

U.S. Department of the Interior Bureau of Land Management

ENVIRONMENTAL ASSESSMENT (EA NV-040-08-10)
August 26, 2008

NL Ranch (Operator No. 2704612) & Joseph Peacock (Operator No. 2704623) Term Permit Renewals White Rock Allotment (0902)

Location: Ely, Nevada
Applicant/Address:

U.S. Department of the Interior
Bureau of Land Management
Ely District Office
Egan Field Office
Phone: (775) 289-1800
Fax: (775) 289-1910



I. INTRODUCTION

Background Information

This environmental assessment (EA) addresses the impacts to public land resources from a proposal to renew the term grazing permits for NL Ranch and Joseph Peacock on the White Rock Allotment (0902). This EA fulfills the National Environmental Policy Act (NEPA) requirement for site-specific analysis of resource impacts. Both the proposed action and alternatives to the proposed action are considered. This EA also analyzes information to determine whether to prepare an Environmental Impact Statement (EIS) or issue a "Finding of No Significant Impact" (FONSI). A FONSI documents why implementation of the selected action will not result in environmental impacts that significantly affect the quality of the human environment.

This EA is tiered to and incorporates by reference the Ely District Record of Decision and Approved Resource Management Plan (RMP) to manage the public lands administered by the Bureau of Land Management's Ely District Office (August 20, 2008).

Standards and Guidelines for Grazing Administration were developed by the Northeastern Great Basin Resource Advisory Council (RAC) and approved by the Secretary of the Interior on February 12, 1997. Vegetation Guidelines were approved in March 2004, and added as Appendix A. The Standards and Guidelines reflect the stated goals of improving rangeland health while providing for the viability of the livestock industry, all wildlife species, and wild horses and burros in the Northeastern Great Basin Area. Standards are expressions of physical and biological conditions required for sustaining rangelands for multiple uses. Guidelines point to management actions related to livestock grazing for achieving the Standards. A thorough discussion of Standards and Guidelines is presented in BLM Handbook H-4180-1 (Rangeland Health Standards). The Northeast Great Basin RAC Standards and Guidelines are available for public review in the Egan Field Office.

This EA also summarizes information from the associated Standards Determination Document (SDD – Appendix I) that evaluates whether current livestock management practices are conforming to the approved Standards and Guidelines for Rangeland Health for the White Rock Allotment.

The term grazing permits under consideration authorize grazing use within the White Rock Allotment. Specifically, the permits authorize use within four pastures of the allotment – East Water Canyon Native, North Preston Seeding, Four Pipe Native, and South Horse Camp Seeding Pastures. Cattle are the authorized kind of livestock. The permits would be for a period not to exceed ten years. The base property for the NL Ranch permit would be approximately 200 acres of privately owned land near Lund, Nevada. The base property for the Joseph Peacock permit would be approximately 250 acres of privately owned land also near Lund, Nevada. The permit area is situated in the central portion of the Ely District BLM, approximately 20 - 25 miles south of Ely, Nevada (White Pine County - Figures 1 & 2). The permit area occurs within the South Steptoe Valley (161), White River North (160A), and White River Central (160B) Watersheds. The current term permit for NL Ranch on the White Rock Allotment has been issued for the period 10/01/2000 to 09/30/2010. The current forage allocation of 394 cattle AUMs has been in effect since a grazing decision was issued on July 17, 2000. The current term permit for Joseph Peacock on the White Rock Allotment has also been issued for the period 10/01/2000 to 09/30/2010. The current forage allocation of 872 cattle AUMs has also been in effect since the grazing

decision of 2000.

A Grazing Final Multiple Use Decision (FMUD) was issued on July 17, 2000 for the White Rock Allotment. A Management Action Selection Report (MASR) was issued on April 11, 2000. A grazing decision is essentially a document that determines whether changes in livestock management practices are necessary for a defined administrative area. As a result of the grazing decision, 118 AUMs of active cattle use were reinstated back to the NL Ranch permit (from 276 to 394 AUMs). The decision reinstated 262 AUMs to the Joseph Peacock permit (from 610 to 872 AUMs). These AUMs had been in voluntary non-use since a Livestock Management Agreement was reached in June, 1994. Further information on grazing changes implemented by the FMUD of 2000 and an FMUD issued in 1995 are presented in the *Range* portion of the affected environment in this EA.

The permit renewal project proposal for the White Rock Allotment was presented to a BLM interdisciplinary ID team on February 13, 2008. At this meeting the ID team discussed the known resource issues and concerns on the allotment. An evaluation and determination of the rangeland health has been conducted during the permit renewal process. Standards for Rangeland Health have been reviewed and evaluated by the BLM ID team for the White Rock Allotment. Standards for Rangeland Health were also evaluated by a team tour of the East Water Canyon Native Pasture and North Preston Seeding with grazing permittees on August 1, 2008. The interdisciplinary team (consisting of Rangeland Management Specialists, Wildlife Biologist, Weeds Specialist, Soil/Water/Air Specialist, Archaeologist, Wild Horse Specialist, Watershed Specialist, Recreation Specialist, and others) individually or collaboratively utilized several scientifically based documents and official publications to complete the assessment. These documents include the Western White Pine County Soil Survey (USDA-NRCS), Range Site Descriptions (USDA-NRCS 2003), Interpreting Indicators of Rangeland Health (USDI-BLM et al. 2005), Sampling Vegetation Attributes (USDI-BLM et al. 1996), the Nevada Rangeland Monitoring Handbook (USDA-SCS et al. 1984), Utilization Studies and Residual Measurements, and the National Range and Pasture Handbook (USDA NRCS 2003). For a complete list of references, see Appendix IV. The interdisciplinary team also used rangeland monitoring data, electronic data files, maps, professional observations, and photographs to evaluate achievement of the Standards and conformance with the Guidelines.

All scientifically based documents and rangeland monitoring data are available for public inspection at the Ely District Office during business hours.

“Standard Riparian Functioning Condition Checklists” (USDI-BLM 2000) have not been completed for those four pastures of the White Rock Allotment grazed by NL Ranch and Joseph Peacock. There are no public land riparian systems present on these pastures. Cattle use of the allotment is dependent on wells, water on private land, or water provided from water developments that originate from riparian areas at higher ground on other allotments.

Standards Achievement

The rangeland health evaluation of the White Rock Allotment has been based on rangeland monitoring data that is summarized in the Standards Determination Document that is associated with this Term Permit Renewal EA (Appendix I). As a result of the I.D. Team assessment and monitoring data review, it has been determined that one of three Standards for Rangeland Health is being achieved on the White

Rock Allotment. One of three Standards is not being achieved. The third Standard is not applicable. A summary of this finding for the allotment follows:

- | | |
|----------------------------------------|---------------------------------------------------------|
| 1. Upland Sites Standard | (Achieved) |
| 2. Riparian and Wetland Sites Standard | (Not applicable) |
| 3. Habitat Standard | (Not achieved, but making significant progress towards) |

Guidelines Conformance

As a result of the assessment and monitoring data review, it has been determined that current livestock grazing management practices do not conform to all of the Guidelines. This finding is summarized as follows:

Current livestock management practices conform to Guidelines 1.1 and 1.3. Guideline 1.2 is not applicable to the assessment area at this time. Management practices also conform to Guidelines 3.3 and 3.6. Management practices do not conform to Guidelines 3.1 and 3.2. Guidelines 3.4 and 3.5 are not applicable to the assessment area at this time. Refer to Appendix I for the Guidelines Conformance Review on page 36.

Are livestock a contributing factor to not achieving the Standards?

Existing grazing management practices and levels of grazing use on public lands within the White Rock Allotment are significant causal factors or contributing factors in failing to achieve the Habitat Standard and conform to the Guidelines. The non-achievement of this Standard is also caused by other factors or conditions (refer to the Standards Determination Document).

Causal Factors – Habitat Standard

X Livestock are a contributing factor to not achieving the Standard

Livestock are not a contributing factor to not achieving the Standard

X Failure to achieve the Standard is also related to other issues or conditions

Need for the Proposal

The need for the proposal is to fully process the renewal of the term grazing permits for NL Ranch and Joseph Peacock on the White Rock Allotment in accordance with all applicable laws, regulations, and policies with terms and conditions of grazing use that conform to the Standards and Guidelines for Grazing Administration and the other pertinent land use objectives for livestock use. The grazing permit would be renewed for a period not to exceed ten years. Title 43 of the Code of Federal Regulations (CFR) Section 4130.2(a), effective March 24, 1995, states “Grazing permits or leases shall be issued to qualified applicants to authorize use on the public lands and other lands under the administration of the Bureau of Land Management that are designated as available for livestock grazing through land use plans.” NL Ranch and Joseph Peacock meet all of the qualifications to graze livestock on public lands administered by the BLM according to Chapter 1 of BLM Manual H-4110, “Qualifications, Permitted Use, and Allotment Transfers.”

Relationship to Planning

The proposed action is consistent with the Federal, State, and local laws, regulations, policies, and plans to the maximum extent possible. The proposed action would be in conformance with the Ely District Record of Decision and Approved Resource Management Plan (RMP) dated August 2008 and signed August 20, 2008. The proposed action implements livestock management decision LG-5 (p. 87 ROD). The proposed action would also be in conformance with the White Pine County Elk Management Plan approved in 2008. The proposed action would also be consistent with the objectives of the President's Healthy Forests Initiative for Wildfire Prevention and Stronger Communities (August 22, 2002). The project is also consistent with the White Pine County Land Use Plan of May, 1998 (revised July 2007) which states the following:

- "The federal government should continue to make the public rangelands economically and realistically available for livestock grazing, along with the other multiple use objectives." (page 7)

The proposed action has been analyzed within the scope and intent of the following agreements, and is in compliance with the acts, regulations, plans, and executive orders listed below:

- State Protocol Agreement between the Bureau of Land Management, Nevada and the Nevada State Historic preservation Office (1999).
- Migratory Bird treaty Act (1918 as amended) and Executive Order 13186 (1/10/01).
- 1973 Endangered Species Act
- Greater Sage Grouse Conservation Plan for Nevada and Eastern California (June 30, 2004)
- White Pine County Portion (Lincoln/White Pine Planning Area) Sage Grouse Conservation Plan (April 12, 2004).

Relationship to Bureau of Land Management Guidance

The Proposed Action also complies with Nevada BLM Instruction Memorandum (IM) No. NV-2006-0034, which provides guidance to facilitate the preparation of grazing permit renewal Environmental Assessments (EAs) as per the requirement set forth in BLM Washington Office IMs WO 2003-071 and WO 2004-126. It also complies with the requirements outlined in the following policies, handbooks, and manuals:

- Migratory Bird Treaty Act – Interim Management Guidelines (BLM IM 2008-050)
- BLM Manual 8400 – Visual Resources Management
- BLM Handbook 4180-1 (Rangeland Health Standards).

Identification of Issues (Scoping)

In order to identify potential issues, internal scoping was conducted for this permit renewal proposal by resource specialists during a meeting held February 13, 2008 at the Ely BLM Field Office. At that time, the BLM wildlife biologist indicated concerns about the sensitive species greater sage grouse and wondered if current livestock grazing management was compatible with sage grouse objectives for the term permit renewal area. No other significant resource value issues were identified. Meeting participants identified that external consultation would include general public notification via the Ely BLM web page, plus hard copies of the EA mailed directly to interested publics who have requested

one. Also, it was determined that Native American Coordination would need to occur. Additionally, the public has been invited to provide input concerning this action and will continue to be afforded the opportunity to provide comments. Thus far, no issues have been identified as a result of public scoping.

In addition, scoping with the grazing permittees occurred during the team allotment tour of August 1, 2008. Sage grouse management was discussed during the tour as well as deferring grazing use in the East Water Canyon Native Pasture.

II. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

Proposed Action – No Fundamental Changes

In order to meet the need for the proposal, the BLM would fully process and issue a new term grazing permit to NL Ranch (operator 2704612) and Joseph Peacock (operator 2704623) and authorize livestock grazing on four pastures of the White Rock Grazing Allotment. The allotment includes approximately 80,513 public land acres. Those four pastures permitted to both operators include approximately 35,000 public land acres (Figures 1 and 2). The current term permit and allotment information follows:

NL Ranch Grazing Permit:

Allotment Number	Name/Pasture	Livestock Number/Kind	Grazing Period		% Public* Land (Billing)	Type Use	AUMs**	
			Begin	End				
0902	White Rock/ Water Canyon Native	15	Cattle	03/01	– 05/31	100	Active	45
		15	Cattle	10/16	– 01/01	100	Active	38
	North Preston Seeding	25	Cattle	03/01	– 05/31	100	Active	76
		22	Cattle	10/16	– 01/01	100	Active	56
	Four Pipe Native	19	Cattle	06/01	– 10/15	100	Active	86
	South Horse Camp Sdng.	19	Cattle	06/01	– 10/15	100	Active	86
Total								387

Joseph Peacock Grazing Permit:

Allotment Number	Name/Pasture	Livestock Number/Kind	Grazing Period		% Public* Land (Billing)	Type Use	AUMs**
			Begin	End			

0902 White Rock/ Water Canyon Native	29 Cattle	03/01 – 05/31	100	Active	88
	36 Cattle	10/16 – 01/01	100	Active	92
North Preston Seeding	50 Cattle	03/01 – 05/31	100	Active	151
	56 Cattle	10/16 – 01/01	100	Active	144
Four Pipe Native	44 Cattle	06/01 – 10/15	100	Active	198
South Horse Camp Sdng.	44 Cattle	06/01 – 10/15	100	Active	198
Total					871

* The allotment is billed at 100% public land through the Rangeland Administrative Billing System (RAS).

** The active permitted use for NL Ranch totals 394 AUMs. The 387 AUMs presented is a rounded figure based on the livestock numbers and grazing period presented above. The active permitted use for Peacock totals 872 AUMs. The 871 AUMs presented is also a rounded figure.

