may be necessary. If a fire does occur, the isolation of most of the allotments from larger tracts of wildlands would inhibit larger fires from occurring and it would not be expected that a fire would spread across the whole area. However, the differences in vegetation between alternatives, especially between alternatives with grazing and alternatives without grazing could cause differences in fire effects. Where vegetation condition has shown an unlikely recovery for the areas burned, the BLM completes Emergency Stabilization and Rehabilitation projects to restore grasslands, protect watersheds, resist invasive plant invasion and restore shrubs more quickly where they are lost.

Vegetation in the CIAA when considering the effects of all other past, present and future actions along with the effects of the alternatives is expected to continue to improve as has been going on since the reductions in grazing effort that took place as a result of the Cassia RMP and the restoration efforts undertaken or that will be undertaken in various other actions such as post fire rehabilitation efforts and juniper removal projects. Overall, all other past, present and foreseeable future actions which have or may affect vegetation consist of only minor impacts to vegetation and do not contribute substantially to cumulative effects. Although there will be some differences in vegetation condition between the alternatives as described above, all of the Oakley East allotments which comprise the vegetation of the CIAA are expected to either continue to meet standards or continue to move in the direction of meeting standards under all alternatives.

Wildlife

Sensitive Animals

Greater Sage-grouse - Sage-grouse are a sagebrush obligate species. The US Fish and Wildlife Service recently determined that the greater sage-grouse is a candidate for listing under the Endangered Species Act, but the listing has been precluded at this time. Range wide, greater sage-grouse currently occupy approximately 56% of their historic range (Connelly et al. 2004). Sagebrush is the main component of the adult sage-grouse diet throughout the year, and sagebrush is especially important during winter (Connelly et al. 2000, Wallestad et al. 1975). Forbs are consumed by hens during pre-laying and by all age and sex classes during summer. Insects are critical for juveniles during the first 3-4 weeks of life, with forbs increasing in the diet as the juveniles' age. Areas having better forb and invertebrate availability appear to have better grouse productivity (Drut et al. 1994).

Another important component of sage-grouse habitat is the overall cover composed of both shrubs and grasses. Delong et al. (2005) found tall grass cover and medium height shrub cover collectively reduced predation and increased sage grouse productivity. For arid sites dominated by Wyoming or low sagebrush types, such as the Oakley East Allotments, Connelly et al. (2000) recommend managing breeding habitats for sagebrush height and cover between 30-80 cm and 15-25% and grass/forb height and cover greater than 18 cm and greater than or equal to 15%. Braun (2006) further recommends that grazing should not be allowed until after 20 June and all livestock should be removed by 1 August with a goal of leaving at least 70% of the herbaceous production each year to form residual cover to benefit sage-grouse nesting the following spring. Braun (2006) also recommends care should be used in calculating stocking rates to ensure that no more than 25-30% forage utilization is achieved.

Potential impacts of herbivory on sage-grouse and their habitat include:

1. Long term effects of historic overgrazing on sagebrush habitat;
2. Sage-grouse habitat changes due to herbivory;
3. Direct effects of herbivores on sage-grouse, such as trampling of nests and eggs;
4. Altered sage-grouse behavior due to presence of hervivores; and
5. Impacts to sage-grouse and sage-grouse behavior from structures associated with grazing management.

The OEA have one occupied lek (on private land within the Bedke-Churchill allotment) at which 9 males were recently observed during the 2012 lek monitoring effort. There are several other leks on surrounding lands. Radio-marked sage-grouse originating from west of the Goose Creek drainage were tracked to the Callahan allotment and surrounding areas during spring, summer and fall suggesting that sage-grouse populations in this area are part of a more extensive population. As per the Idaho Department of Fish and Game's 2010 response to BLM's scoping letter, "Sage-grouse populations throughout the Magic Valley Region, including the Oakley area, declined precipitously in 2008 following several consecutive years of average to above average production and survival. In 2009 the number of breeding males counted on the Birch Creek lek route, which includes lek 4C025 located immediately adjacent to the Callahan Allotment, were 30% below the previous 5-year average." Idaho Department of Fish and Game's lek reports for 2010 and 2011 reveal lek counts rose to nearly the highest levels seen in the past fifteen years. Most recently, sage-grouse populations associated with the Birch Creek Lek route declined again during 2012 as they apparently did along many other routes in the region. It is unclear why sage grouse declined during 2012, however male lek attendance on lek routes normally fluctuates from year to year.

Historically, the Oakley East Allotment Area was overgrazed. Although cover data during this period does not exist, it can be inferred through historic utilization data that the grass and forb cover was severely reduced and would have likely reduced the breeding success of sage-grouse. However, after implementation of the Cassia RMP in 1985, BLM reduced grazing levels in the area and as a result, sage-grouse habitat likely improved. Most notably, utilization decreased and foliar cover and height increased. The increase in plant height is expected to help conceal sage-grouse nests. Also, time has allowed shrub cover to increase in allotments where it was once lacking.

The project area includes 6,768 acres of sage-grouse habitat, of which 6,300 is key habitat (greater than 10% sagebrush cover), 394 acres is perennial grassland and 44 acres is encroached upon by juniper. Surrounding vegetation is mostly private in the Oakley basin, thus the amount of control of sage-grouse habitat through the administration of public land is severely limited. Because of similarities in habitat qualities between sage-grouse and other sagebrush obligates, it is assumed that habitats suitable for sage-grouse are also suitable for other sagebrush obligate species.

