

ENVIRONMENTAL ASSESSMENT (ID-220-2008-EA-42)
WARR PICKET ALLOTMENT GRAZING PERMIT RENEWAL

**BUREAU OF LAND MANAGEMENT
TWIN FALLS DISTRICT
BURLEY FIELD OFFICE
BURLEY, IDAHO**

February 05, 2009

WARR PICKETT ALLOTMENT GRAZING PERMIT RENEWAL ENVIRONMENTAL ASSESSMENT EA # ID-220-2008-EA-42

INTRODUCTION

Background

The Warr Pickett Allotment is located in Cassia County, approximately 2 miles west of the town of Oakley. The legal description of the allotment location is T. 14 S., R. 21 and 22 E., various sections, see Figure 1.

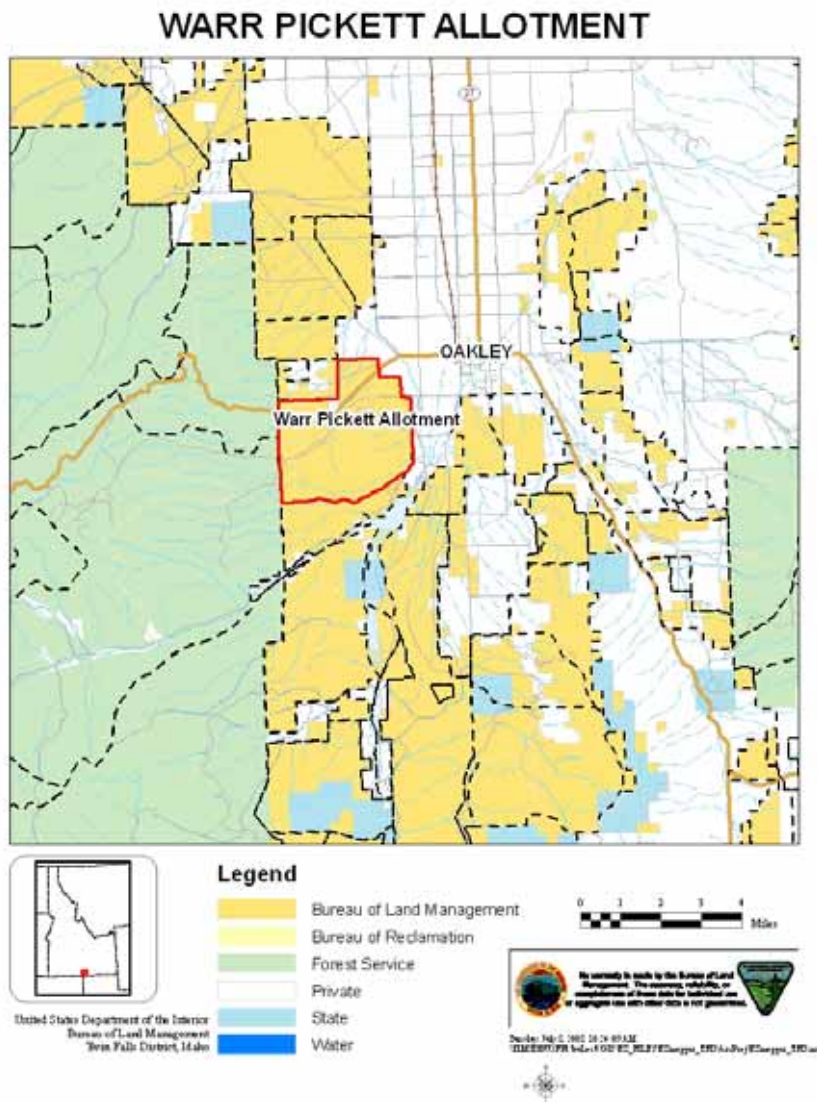


Figure 1

There are several authorities¹ 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. As a consequence, Land Use Plans (LUPs) for BLM have established grazing allotments, grazing objectives, and grazing allocation decisions. Goals, objectives, or decisions which guide livestock grazing within the Warr Pickett Allotment are found in the Cassia Resource Management Plan (RMP, 1985).

The BLM issues grazing permits and leases, hereinafter referred to as permits, for a term not to exceed 10 years. Grazing permits may allow a permittee to graze one or more individual allotments or graze in common with other permittees in one or more allotments. An Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) is completed to determine whether there are significant environmental consequences of the proposed action and to ensure that environmental information is available and considered before decisions are made and actions are taken. This EA is based on existing information found in the study and allotment files, and the December 17, 2001 Warr Pickett allotment Standards and Guidelines Rangeland Health Assessment and Determination. A summary of the Warr Pickett Allotment Determination for the Rangeland Health Standards can be found in the administrative record.

Based on 43 CFR 4180, Idaho's rangelands should be evaluated to determine if they are meeting or making significant progress towards meeting the Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management (USDI, 1997). Meeting the standards provides for the proper nutrient cycling, hydrologic cycling, and energy flow within the allotment's watersheds.

Table 1 displays whether these eight standards are being met within this allotment. (**M** = Meeting the Standard; **NM** = Not Meeting the Standard; **N/A** = the Standard is Not Applicable on this allotment. The eight standards for Rangeland Health 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.) A more detailed description of the standards can be found in the Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management. This document can be found on the internet at <http://www.blm.gov/pgdata/etc/medialib/blm/id/publications.Par.91993.File.dat/SGFinal.pdf>.

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].

Table 1. Idaho Standards for Rangeland Health Allotment Summary.

	Standards for Rangeland Health							
	#1	#2	#3	#4	#5	#6	#7	#8
Warr Pickett	M	NM*	NM*	NM*	NM**	N/A	NM*	NM*

* These standards were not met due to livestock grazing.

** These standards were not met due to factors other than livestock grazing.

Though standards were not met at the time of the determination for the Warr Pickett allotment, several changes were made to the management of grazing in the Warr Pickett allotment after the determination that appear to have improved conditions. Prior to 1999, a two-pasture, modified-deferred grazing system was being employed on the allotment. The north pasture consisted of a crested wheatgrass seeding and the south pasture included both native and seeded range, as well as the only riparian area in the allotment. The cattle would start out in the seeding and end up in the south pasture where the cattle spent most of their time in the riparian and native areas.

The reason standards #2 and #3 were not met was because the cattle spent too much time in the riparian segment of the old south pasture. Because the stream channel/floodplain and riparian vegetation standards were not met (ie. not in proper functioning condition), due to heavy, season-long livestock use, it was likely that water quality criteria were not being achieved and therefore standard #7 was also not met. To alleviate pressure on riparian habitat, a riparian pasture was created which surrounded Little Cottonwood Creek (EA # ID-024-EA-99-052, 1999). The riparian pasture was only meant to be used for a couple of weeks. The creation of this pasture reduced grazing of the riparian area from season long to use only within the first few weeks of the season. A photo comparison of current conditions with those prior to fencing the pasture show that re-vegetation of the creek with new aspen and willow growth has increased the overall cover and structural diversity of those sites (see Figures 3-5).

The reason standards #4 and #8 were not met was overuse of the native uplands and a potential association with a decline in sage grouse habitat quality. To correct this problem, a new fence in the south pasture separated the remaining seeded area from the native (EA # ID-077-2000-029, 2000). The result of the riparian fence as well as this project is less grazing pressure in the native pasture. During spring 2007 and summer (19 August) 2008, field validation visits to the uplands in the native pasture showed little use and a desirable amount of residual native grass. Cover data found that the black sagebrush had a canopy of approximately 17% and a mean height of 12.8 inches. Squirreltail bunchgrasses were abundant. There was little evidence of grazing except for a few footprints left by cattle. Cheatgrass appeared to be reduced from previous years based on interpretation of photographs, but cover data from previous years are not available. Current cheatgrass cover was estimated (based on cover transect data) to be 3% with 1% subcanopy cover. The dominant perennial grass was squirreltail and had a cover of 6% and a subcanopy cover of 5%. Lack of sagebrush in the seeding was also a reason for standard #8 not being met, but 2008 data show that the cover of Wyoming sagebrush has doubled and is now approximately 8%.

Purpose and Need for the Proposed Action

The Cassia Resource Management Plan (1985) identifies the Warr Pickett Allotment as available for domestic livestock grazing. Where consistent with the goals and objectives of the RMP and Idaho's Standards and Guidelines for Grazing Management (1997), it is BLM policy to authorize allocation of forage for livestock grazing to qualified operators. 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 and desired conditions described in the Cassia RMP. Additionally, the purpose is to respond to an application by the permittee to renew his permit and continue grazing for a period of 10 years on the Warr Pickett Allotment.

Based on the above discussion and the impending expiration of the permit, the underlying need for action is to authorize grazing on public lands in this allotment in accordance with all applicable statutes and regulations and in conformance with the objectives and decisions of the Cassia RMP.