The allotment summaries as they appear on the current term permits are as follows:

NL Ranch

Allotment	Permitted Use		Total
	Active	Suspended	
0902 White Rock	394	0	394

Joseph Peacock

Allotment	Permitted Use		Total
	Active	Suspended	
0902 White Rock	872	0	872

The proposed action is to renew the grazing permit without any fundamental changes to the terms and conditions of the permit (status quo). The cattle numbers, season of use, and areas of use would remain the same, as listed above. Appendix II lists the specific terms and conditions that would be included as part of the grazing permit. Allowable use levels for key forage species will be included in the new permit. Allowable use levels are a quantification of Land Use Plan vegetative objectives and a clarification of the grazing terms and conditions. The issuance of the term grazing permit would be for a period not to exceed ten years.

Change in Season of Use Alternative

The BLM Interdisciplinary team has proposed a change in season of use alternative for both grazing permits. According to this alternative, the season of use would be deferred until April 1 (4/1) in the East Water Canyon Native Pasture. This would still allow turnout as early as March 15 according to BLM regulations (See Stipulations Common To All Allotments in Appendix II). The season of use would also be changed for the South Horse Camp Seeding. The season would be changed from 6/1 – 10/15 to 7/1 to 10/15. This would still allow turnout as early as June 15. No changes would be made to stocking level (AUMs), area of use, or other seasons of use. The NL Ranch grazing permit would be as follows:

NL Ranch Grazing Permit:

Allotment Number	Name/Pasture	Livestock Number/Kind	Grazing Period		% Public* Land (Billing)	Type Use	AUMs**	
			Begin	End				
0902	White Rock/ Water Canyon Native	22	Cattle	04/01	– 05/31	100	Active	45
		15	Cattle	10/16	– 01/01	100	Active	38
	North Preston Seeding	25	Cattle	03/01	– 05/31	100	Active	76
		22	Cattle	10/16	– 01/01	100	Active	56
	Four Pipe Native	19	Cattle	06/01	– 10/15	100	Active	86
	South Horse Camp Sdng.	24	Cattle	07/01	– 10/15	100	Active	<u>86</u>
Total							387	

The Joseph Peacock grazing permit would be as follows:

Joseph Peacock Grazing Permit:

Allotment Number	Name/Pasture	Livestock Number/Kind	Grazing Period		% Public* Land (Billing)	Type Use	AUMs**	
			Begin	End				
0902	White Rock/ Water Canyon Native	44	Cattle	04/01	– 05/31	100	Active	88
		36	Cattle	10/16	– 01/01	100	Active	92
	North Preston Seeding	50	Cattle	03/01	– 05/31	100	Active	151
		56	Cattle	10/16	– 01/01	100	Active	144
	Four Pipe Native	44	Cattle	06/01	– 10/15	100	Active	198
	South Horse Camp Sdng.	56	Cattle	07/01	– 10/15	100	Active	<u>198</u>
Total							871	

Proposed Action - Monitoring

Rangeland monitoring data would continue to be collected for the White Rock Allotment to determine if the livestock management practices as authorized by this permit renewal are conforming to the Standards and Guidelines for Rangeland Health and other vegetative and multiple use objectives for the allotment. Monitoring and data collection may continue in the form of establishing key areas, measuring utilization levels, ecological condition, vegetation cover, frequency trend, observed apparent trend, actual use reports, climate studies, professional observation, photos, and compliance checks. Monitoring may also continue according to broad watershed assessment of the White River North and White River Central Watersheds.

Monitoring would be the same for the proposed action and the change in season of use alternative.

Prior to authorizing annual grazing use, monitoring would be conducted to determine forage availability, grazing use areas and grazing management practices. Following the grazing period, monitoring would be conducted to determine overall utilization levels and grazing use patterns.

The term permit renewal area would also be monitored on a periodic basis by both BLM and the grazing permittee for noxious weeds or non-native invasive species. Control treatments would be initiated on noxious weed populations that become established in the project area. Further mitigation measures for weeds are identified in the Noxious Weed Risk Assessment in Appendix III.

If a future monitoring evaluation results in a determination that additional changes in grazing management practices are necessary for compliance with the Standards for Rangeland Health, the grazing permit or lease would be reissued subject to revised terms and conditions.

Other Alternatives

Since the proposed action is to renew the grazing permit without any changes (status quo), the proposed action and the “no action alternative” are one in the same. Thus the “no action alternative” will not be further addressed.

Alternatives Considered but Eliminated from Further Analysis - No Grazing Alternative

The No Grazing alternative was addressed in the Ely Resource Management Plan Final Environmental Impact Statement (RMP-FEIS). The EIS analyzed the impacts of grazing through a proposed action and alternatives. Not issuing term grazing permits was considered as an alternative but eliminated from detailed analysis. Since the alternative of no livestock grazing was fully described and analyzed in the Ely RMP-FEIS, the effects of not renewing the term grazing permit are not analyzed in this document. The decision in the RMP was that livestock grazing would be maintained until the allotments that have not been evaluated are evaluated. Therefore 43 CFR 4130.2(a) and 4130.2(e)(3) requires the issuance of grazing permits to qualified applicants that accept the proposed terms and conditions of the permit or lease.

No additional site specific alternatives are necessary for analysis since there are no unresolved conflicts concerning alternative uses of available resources.

III. DESCRIPTION OF THE AFFECTED ENVIRONMENT

General Environmental Setting

The White Rock Allotment encompasses approximately 80,513 public land acres. Those four pastures permitted to both operators include approximately 35,000 public land acres (Figures 1 and 2).

The allotment is situated in the southern portion of South Steptoe Valley and in the northern portion of White River Valley north and east of Lund and Preston, Nevada. The allotment occurs on both sides of the Egan Mountain Range. The East Water Canyon Native Pasture by Lund is fenced on the north,

west, and south sides. The east side borders the Egan Mountain Range. Approximately 800 acres of unfenced private land occur along Water Canyon Creek in the East Water Canyon Native Pasture. The North Preston Seeding is also fenced on the north, west, and south sides. The east side also borders the Egan Mountain Range. The Four Pipe Native Pasture occurs on the east side of the Egan Mountain Range and is entirely fenced on the north, east, and south sides. A partial fence occurs on the west side. The South Horse Camp Seeding is entirely fenced. The allotment is located entirely within White Pine County, Nevada, in the central portion of the Ely BLM District approximately 20 to 30 miles south of Ely, Nevada. Elevations range from about 5,750 feet north of Lund to 8,100 feet on the east side of the Egan Range. The topography of the area is typical of that found in the Basin and Range Physiographic Province of the western United States. The geographic aspect of the allotment occurs on gentle to moderate sloping alluvial fans and relatively flat lands. Average annual precipitation is 8 – 14 inches. Salt desert shrub plant communities occur in the lower portions of the allotment. Sagebrush/perennial grass communities and like communities that contain varying densities of pinyon/juniper trees occur on the benches. Some pinyon/juniper woodland sites and mountain sagebrush, mountain mahogany, or mountain brush sites occur in the allotment at higher elevations.

The White Rock Allotment occurs within the South Steptoe, White River North, and White River Central Watersheds. The allotment also occurs within the Central Nevada Basin and Range (028B) Major Land Resource Area (MLRA).

The grazing permit renewal area does not occur within a Wild Horse Herd Management Area. The grazing permit renewal does not occur within Wilderness or a Wilderness Study Area.

A. Mandatory Items for Consideration

Mandatory Items of the human environment, which must be considered because of requirements specified in statute, regulation, executive order or Bureau policy, are listed in Table 1. Other elements that may be affected by the proposed action are further described in this Environmental Assessment (EA). Those mandatory items to which there is no or negligible effect beyond those disclosed in the RMP/Grazing EIS are also listed in Table 1. These resource values (no or negligible effect) are not considered further in the Environmental Consequences section of this EA, however these resource values (no or negligible effect) may be discussed further in the narrative portion of the Affected Environment section below Table 1 and 2.

Table 1. Mandatory Items for Consideration and Rationale for Detailed Analysis for the Proposed Action or Elimination from Further Consideration

Mandatory Items	No or Negligible Effect beyond those disclosed in the RMP/Grazing EIS	May Effect	Not Present	Rationale
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Air Quality	X			Normal livestock behavior and grazing associated motor vehicle traffic can cause transient dust to become airborne and release combustion exhaust. The effects are transient and contribute negligibly to air quality degradation. Livestock are known to emit air pollutants such as methane, and manure may produce NO _x . However, cattle and manure on the range are so dispersed that this also has a negligible effect on air quality.
Areas of Critical Environmental Concern (ACEC)			X	Resource not present.
Cultural Resources	X			Site Specific review of known Cultural Resources within the renewal area did not reveal any sites of particular concern for impacts from livestock grazing. Typical impacts to Cultural Resources were disclosed in the Ely District RMP.
Environmental Justice	X			No minority or low-income groups would be affected by disproportionately high and adverse health or environmental effects identified in the proposed action area.
Floodplains and Wetlands			X	Resource not present.
Migratory Birds	X			Several species of migratory birds are known to have a distribution that overlaps with the proposed action area. However, the potential for the proposed livestock grazing to negatively affect migratory birds is discounted because of low density of livestock and dispersed grazing within the allotment. Overall management of habitat could improve. Long term population trends of migratory birds should not be affected.
Native American Religious Concerns	X			No concerns have been identified through consultation & coordination.
Noxious Weeds & Invasive Non-Native Species		X		Weeds specialist has identified “could affect”. Surface disturbing activities resulting from the proposed action or alternative may increase the risk of establishment or spread of these species in the term permit renewal area.
Prime or Unique Farmlands			X	Resource not present.
Riparian Areas			X	Public land riparian areas are not present in the permit area.
Federally listed and Proposed Threatened & Endangered Species	X			There are no listed or proposed Threatened and Endangered species currently known to occur within the identified (4) pastures of the White Rock Allotment. Information is gathered from the Nevada Department of Wildlife and Nevada Natural Heritage Program databases.

State listed sensitive and BLM Special Status Species		X		The greater sage grouse (<i>Centrocercus urophasianus</i>) & ferruginous hawk (<i>Buteo regalis</i>) are present in the term permit renewal area. The White River Catseye (<i>Cryptantha welsii</i>) is also present. It is possible that sage grouse nesting & brooding habitat would be impacted by the livestock grazing as proposed in this EA since active sage grouse leks are present in or within a two mile radius of crested wheatgrass seedings that have been used heavily or severely some years, especially during drought years. It is also possible that the current livestock management practices may result in the improvement of habitat for these species. The sage grouse is currently under a status review by the U.S. Fish & Wildlife Service to determine if the species warrants protection under the Endangered Species Act.
Wastes (Hazardous or Solid)			X	No hazardous or solid wastes exist on the permit renewal area, nor would any be introduced.
Water Quality (Surface or Ground Water)	X			No surface water within the area is used for domestic drinking water. Domestic wells are not present. Ground water in a deep aquifer would not be impacted. The allotment does not overlap any municipal or private drinking water watersheds.
Wild Horses and Burros			X	Allotment not in a Wild Horse Herd Management Area.
Wild & Scenic Rivers			X	Resource not present.
Wilderness/WSA			X	Resource not present.

In addition to the Mandatory Items, the BLM considers other resource values and uses that occur on public lands, or issues that may result from the implementation of the proposed action. The potential resource values and uses, or non-critical elements that may be affected are listed in Table 2. A brief rationale for either considering or not considering the element further is provided. The elements that are considered in the EA are described in the Affected Environment (Section 3) and are analyzed in the Environmental Consequences (Section 4).

Table 2. Other Resource Values and Issues, and Rationale for Detailed Analysis for the Proposed Action

Resource or Issue	No or Negligible Effect beyond those disclosed in the RMP/Grazing EIS	Potentially Affected	Rationale

Range/Livestock Grazing/Standards and Guidelines		X	Range and livestock grazing would be affected. The change in season of use alternative would affect the livestock operation. One Standard is not achieved, but significant progress is being made towards achievement.
Vegetation		X	Vegetation could be impacted positively or negatively by the proposed action or change in season alternative
Soils	X		Soils and objectives for soil quality are addressed in the Ely District RMP. There could be positive or negative impacts to soils as a result of the proposed action or the change in season of use alternative.
Wildlife		X	The allotment provides habitat for elk, mule deer, and pronghorn antelope. The allotment receives year long antelope use. Deer use occurs primarily in winter and early spring. Elk use the allotment primarily in fall, winter, and spring. The allotment is within NDOW areas 221 & 222. The allotment also provides habitat for coyotes, rabbits, badgers, bobcats, fox, sagebrush obligate birds, and other small mammals and reptiles, The proposed project or alternative should continue to provide the current level of habitat for the species presently occurring there, or could improve habitat.
Recreation		X	May be affected. Wildlife related recreation could be enhanced
Visual Resources	X		The proposed permit renewal is consistent with Visual resource Management (VRM) Class 2, 3, and 4 objectives for this area.
Social & Economic Values		X	Renewing the permit would have economic impacts to the permittee and the county
Water Quantity		X	Would maintain water quantity for livestock and wildlife

Based on the above two tables, the following resource values have been identified by the BLM interdisciplinary team as resources in the affected environment that need further site specific discussion than that provided in the above two tables:

Mandatory Items - Cultural Resources, Noxious Weeds and Invasive Non-Native Species, and Special Status Species.

Other Resource Values - Range/Livestock/Standards and Guidelines, Vegetation, Soils, Recreation, Social and Economic Values, and Water Quantity.

A discussion of both classes of values follows:

Mandatory Items

Cultural Resources

A Cultural Resources Inventory Needs Assessment has been prepared and signed for this permit renewal. A cultural resources sensitivity map has been generated for the White Rock Allotment showing that cultural resource sensitivity varies from low to medium. Prehistoric cultural resources (habitation/non habitation sites; lithic scatters, projectile points; isolates; camp areas) may be found in areas adjacent to spring sites, ridge tops and nearby hills throughout the Ely District.