The Oakley East Analysis Evaluation report stated that the OEA area is meeting standards for wildlife including sage grouse. This evaluation was based on a comparison between data collected within the allotments with the guidelines suggested by Connelly et al. (2000). For sage-grouse, BLM found that breeding habitat is suitable in the Two Knobs, Callahan, Mill Creek, Fairchild Canyon and Bedke-Churchill allotments as indicated through sage grouse habitat assessments completed during 2009. It is suitable because the habitat cover values occurred within the guideline values established by Connelly et al. (2000) and the structural arrangement of sagebrush was generally sprawling such that nesting may occur. Breeding habitat is marginal in the Goose Creek Fairchild allotment as found through a sage-grouse habitat assessment during 2009. The habitat in the Goose Creek Fairchild Allotment was rated as marginal even though the sagebrush was structurally suitable and the grass and forb cover and heights were appropriate because the sagebrush cover exceeded 25% and forb abundance was below abundance levels recommended for sage-grouse on arid sites such as the Goose Creek Fairchild Allotment (Connelly et al. 2000). Recent visits during 2012 suggest that during a drought, the nesting cover in the Goose Creek Fairchild Allotment might not meet the recommended grass height/cover for sage grouse nesting for most of the allotment, although it is expected that some areas of the allotment may remain suitable for nesting. Even though there may be some year to year variability in the amount of available nesting habitat within the Goose Creek Fairchild Allotment, the landscape as a whole would continue to provide abundant suitable nesting habitat on the other allotments, and the Goose Creek Fairchild Allotment which has little cheatgrass and abundant sagebrush could provide additional general habitat. Due to the high shrub cover which exceeds that recommended by the guidelines, the habitat in the Goose Creek Fairchild Allotment is expected to remain marginal at best unless the habitat is disturbed enough to reduce shrub cover whether it be by fire, wildlife or a treatment. The evaluation report did not identify any viable opportunities for conserving, enhancing or restoring habitat for sage-grouse and no need was identified.

The Oakley East Allotments are relatively small in size and range from 80 – 2,475 acres. The largest allotment is the only allotment which has been divided into pastures. Because of the small size of the allotments (see Map 1), there is considerable amounts of existing fencing that occur in the sage grouse habitat in this area. However, these allotments are not well connected to each other so most of the fencing for the allotments consists of privately owned perimeter fencing. Therefore, there are only a few fences between connected allotments and pastures under control of the government which may pose a collision risk to sage-grouse.

Although the allotments are of close proximity to one another, there are numerous different operators that do not run in common and run in allotments which are widely different in size (many of which are too small to provide enough forage for all the operators to run in common,

thus there is little opportunity to integrate ranch planning (such as deferment or rotation) for the benefit of sage-grouse.

Grazing seasons in the Oakley East Allotments all incorporate spring grazing before June 20 against the recommendation suggested by Braun (2006). Also, the grazing utilization rates allowed by the current permits are higher than those recommended by Braun (2006). Although the grazing seasons and utilization rates do not follow Braun's (2006) recommendations, the resulting habitat quality still meets the purpose of his recommendation which is to retain enough residual cover (as defined by Connelly et al. 2000) to benefit sage-grouse nesting the following spring.

Brewer's Sparrow - This shrub obligate species requires extensive tracts of open brush lands including sagebrush, plains, alpine meadows, and valleys with low shrubbery. Brewer's sparrows nest in arid sagebrush-grassland habitat; nests are built in sagebrush and other small shrubs, usually near the ground. Brewer's sparrows are known to occur in the project area.

Sage Sparrow - This sagebrush obligate species prefers large patches of sagebrush, and may need patches of continuous habitat of at least 130 hectares (320 acres). However, at least one study has shown that this species will accept the loss of up to 50% of the shrubs to wildfire or prescribed fire, provided the landscape pattern is a mosaic of burned and unburned areas (Petersen and Best 1985). Sage sparrows breed almost exclusively in sagebrush (especially big sagebrush), or sagebrush mixed with other shrubs. They prefer semi-open to dense stands of evenly-spaced to clumped, tall sagebrush (Knick and Rotenberry 1995). As ground feeders, they prefer only a modest amount of understory vegetation. Sage sparrows likely occur within the project area.

Loggerhead shrike - This shrub obligate species prefers open habitat characterized by grasses and forbs of low stature interspersed with bare ground and shrubs or low trees (Dechant et al. 2002). Loggerhead shrikes use prairies, pastures, sagebrush, desert, and fencerows or shelterbelts of agricultural fields, as well as old orchards, riparian areas, open woodlands, farmsteads, suburban areas, mowed road rights-of-way, abandoned railroad rights-of-way, cemeteries, golf courses, reclaimed strip mines, and open juniper savannahs (Woods and Cade 1996). Scattered shrubs or trees, particularly thick or thorny species, serve as nesting substrates and hunting perches. Fences, utility wires, grasses, and forbs also may be used as perches. Thorny shrubs, trees, and barbed wire fences also serve as impaling stations. The loggerhead shrike is expected in the project area.

Pygmy Rabbits – Pygmy rabbits occur in dense patches of big sagebrush. The winter diet of pygmy rabbits is almost exclusively sagebrush so they are considered a sagebrush obligate species. There are no known pygmy rabbit locations in the project area but it is possible that they use the project area based on the availability of suitable habitat.