Conformance to the Cassia RMP

The Cassia RMP was approved on January 24, 1985. This land use plan guides public land management, including the livestock grazing management program, in the area where the subject allotment is located. The proposed action is in conformance with the Cassia RMP, as required by 43 CFR 1610.5-3(a). Specifically, the proposed action is designed to achieve 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." Furthermore, the active grazing use (AUM's) proposed in this EA are within the AUM's allocated for the Warr Pickett Allotment as well as within the approved class of livestock and season of use (Cassia RMP, page 71,83)

The proposed action is in conformance with the *Range Improvements, Grazing Systems, Other Range Management Practices* section on page 7 of the Cassia RMP. The Cassia RMP states that, "A variety of range improvements, grazing systems and other range management practices will be considered in conjunction with livestock management on individual allotments." So, considering the proposed range improvements is approved by the plan.

Appendix A (Resource Monitoring and Evaluation Plan) of the Cassia RMP, pages 56 and 57, provides livestock grazing utilization guidelines for allotment evaluations. This plan cites utilization guidelines to be used to help determine whether suitable livestock

grazing is occurring on the allotment. It states that grazing use greater than 40% on perennial, native grasses or greater than 60% on seeded grasses may be an indicator that a change in livestock use is needed. The proposed action is in conformance with these utilization guidelines.

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 this livestock grazing permit. The applicable “Standards for Rangeland Health” evaluations for the Warr Pickett allotment, and its associated “Determination”, can be found in the administrative record.

Therefore, re-issuance of a grazing permit on this allotment would be in conformance with the Cassia RMP because it would not result in a change in the scope of resource uses or a change in the terms, conditions, and decisions of the approved plan.

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 Assessment and Determination for the allotments identified in the proposed action were completed as shown in Table 1.

Specific guidance regarding the BLM’s responsibilities to conserve ESA listed and candidate species is provided in BLM Manual 6840 – Special Status Species Management (Idaho BLM, 2000). The Special Status Species population and habitat evaluations within the Warr Pickett allotment are in conformance with the 6840 policy.

Scoping and Public Involvement

The Burley Field Office Warr Pickett Permit Renewal Interdisciplinary (ID) team met several times in 2007 to identify issues internally and develop proposed management actions for the Warr Pickett Allotment. The ID team also met with the permittee in the office and field in 2007 to discuss this proposed renewal and alternatives. Public scoping letters describing the proposed actions were sent March 13, 2008 to interested publics and comments were due April 1, 2008. In April 2008, the ID team met to develop proposed actions and to identify preliminary issues, concerns and measures to carry forward into the analysis. Using comments received during internal and external scoping, the interdisciplinary team refined the list of issues and concerns to address.

Issues

The Burley Field Office categorized and sorted internal and public scoping comments into key issues. Key issues were defined as those directly or indirectly caused by implementing the proposed action; these were used to consider alternatives to the

proposed action. Other issues were concerns that were addressed through mitigation measures or project design. Issues identified through ID team meetings include; habitat for sensitive animals (sage grouse), wetlands/riparian zones/water quality, migratory bird habitat (riparian nesting songbirds), wildlife habitat, rangeland resources and invasive/non-native species. Issues identified through public scoping include; concern about past management, monitoring and destructive grazing in the Little Cottonwood Canyon; concern about invasive weeds and grasses such as cheatgrass; concern about high numbers of livestock in the riparian pasture even for a short time; concern with the proliferation of the Brown-headed cowbird in the surrounding areas and the effect of overgrazing facilitating cowbirds.

The effects analysis in Chapter 3 is built around the identified issues and concerns. Comments not considered issues to analyze in this EA were identified as those that were: 1) outside the scope of the proposed action and thus irrelevant to the decision being made; 2) already decided by law, regulation, RMP, or other higher level decision; 3) conjectural and not supported by scientific or factual evidence; or 4) not necessary for making an informed decision. An analysis of the key issues and scoping responses is included in the project record as Exhibit 1 or addressed herein.

PROPOSED ACTION AND ALTERNATIVES

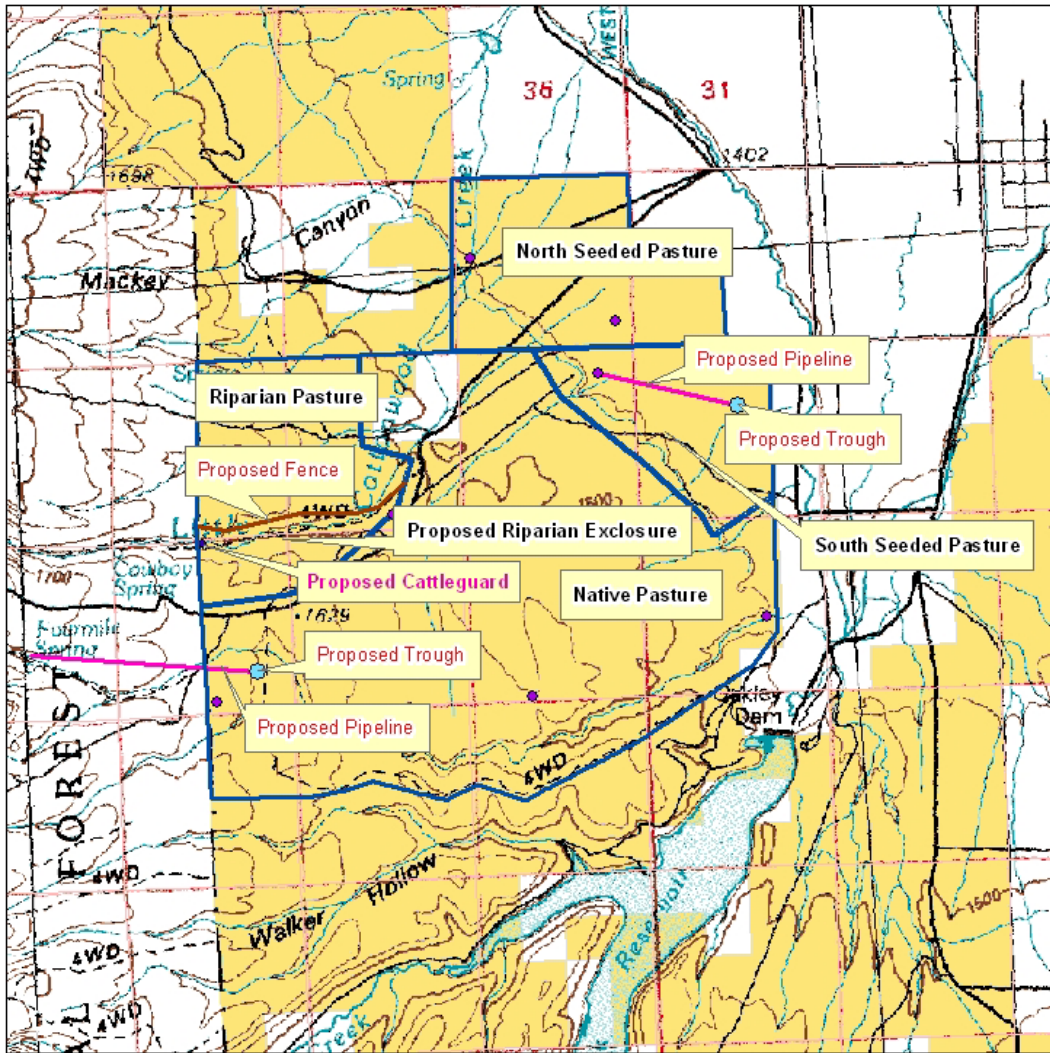
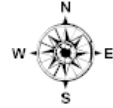
Alternative 1: Re-issue an unmodified Grazing Permit (No Action). The Burley Field Office (BFO) manager would authorize continued grazing within the Warr Pickett allotment. The permit would be re-issued at the same AUM preference level, season of use, and with the same terms and conditions as the existing permit. This alternative would also utilize the current grazing management schedule of a 4-pasture deferred system.

Table 2. No Action: Re-issue an unmodified Grazing Permit (2009-2019).

Number of Livestock	Kind of Livestock	Season of Use	Percent Public Land	Public Land Acres	AUMs
97	Cattle	05/01 – 09/30	100	5,751	488

Alternative 2: (Proposed Action) Re-issue a modified grazing permit with a cattleguard, fence, pipelines and trough developments. This alternative is based on the grazing application submitted by the permittee. The Burley Field Office (BFO) manager would authorize continued grazing within the Warr Pickett allotment as well as the construction of a cattleguard, fence, pipelines, and the placement of two new watering troughs. A map of all projects is provided in figure 2.

PROPOSED RANGE IMPROVEMENTS

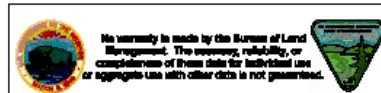


United States Department of the Interior
Bureau of Land Management
Twin Falls District, Idaho

Legend

- Allotment Boundary
- proposed fence
- proposed cattleguard
- proposed trough
- Existing Trough
- Bureau of Land Management
- Private

0 0.3 0.6 0.9 1.2 Miles



Thursday, August 11, 2005 12:30:03 PM
E:\ecrange\Wm Pickle\EA Draft EA EA Map.aprx

Figure 2: Map of Proposed Range Improvements

The permit would be reissued at the same AUM preference level and the same terms and conditions. However, the season of use would be modified based on the permittee's grazing application. The permit would be renewed for a term of 10 years with the

proposed changes to the grazing schedule shown in Table 3. The permittee wants to run more cattle, but for a shorter period of time.