All ground disturbing activities that may occur within the term permit renewal area would be subject to all federal and state cultural resources laws and regulations, including the Archaeological Resources Protection Act of 1979 review, Section 106 review, and if needed, State Historic Preservation Office (SHPO) consultation as per BLM Nevada's implementation of the protocol for cultural resources. No ground disturbing activities are currently planned by BLM for the term permit renewal area.

Noxious Weeds and Invasive, Non-Native Species

The Ely District weeds inventory (Weedpoints_20080107) indicates that there are noxious weeds present on public lands in the term permit renewal area of the White Rock Allotment. The following species are found within the boundaries of and along roads and drainages leading to the White Rock Allotment:

<i>Acroptilon repens</i>	Russian knapweed
<i>Carduus nutans</i>	Musk thistle
<i>Centaurea stoebe</i>	Spotted knapweed
<i>Cirsium vulgare</i>	Bull thistle
<i>Hyoscyamus niger</i>	Black henbane
<i>Lepidium draba</i>	Hoary cress
<i>Lepidium latifolium</i>	Tall whitetop
<i>Onopordum acanthium</i>	Scotch thistle
<i>Tamarix spp.</i>	Salt cedar

The invasive annual grass cheatgrass (*Bromus tectorum*) is present in the permit renewal area. Small patches of the invasive species halogeton (*Halogeton glomeratus*) also occur in the allotment, primarily along roadways. The invasive species Russian thistle (*Salsola kali*) also occurs in small scattered populations in the allotment. A noxious weed risk assessment is included as Appendix III to this document, on page 61. The risk assessment indicates a moderate risk (32) for the spread of noxious weeds with continued livestock grazing.

State listed Sensitive and BLM Special Status Species

The White River Allotment is within both the Butte Valley and Cave Valley population management units for greater sage grouse. Eight active leks have been located within the allotment. One of these leks is located within the South Horse Camp Seeding and another is located about 1/3 mile to the north of the seeding. Another active lek is located about 1.5 miles west of the North Preston Seeding. The allotment includes identified summer, winter, yearlong, and nesting/early brood rearing habitat.

Several ferruginous hawk nest sites have been found in juniper trees in the Water Canyon Native Pasture of the White Rock Allotment to the west of the term permit renewal area.

White River Catseye occurs in the allotment as a biennial or short lived perennial forb that is found in dry, open, sparsely vegetated outcrops, with sandy to silty or clay soils and calcareous or carbonate deposits. Such areas are usually knolls or gravelly hills and often provide little preferred forage for livestock.

Given known habitat associations and current conditions, other state or BLM listed Sensitive or Special Status Species may be present within the allotment. Such species may occur as transients or unknown indigenous populations, including, but not limited to burrowing owl, loggerhead shrike, or pygmy rabbit. However, no other special status or sensitive species has been reported within the allotment.

Other Resource Values:

Range/Livestock/Standards and Guidelines

The White Rock Allotment is currently permitted for cattle grazing. Historically, grazing has been a common activity in eastern Nevada since the late 1800s. Both cattle and sheep grazing occurred on this allotment. Cattle use occurred yearlong and sheep use occurred primarily during the winter period. The current permit for cattle use is described above under the **Proposed Action** on page 6. Licensed use records, adjudication records, scientific and popular literature all indicate the area has been grazed heavily since the late 1800s.

Both NL Ranch and Joseph Peacock begin the grazing year by turning out cattle in spring in either the Water Canyon Native Pasture or the North Preston Seeding. At this time they both start irrigating private hay fields. Care is taken on wet productive years that the cows are not turned out too early in the North Preston Seeding, since grass tetany has been a problem there in the past. NL Ranch removes cattle from public lands to private fields for three to four weeks around June, then trails east over the mountain to Steptoe Valley, using the Water Canyon Trail or Sawmill Trail, taking one to two days on the trail. Joseph Peacock trails over the mountain to Steptoe Valley in June, using the Water Canyon Trail (south fork). Both operators then graze the summer and early fall in the Four Pipe Native Pasture and the South Horse Camp Seeding. Both operators then trail back west over the mountain using the same two trails to graze the late fall/early winter in either the North Preston Seeding or the East Water Canyon Native Pasture.

The current forage allocation for the White Rock Allotment is based on range survey work done in the 1960s. Also during the late 1960s, crested wheatgrass seedings were established in the area of the allotment to restore AUMs of grazing that had been reduced as a consequence of actions taken in 1945 and 1965. Grazing agreements were reached with NL Ranch and Joseph Peacock in 1994 that called for a voluntary 30% reduction in active AUMs for a period of three years (1994-1996). A multiple use grazing decision issued June 1995 confirmed the agreements. Another multiple use decision was issued in July of 2000 that restored the voluntary non-use to full active AUMs. The current forage allocation is based on the 2000 decision (see page 6 above). The 2000 decision also created a four pasture grazing system with licensing by pasture as well as seasons of use and stocking levels by pasture. Other terms and conditions of grazing use were implemented according to the decision.

Licensed Use – White Rock Allotment- NL Ranch

Current active permitted use on the White Rock Allotment for NL Ranch is 394 AUMs. Licensing records indicate NL Ranch has activated use on the allotment every year since 1990. From 2000 through 2007 (eight years), licensed livestock use by NL Ranch averaged 395 AUMs and ranged from 462 AUMs in 2005 to 254 AUMs in 2003. Temporary non-renewable use has been authorized for NL Ranch on the crested wheatgrass pastures during favorable years when residual forage has been available. From 2000 through 2007 cattle numbers have varied from 55 to 80 cattle and have averaged about 65 head. NL Ranch normally turns out cattle in spring to the East Water Canyon Native Pasture. The turn out date from 2000 through 2007 varied from April 1 to May 8 and average turn out date was about April 9. In 2008 NL Ranch took total voluntary non-use on the East Water Canyon Native and North Preston Seeding Pastures for the spring grazing period. During a portion of this time NL Ranch leased grazing use from Ernest Gubler, Inc. on other allotments.

Licensed Use – White Rock Allotment- Joseph Peacock Permit

Current active permitted use on the White Rock Allotment for Joseph Peacock is 872 AUMs. Licensing records indicate Joseph Peacock has activated use on the allotment every year since 1990. From 2000 through 2007 (eight years), licensed livestock use by Joseph Peacock averaged 767 AUMs and ranged from 873 AUMs in 2001 to 601 AUMs in 2004. From 2000 through 2007 cattle numbers have varied from 43 to 115 cattle and have averaged about 85 head. Joseph Peacock also normally turns out cattle in spring to the East Water Canyon Native Pasture. The turn out date from 2000 through 2007 varied from March 16 to April 27 and average turn out date was about April 6. In 2008 Joseph Peacock took partial voluntary non-use on the East Water Canyon Native Pasture through grazing agreement and also took partial voluntary non-use on the North Preston Seeding.

The range in turnout date and licensed use indicates that both operators have made some adjustments to livestock management practices in response to drought conditions that have been persistent in eastern Nevada.

The Habitat Standard is not being achieved on the term permit renewal area of the White Rock Allotment, and current livestock grazing is not in conformance with the Guidelines. Current livestock grazing practices are a causal factor in failing to achieve the Habitat Standard (see the Standards Determination Document Appendix I).

Vegetation

The White Rock Allotment occurs within Major Land Resource Area (MLRA) 028B – Central Nevada Basin and Range Area. The rangeland ecological sites within the allotment have been described, classified, and studied by the Natural Resource Conservation Service (NRCS). Vegetation is typical of that found in eastern Nevada. The four primary vegetation types within the allotment are salt desert shrub, black sagebrush, northern desert shrub (big sagebrush types), and pinyon-juniper woodlands. Some mountain brush vegetation that includes mahogany trees and serviceberry occurs on the higher elevation areas. Two fenced crested wheatgrass seedings (North Preston Seeding and South Horse Camp Seeding) occur in the permitted area. The dominant native plants and trees include several species of native sagebrush, big and small rabbitbrush, antelope bitterbrush, winterfat, shadscale, Indian ricegrass, needleandthread grass, bluebunch wheatgrass, bluegrass, basin wildrye, bottlebrush squirreltail, globemallow, utah juniper, singleleaf pinyon, and other native perennial grasses and forbs.

The invasive annual grass cheatgrass is present in portions of the allotment. There are no known sensitive plant species in the allotment.

Soils

The soils in the White Rock Allotment are primarily loamy soils, derived from material eroded from the Egan Range Mountain Block. The soils are primarily alluvial, occurring on the alluvial fans on both sides of the Egans. The allotment occurs primarily on an area dominated by soils on fan piedmonts (General Soil Mapping Unit No. 11 – Palinor-Shabliss-Blimo Association). The allotment also occurs in an area dominated by soils on hills and mountains (General Soil Mapping Unit No. 24 – Cavehill-Hauchee-Hyzen Association and Unit No. 23 – Birchcreek-Segura-Pioche Association). Soil types vary through the allotment. Over 35 Soil Mapping Units (SMUs) have been identified in that portion of the White Rock Allotment permitted to NL Ranch and Joseph Peacock. The four major SMUs in the allotment are SMUs 323, 842,992, and 282. Together these mapping units represent about 35% of the land area of the allotment.

Some soils are duripan soils that have a restrictive layer going to 20” deep. This restrictive layer limits plant rooting depth. The soils are moderately susceptible to wind or water erosion. The soils on the benches and higher elevation sites are generally less susceptible to erosion than the more fragile silts near the valley bottom (derived from lacustrine sediments). Soils in the White Rock Allotment vary in percolation rates, and water holding capacity.

Recreation

The term permit renewal area is generally isolated and undeveloped with no modern recreational facilities. Recreation in this area includes large and small game hunting, wildlife observation and photography, hiking, horse back riding, primitive camping, fossil collection, and off highway vehicle (OHV) exploration.

Social and Economic Values

The farming and ranching life style has been and continues to be important in White Pine County and the State of Nevada. The local economy of White Pine County has been dependent on farming and ranching activity. Taxes generated from agricultural activity benefit the county.

Water Quantity

Water quantity for livestock grazing varies annually according to climatic conditions. Livestock watering in the term permit renewal area generally occurs on wells, a water pipeline development, and on private ground. Water at wells and that provided by the water development has been consistent and reliable from 2000 – 2007. Water wells that are used in conjunction with both grazing permits include the North Preston Seeding Well (2414), the North Group Seeding Well (0612), the Cattle Camp Wash Well (0710), and the Lund Group Well (0924). Water developments in the Four Pipe Native Pasture include the Four Pipes Pipeline (4428) and the Canyon Spring Pipeline (1002). Water provided by Water Canyon Creek on public or private ground has varied with drought conditions and has not always been available, even during the spring grazing period. Very rarely, temporary water from Rowe Creek

is available for spring or fall grazing in the North Preston Seeding. No water hauling was required to be authorized in the renewal area during the 2000 to 2007 grazing period.

IV. ENVIRONMENTAL CONSEQUENCES

The environmental consequences of grazing were analyzed in the Ely District Record of Decision and Approved Resource Management Plan (RMP) of August 20, 2008. The “proposed action” and the “change in season of use alternative” are within the array of options identified for the alternatives and proposed action as analyzed in the RMP. There have been no major changes made associated with the proposed term permit renewal from the rangeland management actions presented in the RMP. The proposed action and alternative are not substantially different than the actions analyzed in the RMP. The following site specific analysis discusses the environmental consequences (impacts) associated with the proposed action and change in season of use alternative.

Since the proposed action is to renew the grazing permit without any fundamental changes (to stocking level, season of use, or areas of use), the proposed action and the “no action alternative” (status quo) are one in the same. Thus there is no need to present the impacts of a “no action alternative.” Cumulative impacts are discussed at the end of this section.

The environmental consequences of the following resources, which have been identified as “mandatory items” have been identified by resource specialists as either potentially affected by the proposed action:

Anticipated Impacts of the Proposed Action - Mandatory Items

1) Noxious Weeds and Invasive, Non-Native Species

Proposed Action

The grazing permit renewal and the resulting livestock management practices could result in an increase in noxious weeds to the area of the permit renewal. Within the term permit renewal area, watering locations and salt block sites (if present) are of particular concern of new weed infestations due to the concentration of livestock around those sites and the amount of ground disturbance associated with that. Grazing use by livestock could cause an increase in invasive plants such as cheatgrass, halogeton, Russian thistle, or mustard, depending on climate, stocking level, timing of grazing, presence or absence of fire, and other factors. The permit renewal area would be monitored on a regular basis by both BLM and the grazing permittee for noxious weeds or invasive nonnative species. Control treatments would be initiated on noxious weed populations that become established in the project area.

Change in Season Alternative

According to the change in season of use alternative, impacts to noxious weeds and invasive, non-native species would be the same as those listed above.

2) State listed Sensitive and BLM Special Status Species

Proposed Action

Of eight active sage grouse leks located in the White Rock Allotment, four are located within those four pastures of the allotment that compose the term permit renewal area. Licensed use records indicate spring grazing by NL Ranch or Joseph Peacock has not conflicted with sage grouse strutting behavior, however summer grazing in the South Horse Camp Seeding that results in little remaining grass cover or cured residual forage is not achieving land use plan or RAC objectives for sage grouse. Fall grazing in the North Preston Seeding that results in little remaining grass cover is also not achieving these objectives. This problem has been aggravated by persistent drought in eastern Nevada. The BLM also reached agreement with NL Ranch and Joseph Peacock to increase use in the North Preston Seeding during 2007 in order to provide rest for a sagebrush restoration treatment in the East Water Canyon Native Pasture. The grazing permittees have coordinated with the BLM Range Specialist on an annual basis to defer the turnout date in the East Water Canyon Native and North Preston Seeding Pastures in regards to the sage grouse breeding period (see licensed use records p. 15 above).

During normal years or above average production years, the current livestock management practices may result in the improvement of habitat for these species. With limited spring use and good cattle distribution, light grazing pressure in the term permit renewal area may benefit sage grouse that may be present in the area by increasing herbaceous vegetative production and nesting cover. Improved vegetation production and cover has also been shown to increase chick forage and insect production. The proposed action would be in accordance with the White Pine County Portion (Lincoln/White Pine Planning Area) Sage Grouse Conservation Plan (April 12, 2004). The proposed action would not contribute to the need to list any sensitive species as threatened or endangered.