Environmental Impacts

Proposed Action

Under the proposed grazing system, cattle may directly affect greater sage-grouse, Brewer's sparrows, loggerhead shrike and sage sparrows by occasionally disturbing or rarely trampling nests (and eggs). Trampling would be minimal for the songbirds because Brewer's sparrows and shrikes do not nest on the ground, and sage sparrows only occasionally nest on the ground. This effect would also be minimal for sage-grouse which nest in dense stands of sagebrush that cattle would tend to avoid, and because sage-grouse do not have a problem with nest success in Idaho (Owens et al. 1991, Idaho Sage Grouse Advisory Committee 2006). For sage-grouse, potential harm from herbivore induced disturbance would be limited to their nesting period (April 1 – June 15) while other songbirds may continue nesting through the middle of July. Although we don't have data on nest success for sage-grouse in the Oakley East Allotments, the lek route trends suggest sage-grouse populations are stable thus we infer successful nesting is occurring. BLM sensitive wildlife would benefit from the increased availability of water made available through the trough located on the Goose Creek Fairchild Allotment. Allotment evaluations indicate that current grazing is maintaining the growth and persistence of native shrubs, grasses and forbs needed by sage-grouse (and other sagebrush obligate species) for seasonal food and concealment, especially during the nesting period. Changing the season of use in the Goose Creek-Fairchild allotment to grazing later in the season in the spring or to grazing in the fall is expected to defer grazing from the allotment during most of the sage-grouse nesting period (April 1- June 15). This is expected to reduce potential disturbance of sage-grouse (and other sagebrush obligate species) that may nest in the area and is also expected to improve the habitat by allowing the vegetation to grow taller before grazing is initiated. Also, the increased foliar cover and height expected from the reduction in grazing is expected to further improve the habitat for sage grouse. Pygmy rabbits could be temporarily affected by cattle if burrows are accidentally crushed. This effect is not expected because cattle are not normally moving through the most dense sagebrush patches (Owens et al. 1991).

Marking all the BLM managed fences associated with grazing management in the Oakley East Allotments would reduce the potential for fence collision risk for sage-grouse.

Trailing may temporarily displace sensitive wildlife species if they are present when trailing occurs. This temporary impact would last for a few minutes to a few hours as livestock pass through an area and so trailing is expected to have a minimal effect with little harm occurring to wildlife.

Alternative 1 (No Action)

The effects of the No Action alternative differ only in the Goose Creek-Fairchild allotment where there would be no change in season of use and therefore no deferment in grazing out of potential sage-grouse nesting habitat. So, there could be more disturbance from this alternative of nesting sage-grouse in the Goose Creek-Fairchild allotment than the Proposed Action or Alternative 2.

Alternative 2 (No Grazing)

Under this alternative livestock grazing would not have any direct effects on BLM sensitive wildlife (such as trampling). BLM sensitive wildlife would not benefit from the increased availability of water from the Goose Creek Fairchild trough. Instead, animals would have to rely on water only available outside the project area. Some nesting density by BLM sensitive songbirds may decline as a consequence however populations are not expected to change. Indirectly, the vegetative communities would remain in, or continue towards, a late seral or better condition.

Existing fences would remain and would continue to be potential collision risks to BLM sensitive wildlife. Fence marking would reduce some of the risk.

Under this alternative residual herbaceous cover and litter cover from plants would increase across the allotments. An increase in residual herbaceous and litter cover may improve habitat for BLM sensitive wildlife. However, since the allotments are already achieving standard 8, it is unclear whether such changes would affect BLM sensitive populations. In the Goose Creek Fairchild Allotment, the herbaceous height is expected to be greater than under the proposed action during the last week of the nesting season since grazing would begin June 7 and the nesting season ends approximately June 15. This alternative would result in greater herbaceous height during the last month of the nesting season as compared to Alternative 1. The increased foliar height expected from no grazing in the Goose Creek Fairchild Allotment is expected to further improve the habitat for sage grouse during drought years. Pygmy rabbits would not be affected by cattle under this alternative. Habitat in the Goose Creek-Fairchild Allotment is expected to remain marginal for sage grouse due to the high amount of sagebrush cover which is expected to continue to inhibit diversity and abundance of grasses and forbs.

Trailing which may occur under this alternative may temporarily displace sensitive wildlife species if they are present when trailing occurs. This temporary impact would last for a few minutes to a few hours as livestock pass through an area.

Cumulative Effects

The Burley Field Office was separated into four "Cumulative Effects Analysis Units" (CEAUs). The seven Oakley East grazing allotments lie within the Goose Creek CEAU (Map 2). The Goose Creek CEAU was bounded spatially because the following primary issues could be analyzed together when a range project such as a permit renewal was identified within its boundaries: juniper forests, greater sage-grouse habitat, elk habitat, fisheries, mule deer habitat, common permittees, similar noxious weed and invasive plant species and sensitive plants. Furthermore, the Goose Creek CEAU contains a major watershed that due to topography, forested habitats and human development (large expanse of agriculture to the north in the Snake River plain) may to some extent limit sage-grouse dispersal out of the CEAU. This is supported by a telemetry study that showed all of the sage-grouse collared within the CEAU did not leave the CEAU. Therefore, the Goose Creek CEAU is large enough to contain all the other potential actions that affect sage-grouse at multiple scales to which the effects of this action may be added. Since sage-grouse generally require much larger areas than other affected resources, the CEAU would also be appropriate, or more so, to analyze cumulative effects for other wildlife species.

Therefore the Goose Creek CEAU is the cumulative effects analysis area for all wildlife affected within the Oakley East Allotments.

The Goose Creek CEAU includes 51 different allotments (see Map 2). The 51 allotments within the Goose Creek CEAU consist of 116,457 acres of public lands, 10,798 acres of State lands and 24,656 acres of private lands. In addition to the acreages that make up the 51 allotments there are other lands that are located outside of the allotments' boundaries. Consequently, the total acreage of the lands within the Goose Creek CEAU consists of approximately 116,870 acres of public land, 160,286 acres of private land, 184,756 acres of U.S. Forest Service land, 14,425 acres of State land and 922 acres of National Park Service land. The seven allotments at issue here make up about 4% of the public lands within the Goose Creek CEAU.