Table 3. Proposed Action: Issue Modified Grazing Permit for a 10-year Term (2009-2019).

Number of Livestock	Kind of Livestock	Season of Use	Percent Public Land	Public Land Acres	AUMs
300	Cattle	05/01 – 5/25 no more than 25 days	100	5,751	247
75	Cattle	05/26 – 09/30 no more than 120 days	100	5,751	241

The cattleguard was proposed by the Warr Pickett permit renewal ID team to reduce unauthorized grazing which occasionally occurs when the gate at the border between the BLM and Forest Service managed lands on Little Cottonwood Creek is left open (see figure 2,3).



Figure 3: Location of Proposed Cattleguard

The pipeline extensions and troughs were requested by the permittee because the current distribution of watering troughs has resulted in uneven utilization of the native and south seeded pastures. To spread out the use within these pastures, i.e., improve livestock distribution, a pipeline extension with a new trough would be developed in the seeded pasture, as well as a pipeline coming off National Forest System lands from the west (see figure 2,4,5).

One pipeline would extend from an existing spur of the Cowboy Spring Pipeline south approximately 1 mile into the south end of the seeded pasture and would be equipped with a trough (see figures 2 and 5). The other will come off the Forest System lands from Fourmile spring into the native pasture (see figures 2 and 4). Polyethylene pipe would be buried under ground with a pipe layer and the trough locations would be leveled. The new troughs would be regulated by a float to utilize only needed water. Wildlife escape ramps would be installed to assist trapped animals to escape. Also, the pipeline routes and trough locations would be rehabilitated and re-contoured to match the existing landscapes.



Figure 4: Location of Proposed Trough and Pipeline Route Locations for the Native Upland Pasture



Figure 5: Proposed Trough and Pipeline Route Locations for the South Seeded Pasture

The fence was requested by the permittee to make gathering easier (the canyon sides along the creek are wooded, steep and rocky) and to allow more time in what is now the current riparian pasture. The fence would be located approximately 150 feet north of Little Cottonwood Creek and would be approximately 1 mile in length. The fence would protect the creek by creating a riparian enclosure that would only be used by cattle for trailing (see figure 2). The permittee also requested access for cattle to the creek. The access reach would be located at the east end of the current riparian pasture approximately 1.2 miles downstream from the Forest Service boundary. No blading would be used during the fence construction. However, some Utah juniper trees may need to be cleared to facilitate the fence construction.

The grazing management schedule cycles through 4 different schedules that repeat every 4 years as depicted in table 4. Pasture 1 is the north seeding, pasture 2 is the south seeding, pasture 3 is the native upland area, and pasture 4 is the riparian pasture (minus the riparian enclosure). Cattle would be allowed to trail through the riparian enclosure when necessary.

Table 4. Proposed Grazing Sequence

		May	June	July	August	September
Year 1	Pasture 1	█				
	Pasture 2		█			
	Pasture 3			█	█	█
	Pasture 4					█
Year 2	Pasture 1		█			
	Pasture 2	█				
	Pasture 3			█	█	█
	Pasture 4					█
Year 3	Pasture 1	█	█			
	Pasture 2			█		
	Pasture 3				█	█
	Pasture 4	█				
Year 4	Pasture 1				█	█
	Pasture 2				█	
	Pasture 3	█	█	█		
	Pasture 4					█

* Pasture move dates will be based on utilization so actual calendar dates of moves of may vary.

Management Consistent with all Alternatives

Management Flexibility - Management flexibility allowing for annual changes in management due to natural occurrences such as drought, unusually wet years and wildfire would be allowed so long as it is approved in advance by the authorized officer. Flexibility would include making adjustments in on and off dates (2 weeks either side of permitted dates) and / or numbers and / or rotations so long as permitted AUMs and annual indicator criteria are not exceeded. Any changes in rotations will adhere to the Idaho Guidelines for Livestock Grazing Management (USDI 1997).

Annual Indicator Criteria:

- 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.
- Pastures containing predominately seeded non-native species will be managed for maximum utilization levels of up to 60% on key forage species.
- Pastures containing predominately native vegetation will be managed for maximum utilization levels of up to 40% on key forage species.

Monitoring:

- Implementation Monitoring:
Upland Utilization – Utilization studies would be conducted using approved methodology described in the *Interagency Technical Reference 1734-03 Utilization Studies and Residual Measurements*. Utilization data would be collected after the growing season.
- Effectiveness Monitoring:
Riparian area condition would be assessed through previously established photo points and during periodic lotic wetland health assessments.
Upland trend monitoring would continue to be conducted utilizing methodology contained in *Interagency Technical Reference 1734-04 Sampling Vegetative Attributes*.

Additional Terms and Conditions:

- Any feeding of supplements or salting must be accomplished a minimum of ¼ mile away from all springs, creeks, and livestock watering facilities unless otherwise approved in advance by the BLM authorized officer.
- Actual use will be submitted to the authorized officer within 15 days after livestock leave the allotment for the grazing year.
- Project maintenance will occur in accordance with the appropriate cooperative agreements.
- In accordance with regulation, crossing permits may be issued to any applicant showing the need to cross public land.

The permit can be modified at any time during the 10-year period if: 1) New information or changed conditions are presented that may be cause for modification or, 2) Information collected subsequent to the renewal indicates changes in management are needed to ensure that this allotment is meeting or making significant progress towards Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management.

Alternatives Considered but not Analyzed in Detail

Under a “No Grazing” alternative, the BFO manager would discontinue livestock grazing in the Warr Pickett allotment. As a result, the BFO manager would not reissue a 10-year term grazing permit upon expiration, nor issue any new livestock grazing permits within the allotment. A “No Grazing” alternative was not analyzed because its implementation would not meet the underlying purpose and need for the action and because livestock grazing on this allotment was determined to be an appropriate use in the Cassia RMP.

Alternatives proposed to reduce the amount of livestock grazing on this allotment were not analyzed in this EA because we already made changes (EA # ID-024-EA-99-052, 1999; EA # ID-077-2000-029, 2000) that have either resulted in improvements (in the case of Little Cottonwood Creek) or are expected to result in improvements (in the case of the native upland pasture). Furthermore, actions that would remove fences, pipelines and other water developments and reduce the ability to manage livestock were considered but not analyzed because the result of this type of action would not meet the purpose and need. The removal of fences, pipelines and other water developments that effectively improved conditions would result in a reversal of progress towards meeting standards for rangeland health.

AFFECTED ENVIRONMENT

General Setting

The Warr Pickett Allotment is located about 2 miles west of Oakley, Idaho (see figure 1). Public lands border the allotment on the south side, public and private lands border on the north side, while Forest Service managed lands are located on the west and private lands are to the east. Elevation ranges from 4,650 to 5,450 feet. In general, the allotment’s topography is characterized by rolling hills dissected by numerous drainages. The allotment contains approximately 1,325 acres of public land that was seeded to crested wheatgrass; the remaining public land consists of approximately 3650 acres of low sagebrush, approximately 220 acres of big sagebrush, approximately 550 acres of Juniper dominated sage types or Juniper woodlands and approximately 4 acres of riparian vegetation. The public land in the native pasture surrounds approximately 125 acres of private land.

The Burley Field Office (BFO) is separated into four larger “Cumulative Effects Analysis Units” (CEAU). Warr Pickett Allotment lies within the Goose Creek Cumulative Effects Analysis Unit

GCCEAU). The GCCEAU was bounded spatially because of shared watershed boundaries and common resources. Examples of these resources include juniper forests, habitat for elk, sage grouse and mule deer, fisheries including low-stone Cutthroat Trout, sensitive plants and invasive plant species (01/04/06 BFO Meeting Notes).

The GCCEAU consists of 59 allotments. The 59 allotments within the GCCEAU consist of 125,318 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 59 allotments there are other lands that are located outside of the allotments' boundaries. Consequently, the total acreage of the lands within the GCCEAU consists of approximately 125,731 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. (These GCCEAU has been delineated to assess the cumulative impacts of proposed actions.)

Major vegetation types within the GCCEAU are summarized in Table 5. For comparison purposes Table 6 describes major vegetation types in the GCCEAU.

Table 5. Major Vegetation Types in the Goose Creek Cumulative Effects Analysis Unit

Vegetation Type*	Acres*
Exotic Grass Seeding	16,254
Native Perennial Grass	7,480
Big/Low Sagebrush	54,857
Riparian	110
Juniper	31,569
Annual Forb	356

*Data compiled from the Cassia RMP. Acres only includes public lands.

Table 6. Major Vegetation types in the Warr Pickett Allotment in 1984

Vegetation*	Approximate Acres*
Exotic Grass Seeding	1,199
Riparian	4
Big/Low Sagebrush	4004
Juniper	544

*Data compiled from the Cassia RMP. Acres only includes public lands.