Since ferruginous hawks nest primarily in live juniper trees, livestock are unlikely to directly impact the hawk or their nests. Dispersed grazing at appropriate levels would not be expected to significantly impact the hawk's prey base, nor that of incidental use of other raptors (i.e. flying overhead for hunting). Proper grazing management could improve grass and forb vegetative communities, thereby improving habitat for small prey species.

Given the areas that the White River Catseye is found and that the species appears to tolerate or even increase with transient disturbances within its habitat, such as animal trampling, it is unlikely the proposed grazing would negatively impact the species.

Change in Season Alternative

Impacts to State listed Sensitive and BLM Special Status Species are expected to be similar to those listed above for the proposed action. By moving back the turnout date in the South Horse Camp Seeding, there would be less potential for cows to disrupt sage grouse nesting and early brooding behavior. Deferring turnout until April 1 in the East Water Canyon Native Pasture could benefit sage grouse by limiting cattle activity during the sage grouse breeding period. Monitoring data is limited on active sage grouse strutting (breeding) behavior in this pasture.

Anticipated Impacts of the Proposed Action - Other Resource Values

The following resource values have also been identified by resource specialists as potentially affected by the proposed action:

1. Range/Livestock/Standards and Guidelines

Proposed Action

According to the proposed action, grazing would continue as it has in the past. Livestock management practices would remain the same or similar to what they have been. The Four Pipe Native Pasture and South Horse Camp Seeding would receive rest during the critical spring growing period. A deferred rotational pasture grazing system would continue. Cattle distribution would continue to be influenced by the location of wells, a water development, and Water Canyon Creek. The grazing permittees would continue to be offered the flexibility of grazing the East Water Canyon Native Pasture during March, which could allow the targeted grazing of cheatgrass during March. The permittees would also continue to be offered the flexibility of grazing the South Horse Camp Seeding during June. The permittees would be expected to continue working with BLM on an annual basis to take partial voluntary non-use during drought years, to defer spring use, to rest areas that have exceeded allowable use levels and use areas that have been determined are ready to be grazed. Utilization of key forage plants is expected to be moderate or less, with occasional heavy grazing in the crested wheatgrass seedings during drought years. Moderate use stimulates new plant growth. It is possible that local areas of over-utilization of key forage plants could result from use by cattle, or combined use by cattle and elk. This possibility would be monitored and actions taken to correct the problem. Utilization of cheatgrass would help prevent wildfire. Wildfire in this allotment would lead to a loss of native plants, an increase in cheatgrass, and a return to a frequent cheatgrass fire cycle that destroys wildlife habitat. The proposed action would achieve or continue to make progress towards achieving and conforming to the Standards and Guidelines for Rangeland Health and the other multiple use resource objectives for the allotment.

Change in Season Alternative

According to the change in season of use alternative, grazing would also continue much as it has in the past. The Four Pipe Native Pasture and South Horse Camp Seeding would receive rest during the critical spring growing period. The East Water Canyon Native Pasture would receive additional rest during the critical spring growing period some years. Use in the South Horse Camp Seeding would be deferred until July 1. However there would be less flexibility offered to the grazing permittees to schedule the timing of grazing. It would no longer be possible to graze early, then leave the pasture. It would not be possible to graze cheatgrass prior to March 15.

2. Vegetation

Proposed Action

The term permit renewal would be expected to lead to vegetation impacts such as maintaining current vegetation composition and cover, maintaining vegetation production and forage availability, stimulation of new growth, the grazing of older age class wolfy native perennial grasses or crested wheatgrass, and stabilization of rangeland condition and trend. Deferred cattle use along with distribution of grazing would allow native plants to produce seed. During many recent drought years native plants have not produced much seed. Disturbed areas of vegetation of approximately ½ to one acre could develop around wells. These areas are already degraded, as shown by photographs. Vegetation would be crushed and potentially disappear from these locations.

The term permit renewal would be expected to help prevent catastrophic wildfire and the beginning of a frequent cheatgrass fire cycle. By maintaining grazing on the allotment the cheatgrass fine fuels would be held to manageable levels.

Cattle grazing on native range and in the crested wheatgrass seedings is expected to be equal to or less than the allowable use levels for key forage plants as identified in the terms and conditions of the proposed permit renewal. The allowable use levels are based on the land use plan, the Nevada Rangeland Monitoring Handbook, and the grazing decision for the White Rock Allotment dated July 17, 2000. Local areas of heavy use could result, especially during drought years. Actions would be taken to correct this result. General range science recognizes moderate levels of grazing as beneficial to healthy rangelands.

Change in Season Alternative

Impacts to vegetation would be similar to those listed above for the change in season of use alternative. There could be a benefit to the native grass and forb component in the east Water Canyon Native Pasture by providing for additional rest during the spring critical growth period, depending on annual climatic conditions. This could result in increased vegetation production and litter. This would benefit the herbaceous understory in black sagebrush range, but would have little benefit to the monotypic Wyoming sage range where the shrubs are overly dominant. There would be less opportunity to target the new growth of cheatgrass for grazing under this alternative. There could be minor increases in vegetation production and cover in the South Horse Camp Seeding as a result of this alternative. During some years precipitation occurring during June can contribute to vegetation production.

General impacts to vegetation have also been addressed in the Ely District RMP.

3. Soils

Proposed Action

The impacts to soils are expected to be minimal from implementing the proposed action. However the permit renewal action could result in positive or negative impacts to soils. Generally, grazing would not be concentrated in any one location, but would be dispersed and distributed throughout the native pastures and crested wheatgrass seedings. Maintenance of vegetation production and appropriate vegetation canopy and ground cover would tend to maintain good soil/water relations. Soils would maintain structure, water holding capacity, and percolation characteristics. Wind or water erosion would be expected to be minimal. There would be minimal soil disturbance and compaction to the soils during the critical growing period in the Four Pipe Native Pasture and South Horse Camp Seeding. There could be soil disturbance and compaction to the soils in the East Water Canyon Native Pasture due to hoof action during the critical spring growth period, generally March through May. This could vary with annual climatic conditions. There could be some effects to soil structure, water holding capacity, and percolation characteristics. This would lead to less wind or water erosion. Disturbed, compacted areas of soil of approximately 1/4 acre or less could develop near waters in the allotment or other areas where cattle or cattle and elk concentrate over time. These areas would be monitored and actions taken to correct the problem.

General impacts to soils have also been addressed in the Ely District RMP.

Change in Season Alternative

Impacts to soils under the change in season alternative would be similar to those listed above for the proposed action. By deferring turnout in the East Water Canyon Native Pasture until April 1, there could be less soil disturbance and compaction through hoof action during the critical growth period, depending on annual climatic conditions. If soils are moist or wet later in the growing season, there could be increased disturbance and compaction through hoof action as a result of this alternative.

4. Wildlife

Proposed Action

The project, as proposed, should continue to provide the current level of habitat for the species presently occurring there. Wildlife habitat would be expected to be maintained or enhanced by the quantity and availability of forage and cover resulting from good cattle distribution. To the extent that moderate livestock grazing stimulates new plant growth, that growth will be available for wildlife. The habitat for sagebrush obligate species such as songbirds would not change. Water availability would continue for wildlife at water developments maintained by the permit. Because water would not be provided year-round at water locations, some stress may result to localized wildlife populations when the water is shut off. Some wildlife drownings could occur even though wildlife escape ramps would be placed in the troughs.

Change in Season Alternative

Impacts to wildlife would be expected to be the same as those listed above for the proposed action. Elk may increase use in the South Horse Camp Seeding somewhat in June if cattle are not present in the seeding.

General impacts to wildlife were also addressed in the Ely District RMP.

5. Recreation

Proposed Action

There would be minimal impacts to existing recreational activities as a result of the term permit renewal. To the extent that wildlife populations benefit, wildlife-related recreation such as hunting, wildlife viewing, antler collection, and photography would be enhanced. The permit renewal is not expected to lead to increased off-highway vehicle (OHV) use in the area.

Change in Season Alternative

Impacts to recreational activities would be expected to be the same as those listed above for the proposed action.

6. Social and Economic Values

Proposed Action

Lifestyles of local residents would not be impacted. The farming and ranching life style would continue in White Pine County. Taxes generated from the agricultural activity associated with the proposed action would continue to benefit the county. The proposed term permit renewal would provide economic benefits for the livestock permittee in this area by maintaining the grazing permit and by maintaining the economic stability and efficiency of their overall operation. The proposed permit renewal would facilitate livestock management.

Change in Season Alternative

Impacts to social and economic values would be expected to be the similar to those listed above for the proposed action. There could be a minor loss in economic value to the grazing permittees according to this alternative by providing less flexibility during the spring grazing period.

General impacts to social and economic values have also been addressed in the Ely District RMP.

7. Water Quantity

Proposed Action

Water quantity varies according to climatic conditions. Implementing the term permit renewal action would generally maintain water quantity and availability for livestock and wildlife, or any other resource value in the allotment. Generally grazing occurs in association with water wells, water pipeline developments, and on private ground and does not have to be hauled to tanks and troughs.

Change in Season Alternative

Impacts to water quantity would be the same as for the proposed action.

Cumulative Impacts

The purpose of the cumulative analysis in the EA is to evaluate the significance of the Proposed Action's contributions to cumulative impacts. A cumulative impact is defined under federal regulations as follows:

Cumulative impacts are impacts to the environment or resource values that result from the incremental or combined impact of the Proposed Action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively important actions taking place over a period of time (40 CFR 1508.7).

According to the 1994 BLM Handbook "Guidelines for Assessing and Documenting Cumulative Impacts," the cumulative analysis can be focused on those issues and resource values identified during scoping that are of major importance. Sage grouse have been identified during scoping as an important resource value. No other issues or resource values of major importance were identified during the EA scoping period. However, since the scoping period the Southern Nevada Water Authority Groundwater

Development Project has also been identified as an issue of major importance. This issue is discussed below. A general discussion of past, present, and reasonably foreseeable future actions is also presented.

Past Actions

There have been limited previous actions occurring in the project area. Historical mineral mining has occurred on the east side of Ward Mountain, a few miles northwest of the Four Pipe Native Pasture. There has been no historical oil or gas production and minimal oil exploration in the area. There is one reclaimed oil exploration pad in the East Water Canyon Native Pasture. Woodcutting and pinyon nut gathering have been minimal. Hunting, trapping, wildlife viewing, and other recreational activities including OHV use have been common in the area, in part due to the geographic position of the allotment near Lund and Ely, Nevada. Small two track roads associated with these activities occur on the landscape. Wildfires have not been frequent or catastrophic. The Jakes Fire (K-212) of 2001 burned approximately 50 acres within the North Preston Seeding. That portion of the fire in the seeding was not fenced or seeded. Wildlife use, particularly elk use, has been common in the area, but has not fundamentally altered the plant communities. Livestock grazing has been intensive historically and together with climate, drought, lack of wildfire, road establishment, and/or other factors, may be a contributing factor to the current dominance of shrubs and the presence of invasive plant species. Allotment boundary fences have been constructed to improve livestock management and provide for improved administration of rangelands. Several wells and two water pipeline developments have been constructed over the years. Rangeland monitoring has been a common activity in the area.

In the fall of 2006, the Bureau of Land Management conducted a fuels reduction and sagebrush restoration vegetation treatment project in Wyoming sagebrush rangelands in the East Water Canyon Native Pasture of the White Rock Allotment. The purpose and need for the project was to restore watershed and rangeland health in sagebrush habitats (CX No. NV-040-03-076). Objectives were to improve vegetation composition, cover, production, and vigor. Objectives were also to restore sage grouse and other wildlife habitat, and promote the ecological process of natural fire in the sagebrush ecosystem.

Approximately 620 acres of identified public lands within the allotment were treated mechanically using a dixie harrow to treat sagebrush range. Approximately 80 acres were prescribed burned. Both treated areas were seeded with an appropriate seed mix. The treatment was not fenced. Grazing agreements were reached with both Norris Hendrix and Russel Peacock to rest the treatment and make grazing use in other use areas of the allotment to allow for herbaceous plant germination and seedling establishment.

A hard rock mineral exploration project was completed in September, 2007 to the north of the North Preston Seeding. The "South Ely Project" (N83622) covered approximately one acre and occurred in the Dark Peak Allotment. Two of five test holes were bored and sampled. Results were negative. Approximately 0.25 miles of new two track road were constructed for the project and approximately 1.00 miles of existing road was improved. The project area is believed to be reclaimed by contouring and seeding. One of the exploratory holes was drilled in Rowe Canyon, at the north border of the North Preston Seeding.

Present Actions

Current activities or projects occurring in the project area are very limited. There is no oil and gas exploration, or wind energy testing. There is no current mineral mining. Woodcutting, pinyon nut gathering, and trapping are minimal. OHV use is common in the area and is commonly associated with hunting and antler hunting. Other recreational activity such as hiking, back packing, primitive camping, bird watching, horseback riding, and similar activities are minimal. There is common use of the small two track roads in the area. Other than the Jakes Fire of 2001 (K212), there have been no recent wildfires. Current livestock grazing and wildlife use are not intensive in the area. According to signed agreement, livestock grazing has been shifted to other pastures of the White Rock Allotment to give the East Water Canyon Native Pasture a rest that allows the sagebrush restoration treatment to recover. There are no current gravel operations. The permitted area continues to be monitored to determine if grazing management practices are meeting the healthy rangelands, watershed, and vegetative objectives for the allotment.