Map 2 Goose Creek Cumulative Effects Analysis Area

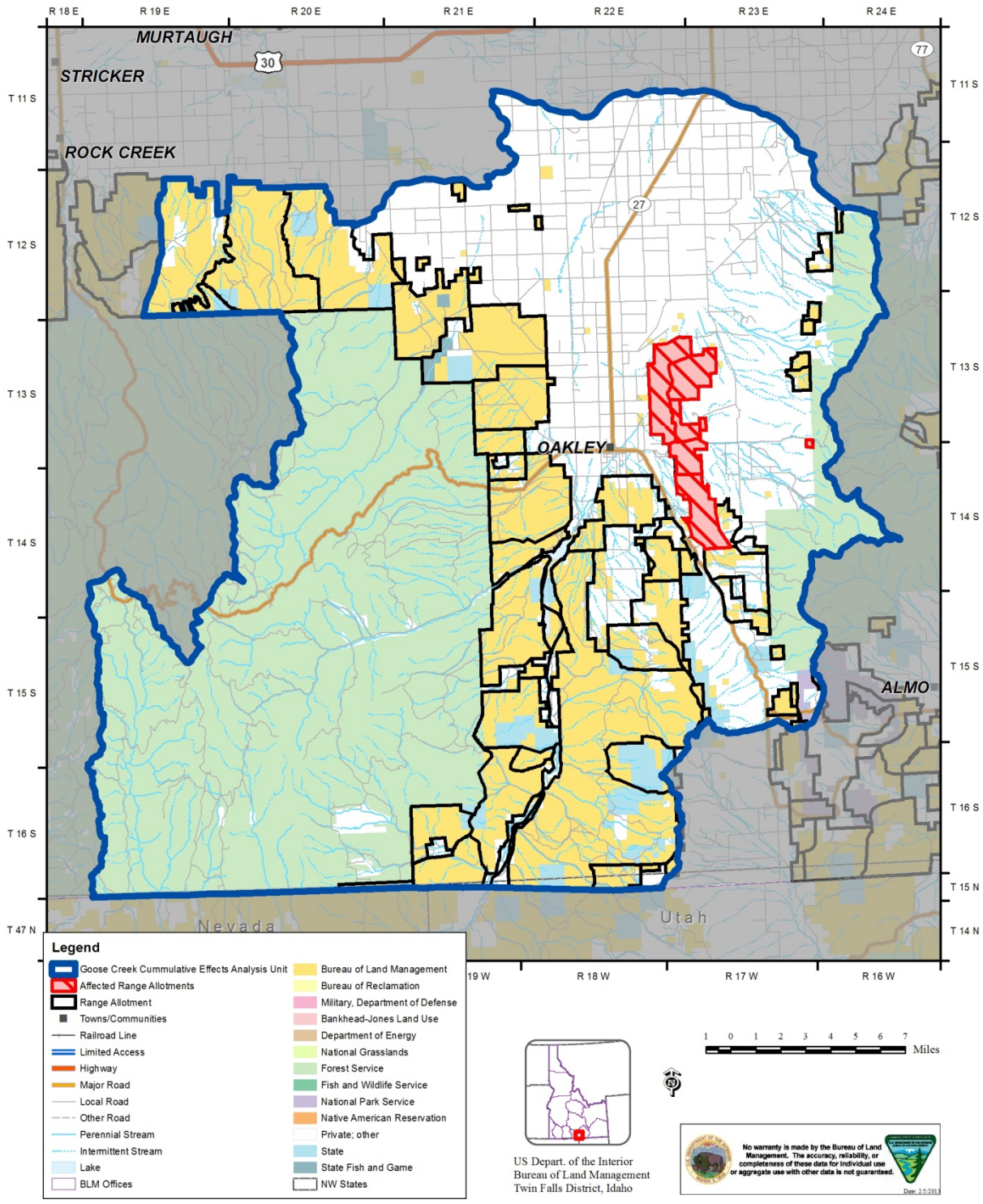


TABLE 7
PAST, PRESENT AND REASONABLY FORESEEABLE ACTIONS

Name of Project	Land Ownership	Project Description	Size of Project
Gateway West Project	BLM/Private/USFS/ Idaho State Land	Reasonably foreseeable Transmission Line	Varies by Alternative
Vegetation Treatments	BLM/ USFS	Past, present and reasonably foreseeable Juniper Treatments	*Burley Aspen*: 392 acres treated *Burley Landscape*: 7,983 acres (future treatment), 2,605 acres (treatment completed) *Mackay Canyon*: 336 acres (treatment completed) *North East Cassia*: 2,596 acres
Mining	BLM/Private	Variety of ongoing mining operations	*BLM/ Salable: 45 acres* *BLM/ Locatable:* 80 acres Current operations may expand by 1-5 acre per year. Most of the mining occurs on private land but the amount is unknown.
Livestock Grazing	BLM/USFS/NPS/ Private/ State Land	Ongoing grazing	*51 BLM allotments* (includes Oakley East Allotments).
Livestock Trailing	BLM/ USFS / Private	Ongoing livestock trailing	Varies annually.
ESR	BLM	Past and future restoration	Varies annually: Most recently Cave Canyon and Birch Creek.
Development/Farming Private lands	Private	Large scale industrial farming	Undetermined: however majority of private land involved.
Shrub Planting	BLM	Future shrub restoration	Undetermined: however expected to be small scale.
Fire Suppression	BLM/USFS	Past and future wildland firefighting	Efforts mostly limited to fire edge, however burning ahead of fire may consume vegetation.
Roads	BLM/USFS/Private	Past road construction	625.6 miles of roads in sage-grouse habitat 1,267 total miles of roads

Other activities that may affect either sage-grouse, sage sparrow, Brewer's sparrow, pygmy rabbit and loggerhead shrike within the Goose Creek CEAU include present and future grazing within other BLM and Forest Service allotments, livestock trailing, fire suppression, Emergency Stabilization and Rehabilitation (ESR), rock quarries, development (including farming), fuels projects and the Gateway West 500 kV transmission line (see Table 7). Present grazing and livestock facilities (such as fences) in other allotments would have similar effects as those direct and indirect effects described above.