The current vegetation in the GCCEAU has been influenced by past actions. Past actions include historical livestock grazing, vegetative manipulation (seedings), wildfire suppression and rehabilitation efforts, and the introduction of cheatgrass.

Warr Pickett Allotment is located near the center of the GCCEAU. Neither the proposed action nor any of the alternatives contain proposals to increase permitted use above the current levels. The allotment was not meeting standards on the seedings due to lack of sagebrush and on the native uplands due to decline in perennial grasses. A division fence was constructed in 2001 between the native uplands and the remaining unfenced seeding. Since that time the amount of sagebrush cover in the north seeding doubled and is

currently approximately 8%. Then, the rotation was altered to shift the majority of spring use off the native vegetation onto the seedings after 2001. Species of forbs were observed in the native pasture in 2008 which were not observed in 1999 when the standards for rangeland health were evaluated (see page 4 in Background section of this EA). Since changes have been made to move this allotment toward meeting the standards and no vegetative manipulation treatments are proposed, there should be little change to the baseline condition of this resource. Any changes to the baseline will occur as a result of project implementation. There may be some effects to the environment resulting from these actions and those will be discussed later in this document. Bostetter Road runs through this allotment. The road itself is a trailing corridor for livestock traveling to and from Forest Service Allotments in the spring and the fall.

Wetlands/riparian zones including water quality and floodplains

About 1.5 miles of Little Cottonwood Creek flows through the Warr Pickett Allotment. Little Cottonwood Creek originates from several springs on National Forest System lands. After arriving on the BLM on the west side of the Warr Pickett Allotment, the creek channel is in its natural state for about 1.25 miles. The creek is considered an irrigation ditch (historic right of way exists) below this point and is subject to periodic cleaning and maintenance practices. Because of irrigation water rights, the creek is known to dry up and becomes intermittent in the late summer when water is diverted for irrigation purposes. The upper 1.2 miles of stream contains nearly all of the obligate riparian species due to inadequate frequency/duration of water below this point. Little Cottonwood Creek is not listed on the State of Idaho's 303(d) list of impaired waterbodies and there is no known water quality data for Little Cottonwood Creek within this allotment.

The Burley Field Office recognized the need for riparian area improvement prior to the 2001 rangeland health determination. After completing the field work for the evaluation we proposed and built the Little Cottonwood Riparian Pasture Fence (EA #ID024-EA-99-052) in order to improve riparian area and water quality conditions. The following photographs depict post-determination monitoring of Little Cottonwood Creek and the progress which has been made with respect to riparian area condition in the Warr Pickett Allotment under current management. Specifically, we found improved bank conditions and regeneration of woody species. Increased streamside shade, more stable streambanks and less intensive livestock use is expected to be resulting in improved water quality through reduced sediment and nutrient loads and by moderating water temperature.

Figures 3-5



Little Cottonwood Creek 8-20-98



Little Cottonwood Creek 5-8-07 Note improved bank condition and new aspen obscuring those present in 1998.



Little Cottonwood Creek 8-20-98
Note new willow in foreground.



Little Cottonwood Creek 5-8-07
willow in foreground



Little Cottonwood Creek Oct. 2000 (photo courtesy of Western Watersheds Project)



Little Cottonwood Creek Aug. 2008 Note numerous new willows.

Cultural Resources

Approximately 1,300 acres of BLM managed lands in the Warr Pickett Allotment have been surveyed for cultural resources. Eight previously recorded cultural resources are known to occur within the allotment boundary. Should any eligible or potentially eligible cultural resources be discovered during pre-construction clearance/inventory or during actions permitted under this grazing permit renewal, appropriate protective (i.e. avoidance) or other site specific mitigation measures (BLM Manual 8140 § .24B2).

Threatened/Endangered Animals; Sensitive Animals

Sierra Nevada Bighorn Sheep – A small population of bighorn sheep occurs in the Big Cottonwood Creek Wildlife Management Area a few miles north of the Warr Pickett Allotment. Bighorn sheep require steep, open habitat and rocky outcroppings to escape from predators. Occasionally, young males venture into flatter land seeking to forage. Habitat in the Warr Pickett Allotment is limited for bighorn sheep to the extent that it is almost considered unsuitable because of the dense stands of juniper along the north and south sides of Little Cottonwood Creek canyon (which is narrow and not very steep), and because the remaining portion of the allotment is relatively flat range lands. Furthermore, bighorn sheep have only been observed once in the allotment since being reintroduced.

Greater Sage Grouse - Sage grouse are a sagebrush obligate species. 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). Sage grouse occupy lek, nesting, brood rearing, and winter habitats within the project area and are mostly found in areas that have an adequate sagebrush-steppe habitat. However, there are no seeps or meadows suitable for late brood rearing habitat occurring within the allotment.

The project area encompasses five known active sage grouse leks. Also, there is one inactive lek that became inactive in the 1970's. The reason for the loss of this lek appears to be Utah juniper encroachment of the lek site based on the current distribution of juniper within the vicinity. Juniper encroachment is considered a significant threat to sage grouse populations range-wide, as it reduces shrub cover and the season of availability of succulent forbs is reduced because of soil moisture depletion (Crawford et al. 2004). Furthermore, Doherty et al. (2008) found that wintering grouse also avoid conifer encroachment areas. In the Warr Pickett allotment, juniper is encroaching onto lek, winter and nesting habitats. Sage grouse use both the native pasture and black sagebrush sites in the south seeded pasture.

The Warr Pickett Allotment Determination (November 2001) stated (in regards to sage grouse habitat) that "sagebrush communities appear to be lacking sufficient perennial bunchgrass cover required for suitable nesting habitat. Competition from cheatgrass further impedes the potential to increase native bunchgrass or forb cover. Season-long livestock grazing is contributing to poor range conditions resulting in less than desirable habitat for sagebrush obligate species." Since that time, fences were created separating the seeded pastures from the native habitats as well as the riparian area. The intent of these actions was to decrease the amount of time cattle used the native vegetation and to delay turnout to reduce grazing use of occupied breeding habitat by diverting more use to the seedings. These actions resulted in the allotment having a four pasture deferred grazing system that employs appropriate conservation measures identified in the Idaho Sage-Grouse Conservation Plan (Sage Grouse Advisory Committee 2006).

Data used for sage grouse population analyses were provided to the BLM by Idaho Department of Fish and Game (2008). Lek count effort began in earnest in 1999, at which point three of the current five leks were counted. The total number of males attending these leks at this time was 48. The number of leks counted varied between subsequent years, as did the total numbers of males. However, these leks are located in very close proximity, with the two most distance leks being only a little over two miles apart. Most likely, these leks are connected with overlap in use by displaying males and visiting females. One lek, located along the main road out of Oakley about a ½ mile from the western edge of the allotment, averaged only 1.3 males attending per year while counted 7 out of 9 years during 1999-2007. This lek was located in an area experiencing conifer encroachment, however a recent juniper encroachment treatment occurring around this lek location could act to reverse this trend. Overall, the trend in male lek attendance within the allotment appears to have risen and fallen during 1999-2007, while not appearing to have dropped below the initial counts.

Brewer's Sparrow - This 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.

Ferruginous Hawk – This species occurs in sagebrush steppe habitat, especially where isolated juniper are available for nesting. Nesting occurs in juniper but can also occur on the ground. There is one active ferruginous hawk nest in the project area and another inactive nest that apparently fell apart. Ferruginous hawks are neo-tropical migrants that generally are only present during the breeding season. Their diet consists primarily of rabbits and rodents, especially ground squirrels.

Sage Sparrow - This 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 1987). Sage sparrow 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. Not all necessary habitat features have been identified, because sage sparrow are often absent from areas where the habitat appears suitable. Sage sparrows likely occur within the project area.

Migratory Birds

Migratory bird species of conservation concern that would be affected by one or more alternatives include some BLM sensitive species, which will only be addressed in the sensitive species section. Others which are known to occur and would be affected, or have not been observed within the Warr Pickett Allotment, but may potentially occur and be affected due to habitat availability, include northern harrier, short-eared owl, and red-naped sapsucker.

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 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 1996). Northern harrier 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 have not been observed in the Warr Pickett Allotment but 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.

Red-naped Sapsucker - This species is on the BLM watch list. They occur in mixed coniferous forests and aspen and cottonwood groves, where they feed on tree sap and nest in tree cavities (Walters et al. 2002). Red-naped sapsucker habitat in the Warr Pickett Allotment can be found along the natural reaches of Little Cottonwood Creek. Grazing could affect the habitat of red-naped sapsuckers if grazing management changes the amount of trees available for foraging and nesting.

Wildlife Species (Non-Sensitive)

The Warr Pickett allotment is important mule deer winter range. Pronghorn also occur within the allotment.