Reasonably Foreseeable Future Actions

It is reasonable to expect that the grazing permit as proposed by this EA would become active and cattle would be permitted to graze the White Rock Allotment. Rangeland monitoring is expected to continue in about the same manner and scope as it has in the past. Monitoring would continue to evaluate the ecological sites to determine if Rangeland Health Standards and other vegetative objectives are being achieved. It is expected that vegetative objectives will eventually be achieved on the sagebrush restoration project in the Water Canyon Native Pasture, in which case cattle grazing will resume in that area. The BLM interdisciplinary/permittee tour of August 1, 2008 concluded that recovery of the Dixie harrow treatment and prescribed burn is proceeding very slowly, due to two drought years and hot dry conditions following the treatments. OHV use is expected to continue to be a common use in the area, particularly associated with antler hunting.

Dozens of grazing term permit renewals are expected to be completed each year through 2009 and during subsequent years in the Ely District BLM.

Southern Nevada Water Authority (SNWA) has applied to the BLM for rights-of-way to construct and operate a groundwater development project. The Clark, Lincoln, and White Pine Counties Groundwater Development Project is currently undergoing environmental analysis and is expected to be operational by 2014. SNWA has applied for water in the Cave Valley Hydrographic Basin, which occurs in both White Pine and Lincoln Counties. Groundwater development maps indicate a potential water exploratory area within this basin that occurs from 20 to 30 miles south of the permitted grazing area. SNWA has also applied for water in the Spring Valley Hydrographic Basin, which also occurs in both White Pine and Lincoln Counties. Maps indicate a potential water exploratory area that occurs from 10 to 15 miles east of the grazing area.

The number and exact location of water wells and associated pipelines and infrastructure is not known at this time. The scientific community and many individuals have speculated that the groundwater development could lead to drying of the earth surface and a consequent change or loss to the vegetation resource. Riparian systems including streams, springs, and seeps with riparian vegetation could also dry up. This would have a direct impact on livestock grazing, soils, vegetation, and wildlife in the allotment.

Outside of the SNWA project, no other public lands actions are planned for the project area in the near future. There are no anticipated increases in mining, oil & gas development, wind energy testing, woodcutting, pinyon nut gathering, OHV use, hunting, trapping, recreational camping or hiking, horse back riding, or fossil collection in the area in the reasonably foreseeable future.

The Ely District Record of Decision and Approved Resource Management Plan (RMP) to manage the public lands administered by the Bureau of Land Management's Ely District Office was signed on August 20, 2008. According to the new RMP, resource management would occur on a watershed basis. The area of the proposed action occurs within the South Steptoe Valley and White River Watersheds. Watershed assessment of the South Steptoe Valley Watershed is complete. Assessment of the White River Watershed is expected to be accomplished by BLM within the next ten years. These assessments will determine if further changes in grazing management practices are needed to conform to the Standards and Guidelines for Rangeland Health. The assessments may also recommend sagebrush restoration treatments or other vegetative treatments designed to maintain or improve ecological health.

Cumulative Impacts Conclusion

No cumulative impacts of major concern are anticipated in the near future to resource values as a result of the proposed project in combination with any other past, current, or reasonably foreseeable future projects or activities. There should be no noticeable overall changes to the affected environment. Implementation of the proposed action would continue to achieve or make progress towards achieving and conform to Rangeland Health Standards. Local areas of heavy use of key forage species could result from cattle use or combined use by cattle and elk. If this is the case some soil erosion could occur, and optimum habitat for sage grouse nesting and early brood rearing would not be maintained. This situation would continue to be monitored and actions taken to correct the problems. As the SNWA groundwater project gets underway, rangeland monitoring of the ecological sites is expected to intensify to determine if project development and aquifer pumping events have an effect on resource values in the area.

V. PROPOSED MITIGATING MEASURES

Appropriate mitigation has been included as part of the proposed action (mitigation measures for weeds are identified in the Noxious Weed Risk Assessment in Appendix 3). The terms and conditions (Appendix II) of the term grazing permit would mitigate anticipated impacts. No additional mitigating measures are proposed based on this environmental analysis.

VI. SUGGESTED MONITORING

Appropriate monitoring has been included in the proposed action. No additional monitoring has been suggested by the BLM interdisciplinary team, the grazing permittees, or the interested public at this time.

VII. CONSULTATION AND COORDINATION

Public Interest and Record of Contacts

There is a general public interest in the proper grazing management of public lands. NL Ranch and Russel Peacock have a strong interest in this grazing permit renewal.

On February 12, 2008 the NL Ranch and Joseph Peacock Term Permit Renewal proposals were presented to a Tribal coordination meeting at the Ely BLM Field Office. No concerns were identified during this meeting. There were no questions or comments regarding the proposal from the Tribal participants. On February 13, 2008 the project was presented to the Ely BLM internal scoping team and the sage grouse issue was identified.

A scoping letter was mailed to each grazing permittee regarding the permit renewal action on February 28, 2008, requesting comments by March 14, 2008. Comments were received from Russel Peacock concerning this letter. A project summary of this term permit renewal was posted on the BLM website on April 3, 2008. No comments have been received to date regarding the posting.

This preliminary EA will be posted for a fifteen day public review and comment period on the Ely BLM external website. A hard copy of the EA will also be mailed to those interested publics who have requested it, and who have expressed an interest in range management actions on the White Rock Allotment. Changes in the EA based upon public input will be made as appropriate.

Interested publics will again be notified by mail or e-mail when the final EA is completed and the Decision Record/Finding of No Significant Impact (DR/FONSI) is signed. These documents will also be mailed to interested publics that have requested a hard copy. The signed DR/FONSI initiates a 15 day protest period and a 30 day appeal period.

Before including addresses, phone numbers, e-mail addresses, or other personal identifying information in comments, you should be aware that the entire comment – including personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

The Ely District Office mails an annual Consultation, Cooperation, and Coordination (CCC) Letter to individuals and organizations that have expressed an interest in rangeland management related actions. Those receiving the annual CCC Letter have the opportunity to request from the Field Office more information regarding specific actions. Those requesting notification of range improvement actions are requested to respond if they want to receive a copy of the final EA and signed Decision Record/Finding of No Significant Impact. The following individuals and organizations, who were sent the annual CCC letter in January 2007 or January 2008, have requested additional information regarding rangeland related actions or programs within the White Rock Allotment:

Steven Carter
Kena and Pat Gloeckner
Holland & Hart LLP
Rob Mrowka
Nevada Cattlemen's Association
Russel Peacock
John McLain, Resource Concepts, Inc.
SNWA Environmental Resources Division

SNWA Deputy Counsel
SNWA Ranch Manager
Cindy MacDonald
Sustainable Grazing Coalition
Laurel Marshall
Steve Foree, Nevada Division of Wildlife
Nevada State Clearinghouse
Western Watersheds Project, Katie Fite

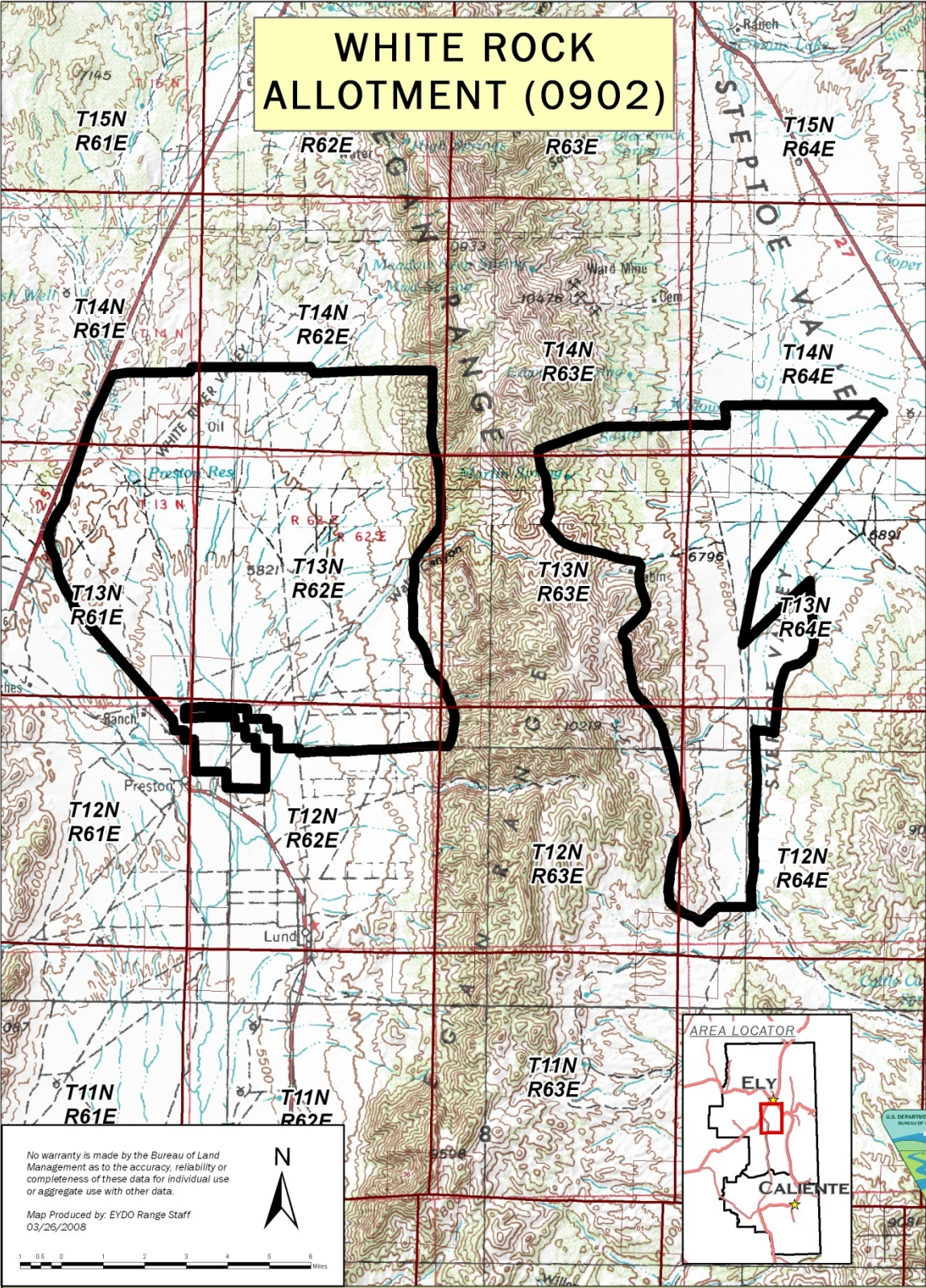
Record of Personal Consultation and Coordination

Norris Hendrix, NL Ranch
Russel Peacock
Jeff Gardner
Gary Sprouse

B. Internal District Review

Dave Jacobson	Wilderness
Kalem Lenard	Recreation, Visual Resources
Mark Lowrie	Rangeland Resources/ Environmental Coordination/ Wildlife
Bonnie Million	Noxious & Non-native Invasive Weeds
Elvis Wall	Native American Religious Concerns
Sheri Wysong, Gina Jones	Environmental Coordination
Deborah Koziol, Paul Podborny	Wildlife/T&E Species/Riparian/Migratory Birds
Lorie Leshar	Cultural Resources
Melanie Peterson	Hazardous and Solid Wastes
Kari Harrison	Soil/Water/Air
Gary Medlyn	Watershed Assessment
Chris Mayer	Environmental Coordination/Range
Craig Hoover	Range

WHITE ROCK ALLOTMENT (0902)



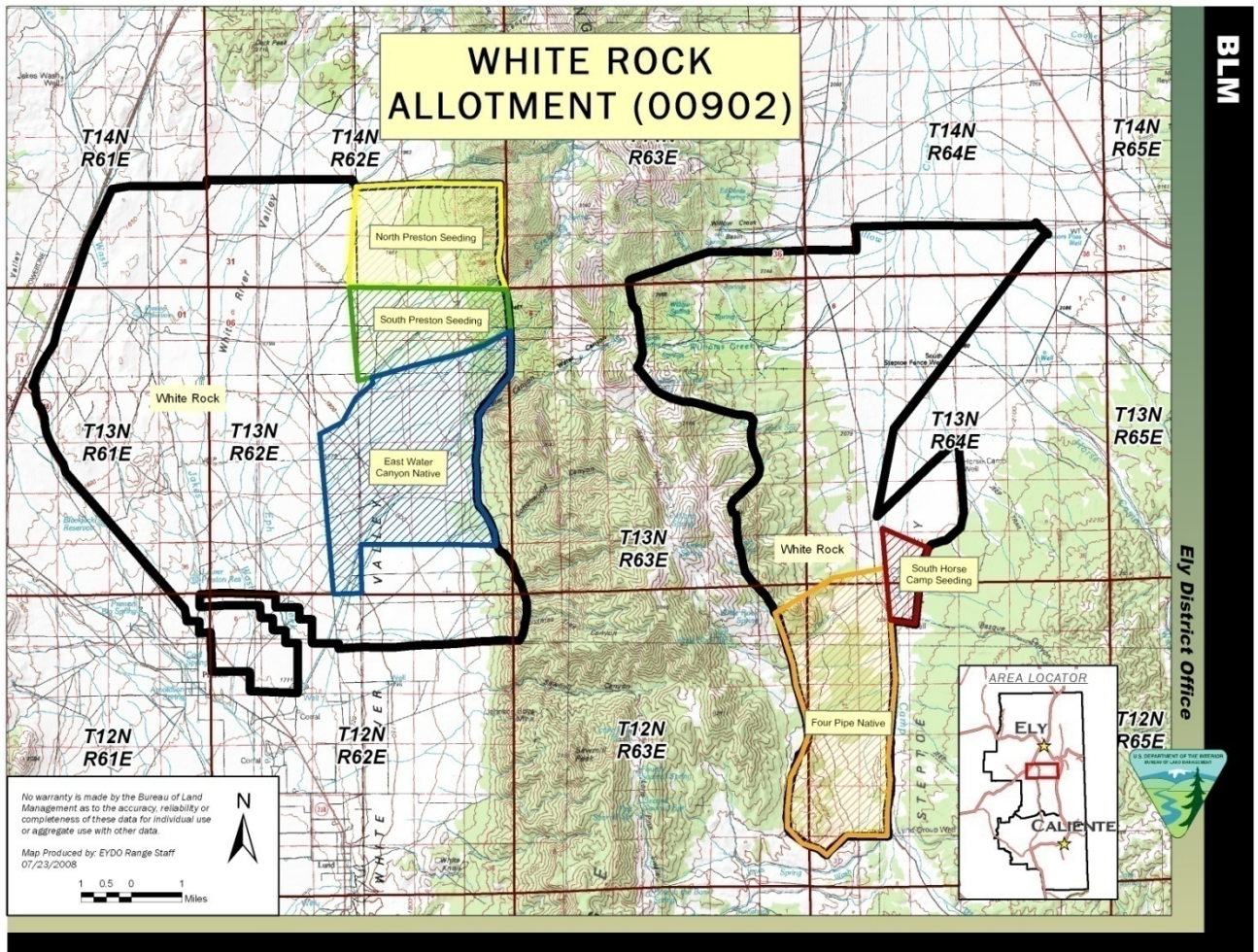
BLM

Ely District Office

No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual use or aggregate use with other data.