Currently, the BLM administers grazing on 51 allotments including the 7 OEA totaling approximately 116,447 acres within the Goose Creek CEAU. Of those, rangeland health evaluation reports have been completed on 27 allotments including the seven OEA allotments containing approximately 67,419 acres including the 5,166 acres in the OEA allotments. Of the 27 evaluated allotments, 28,996 acres, including the 5,166 acres in the OEA were found to be meeting standard 8 at the time they were evaluated and thus maintained suitable habitat for BLM sensitive species. The remaining evaluated allotments were not meeting standard 8 for a variety of reasons including current livestock management (4 allotments, approx. 4,700 acres), historic livestock grazing (2 allotments, approx.1,000 acres), lack of sagebrush (4 allotments, approximately 11,162 acres) and juniper encroachment (4 allotments approx.15,000 acres). Where current livestock management was found to be a significant cause for not meeting standard 8, changes have been made to livestock management and significant progress has been made and is expected to continue. In addition, some allotments were not meeting standards because of recent fire (lack of sagebrush) or juniper encroachment. These allotments were otherwise in good condition and recent fires or juniper treatments have reduced the effects of juniper encroachment (see discussion on juniper management and fire below). The majority of the assessed acreage in the CEAU was prioritized based on known resource issues related to current management (mainly riparian). Since the Burley Field Office utilized this proactive approach early in the S&G process it is now believed that the majority of the known issues in the CEAU have been addressed.

The remaining allotments not assessed for the current rangeland health standards may have some similar issues; however, they are not believed to be common based on current knowledge (photographs, S&G field work, monitoring) of habitats. If resource issues are identified in future evaluations and current grazing is found to be a factor, changes will be made, as required by the grazing regulations (43 CFR 4180), and demonstrated above, that will result in overall improved habitat conditions for BLM sensitive species.

Five livestock trailing events are authorized in the CEAU annually. These events are located within and adjacent to existing roads and are short in duration, the longest event taking 4 days. Crossing permits contain stipulations to reduce effects to BLM Sensitive wildlife. Examples of stipulations include excluding trailing within 1/2 mile of sage grouse leks during critical display periods, no overnighting within 1/2 mile of occupied ferruginous hawk nests. Effects of this activity are expected to be similar to those described in the direct and indirect effects on page 25. Trailing in other areas of the CEAU is expected to have little measurable effect to wildlife.

Shrub planting and seeding occurs as part of Emergency Stabilization following wildfire and sometimes continues for many years after a fire. These efforts are aimed at restoring vegetative

communities, i.e. sensitive wildlife habitat and result in improved conditions for these species. These activities have occurred numerous times in the CEAU and are expected to continue as needed. These types of projects are part of an overall strategy to improve vegetative communities and wildlife habitat, especially for sage-grouse.

Fire could occur within the Oakley East Allotments so fire suppression may be necessary. If a fire does occur, the isolation of most of the allotments from larger tracts of wildlands would inhibit larger fires from occurring and it would not be expected that a fire would spread across the whole area. However, the differences in vegetation between alternatives, especially between alternatives with grazing and alternatives without grazing could cause differences in fire effects. Additional litter and foliar cover expected as a result of no grazing could increase the chances that a higher severity fire might occur. If so, it would be less likely for the existing vegetation to survive the fire due to the intense heat of a high severity fire and it would therefore likely be necessary to restore the area through emergency stabilization and rehabilitation. If this were the case, some vegetative loss may occur and sage-grouse habitat quality in the future may suffer. Some fires have occurred in the past and will be expected in the future on other areas of the Goose Creek CEAU. Fire suppression has involved using bulldozers and hand tools to create firelines. Sometimes, vegetation has been burned in advance of the fire to eliminate fuel and control the fire. Where dozer lines were created, the land has generally been restored with perennial grasses wherever possible. Areas burned through suppression are treated similar to areas naturally burned. The effect of fire can be devastating for sage grouse when fire consumes large amounts of suitable habitat. However, it can also be beneficial when it burns conifer encroached habitat or decadent stands of sagebrush. Where pre-burn vegetation condition indicates an unlikely potential for recovery for the areas burned, the BLM has completed Emergency Stabilization and Rehabilitation projects to restore grasslands, protect watersheds, and restore shrubs more quickly where they have been lost. Similarly, vegetation in other allotments on public land within the Goose Creek CEAU would be considered for rehabilitation if a fire occurs.

There is some Utah juniper encroachment at the southern end of the Oakley East Allotment project area. Generally, juniper in the Oakley East Allotments is scarce. However, it could expand rapidly in the absence of fire or treatment. If fire does not reach this area, habitat suitability may decline in the future. Even though there is little encroaching juniper in the Oakley East Allotments, encroaching juniper is a common problem in the Goose Creek CEAU for sage-grouse as well as the other sagebrush obligate species. The reason juniper is a problem is that it displaces shrub, grass and forbs (required for nesting) and provides increased perching opportunities for predatory birds. Furthermore, sage-grouse avoid areas encroached by juniper. The Sage-grouse Habitat Planning Map provides broad conditional information on sage-grouse habitat in the Goose Creek CEAU depending on the existing habitat. Habitat is separated based on current vegetation into the following categories; Key (greater than 10% sagebrush), R1 (perennial grasslands), R2 (annual grasslands), R3 (juniper encroached) and Recently Burned. There are 96,345 acres of Key, 42,055 acres of R1, no acres of R2, 73,927 acres of R3 and 66,629 acres which have recently burned within the Goose Creek CEAU. This current vegetation reflects the effects of past fires which burned sagebrush or juniper with the exception of fires taking place during the summer of 2012. Fires which occurred during 2012 (including Cave Canyon and Little Birch) in the Goose Creek CEAU are currently attributed to the Recently