Invasive, Non-native Species

Diffuse knapweed is known to occur and has been treated along the road on the south side of the allotment. It appears to only occur in this area and along this particular road. Cheatgrass occurs in varying amounts throughout the allotment. Cheatgrass can expand its cover and distribution for a variety of reasons, including reduced vegetation vigor, reduced perennial cover and surface disturbance caused by livestock. Studies conducted within the allotment found cheatgrass patchily distributed. Efforts to change the management of the allotment by separating the seeding from the native and creating another pasture around the native riparian are expected to reduce the potential for cheatgrass expansion because there will be less grazing on the native pastures, so the vegetation within native pastures is expected to have improved vigor, cover and reproduction.

Soils

Soils affected by the proposed action through disturbance during pipeline construction may include Ayesees gravelly-loam and Paniogue-buko loam. These soils are fairly common as there are approximately 17,170 acres of the Ayessee soils in western Cassia county and 7,522 acres of Paniogue-buko soils in western Cassia County. Neither soil type is considered highly erosive.

Vegetation types, communities and the rangeland resource

The following describes the condition of the upland vegetation in the Warr Pickett Allotment based upon findings of the Standards and Guidelines Rangeland Health Evaluation and Determination:

Vegetation found during Standard and Guidelines field assessment included low, black and Wyoming sagebrush, green and gray rabbitbrush, cat's claw horsebrush, bluebunch wheatgrass, crested wheatgrass, squirreltail, Sandberg bluegrass, six weeks fescue,

cheatgrass, halogeton, pepperweed, globe mallow, hawksbeard, Hooker's balsamroot, false yarrow, rockcress, senecio, milkvetch, Indian paintbrush, long leaf phlox, sego lily, salsify, prickly pear and Utah juniper. The two major range sites on the allotment are Black-low sagebrush/ bluebunch wheatgrass and Shadscale-Wyoming big sagebrush/ Thurber needlegrass –bluebunch wheatgrass sites.

The standard for native plant communities (#4) was not being met due to livestock management practices in 1999. The native plant communities were described as showing signs of low vigor, with little reproduction apparent. Cheatgrass occurred in some areas. Trend plots showed a loss in perennial grass cover from 1983 to 1999. The standard for seedings (#5) was not being met and livestock management was not a significant factor. The crested wheatgrass seeding was described as healthy and vigorous but lacking plant diversity such as sagebrush.

To address these issues, a division fence was constructed in 2001 to separate the crested wheatgrass from the native vegetation. A change was made in livestock management practices to include a rotation that utilized the crested wheatgrass seedings in the spring, followed by use of the native pasture. Field visits during 2007 and 2008 verified that sagebrush has increased to 8% in the crested wheatgrass. Forb reproduction was noted on native sites (BFO field notes 5/17/08).

In 2008, a new photo trend plot was added to the north pasture crested wheatgrass seeding. In the native pasture, a quality check monitoring point was established in a bluebunch wheatgrass site. The three trend plots at the time of the Standard and Guidelines Evaluation in 1999 were described as follows: one trend was up, one was down and one was static in relation to the amount of key species in the plot. Recent trend plot photos are similar in appearance to the previous photos with the exception of sagebrush in the crested wheatgrass seeding has approximately doubled (BFO notes 10/06/08).

The amount of time the cattle spend on the native vegetation has been reduced since 1999. "In general reducing the amount of time cattle graze the native plant communities combined with periodic rest from use during the growing season should improve plant vigor. Further, improved plant health amongst perennial grasses should result in less cheatgrass over the years. Fewer cheatgrass plants means less competition for water and nutrients with other plant species resulting in better opportunities for successful recruitment and establishment of perennial grass seedlings during favorable growing conditions. Improved perennial grass and forb cover will provide better nesting and brood rearing habitat for sage grouse" (ID-077-EA-2000-029).

These changes have been implemented but not enough time has passed to determine overall trend on vegetation using trend data. It will require a longer timeframe to see substantial long term trends, related to 1999 and 2001 projects, to become evident in photo plots. Field observations state the presence of forb reproduction and more sagebrush in the crested wheatgrass seedings. (BFO notes 5/17/08, 10/06/08) The following photos show a 2008 comparison to a 1975 photo site. The 1975 photo depicts

a site dominated by black sagebrush with little herbaceous vegetation. The 2008 photo clearly shows herbaceous vegetation recovery (Sandberg bluegrass and Hood's phlox) within the sagebrush community. These photos were taken at a Parker 3-Step plot that was established in 1953.



12/02/08 Retake of 1975 Photo on Warr Pickett Allotment



9/04/75 Photo of Parker 3 –Step Photo Point on Warr Pickett Allotment

Utilization measurements have been taken in the crested wheatgrass seedings in 2007 and 2008. Two out of three transects measured in 2007 exceeded (72%, 83%) the moderate

category into the heavy grazing category. The third transect was 58%. In 2008, the highest utilization (42%) on crested wheatgrass was measured in the moderate category with one other transects (9%) in the slight grazing category. In 2008 utilization (49%) was in the moderate category measuring bluebunch wheatgrass.

ENVIRONMENTAL CONSEQUENCES OF THE NO ACTION ALTERNATIVE

Wetlands/riparian zones including water quality and floodplains

Direct and Indirect Effects

The Little Cottonwood Riparian Pasture Fence which was built following the rangeland health evaluation process should ensure that the riparian system (vegetation and streambanks) along Little Cottonwood Creek continues to progress toward proper functioning condition (PFC) thereby reducing sediment and improving water quality. Significant progress has been occurring within the allotment as can be seen in the comparison photographs contained in the affected environment section. These photographs depict improved streambank conditions and streamside cover which are the result of reduced livestock utilization and trampling within the riparian area. Prior to the completion of this fence, Little Cottonwood Creek received nearly season-long livestock use which resulted in poor riparian area conditions. Riparian pasture fences are approved component practices for BMP (best management practices) within the Idaho Agricultural Pollution Abatement Plan. This plan is a guidance document that describes the State's process for the control and abatement of agricultural nonpoint source pollution as it relates to water quality (Idaho Soil Conservation Commission 2003).

Cumulative Effects

There are no known adverse cumulative impacts associated with continuing current management which is improving riparian area and stream channel conditions along Little Cottonwood Creek and leading towards PFC.

The effects of improving riparian area condition within the Warr Pickett allotment combined with improvements on private land and other BLM allotments within the GCCEAU should be leading to overall improved water quality within this portion of south-central Idaho. The improvement in streamside cover should be leading to reduced erosion through improved bank stability, improved filtration of sediment, and improved streamside shading, all of which are integral to improving water quality.

The main access road up Little Cottonwood Creek parallels and crosses the channel twice within the Warr Pickett Allotment. One additional crossing occurs on Forest Service managed land upstream from the allotment. There is likely a small increment of sediment entering the stream system from road runoff and the stream crossings; however, no significant sources are currently known. Dispersed recreation does occur within the Warr Pickett Allotment although it is widely dispersed and relatively infrequent and adds little

if any additional sediment or nutrients to the stream systems. The USFS manages the headwaters of Little Cottonwood Creek and is currently proposing a hazardous fuels reduction project on approximately 3,090 acres here. There may be some immediate effects as a result of this including increased sediment in the form of soil or ash; however, these effects would be expected to diminish quickly as treated areas become vegetated. Long-term effects of the fuels reduction project could be improved water quality due to better overall vegetative cover in the watershed. Livestock grazing also occurs along Little Cottonwood Creek on USFS lands upstream from the Warr Pickett Allotment. Impacts from livestock grazing on USFA lands would be similar to the effects of livestock grazing on BLM managed lands.

The Burley BLM has recently proposed a project designed to improve aspen stands which include aspen along Little Cottonwood Creek within the Warr Pickett Allotment. The project would remove juniper trees growing within the aspen or adjacent to it in order to reduce competition and allow for more aspen regeneration. This project is expected to result in improved riparian vegetative conditions and therefore will enhance current efforts to restore this riparian area.

The increments described above when added to that from the Proposed Action would not be of sufficient magnitude to curtail achievement of water quality standards within the Warr Pickett Allotment.

Future grazing permit renewals in the GCCEAU will be aimed at either maintaining riparian conditions where those conditions are found to be meeting the Standards for Rangeland Health and or improving riparian conditions where Rangeland Health Standards are found to be deficient and deficiencies are a result of current livestock management.

Threatened/Endangered Animals; Sensitive Animals/Wildlife

Direct and Indirect Effects

Under the current grazing system, cattle may directly affect greater sage grouse, ferruginous hawks, Brewer's sparrows, and sage sparrows by occasionally disturbing or trampling nests, though this effect would be minimal because the sparrows and ferruginous hawks do not normally nest on the ground in this area and sage grouse nest in dense stands of sagebrush that cattle would tend to avoid. Shifting season long grazing to having more grazing occurring in the seeding is expected to promote the growth and persistence of native shrubs, grasses and forbs needed by sage grouse for seasonal food and concealment, especially during the nesting period. Likewise, this shift is expected to improve the habitat for the other sensitive sagebrush obligate species. Brown-headed cowbirds were raised as a potential issue because they can reduce the productivity of songbirds by dumping their eggs in the nests of hosts which raise the cowbird chicks as their own, often at the expense of their own chick. However, brown-headed cowbirds have not been reported from this area, improvements in vegetative cover are expected to improve nest concealment for susceptible species, and parasitism rates on Brewer's sparrow and sage sparrows are untypically low in similar habitats (Vander Haegen and

Walker 1999). Habitat is improving for sagebrush obligate species in the seeded pastures where data collected during the summer of 2008 show sagebrush cover has doubled, and sage grouse are beginning to occupy some seeded areas.