Map Produced by: EYDO Range Staff
03/26/2008





***STANDARDS DETERMINATION DOCUMENT
NL Ranch and Joseph Peacock Term Permit Renewals
White Rock Allotment (0902)***

Standards and Guidelines Assessment

Standards and Guidelines for Grazing Administration were developed by the Northeastern Great Basin Area Resource Advisory Council (RAC) and approved by the Secretary of the Interior on February 12, 1997. Standards and Guidelines reflect the stated goals of improving rangeland health while providing for the viability of the livestock industry, all wildlife species and wild horses and burros in the Northeastern Great Basin Area. Standards are expressions of physical and biological conditions required for sustaining rangelands for multiple uses. Guidelines point to management actions related to livestock grazing for achieving the Standards.

This Standards Determination Document (SDD) evaluates and assesses livestock grazing management achievement of the Standards and conformance to the Guidelines for the White Rock Allotment (0902), in the Ely District BLM. This SDD evaluates rangeland health. This document does not evaluate or assess achievement of the Wild Horse and Burro or Off Highway Vehicle Standards or conformance to the respective Guidelines. The White Rock Allotment encompasses approximately 80,513 public land acres and is the permitted grazing allotment for the NL Ranch (Operator No. 2704612) and Joseph Peacock (Operator No. 2704623) term permit renewals. Those four pastures of the allotment permitted to NL Ranch and Joseph Peacock (East Water Canyon Native, North Preston Seeding, South 4 Pipe Native, and South Horse Camp Seeding) together encompass approximately 35,000 acres. The White Rock Allotment has been classified by Land Use Planning Documents as a category “I” (improve) allotment.

The permit renewal project proposal for the White Rock Allotment was presented to a BLM interdisciplinary team on February 13, 2008. At this meeting the ID team discussed the known resource issues and concerns on the allotment. An assessment of the rangeland health has been conducted during the permit renewal process. Standards for Rangeland health were also evaluated by a BLM interdisciplinary team that toured the Water Canyon Native Pasture and the North Preston Seeding with the grazing permittees on August 1, 2008. The interdisciplinary team (consisting of Rangeland Management Specialists, Wildlife Biologist, Weeds Specialist, Archaeologists, Watershed Specialist, Wilderness Specialist, Soil/Water/Air Specialist, and others) utilized several scientifically based documents and official publications to complete the assessment. These documents include the Western White Pine County Soil Survey (USDA-SCS), Ecological Site Descriptions (USDA-SCS 2003), Interpreting Indicators of Rangeland Health (USDI-BLM et al. 2006), Sampling Vegetation Attributes (USDI-BLM et al. 1996), the Nevada Rangeland Monitoring Handbook (USDA-SCS et al. 1984), Utilization Studies and Residual Measurements, and The National Range and Pasture Handbook (USDA NRCS 2003). The interdisciplinary team also used rangeland monitoring data, electronic data files, professional observations, and photographs to evaluate rangeland health and assess achievement of the Standards and conformance to the Guidelines. A complete list of references is included as an appendix to this SDD.

Rangeland monitoring is conducted at key areas and representative study sites in the term permit

renewal area. The key areas and study sites have been selected based on accessibility, soil mapping units (SMU), representative ecological (range) sites, livestock use patterns, and permittee input. The term permit renewal area has been monitored for vegetation condition and rangeland health periodically since the 1960s. The primary evaluation period for this Standards Determination Document is considered to be from 2000 through 2007. "Current livestock grazing management practices" are considered to be those practices implemented during this period. A small amount of data prior to 2000 is also considered in this SDD. All scientifically based documents and rangeland monitoring data are available for public inspection at the Ely District Office during business hours.

PART 1. STANDARD CONFORMANCE REVIEW

Standard # 1. Upland Sites

Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate and land form.

Soils indicators:

- ❖ Canopy and ground cover, including litter, live vegetation and rock, appropriate to the potential of the site.

Determination:

X Achieving the Standard

- Not achieving the Standard, but making significant progress towards
- Not achieving the Standard, not making significant progress towards

Guidelines Conformance:

X In conformance with the Guidelines (See Part 3. Guideline Conformance Review – p. 36)

- Not in conformance with the Guidelines

Conclusion:

Standard achieved. Vegetation cover studies, ecological condition studies, utilization studies, licensed use records, photographs, and professional observations indicate the majority of that portion of the White Rock Allotment permitted to NL Ranch and Joseph Peacock (two native pastures and two crested wheatgrass seedings) is achieving the Upland Sites Standard. The amount of canopy and ground cover, including litter, live vegetation, and rock, are appropriate to ecological site potential in native range. (See line intercept vegetation cover studies on page 41). Utilization levels of key forage plants have varied during the evaluation period. Utilization has generally been in conformance with the Guidelines for Rangeland Health and is within the range that scientific literature and experience indicates should allow for ecological site maintenance. Key forage utilization accomplished in both big sagebrush range (028BY094NV and 028BY007NV) and black sagebrush range (028BY011NV) has been generally moderate or less during the assessment period. This promotes litter to stabilize upland sites. Biological crusts are present and there is no indication of excess surface compaction or trampling of soils. This

indicates stable soils where percolation and infiltration are appropriate to ecological site potential. Key Areas are on landform slopes less than 5%. Mild slopes are contributing to stable soil conditions. There are no cheatgrass/annual grass dominant ranges in the allotment.

Key forage utilization accomplished in the crested wheatgrass seedings has varied during the evaluation period. Utilization has been heavy or severe some years. Monitoring data indicates the seedings have recovered well from this use, despite drought conditions. Litter has been periodically abundant to protect soils. Professional observation indicates that crested wheatgrass composes from 50 to 80% by weight of the current year's growth in these seedings. The seedings are not shrub dominant. Native perennial grasses and forbs such as Indian ricegrass, Sandberg's bluegrass, needleandthread grass, globemallow, eriogonum (buckwheat), cryptantha (miner's candle) and globemallow are currently present in the two crested wheatgrass seedings. The east portion of the North Preston Seeding has a good component of native grasses, shrubs, and trees and is forb rich, with many forbs present. A healthy herbaceous component is generally synonymous with healthy soils. The South Horse Camp Seeding is rested each year until after June 1.

However, vegetation composition is inappropriate in the East Water Canyon Native Pasture (one of four pastures in the allotment) to the extent that Key Area WR-04 and Study Site EWC-01 are in a shrub dominant state with a native grass and forb component that is below ecological site potential (see Habitat Standard discussion below). Soil/water relations are optimum when a healthy herbaceous component appropriate to site potential is present. The absence of the more desired native grasses and forb component increases the risk of soil erosion, runoff, and less water infiltration and percolation.

Standard #2. Riparian and Wetland Sites

Riparian and wetland areas exhibit a properly functioning condition and achieve State water quality criteria

This Standard was not evaluated since there are no public land riparian systems present in that portion of the White Rock Allotment permitted to NL Ranch and Joseph Peacock.

Standard #3. Habitat

Habitats exhibit a healthy, productive, and diverse population of native and/or desirable plant species, appropriate to the site characteristics, to provide suitable feed, water, cover and living space for animal species and maintain ecological processes. Habitat conditions meet the life cycle requirements of threatened and endangered species.

Habitat indicators:

- ❖ Vegetation composition (relative abundance of species); vegetation structure (life forms, cover, height, or age classes); vegetation distribution (patchiness, corridors); vegetation productivity; and vegetation nutritional value.

Determination:

Achieving the Standard

X Not achieving the Standard, but making significant progress towards

Not achieving the Standard, not making significant progress towards

Guidelines Conformance:

In conformance with the Guidelines

X Not In conformance with the Guidelines (See Part 3. Guideline Conformance Review – p. 36)

Livestock As A Causal Factor:

X Livestock are a contributing factor to not achieving the Standard

Livestock are not a contributing factor to not achieving the Standard

X Failure to achieve the Standard is also related to other issues or conditions

Conclusion:

The Habitat Standard is not achieved on native range, but significant progress is being made towards achievement. Vegetation cover studies, ecological condition studies, frequency trend studies, photographs, and professional observations indicate portions of the White Rock Allotment native range are not achieving the Habitat Standard, due to inappropriate plant composition at certain key areas. Plant composition is one of five indicators used to determine achievement of this Standard. The shrub composition at Key Area WR-04 and at Study Site EWC-01, both in the East Water Canyon Native Pasture, is too high. The composition of shrubs according to ecological condition studies (EC) at Key Area WR-04 was 87.1% in 1998 and 89.0% in 2007. The shrub composition at Study Site EWC-01 was 96.1% in 2007. The shrub composition according to line intercept vegetation cover studies at Key Area WR-04 was 94.0% in June 2007. The shrub composition according to line intercept at Study Site EWC-01 was 93.8% in June 2007. Shrubs should compose about 45% of the plant community according to the rangeland ecological site description for the shallow calcareous loam site.

Professional observations gathered from several site visits to Wyoming sagebrush rangeland ecological sites in the East Water Canyon Native Pasture also indicate a large portion of these sites to be shrub dominant with an absence of native perennial grasses and forbs in the understory.

Vegetation structure is inappropriate in the term permit renewal area to the extent that certain key areas and other areas are in a shrub dominant state with a native grass and forb component that is below ecological site potential. The shrub life form is over abundant and the native perennial grass life form or forb life form is lacking. However the variation in vegetation structure over the entire term permit renewal area is good, as indicated by topographic diversity and the variation in soil mapping units and rangeland ecological sites.

Range monitoring data (line intercept vegetation cover studies) and professional observation indicate vegetation cover and ground cover are generally adequate to sustain healthy soils and appropriate infiltration and permeability rates (see Upland Sites Standard above). Vegetation height and age classes are diverse. A diversity of native shrubs, grasses, and forbs are generally present in the allotment as indicated by the Native Plant Species Table on page 47 and other range monitoring data gathered for the

term permit renewal area.

Vegetation productivity has been excellent at Key Area WR-03 (2005 & 1998), at Study Site WRA (2005), and at Key Area WR-04 (1998). Productivity has been that expected for the ecological site in an unfavorable year at Key Area WR-04 (2007) and Study Site EWC-01 (2007).

Invasive species are present in the term permit renewal area. The invasive annual grass cheatgrass is present in portions of the allotment, including in the Dixie harrow treatment implemented in the fall of 2006 (cheatgrass production is summarized on page 47). Cheatgrass production varies from year to year. The invasive annuals halogeton, Russian thistle, and some mustards are present, primarily along roadways. Vegetation nutritional value has not been monitored for, however nutritious, palatable plant species are present to meet the physiological requirements of livestock and wildlife, even during the winter period. No concerns have been presented by the grazing permittees, interested publics, or the division of wildlife (NDOW) related to animal condition.

The native plant communities have not crossed a threshold to the “cheatgrass/annual grass infested state” where a significant amount of cheatgrass occurs in a shrub dominated community. The plant communities are still considered somewhat resilient and resistant to invasive annual introduction, especially in the Four Pipe Native pasture. Vegetation treatments should be considered to maintain soils, vegetation resiliency, resistance, watershed health, and native species diversity of portions of the term permit renewal area. The understory herbaceous component needs to be maintained or improved to achieve desired plant community objectives, which would help prevent the spread of halogeton, cheatgrass, or other invasive species into these ecological sites. The North Preston and South Horse Camp Seedings should continue to be monitored to ensure grazing use complies with active permitted use and allowable use levels.

The presence of cheatgrass is a concern in this allotment, primarily in the East Water Canyon Native Pasture. Cheatgrass production varies from year to year. The presence of cheatgrass in native rangeland ecological sites has become a common condition through many allotments and watersheds in the Ely District. The fine fuels of cheatgrass increase the risk for a wildfire disturbance in sagebrush range that would result in elimination of native plants from rangeland ecological sites. Cheatgrass control measures (e.g. herbicide) may be appropriate for this allotment in the future.

In native range, livestock are not a contributing or causal factor in failing to achieve the Habitat Standard. The failure to achieve is more directly related to the other causal factors such as drought, historic heavy livestock grazing from 1870-1990, lack of natural wildfire, climate change, road construction, or other factors. In the crested wheatgrass seedings, livestock are a contributing or causal factor in failing to achieve the Habitat Standard. Some years use levels have exceeded those recommended for sage grouse nesting and early brooding habitat.

Significant progress is being made towards achievement of the Habitat Standard because of the current grazing system that has been implemented according to the past grazing decisions and given the natural capability of the vegetative resources to maintain or improve in the term permit renewal area. The grazing permittees have cooperated with BLM to defer grazing use in the East Water Canyon Native Pasture and have taken some voluntary non-use on their permits in consideration of drought. The current grazing system has been in compliance with allowable use levels for Indian ricegrass in the East

Water Canyon Native Pasture as indicated by monitoring data summarized on pages 43 -45. Use of Indian ricegrass has often been light or less. Vegetation production data and vegetation cover data are also positive for the East Water Canyon Native pasture. Movement towards achieving the Habitat Standard is at an acceptable level of rate and magnitude and is effective as practicable.