Burned habitat category because we do not know what to expect from natural or treatment caused recovery of the vegetation. The Cave Canyon fire was an unusually large fire, much larger than any recorded fire in the Goose Creek CEAU. What we do know is that we employed suitable methods for sagebrush steppe restoration where the fire occurred on BLM managed lands as prescribed by the ESR plans and the pre-burn condition of the vegetation. Also, the BLM will be excluding livestock grazing from the burned areas to allow recovery of the vegetation. Although these fires burned considerable amounts of sage-grouse habitat (23,838 acres of key habitat), the majority was encroached by juniper (41,305 acres of R3 habitat) so these fires are expected to have both short term adverse and long term beneficial effects to the habitat of sage-grouse and other sagebrush obligate species. Also, some of the sagebrush steppe burned severely while other areas retained a mosaic of sagebrush. The mosaic areas are expected to retain value for sage-grouse as suitable habitat. In addition to fire effects on vegetation, other areas with encroaching juniper will be treated for juniper removal or have already been treated as planned under the Burley Landscape Sage Grouse Habitat Restoration Project (DOI-BLM-ID-T020-2010-0002-EA). The result of this treatment within the Oakley East Allotments and the Goose Creek CEAU is the long term protection of existing habitat and the expansion of suitable habitat for sage-grouse and other sagebrush obligate species. The Burley Aspen Restoration Project, the Mackey Canyon Wildland Interface Fuels Reduction project and the USFS Northeast Cassia project also have removed juniper within the CEAU and help to ensure that diverse, productive vegetative communities are maintained. One difference between juniper reduction projects and fire is that fire not only kills live trees but also eliminates the seed bank. Therefore the effects of fire on juniper encroachment may have more long-term benefits to BLM sensitive species using sagebrush steppe habitat. However, the juniper reduction projects do not clear sagebrush so these projects have immediate short and long term benefits to BLM sensitive species using sagebrush steppe habitat.

Roads may affect BLM sensitive species in a variety of ways both harmful and beneficial and effects vary depending on the width of the road, the amount of traffic and the speed at which vehicles may travel. There are approximately 625.6 miles of roads in the Goose Creek CEAU within Sage-grouse habitat (representing most of the habitat for all BLM sensitive species in the CEAU) with a total of approximately 1,267 miles outside sage-grouse habitat areas. Roads may increase harm to BLM sensitive species through vehicular collisions, disturbance of lekking sage-grouse, disturbance of nesting birds, causing avoidance of otherwise suitable habitats, through the increased spread and cover of noxious and invasive weeds and through the increased use by predators as corridors for movement. Most of the roads in the Goose Creek CEAU (within sage-grouse habitat) are not well used and are not used at high speeds so collision risk and road based disturbance in sagebrush steppe is expected to be minimal. Sage-grouse leks do occur on two roads however, one lek appears to have moved away from the road and the other lek appears to be stable so it is unclear whether any actual harm has occurred. Roads outside sage-grouse habitat may harm BLM sensitive wildlife if they cross non-habitat areas when moving across the valley bottom. This would not be expected because there are corridors of habitat which connect habitats east-west from just north of the Oakley reservoir to the south. While nesting birds may be disturbed, the areas adjacent to the road are relatively small in comparison to the vast expanses of sagebrush in-between roads so this effect is not expected to be measurable on populations. Noxious and invasive weeds do primarily occur on roads as they appear to be distributed by vehicles. Some expansion to interior areas is possible but most infestations are

treated as discovered and are thus not considered to be a major threat to BLM sensitive species in the Goose Creek CEAU. Benefits of roads to BLM sensitive species primarily are manifested in the ability of the roads to retard or stop fire and the access that they provide to fire suppression efforts. Wider, smoother roads are expected to be the most useful in reducing fire size and roads which are useful in protecting suitable habitat are expected to have the greatest potential benefit.

Rock quarries and other minerals projects in the area use a small portion (approximately 125 acres) of habitat for these species, which is currently unsuitable. So, the rock quarries contribute a negligible amount of harm to sage-grouse and other BLM sensitive species.

Effects of the Gateway West Project on BLM sensitive species are uncertain, depending on the routing, but could increase collision hazards for avian species and could increase predation risk for prey species.

Private developed and agriculture lands also appear to co-dominate the Goose Creek CEAU with the rangelands described above. While most of the effects to BLM Sensitive species have already occurred because of the clearing and fragmentation of habitats, the effects of fragmentation on the continuity of the existing habitat still persists and still affects BLM sensitive species. Residual effects include reduced habitat availability, source areas for weed spread, enrichment of predatory wildlife species which prey on BLM sensitive species (such as ravens and magpie which are the most common nest predators of sage-grouse), and fragmentation and isolation of populations. Additionally, it must be noted that some private lands are retained as rangelands and continue to provide habitat for BLM sensitive species.

Under the no grazing alternative, the closure of BLM lands to grazing may cause private landowners/state leaseholders to fence private land separate from public land where allotments or pastures contain both private, state and public land so that they can continue to graze their private land or state leased land. If this were to occur, there could potentially be increased collision risk to BLM Sensitive wildlife from new fencing that would result from this alternative.

Overall, conditions are improving on BLM administered rangelands throughout the Goose Creek CEAU due to adjustments to livestock use which took place as a result of implementing the Cassia RMP (1985) throughout the resource area similar to the adjustments made to the Oakley East Allotments (see figures 1-4). The Cassia RMP effort also appears to have resolved numerous livestock issues associated with historic livestock grazing problems, and conditions appear to have improved as evident in the more recent rangeland health evaluations described above. Also, where issues were discovered after implementation of the Cassia RMP, efforts were made to resolve them as described above.

While the abundance of adverse past and present effects discussed above coupled with the amount of area upon which these effects are or may be manifested is great, BLM sensitive species in the Goose Creek CEAU do retain remarkable resilience and populations appear to be more stable than expected. This may be due to the fact that the sensitive species affected are highly mobile and capable of acclimating to changing conditions. Also of importance is that the lands retained in public ownership or otherwise maintained as rangeland have retained enough diversity of habitats to meet the requirements of BLM sensitive species. The evidence for this is

the persistence and stability of these species at the current time. While future effects are not entirely known, there are little planned future actions which will be harmful to these species and certainly not harmful enough to affect populations. Instead, most of the planned future actions are aimed at improving habitat such as the Burley Landscape Project, shrub planting, Emergency Stabilization and Rehabilitation, and the adjustment of grazing included in the alternatives of this EA. Also, habitat appears to be improving throughout the Goose Creek CEAU through ongoing grazing administration in other allotments. Therefore, when considering the effects of the alternatives (despite minor differences in effects) when added to all the past, present and reasonably foreseeable actions within the Cumulative effects area, conditions are expected to continue to improve and that the effects of this action negligibly contribute to this improvement because these allotments constitute 4% of the BLM managed land in the CEAU.