Cumulative Effects

The Warr Pickett allotment lies within the Goose Creek Cumulative Effects Analysis Unit (GCCEAU). Other activities that may affect sage grouse, sage sparrow, Brewer's sparrow, and ferruginous hawks within the GCCEAU include past grazing use within the Warr Pickett allotment as well as past, present, and future grazing within other BLM and Forest Service allotments, fire suppression and juniper treatments. Past grazing may have altered the shrub component of native sites by increasing sagebrush cover and reducing grass cover. This may have indirectly affected sage grouse by reducing the amount of grass cover needed for nesting and forbs available for foraging. Present grazing in other allotments would have similar effects as those direct and indirect effects described above. Meeting standards or making significant progress toward meeting standards in other allotments as planned would result in overall improved habitat conditions for BLM sensitive species. Fires have not historically occurred on this allotment but fire suppression efforts in nearby areas have prevented fires in other areas from reaching the Warr Pickett Allotment. This has resulted in an increase in juniper density and height within the allotment which affects sage grouse by reducing available lek, nesting, wintering and brood rearing habitats, and affects Brewer's sparrow and sage sparrow by reducing the amount of potential shrubs for nesting. However, recent juniper treatments within the Warr Pickett allotment completed in 2007, and the adjacent Mabey Goose Creek Allotment (in progress) reduced juniper encroachment in shrub habitats used by grouse for leking, nesting, brood rearing and wintering. These projects along with juniper treatments proposed on adjacent Forest Service lands are expected to offset the severity of this effect, though there still remain some encroachment areas likely to still affect grouse.

Migratory Birds

Direct and Indirect Effects

Under the current grazing system, 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 would not be great and there are no known nests of either of these species in the allotment. Renewing the permit would not change this existing situation. Red-naped sapsuckers would indirectly be affected under the current grazing system because the positive trend in riparian health in the direction of PFC will continue to improve the habitat of sapsuckers which rely on riparian trees such as aspen for nesting and foraging. This effect is not expected to be measurable because available suitable habitat might increase in quality but would not increase in area. Short-eared owls would be indirectly affected because grazing may reduce the quality of the grasslands for nest concealment. However, no short-eared owl nests have been

documented on the site and the uneven distribution of grazing likely maintains some areas with light to no grazing occurring.

Cumulative Effects

Other activities that may affect northern harrier, short-eared owls or red-naped sapsuckers within the GCCEAU include past grazing use within the Warr Pickett allotment as well as past, present and future grazing within other BLM and Forest Service allotments. Additionally, a proposed aspen restoration project (ID-220-2009-CE-3575) could affect red-naped sapsuckers. Past, present and future grazing has had and would continue to have similar minimal direct effects to northern harrier and short eared owls as the current grazing system, and cumulatively would not amount to any significant effect. Past grazing in the native pasture which tended to concentrate in Little Cottonwood creek, and possibly along riparian areas within some other GCCEAU allotments probably reduced the quality of red-naped sapsucker habitat because the cows were grazing the young woody vegetation along the side of the creek, thus reducing the amount of recruitment occurring. However, meeting standards or moving in the direction of meeting standards in Warr Pickett and other allotments, as planned, would result in overall improved habitat conditions for migratory birds. Furthermore, proposed aspen restoration (through juniper treatment) in Little Cottonwood Creek (is expected to create more space and water available for aspen and other riparian vegetation which, in addition to improvements through changes in grazing management, is expected to cause faster improvement of the riparian habitat for red-naped sapsuckers.

Wildlife

Direct and Indirect Effects

Mule deer wintering habitat would not be affected under the current grazing system.

Cumulative Effects

There are no known cumulative effects on mule deer winter range from the no action alternative.

Invasive, Non-native Species

Direct and Indirect Effects

No change in the amount of invasive, non-native species is expected under the current grazing management. Cheatgrass is known to fluctuate annually because it is an annual grass and is more susceptible to annual fluctuations in precipitation. Noxious weeds are also not expected to increase due to current grazing management because the present populations of noxious weeds appear to be spread by vehicles.

Cumulative Effects

There are no known cumulative effects on invasive or non-native species from the no action alternative.

Soils

Direct and Indirect Effects

There would be no direct or indirect effects to soils expected under the current grazing management.

Cumulative Effects

There are no known cumulative effects on soils from the no action alternative.

Vegetation types, communities and the rangeland resource

Direct and Indirect Effects

Direct impacts to vegetation result from herbage removal from foraging animals. The amount and timing of forage removal determines the plants ability to maintain productivity and vigor (Holechek et al. 2004). When the amount of forage or timing of forage removal occurs to the point of where the vegetation becomes less productive, over time a change in vegetative composition can occur. It is for these reasons that utilization levels are established and grazing systems are implemented that maintain plant vigor.

The grazing system currently used on the Warr Pickett Allotment is a deferred grazing system, implemented since 1999. It is designed to give native vegetation an interval of growing season each spring before grazing occurs later in the season to maintain or improve plant vigor. Prior to this, the grazing system was season-long. The allotment has utilization guidelines of 40% or less on native grasses and less than 60% on crested wheatgrass seedings. Field observations noted forb establishment in 2008. The amount of sagebrush cover in the crested wheatgrass seedings has doubled according to cover transects completed in 2008. These were two important factors in the upland vegetation Rangeland Health Evaluation and Determination suggested as reasons why the upland vegetation on the allotment was not meeting standards that appear to be improving.

Cumulative Effects

As discussed in the affected environment, past actions influenced the current condition and pattern of vegetation in the GCCEAU as well as the Warr Pickett Allotment. These actions include past range rehabilitation projects (crested wheatgrass seedings), season-long grazing, wildfire suppression, sagebrush restoration projects (juniper treatments) and the spread of cheatgrass. Future projects include sagebrush restoration projects for sage

grouse and/ or juniper removal for fuel reduction projects in other areas (BLM – Walker Hollow and FS). A consequence of these projects could be more perennial grasses after juniper removal. No changes in grazing preferences on the Warr Pickett Allotment will result from these projects.

Since 1999, changes in livestock management practices have included the creation of a riparian pasture, fencing which divides the native vegetation from the crested wheatgrass seedings allowing for deferred grazing and less time on the native vegetation, and an extension of a pipeline to improve livestock distribution. The division fence and riparian pasture fence allow for greater management control of the timing of use and the amount of time livestock spend on native range. More growing season deferment is expected to result in improved vigor, cover and reproduction of herbaceous plants which should result in new plant establishment over time.

Trend photos in 2008 indicate that vegetative conditions remain similar to the photos taken in the evaluation period for the Standards and Guidelines Evaluation. Continuation of monitoring as well as utilization monitoring will determine if long-term resource objectives i.e. meeting standards for rangeland health are being met.

No changes impacting vegetation from that described in the baseline have been proposed under the No Action Alternative; therefore no known adverse cumulative impacts would occur to the vegetative types, communities and the rangeland resources when added to other past, present and reasonably foreseeable future actions within the GCCEAU.

Future grazing permit renewals in the GCCEAU will be aimed at either maintaining vegetative conditions where those conditions are found to be meeting the Standards for Rangeland Health and or improve resource conditions where Rangeland Health Standards are found to be deficient and deficiencies are a result of current livestock management.

ENVIRONMENTAL CONSEQUENCES OF THE PROPOSED ACTION

Wetlands/riparian zones including water quality and floodplains

Direct and Indirect Effects

Under this alternative, a fence would be built north of Little Cottonwood Creek which would create a new pasture and include less upland vegetation within the riparian pasture. This new, smaller riparian pasture (exclosure) would not be part of any scheduled grazing season and would provide nearly complete exclusion of livestock (except for occasional trailing) along the perennial portions of Little Cottonwood Creek within the allotment. This would be expected to improve riparian area conditions along Little Cottonwood Creek faster than the no action alternative. Occasional trailing of livestock through the exclosure may be necessary. The newly created pasture would require a watering area (for livestock to water) on Little Cottonwood Creek near the mouth of the canyon approximately 1.2 miles downstream from the USFS boundary. This is approximately the location of the lower end of obligate riparian plant growth along the creek due to an

overall lack of consistent water below this point. The watering area would encompass approximately 0.3 miles of Little Cottonwood Creek. This area would receive more livestock use than it would under the “No-Action” alternative since livestock would be concentrated here as opposed to having access to the entire riparian pasture. This may result in more livestock bank trampling, utilization of vegetation near the creek and increased sediment in this area however the overall amount of sediment entering the creek may be similar to or less than that of the no action alternative since livestock would have access to the creek in only one location while the remainder of the creek would essentially be excluded. The watering area would be near the lower end of the “natural” portion of the channel as described in the affected environment section above so any effects on water quality would primarily be confined to the ditched portion of the creek downstream.