PART 2. ARE LIVESTOCK A CONTRIBUTING FACTOR TO NOT MEETING THE STANDARDS?

Grazing related questions as part of the determination process

1. Is it more likely than not that existing grazing management practices or levels of grazing use are significant factors in failing to achieve the Standards or conform with the Guidelines? Yes.
2. Is it more likely than not that existing grazing management needs to be modified to ensure that the Fundamentals of Rangeland Health are met, or making significant progress toward being met? An alternative has been presented in this EA which proposes a change in season of use modification.

Standard # 1. Soils.

No. The Upland Sites Standard for stable soils and hydrologic function is being achieved.

Standard # 2. Riparian and Wetland Sites

No. This Standard is not applicable to the term permit renewal area, since there are no public land riparian systems on this portion of the White Rock Allotment.

Standard # 3. Habitat

Yes. Livestock are a contributing factor to not meeting this Standard for the crested wheatgrass seedings because use levels have exceeded those recommended for healthy sage grouse nesting and early brooding habitat. KFPM utilization studies also show use by cattle or combined use by elk and cattle within the term permit renewal area have often been within allowable use levels. When use has exceeded recommended levels in the crested wheatgrass seedings, it has been observed that vegetation growth and vigor was restored during a drought year.

However, livestock are not a contributing factor to not meeting this Standard on native range. The failure to achieve plant composition goals (ecological site potential) on native range is more directly attributable to drought, historic heavy livestock grazing from 1870-1990, lack of natural wildfire, climate change, road construction, or other factors. A grazing agreement was reached in 1994 that called for a 30% reduction in grazing use for a three year period. A grazing decision was issued in July 2000 that created a four pasture grazing system with licensing by pasture as well as seasons of use and stocking levels by pasture. Other terms and conditions of grazing use were implemented according to the decision. A deferment was created every year for the Four Pipe Native Pasture and the South Horse Camp Seeding. Because of the current grazing system and given the natural capability of the vegetative resources in the term permit renewal area, movement towards achieving the Habitat Standard is at an acceptable level of rate and magnitude and is effective as practicable.

PART 3. GUIDELINE CONFORMANCE REVIEW

GUIDELINES:

- 1.1 Management practices will maintain or promote upland vegetation and other organisms and provide for infiltration and permeability rates, soil moisture storage, and soil stability appropriate to the ecological site within management units.
- 1.2 When grazing practices alone are not likely to restore areas of low infiltration or permeability, land management treatments should be designed and implemented where appropriate.
- 1.3 Management practices are adequate when significant progress is being made toward this Standard.

Current livestock grazing management practices conform with Guidelines 1.1 and 1.3. Guideline 1.2 is not applicable to the assessment area at this time.

GUIDELINES:

- 3.1 Management practices will promote the conservation, restoration, and maintenance of habitat for threatened and endangered species, and other special status species as may be appropriate.
- 3.2 Intensity, frequency, season of use and distribution of grazing use should provide for growth and reproduction of those plant species needed to reach long-term land use plan objectives. Measurements of ecological condition and trend/utilization will be in accordance with techniques identified in the Nevada Rangeland Monitoring Handbook.
- 3.3 Grazing management practices should be planned and implemented to allow for integrated use by domestic livestock, wildlife, and wild horses consistent with land use plan objectives.
- 3.4 Where grazing practices alone are not likely to achieve habitat objectives, land treatments may be designed and implemented as appropriate.
- 3.5 When native plant species adapted to the site are available in sufficient quantities, and it is economically and biologically feasible to establish or increase them to meet management objectives, they will be emphasized over non-native species.
- 3.6 Management practices are adequate when significant progress is being made toward this Standard.

Current livestock grazing management practices conform with Guideline 3.3 and 3.6. Livestock management practices do not conform to Guidelines 3.1 and 3.2. Guidelines 3.4 and 3.5 are not applicable to the assessment area at this time.

PART 4. MANAGEMENT PRACTICES TO CONFORM WITH GUIDELINES AND ACHIEVE STANDARDS

1. Maintain the overall current season of use for cattle grazing for both permits from 03/01 to 01/01.

See Appendix II for the grazing pasture schedules.

2. For the Joseph Peacock grazing permit, cattle will graze the East Water Canyon Native Pasture and the North Preston Seeding for the period 3/1 to 5/31 and for the period 10/16 to 01/01 according to the proposed action or graze the East Water Canyon Native Pasture from 4/1 to 5/31 and 10/16 to 01/01 according to the change in season of use alternative. Annual permitted use will not exceed 180 AUMs on the East Water Canyon Native Pasture and 296 AUMs on the North Preston Seeding. Beginning 6/1, cattle will be turned into the Four Pipe Pasture and the South Horse Camp Seeding according to the proposed action or graze the Four Pipe Native beginning 6/1 and the South Horse Camp Seeding beginning 7/1 according to the change in season of use alternative. Annual permitted use will not exceed 198 AUMs in the Four Pipe Pasture and 198 AUMs in the South Horse Camp Seeding.
3. For the NL Ranch grazing permit, cattle will graze the East Water Canyon Native Pasture and the North Preston Seeding for the period 3/1 to 5/31 and for the period 10/16 to 01/01 according to the proposed action or graze the East Water Canyon Native Pasture from 4/1 to 5/31 and 10/16 to 01/01 according to the change in season of use alternative. Annual permitted use will not exceed 83 AUMs on the East Water Canyon Native Pasture and 133 AUMs on the North Preston Seeding. Beginning 6/1, cattle will be turned into the Four Pipe Pasture and the South Horse Camp Seeding according to the proposed action or graze the Four Pipe Native beginning 6/1 and the South Horse Camp Seeding beginning 7/1 according to the change in season of use alternative.. Annual permitted use will not exceed 89 AUMs in the Four Pipe Pasture and 89 AUMs in South Horse Camp Seeding.
4. Maintain the current stocking level of 394 cattle AUMs for NL Ranch and 872 AUMs for Russel Peacock.
5. An allowable use level will be established as 40% of the current year's growth by weight for spring use (3/1 – 5/31) of the key native species Indian ricegrass in the East Water Canyon Native Pasture of the White Rock Allotment. This is to help achieve sage grouse habitat objectives in the pasture. An allowable use level will be established as 50% of the current year's growth by weight for yearlong use in the East Water Canyon Native Pasture. Utilization will be measured at established key grazing areas or other sites representative of the dominant vegetation in the allotment.
6. An allowable use level will be established as 50% of the current year's growth by weight for summer/fall use (6/1 – 10/15) of the key native species Indian ricegrass and bluebunch wheatgrass in the Four Pipe Native Pasture of the White Rock Allotment. Utilization will be measured at established key grazing areas or other sites representative of the dominant vegetation in the allotment.
7. An allowable use level will be established as 50% of the current year's growth by weight for spring use of crested wheatgrass in the North Preston Seeding. An allowable use level will be established as 60% for use through 01/01.
8. An allowable use level will be established as 60% of the current year's growth by weight for summer/fall use of crested wheatgrass in the South Horse Camp Seeding. Utilization will be measured at established key grazing areas or other sites representative of the dominant vegetation in the use area.
9. Grazing use on the White Rock Allotment shall be in accordance with the final multiple use decision dated July 17, 2000.
10. The permittee(s) will be responsible for continued maintenance of the existing fences and water developments as assigned in the June 1994 agreement.
11. Salt and supplements will be allowed on private ground within ¼ mile of Water Canyon Creek for livestock management purposes.
12. Coordinate with the grazing permittee on an annual basis to implement grazing management practices that (a) maintain sufficient residual vegetation and litter, (b) promote attainment or

maintenance of proper functioning condition, and (c) meet desired plant physiological and reproductive requirements.

Resource Specialists

	Date
Kari Harrison Soil/water/air/floodplains/riparian/wetlands	
Bonnie Million Noxious and invasive non-native species	
Lorie Leshar Cultural resources	
Deborah Koziol Wildlife/migratory birds/special status animals/plants	
Dave Jacobson Wilderness Values/ACEC/Special designations	
Kalem Lenard VRM/recreation	
Melanie Peterson Hazardous and solid wastes	
Elvis Wall Native American religious concerns	
Gina Jones Ecology/environmental coordination	
Gary Medlyn Watershed assessment	

Prepared by:

Mark Lowrie, Rangeland Management Specialist

Date

Reviewed by:

Chris Mayer, Lead Rangeland Management Specialist

Date

I concur:

Jane Peterson
Field Manager
Schell Field Office

Date

Standards Determination Document
Appendix I
Monitoring Data for the White Rock Allotment

Findings: *Monitoring data results describing current resource conditions for Key Areas and study sites in the White Rock Allotment (East Water Canyon Native Pasture, North Preston Seeding, Four Pipe Native Pasture, and South Horse Camp Seeding) as they relate to the above Upland Sites Standard and soils indicators are as follows:*

Major Land Resource Area and Soils

The White Rock Allotment occurs within Major Land Resource Area (MLRA) 028B, the Central Nevada Basin and Range Area. The allotment occurs primarily on an area dominated by soils on fan piedmonts (General Soil Mapping Unit No. 11 – Palinoir-Shabliss-Blimo Association). The allotment also occurs in an area dominated by soils on hills and mountains (General Soil Mapping Unit No. 24 – Cavehill-Hauchee-Hyzen Association and Unit No. 23 – Birchcreek-Segura-Pioche Association). Soil types vary through the allotment. Over 35 Soil Mapping Units (SMUs) have been identified in that portion of the White Rock Allotment permitted to NL Ranch and Joseph Peacock. The four major SMUs in this portion of the allotment are SMUs 323, 842,992, and 282. Together these mapping units represent about 40% of the land area of the allotment. Key Area WR-03 in the South Four Pipe Native Pasture occurs in SMU 323 (Urmafot-Bobs-Palinoir Association). Key Areas WR-04 and EWC-01 in the East Water Canyon Native Pasture occur in SMU 282 (Palinoir very gravelly loam, 2 to 15% slopes). The main rangeland ecological sites associated with the SMUs within that portion of the White Rock Allotment permitted to NL Ranch and Joseph Peacock that are reported on below include the shallow calcareous loam 8-10” ecological site (Ararn/Orhy-Stco4), the calcareous loam 10-14” ecological site (Artr2/Pssp/Achy), and the loamy 10-12” ecological site (Artr2/Acth7/Pssp).

Line Intercept Vegetation Cover Data

Vegetation cover data was gathered in the White Rock Allotment in September and June 2007, June and July 2005. This study is called the Line Intercept Vegetation Cover Study. This cover study measures the foliar (canopy) cover of shrubs and forbs and the basal crown cover of native grasses. Vegetation cover is a linear measure, expressed in feet, along a 100 foot tapeline. Observations are recorded on the cover study form regarding the presence or absence of biological surfaces, whether or not the soils are compacted or trampled by animals, and whether cheatgrass is present. Photographs were taken for most if not all of the cover studies. The results are presented in Table 1 as follows:

Table 1. Line Intercept Vegetation Cover Data - White Rock Allotment

Key Area/ Date	Location	Ecological Site	Measured Vegetation Cover/Litter	Biological Surfaces	Soil Compaction/ Infiltration
WR-04/ 6/28/07	East Water Canyon Native Pasture	028BY011NV*	12.92 feet/ 29.77 feet	Common	No excess trampling or compaction
EWC-01/ 6/28/07	East Water Canyon Native Pasture	028BY011NV*	20.41 feet/ 31.35 feet	Common	No excess trampling or compaction
WR-Z/ 9/05/07	South 4 –Pipe Native Pasture	028BY007NV*	19.82 feet/ 8.00 feet	Little to none	No excess trampling or compaction
WR-SSB 7/05/05	South 4 –Pipe Native Pasture	028BY011NV*	27.45 feet/ 2.91 feet	In place in shrub interspaces	No excess trampling or compaction
WR-SSA 6/08/05	South 4 –Pipe Native Pasture	028BY094NV*	29.20 feet/ 4.99 feet	Very little	No excess trampling or compaction
WR-03 6/08/05	South 4 –Pipe Native Pasture	028BY094NV*	28.96 feet/	Little to none	No excess trampling or compaction
NPS SS1 6/28/07	North Preston Seeding	028BY094NV*	25.82 feet/ 43.49 feet	Black & white crust in interspaces	Area worked by cattle pretty good in spring

* Key Areas WR-04, EWC-01, and study site WR-SSB are located within a shallow calcareous loam 8-10” ecological site (Ararn/Orhy-Stco4).

Key Area WR-03 and study sites WR-SSA and NPS SS1 are located within a Calcareous loam 10-14” ecological site (Artr2/Pssp/Achy).

Study site WR-Z is located within a loamy 10-12” ecological site (Artr2/Acth7/Pssp).

Canopy and Ground Cover Compared to Rangeland Ecological Site Potential

The canopy and ground cover at the upland Key Grazing Areas in the permit renewal area of the White Rock Allotment were found to be similar to the potential of the ecological sites. Key Areas WR-04, EWC-01, and study site WR-SSB are located within a shallow calcareous loam 8-10” ecological site (Ararn/Orhy-Stco4). Black sagebrush, Indian ricegrass and needleandthread dominate the plant community. Approximate ground cover (basal and crown) is 15 to 20 percent. This compares to measured readings of 13% at WR-04, 20% at EWC-01, and 27% at WR-SSB.

Key Area WR-03, study sites WR-SSA and NPS SS1 are located within a calcareous loam 10-14” ecological site (Artr2/Pssp/Achy). Bluebunch wheatgrass, Indian ricegrass, and big sagebrush dominate the plant community. Approximate ground cover (basal and crown) is 20 to 30 percent. This compares to measured readings of 29% at WR-03, 29% at WR-SSA, and 26% at NPS SS1. Study site WR-Z is located within a loamy 10-12” ecological site (Artr2/Acth7/Pssp). Thurber needlegrass, bluebunch wheatgrass, and big sagebrush dominate the plant community. Approximate ground cover (basal and crown) is 20 to 30 percent. This compares to a measured reading of 20% at WR-Z.