Migratory Birds

Migratory bird species of conservation concern which are also BLM sensitive species that may be affected include Brewer's sparrow, sage sparrow and loggerhead shrike. These species have already been addressed in the sensitive species section. Other migratory birds which are known to occur and would be affected, or have not been observed within the Oakley East Allotments but may potentially occur and be affected due to habitat availability, include northern harrier and short-eared owl.

Northern Harrier – Northern harrier use rangelands in southern Idaho year long. They are relatively abundant in shrub steppe habitats, especially where dense but low vegetation is found (Macwhirter and Bildstein 1996). Northern harrier benefit from moderate and other (variable) grazing intensities (Saab et al. 1995). Nesting occurs on the ground so nests could be disturbed by grazing (Macwhirter and Bildstein 1996). Northern harriers are generalists, feeding mostly on small rodents and birds.

Short-eared Owl - This species is on the BLM watch list. Short-eared owls are the most widespread species of owls. They are primarily a grassland species that hunts voles and nests in grasslands. Short-eared owls appear to prefer tall dense ungrazed grasslands for nesting, but also appear to hunt in most other open habitats (Wiggins et al. 2006). Short-eared owls were not observed on these allotments, but they could occur. Saab and others (1995) reported that they can be harmed by moderate levels of livestock grazing. The reason for this may be loss of preferred nesting habitat.

Environmental Impacts

Proposed Action

Under the Proposed Action, cattle may directly affect northern harrier or short-eared owls by occasionally disturbing or trampling nests, though this effect would be minimal because the nesting density of these species is not expected to be great and there are no known nests of either of these species within these allotments. Renewing the permits would not change the habitat for migratory birds. Short-eared owls could be indirectly affected because grazing may reduce the quality of the grasslands for nest concealment. However, the uneven distribution of grazing

likely maintains some areas with light to no grazing which would provide the vegetative cover where little disturbance of nests would be expected. Fence marking may help reduce collision risk for migratory birds (especially short-eared owls). Trailing may temporarily displace migratory birds if they are present when trailing occurs.

Alternative 1 (No Action)

The effects of the No Action alternative differ only in the Goose Creek-Fairchild allotment where there would be no change in season of use and therefore migratory birds may be disturbed at a different period of use of their life cycles, but effects are expected to be similar.

Alternative 2 (No Grazing)

Under this alternative residual herbaceous cover and litter cover from native plants would increase across the allotments. The increased cover that may result may increase the abundance of small rodents such as voles, so indirectly the foraging habitat for short-eared owls and northern harrier may improve. Trailing may temporarily displace migratory birds if they are present when trailing occurs.

Cumulative Effects

Other activities that may affect migratory birds within the Goose Creek CEAU include the same present and future actions described under BLM Sensitive Species (see Table 7). Present and future grazing in other allotments would have similar effects as those direct and indirect effects described above. Grazing use within Cassia County as a whole was given considerable attention during the Cassia Resource Management Plan as adjustments to AUMs in the form of reductions were given where necessary similar to the Oakley East Allotments. These adjustments have been found repeatedly as in Oakley East to have improved conditions. Meeting standards or making significant progress toward meeting standards in other allotments as planned and described above under BLM Sensitive Species would result in overall improved habitat conditions for migratory bird species.

Juniper Encroachment throughout the Goose Creek CEAU is also a problem for migratory birds and effects of this habitat condition cover the same areas. Planned juniper reducing treatments such as the Burley Landscape Sage Grouse Habitat Restoration Project as well as naturally occurring fire are expected to counter this adverse effect. The result of this treatment within the Oakley East Allotments and throughout the Goose Creek CEAU is the long term habitat protection of existing short-eared owl and northern harrier habitat. Rock quarries and other minerals operations in the area have removed or reduced suitability of a small portion (approximately 125 acres) of habitat for these species. Effects of the Gateway West Project on northern harrier and short-eared owl are uncertain, depending on the routing. If constructed, the Gateway West project would remove small amounts of habitat around transmission line structures and in temporary work areas; installation of structures could also increase the risk of birds colliding with structures. Roads, private land development and agriculture, fire suppression and ESR all affect migratory birds similar to the effects on BLM sensitive species.

Under the no grazing alternative, the closure of BLM lands to grazing may cause private landowners/state leaseholders to fence private land separate from public land where allotments or pastures contain both private, state and public land so that they can continue to graze their private land or state leased land. If this were to occur, there could potentially be increased collision risk to migratory birds from new fencing that would result from this alternative.

Overall, the cumulative effects of the alternatives (despite minor differences in effects) when combined with all the past, present and reasonably foreseeable actions are expected to continue to allow improved habitat conditions while having negligible additional adverse effects, and the improvements in habitat condition in the project area is expected to negligibly contribute to this overall change throughout the Goose Creek CEAU.

Wildlife (non-sensitive species)

The Bedke-Churchill, Two Knobs, Mill Creek, Fairchild Canyon and Churchill-Mathews allotments contain mule deer winter habitat. In 2009 more than 600 mule deer were observed during the winter in these allotments. These allotments also contain habitat suitable for pronghorn antelope which were encountered during assessments. The mule deer population in IDFG unit 55 (which these 7 allotments are a part of) has been healthy enough in recent years to allow for doe hunts. Antelope have been relatively scarce in and around these allotments until the last 5-10 years when they began to expand into this area due to the presence of suitable habitat. These antelope are presumably related to a transplant operation conducted in the Shoshone Basin approximately 30 miles to the west in about 1990.