Cumulative Effects

Impacts would be the same as those described under the no action alternative. There are no known adverse cumulative impacts associated with excluding livestock access along 1.2 miles of Little Cottonwood Creek or providing livestock water along 0.3 miles of creek in an area where livestock currently have access to water.

Threatened/Endangered Animals; Sensitive Animals/Wildlife

Direct and Indirect Effects

The proposed action would have the same direct effects as the no action alternative as well as the following additional direct and indirect effects. Construction of the fence, cattle guard, pipelines and troughs could disturb some BLM sensitive animals (bighorn sheep and sagebrush obligate birds) through increased noise and human activities that the animals may avoid. However, this disturbance would be minimized by restricting the timing of construction to avoid the nesting period of BLM sensitive birds and big horn sheep are not expected to be affected because the Warr Pickett allotment does not contain habitat typically used by bighorn sheep and only one big horn sheep has ever been recorded within the allotment. Also, this effect would be short term and animals could find sufficient habitat in surrounding areas during the construction period. The fence could directly affect BLM sensitive wildlife (bighorn sheep and sagebrush obligate birds) by restricting movement or causing injury if wildlife collide with the fence or become entangled with the wire. However, these effects would be minimized by constructing the fence to wildlife specifications. Furthermore, the location of the fence on the north side of Little Cottonwood Creek is away from the sage grouse leks and the habitat is relatively thick juniper. Therefore, sage grouse are not expected to be affected by the fence construction. The construction of the pipelines would require the removal of a small amount of vegetation, including some sagebrush, which could be used by Brewer’s sparrows, sage grouse or sage sparrows for nesting. However, the amount of vegetation removed will not be enough to displace animals or cause any measurable loss in the total amount of sagebrush available to sage grouse for nesting, and sagebrush would eventually re-grow in the area.

Indirectly, habitat in the native upland is expected to generally improve for BLM sensitive species similar to the no action alternative, but possibly at a faster rate. The effect of more cattle for less time may reduce the number of times plants are grazed and may allow more time for grasses to re-grow. This could benefit BLM sensitive species because the grasses would maintain better vigor and there would be more grass left later in the year for cover. The effect of adding the troughs could indirectly create new concentrated use areas that could reduce the quality of habitat for Greater Sage, sage sparrow and Brewer's sparrow by reducing the amount of sagebrush available. However, the overall effect would be reduced concentrated use around the other troughs and better distribution of grazing throughout the pasture. Better distribution of grazing could both improve the quality of the habitat in the seeded pasture for BLM sensitive species, and allow more time in the seeding while decreasing time in the native upland which would improve the habitat in the native upland as well. The creation of a new pasture within the current riparian pasture would likely create another concentrated use area along the ditched portion of Little Cottonwood Creek. Because the area considered for a water access point is mostly covered by sagebrush, this could decrease a small amount of Brewer's sparrow and sage sparrow habitat. However, the exclusion of cattle from Little Cottonwood Creek would likely improve other areas with Brewer's sparrow and sage sparrow breeding habitat. Also, the use of the north end of the riparian pasture could improve other portions of the allotment for these BLM sensitive species.

Cumulative Effects

Other past, present and future actions affecting BLM sensitive species include those described under the no action alternative. Overall, indirect improvements to the upland habitat through implementation of the proposed action are expected to cause the improvement of BLM sensitive species habitat at a faster rate.

Migratory Birds

Direct and Indirect Effects

The proposed action would have the same direct effects to migratory birds as the no action alternative except that the magnitude of the nest disturbance is expected to be less because having more cattle for less time means there would be less time for nests to be disturbed. Additionally, excluding cattle from Little Cottonwood Creek would improve the quality of habitat for red-naped sapsuckers at a faster rate. Adding the trough and thus distributing cattle more evenly in the south seeded pasture would indirectly reduce the habitat quality of short-eared owls, which require tall thick patches of grass. However, the amount of short-eared owl habitat in the allotment is not great and short-eared owls aren't known to use the allotment, so the effect is not expected to be adverse.

Cumulative Effects

Other past, present and future effects to migratory birds are the same as those of the no action alternative. However, indirect improvements to the riparian and upland habitats through implementation of the proposed action are expected to cause the overall improvement of migratory bird habitat at a faster rate.

Wildlife

Direct and Indirect Effects

Construction of the fence, cattleguard, pipelines and trough could disturb other wildlife species such as deer or pronghorn antelope through increased noise and human activities that the animals may avoid. However, construction would require only a short period of time during which animals could find sufficient habitat in surrounding areas. The fence could directly affect wildlife by restricting movement or causing injury if wildlife collide with the fence or become entangled with the wire. However, these effects would be minimized by constructing the fence to wildlife specifications. The construction of the pipelines would require the removal of a small amount of vegetation, including some sagebrush, which could be used by deer for winter food. However, the amount of vegetation removed will not be enough to affect the deer, and would eventually re-grow in the area. Also, the presence of additional troughs could benefit deer and antelope by providing an alternative site for finding water.

Cumulative Effects

Other activities that may affect mule deer and pronghorn antelope within the GCCEAU include past, present, and future grazing within other BLM and Forest Service allotments, fire suppression and juniper treatments (upland and in aspen areas). Past grazing may have altered the shrub component of native sites by increasing sagebrush cover and reducing grass cover. This may have indirectly affected mule deer and pronghorn antelope by increasing the amount of winter browse available. Meeting standards or making significant progress toward meeting standards in other allotments as planned would result in overall improved habitat conditions for mule deer and pronghorn antelope. Fires have not historically occurred on this allotment but fire suppression efforts in nearby areas have prevented fires in other areas from reaching the Warr Pickett Allotment. This has resulted in an increase in juniper density and height within the allotment which if continued, could result in a reduction of food for mule deer and pronghorn antelope but an increase in cover. However, recent juniper treatments within the Warr Pickett allotment completed in 2007, and the adjacent Mabey Goose Creek Allotment (in progress) reduced juniper encroachment. These projects along with juniper treatments proposed on adjacent Forest Service lands are expected to offset the severity of this effect. Furthermore, aspen restoration as proposed (through juniper treatment) is expected to create more space and water available for aspen and other riparian vegetation which, in addition to improvements through changes in grazing management, is expected

to cause faster improvement of the riparian habitat for red-naped sapsuckers. Fences already occur within the Warr Pickett Allotment and other grazing allotments within the GCCEAU and the length of fence added to the area by this project, are not enough to have any measurable additive effects on the populations of mule deer and pronghorn antelope.

Invasive, Non-native Species

Direct and Indirect Effects

Actions including construction of the fence, water access point, pipelines and placement of the troughs could all potentially affect the spread of some invasive, non-native species. However, design features would minimize the spread of cheatgrass. Furthermore, the amount of disturbance involved with construction is minimal and any noxious weeds encountered during routine monitoring will be treated appropriately to prevent further spread.

Cumulative Effects

Cumulatively, invasive, non-native species are not expected to increase because known infestations of these species would continue to be treated.

Soils

Direct and Indirect Effects

Actions including construction of the fence, water gap, pipeline and placement of the trough could all potentially affect soils through direct disturbance. During construction activities, there may be a small amount of erosion because vegetation and cover will be removed. Soils in the immediate vicinity of the new troughs and the new water access point could be compacted by concentrated livestock use and less vegetation is expected to grow in these areas. As a result, small amounts of erosion are expected to occur. This small amount of erosion is expected to be a net decrease in overall erosion within the allotment because fencing of Little Cottonwood Creek would reduce the amount of bank trampling, and stream bank stability is expected to increase as vegetation on the stream bank increases.

Cumulative Effects

Other actions potentially affecting the same types of soils affected by the proposed action in the GCCEUA include surface rock mining within the Warr Pickett Allotment and nearby, and other small scale fence and pipeline constructions that have occurred on this allotment. These actions would be small in scale and once cover is restored, the erosion is expected to be reduced to background levels. Therefore, no residual effects are expected in the long term.

Vegetation types, communities and the rangeland resource

Direct and Indirect Effects

In addition to the effects of the No Action Alternative, the proposals under the Proposed Action are to adopt a more formal deferred grazing system, to have flexibility to run larger numbers of livestock for shorter periods of time, the creation of a riparian enclosure, installation of a cattleguard and the extension of two existing pipelines with the addition of two new troughs.

The construction of a riparian enclosure would exclude the riparian vegetation from grazing. The surrounding upland vegetation to the north of the enclosure would be open to livestock grazing for a longer season because it would no longer exist as a riparian pasture that is only grazed for a short interval. The upland native vegetation, in that pasture, will receive more removal than in the past but the utilization standard would ensure a proper grazing level. The proposed cattleguard would not have an effect on vegetation because it would be placed in an existing road.

The proposed action allows for a greater number of livestock for a shorter duration. The amount of AUMs would not increase or decrease and the utilization standard would remain the same so the effect on vegetation should be similar to the no action if the deferred rotation system (deferring two years out of four) is followed. The grazing system would be based ultimately on utilization levels and would allow plants to be grazed after producing seed in two years out of four. Effects of higher livestock density could also include reduced plant selectivity so that more species of plants are grazed and even livestock distribution.

Under the Proposed Action, the health and vigor of upland vegetation, both crested wheatgrass and native species, are expected to improve. Since the Standards and Guidelines Evaluation was written, the majority of spring use has occurred on the crested wheatgrass seedings. The deferred rotation system in the proposed action now includes the native vegetation as the first pasture grazed in the spring during one of four years.

In the Proposed Action, a pipeline extension from the Forest Service onto BLM would concentrate grazing in another area on native vegetation by the addition of another trough. There would be a short term loss of vegetation where the pipeline is buried but the disturbed ground would be seeded after construction. The area around the trough would be disturbed annually causing disturbed soils that are conducive to the introduction and spread of invasive/ noxious weeds. The native vegetation throughout the pasture would benefit from better livestock distribution, spreading the impact of livestock more evenly around existing troughs and the proposed additional trough.

A second pipeline extension is also proposed in a crested wheatgrass pasture. The effects mentioned above would be the same for this proposal but would affect crested wheatgrass vegetation as opposed to native vegetation. Negative impacts from either of the pipeline

proposals would be mitigated through weed spraying and seeding areas disturbed by pipeline.

Cumulative Effects

As discussed in the affected environment, past actions influenced the current condition and pattern of vegetation on in the GCCEAU as well as the Warr Pickett Allotment. These actions include past range rehabilitation projects (crested wheatgrass seedings), season-long grazing, wildfire suppression, sagebrush restoration projects (juniper treatments) and the introduction of cheatgrass. Future projects include sagebrush restoration projects for sage grouse and/ or juniper removal for fuel reduction projects in other areas (BLM- Walker Hollow and FS). A consequence of these projects could be more perennial grasses after juniper removal. No changes in grazing preferences on the Warr Pickett Allotment will result from these projects.

There are no known adverse cumulative impacts associated with the Proposed Action. The Proposed Action is intended to maintain conditions of the rangeland resource where it was found to be meeting the standards for rangeland health or improve conditions where a standard was not being met (native and crested wheatgrass seedings). The existing improvements that have been implemented since 1999 and the Proposed Action alternative components should not cumulatively adversely affect vegetation but in the long term continue to move toward meeting the standards.

Since 1999, changes in livestock management practices have included the creation of a riparian pasture, fencing which divides the native vegetation from the crested wheatgrass seedings allowing for deferred grazing and less time on the native vegetation, and an extension of a pipeline to improve livestock distribution. The division fence and riparian pasture fence allow for greater management control of the timing of use and the amount of time livestock spend on native range. More growing season deferment is expected to result in improved vigor, cover and reproduction of herbaceous plants which should result in new plant establishment over time.

Trend photos in 2008 indicate that vegetative conditions remain similar to the photos taken in the evaluation period for the Standards and Guidelines Evaluation. Continuation of monitoring as well as utilization monitoring will determine if long-term resource objectives i.e. meeting standards for rangeland health are being met.

Future grazing permit renewals in the GCCEAU will be aimed at either maintaining vegetative conditions where those conditions are found to be meeting the Standards for Rangeland Health and or improve resource conditions where Rangeland Health Standards are found to be deficient and deficiencies are a result of current livestock management.

CONSULTATION AND COORDINATION

The Shoshone Bannock Tribes
Western Watersheds Project
Idaho Department of Environmental Quality
Idaho Department of Fish and Game
Idaho Department of Lands
Eugene Mathews
Alliance for Wild Rockies
Idaho Department of Agriculture (Ron Kay)
Idaho Department of Parks and Recreation
Sportsmen for Fish and Wildlife
Prairie Falcon Audubon Society
Katie Fite

List of Preparers:

Jeremy Bisson	BLM Wildlife Biologist
Jim Tharp	BLM Burley Assistant Field Manager/Natural Resource Specialist
John Lytle	BLM Archaeologist
Michael Courtney	BLM Burley Field Office Manager
Nancy Ady	BLM Rangeland Management Specialist
Lisa Cresswell	BLM Archeologist

REFERENCES

- Connelly, J. W., S. T. Knick, M. A. Schroeder, and S. J. Stiver. 2004. Conservation Assessment of Greater Sage-grouse and Sagebrush Habitats. Western Association of Fish and Wildlife Agencies. Unpublished Report. Cheyenne, Wyoming.
- Connelly, J. W., M. A. Schroeder, A. R. Sands and C. E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. *Wildlife Society Bulletin* 28:967-985.
- Crawford J.A., R.A. Olson N.E. West, J.C. Mosley, M.A. Schroeder, T. D. Whitson, R.F. Miller, M.A. Gregg, and C. S. Boyd. 2004. Ecology and management of sage-grouse and sage-grouse habitat. *Rangeland Ecology & Management* 57: 2–19
- Doherty, K.E., D.E. Naugle, B.L. Walker and J.M. Graham. 2008. Greater Sage-Grouse Winter Habitat Selection and Energy Development. *Journal of Wildlife Management* 72: 187-195.
- Drut, M. S., W. H. Pyle, and J. A. Crawford. 1994*b*. Diets and food selection of sage grousechicks in Oregon. *Journal of Range Management* 47: 90-93.
- Fischer, R.A., Apa, A.D., Wakkinen, W.L., Reese, W.P., and Connelly, J.W. 1993. Nesting-Area Fidelity of Sage Grouse in Southeastern Idaho. *Condor*, Vol. 95, No. 4, pp. 1038-1041.
- Holechek, Jerry L., Pieper, Rex D., Herbel, Carlton H., 2004 *Range Management Principles and Practices*, 5th Edition, page 235.
- Idaho Department Fish and Game. 2008. Greater sage-grouse Database.
- Idaho Sage-grouse Advisory Committee. 2006. Conservation Plan for the Greater Sage-grouse in Idaho.
- Idaho Soil Conservation Commission. 2003. Idaho Agricultural Pollution Abatement Plan: A Guidance Document Addressing Nonpoint Source Water Quality Pollution.
- Macwhirter, R. Bruce and Keith L. Bildstein. 1996. Northern Harrier (*Circus cyaneus*), *The Birds of North America Online* (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/210doi:10.2173/bna.210>

- Knick, S.T., and J.T. Rotenberry. 1995. Landscape characteristics of fragmented shrubsteppe habitats and breeding passerine birds. *Conservation Biology* 9:1059-1071.
- Petersen, K.L., and L.B. Best. 1985. Nest-site selection by Sage Sparrows. *Condor* 87:217-221.
- Rotenberry, J. T., M. A. Patten, and K. L. Preston. 1999. Brewer's sparrow. In: A. Poole and F. Gill, editors. *The birds of North America*. The Birds of North America, Inc., Philadelphia, PA. 24 p.
- Schroeder M.A., C.L. Aldridge, A.D. Apa, J.R. Bohne, C.E. Braun, S.D. Bunnell, J.W. Connelly, P.A. Deibert, S.C. Gardner, M.A. Hilliard, G.D. Kobriger, S.M. McAdam, C.W. McCarthy, J.J. McCarthy, D.L. Mitchell, E.V. Rickerson, and S.J. Stiver. 2004. Distribution of sage-grouse in North America. *Condor* 106:363-376.
- Saab, V.A., C.E. Bock, T.D. Rich, D.S. Dobkin. 1995. Livestock grazing effects in western North America *in* Martin, T.E., and D.M. Finch, eds. *Ecology and management of Neotropical migratory birds: a synthesis and review of critical issues*. Oxford University Press, New York, NY. pp. 311-353.
- US Department of Interior. 2005. *Interpreting Indicators of Rangeland Health*. Technical Reference 1734-6, Version 4.
- US Department of the Interior. 2001. 4180 Rangeland Health Standards Manual Section and Handbook and Guidance. BLM Technical Manual 4-106.
- US Department of Interior. 1997. *Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management*, Final. 18 p.
- US Department of Interior. 1985. *Cassia Resource Management Plan*. pp 103.
- Vander Haegen, W. M. and B. Walker. 1999. Parasitism by Brown-headed Cowbirds in the shrubsteppe of eastern Washington. *Studies in Avian Biology* 18:34-40.
- Wallestad, R. O., J. G. Peterson, and R.L. Eng. 1975. Foods of adult sage grouse in central Montana. *Journal of Wildlife Management* 39:628-630.
- Walters, Eric L., Edward H. Miller and Peter E. Lowther. 2002. Red-naped Sapsucker (*Sphyrapicus nuchalis*), *The Birds of North America Online* (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the *Birds of North America Online*: <http://bna.birds.cornell.edu/bna/species/663bdoi:10.2173/bna.663>

Wiggins, D.A., D.W. Holt, and S.M. Leasure. 2006. Short-eared Owl (*Asio flammeus*),
The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of
Ornithology; Retrieved from the Birds of North America Online:
<http://bna.birds.cornell.edu/bna/species/062>