Environmental Impacts

Proposed Action

Continued grazing and occasional trailing within the Oakley East allotments is expected to maintain suitable habitat conditions for mule deer and pronghorn antelope. Vegetation remaining after grazing is sufficient in providing forage and cover for these species. No changes are expected by implementing the Proposed Action. The trough in the Goose Creek Fairchild Allotment would continue to provide a source of water for wildlife. Livestock trailing is not expected to affect mule deer or pronghorn antelope use of the allotments.

Alternative 1 (No Action)

There are no expected differences in effects to non-sensitive wildlife between the proposed action and no action alternatives.

Alternative 2 (No Grazing)

Under this alternative, mule deer and antelope would not benefit from the increased availability of water from the trough in the Goose Creek Fairchild Allotment. Instead, animals would have to rely on water available outside the project area. Locally, populations would likely modify behavior slightly but there would not likely be any effects to populations.

Under this alternative, more forage would be available for wildlife; however, residual herbaceous cover and litter cover from native plants is currently adequate across the allotments. As residual herbaceous and litter cover increases, there may be reduction in production in the grasses and forbs available for wildlife. However, all of the forage would be available to wildlife for consumption.

Cumulative Effects

Other activities that may affect mule deer and antelope within the Goose Creek CEAU include the same present and future actions described under BLM Sensitive Species (see Table 7). Present and future grazing and trailing in other allotments would have similar effects as those direct and indirect effects described above (for non-sensitive species). Meeting standards or making significant progress toward meeting standards in other allotments as planned would result in overall improved habitat conditions for wildlife species.

Juniper Encroachment throughout the Goose Creek CEAU is also a problem for mule deer and antelope and effects of this habitat condition cover the same areas. However, mule deer also use juniper encroached habitats for cover. Planned juniper reducing treatments such as the Burley Landscape Sage Grouse Habitat Restoration Project as well as naturally occurring fire are expected to counter this adverse effect whereby primarily food cover is lost as encroached habitats suffer from reductions in understory vegetation. The result of this treatment within the Oakley East Allotments is the long term protection of existing mule deer and antelope habitat. Rock quarries and other minerals projects in the area have removed or reduced suitability of a small portion (approximately 125 acres) of habitat for mule deer and pronghorn. Effects of the Gateway West Project on mule deer and antelope are uncertain, depending on the routing. If the Gateway West Project is constructed, it would increase the risk of disturbance during construction activities and would permanently remove small amount of forage and cover. Roads, private land development and agriculture, fire suppression and ESR all affect non-sensitive wildlife similar to the effects on BLM sensitive species.

Under the no grazing alternative, the closure of BLM lands to grazing may cause private landowners/state leaseholders to fence private land separate from public land where allotments or pastures contain both private, state and public land so that they can continue to graze their private land or state leased land. If this were to occur, there could potentially be increased collision risk to non-sensitive wildlife from new fencing that would result from this alternative.

Overall, the cumulative effects of the alternatives (despite minor differences in effects) and all the past, present and reasonably foreseeable actions are expected to continue to allow improved habitat conditions while having negligible additional adverse effects, and the improvements in habitat condition in the project area is expected to negligibly contribute to this overall change in habitat throughout the Goose Creek CEAU. Populations of mule deer and antelope while capable of wide fluctuations appear stable and are expected to persist if not increase over the long term.

Socio-Economics

Each of these allotments, and their associated permits, are important components of the permit holders year round livestock grazing operation. Balancing livestock grazing on public lands with forage production on their private lands allows the permittees to maintain economic viability of their agricultural investment. The BLM does not have extensive knowledge of the ranching interests or alternative grazing options of the permittees, or access to the financial and business records of the permittees. The livestock industry, however, is an important component of the local economy and provides employment and income, directly and indirectly, to much of the local population.

Environmental Impacts

Proposed Action

One operation in the Goose Creek Fairchild Allotment would have his season of use changed under this Alternative. This change would be in a delayed turn-out of 3 weeks. This livestock operator may have to potentially feed longer or find other forage during that time. However, the amount of time spent on the allotment would be the same and as such this effect is expected to be minimal.

Alternative 1 (No Action)

This Alternative would result in no changes in the mandatory terms and conditions for livestock grazing in the OEA. There would be no impact from this Alternative which is the baseline for addressing economic and social values.

Alternative 2 (No Grazing)

Under Alternative 2, the authorized use would be reduced by 329 AUMs for a period of 10 years. Livestock would either need to be fed or additional pasture would need to be located for an average of 40 days for the OEA allotments. Since many of these allotments contain parcels of public land intermingled with state and or private lands (see Map 1), these lands would need to be fenced to keep livestock off of public lands during the ten year period. If constructed, the total miles of new fence would equate to approximately 12 miles. If fence construction does not occur, the private and state lands would also not be utilized increasing the economic effect on the operators in the OEA. The likelihood that at least some fencing would occur is great since these other lands (state and private) provide a significant amount of forage in several of these allotments.

Cumulative Effects

The socio-economics cumulative impacts analysis area is the Goose Creek CEAU (see map 2). This area was chosen since several of the operators in the OEA have other grazing allotments all of which fall inside the larger CEAU.

As the BLM processes grazing permits in other allotments where these operators graze livestock, decisions will be made to continue with current management, alter grazing seasons and or numbers or have no grazing for a period of ten years. These decisions would affect these operators economically depending on the outcome of the permit renewal analysis and resulting grazing decisions. A no grazing decision and or significant reduction in use would likely have the greatest economic effect on the operators in the OEA. If chosen, these decisions would cumulatively affect the operator if their other allotments are reduced or closed to grazing and the periods of reduction/closures overlapped.

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