The relative percent composition of native plant species according to the line intercept vegetation cover studies for the White Rock Allotment are as follows:

Key Area WR-04

Total cover of all vegetation = 12.92 feet (of 100 feet).

Vegetation composition by percent along the 100 foot transect is as follows:

<u>Species</u>	<u>Percent Composition</u>
Black sagebrush	93.2%
Indian ricegrass	04.5%
Needleandthread	01.2%
Winterfat	00.8%
Perennial forb	00.4%

The following range notes were made on the line intercept cover form:

No excess trampling & compaction. Black biotic crusts are common in the shrub interspaces. Stable gravelly soil. Area not used this past spring. Cheatgrass is present, primarily under shrubs. Cheatgrass < 1% of current annual growth of plant community. Winterfat, prickly pear cactus, small rabbitbrush, and phlox hoodii are present. Mustard stalks from last two years, none this year. Indian ricegrass in fair vigor at best, few seedlings. Black sagebrush low vigor also.

Key Area WR-03

Total cover of all vegetation = 28.96 feet (of 100 feet).

Vegetation composition by percent along the 100 foot transect is as follows:

<u>Species</u>	<u>Percent Composition</u>
Big sagebrush	35.8%
Cryptantha	17.5%
Phlox	12.2%
Bluebunch wheatgrass	07.9%
Bitterbrush	07.3%
Sandberg's bluegrass	04.4%
Nevada bluegrass	03.3%
Small rabbitbrush	02.1%
Perennial forb	02.1%
Indian ricegrass	01.7%
Larkspur	01.5%
Hawksbeard	01.4%
Prickly gilia	01.2%
Bottlebrush squirreltail	01.1%
Astragalus	00.3%
Perennial forb	00.1%

The following range notes were made on the line intercept cover form:

The canopy cover (foliar cover of cryptantha) was measured. Old dry stalks of shrubs were counted as litter. Other species present but not encountered in the transect include: Juniper trees, cheatgrass (very little present), senecio, orange Indian paintbrush, and penstemon. Although little to no mosses and lichens were observed, this is a very stable gravel soil with lots of ground litter, little to no plant pedestalling or erosion. The shrub component + small trees may exceed the appropriate ecological site potential. Beginning of threshold to a woody community. This appears to be due to lack of fire.

Study Site WR-Z

Total cover of all vegetation = 19.82 feet (of 100 feet).

Vegetation composition by percent along the 100 foot transect is as follows:

<u>Species</u>	<u>Percent Composition</u>
Wyoming sagebrush	52.9%
Phlox hoodii	23.7%
Sandberg's bluegrass	08.1%
Bluebunch wheatgrass	04.9%
Cryptantha	04.9%
Indian ricegrass	02.3%
Eriogonum	01.5%
Small rabbitbrush	02.1%
Perennial forb	01.3%
Hawksbeard	00.5%

The following range notes were made on the line intercept cover form:

Stable gravel soils. Slope is 0 -2%. No excess trampling or compaction. Very little biotic crusts is present, even at base of shrubs, yet good herbaceous understory is stabilizing site...no cheatgrass is present, site is resilient & resistant. P/J trees are encroaching.

Key Area EWC-01

Total cover of all vegetation = 20.41 feet (of 100 feet).

Vegetation composition by percent along the 100 foot transect is as follows:

<u>Species</u>	<u>Percent Composition</u>
Black sagebrush	77.8%
Small rabbitbrush	16.0%
Indian ricegrass	03.8%
Prickly gilia	02.45%

The following range notes were made on the line intercept cover form:

Dead stalks counted as litter. No excess compaction or trampling. Cryptogamic crust is common in the shrub interspaces. Cheatgrass and mustard are thick beneath black sagebrush in places. Plants of fair vigor at best. Quite a bit of dead sage stalk on the ground. Good Indian ricegrass component. Request a low number of AUMs during spring use.

Study Site WR-SSA

Total cover of all vegetation = 29.20 feet (of 100 feet).

Vegetation composition by percent along the 100 foot transect is as follows:

<u>Species</u>	<u>Percent Composition</u>
Wyoming sagebrush	34.7%
Phlox hoodii	29.0%
Cryptantha	13.7%
Bluebunch wheatgrass	08.5%
Sandberg's bluegrass	04.4%
Nevada bluegrass	03.9%
Larkspur	01.4%
Indian paintbrush	01.3%
Spiny gilia	01.1%
Erigeron	00.6%

Indian ricegrass	00.5%
Bottlebrush squirreltail	00.3%
Sandwort	00.3%
Penstemon	00.2%

The following range notes were made on the line intercept cover form:

A 1-2” reddish annual forb (semi-succulent) is present in abundance & since it is single stemmed it is not included in transect measurements. Very little biotic crust present, however soils very stable, gravelly, plants not pedestalled. Little evident erosion. No excess trampling or compaction. Cover appears good... appropriate to site potential. Good forb component is present. Other species present in the plant community but not encountered in the transect include: lupine, juniper trees, and aster (daisy).

Study Site WR-SSB

Total cover of all vegetation = 27.45 feet (of 100 feet).

Vegetation composition by percent along the 100 foot transect is as follows:

<u>Species</u>	<u>Percent Composition</u>
Black sagebrush	86.7%
Sandberg’s bluegrass	11.2%
Bottlebrush squirreltail	01.2%
Indian ricegrass	00.7%
Astragalus	00.1%
Cordylanthus kingii	00.1%

The following range notes were made on the line intercept cover form:

Soils stable with desert pavement – like surface. Biotic crusts in place in shrub interspaces. No excess trampling or compaction. Slight to no spring use by elk. Plants present but not encountered in the transect include senecio, haplopappus, sego lily, erigeron. No cheatgrass found. Scattered young juniper trees.

Professional Observations – 6/28/2007

Overall in the term permit renewal area, soils were observed to be stable. Soil surfaces were stabilized by litter and organic matter. Biotic crusts such as lichens and mosses were generally present. Soils were not compacted or trampled, indicating appropriate infiltration and percolation of water. Generally, native plants were not pedestalled, indicating minimal wind or water erosion of topsoil. The invasive non-native annual grass cheatgrass was present in varying densities. The frequency or size of rocks was not recorded.

Forage Utilization – White Rock Allotment – East Water Canyon Native Pasture

On June 6, 2008 three key forage plant method (KFPM) utilization transects were conducted in the East Water Canyon Native Pasture for use on key forage species during the 2008 grazing year to date. Photographs were taken. Use of Indian ricegrass was 10% and use of winterfat was 20% at Key Area WR-04. Use of Indian ricegrass was 25% and use of winterfat was 38% at the utilization cage about 0.4 miles north of WR-04. Near Study Site EWC-01, use of Indian ricegrass was 14%.

Professional observations noted on the utilization forms included the following:

Indian ricegrass inside the use cage at Key Area WR-04 was of good vigor to 9" tall, making seed. Winterfat in cage also of good vigor to 11" tall. Needleand thread grass in the area making seed. Cows did not use the area much this year. At the use cage north of the key area, Indian ricegrass inside the cage was of fair vigor with seedstalks to 7" tall. Near Study Site EWC-01, a photo was taken of a typical ricegrass bunchgrass that showed good vigor for a drought year.

On June 28, 2007 two key forage plant method (KFPM) utilization transects were conducted in the East Water Canyon Native Pasture for use on key forage species during the 2007 grazing year to date. Use of Indian ricegrass was 1% at Key Area WR-04 and 0% at key Area EWC-01. This pasture was rested from cattle grazing use during the spring of 2007. Several photographs were taken in association with upland range monitoring studies completed this day.

On April 17, 2007 nine key forage plant method (KFPM) utilization transects were conducted in the East Water Canyon Native Pasture for use on key forage species during the 2006 grazing year. Several photographs were taken. Use of the key native bunchgrass Indian ricegrass ranged from 16% to 54% and averaged 39% for the seven transects where Indian ricegrass was present. Professional observations noted on the utilization forms included the following:

Winterfat a very minor component in the pasture. Two transects read for winterfat show severe use by combined cattle, rabbits, and antelope. At Key Area WR-04 cheatgrass not growing this spring beneath shrubs where last year it grew to 20" tall. At the utilization cage north of Key Area WR-04 on a black sagebrush ecological site ricegrass in the cage was of good vigor with cured leaves to 7" and new green leaves to 5". Cheatgrass was not growing beneath the thick cheatgrass growth from last year. At 0.55 miles south of the bridge on main track black & white biotic crust was very abundant in the shrub interspaces. Very stable gravelly soil. Very little native perennial grass was present. Black sagebrush 95% or more of current annual growth. Cheatgrass less than 0.5% of current annual growth. North of the Dixie harrow treatment, 90% Wyoming sagebrush, 5% Brte, no green Brte this spring. Little orhy present, mostly poa. Cheatgrass, poa, astragalus coming up in treatment. Productive Wyoming sage ecological site north of treatment in terms of size of shrubs. Shrub dominant state. Good ricegrass component 0.6 miles NW on track from NW side of bridge. Green leaves coming 4 to 5". Last two transects of day – pretty much black sagebrush monoculture (98% & 96% black sagebrush) on stable soil with biotic crust in interspaces but impoverished understory of native grasses. Some cheatgrass present.

On June 28, 2005 two key forage plant method (KFPM) transects were conducted in the East Water Canyon Native Pasture for use on key forage species to date. 2005 was a very good growth year. At Key Area WR-04 on a black sagebrush ecological site Indian ricegrass was used 33%, winterfat 40%, and needleandthread 9%. At 0.5 miles south of the cattleguard on the main county road in black sagebrush range, Indian ricegrass was used 24% and winterfat 40%. Professional observations noted on the utilization forms included the following:

At Key Area WR-04 cheatgrass was very common in the area. 20 head of cows were still present in the East Water Canyon Native Pasture. Cheatgrass was also very abundant in the range at the second study site. At this site there was a good component of Indian ricegrass and ricegrass inside the utilization cage was of excellent vigor to 16" tall.

On March 22, 2005 seven key forage plant method (KFPM) transects were conducted in the East Water Canyon Native Pasture for use on key forage species during the 2004 grazing year. Use of the key native bunchgrass Indian ricegrass ranged from 22% to 72% and averaged 52% for the five transects where Indian ricegrass was present. Professional observations noted on the utilization forms included the following:

A fair Orhy component was noted in a black sagebrush ecological site about 0.2 miles easterly from Eph Creek. Orhy of fair vigor but many bunchgrass centers dead. The Eph Creek shallow drainage was filled with decadent Wyoming sagebrush

with no herbaceous undersotory... the area has crossed a threshold to the shrub dominated state. In the SE corner of section 16 the mixed Wyoming sagebrush/black sagebrush range has also crossed a threshold to shrub dominance with no perennial grass & forb understory. In the west portion of section 22 there was a fair native grass component growing on a stable soil type with cheatgrass growing under shrubs. In the south ½ of section 15 there was a very limited Indian ricegrass availability and cheatgrass was again present growing beneath the Wyoming sagebrush and black sagebrush shrubs. In the NE1/4 of section 14 or the N1/2 of section 13 north of private ground on Water Canyon Creek there was no bluebunch wheatgrass, Indian ricegrass, or needlegrass growing with black sagebrush. A fair component of bluegrass and forbs was present. No elk sign. At 1.8 miles southwesterly from “the corral” on a mixed black sagebrush/Wyoming sagebrush ecological site there was a fair frequency of ricegrass plants, but poor vigor. No indication much ricegrass seed was produced again last year. At Key Area WR-04 on a black sagebrush ecological site ricegrass & needlegrass inside the utilization cage were in good cured vigor with cured leaves to 8” and green leaves to 4”. Some cheatgrass or bottlebrush squirreltail was growing beneath shrubs in the area.

Forage Utilization – White Rock Allotment – North Preston Seeding

On June 6, 2008 five key forage plant method (KFPM) transects were conducted in the North Preston Seeding for use on current year’s growth of crested wheatgrass to date. Cattle were already removed from the seeding by June 6. Photographs were taken. Use of crested wheatgrass ranged from 16% to 30% and averaged 23% (light) for the five transects. In the burn area east of the well Indian ricegrass was used 14% while needleandthread grass was used 50%. Use was primarily by cattle. Professional observations noted on the utilization forms included the following:

Crested wheatgrass in a key area use cage was of good green vigor to 15” tall, abundant seed being produced. In the grazed range the grass plant seedstalks averaged about 8” high.

On November 8, 2007 a field tour in the area of the North Preston Seeding was conducted to investigate an unauthorized use situation by cattle. Photographs were taken of the North Preston Seeding. A memorandum written for the field tour indicated severe use in the area of the north troughs and throughout the seeding.

On June 28, 2007 six key forage plant method (KFPM) transects were conducted in the North Preston Seeding for use on current year’s growth of crested wheatgrass to date. Use ranged from 70% to 80% and averaged 74% for the six transects. Use was primarily by cattle and elk. Professional observations noted on the utilization forms included the following:

Crested wheat stubble height averaged 1.5 to 2” at .35 miles east of windmill. At transect No. 3, 50% or more of the current annual growth by weight is the seeded species. Numerous cured wheatgrass seedstalks to 28” tall were present in shrubs.

On October 13, 2006 two KFPM transects were conducted in the North Preston Seeding for use to date. In the area of the windmill, use was recorded at 29% and 36% for the two transects (light).

On March 15 and 16, 2005 eight key forage plant method (KFPM) transects were conducted in the North Preston Seeding for year long use during 2004. Use ranged from 45% (moderate) to 84% (severe) for seven transects recording crested wheatgrass and use was 39% (light) for one transect recording bluebunch wheatgrass in the upper portion of the seeding. Use of crested wheatgrass averaged 61% (low heavy) for the seven readings. Professional observations noted on the utilization forms included the following:

Approximately 10 acres severe use near windmill, 60 acres of severe use on northwest side of the dry creek bed, plus severe use in the south portion of the seeding 150 yards from the corral and near transect numbered 7. At 0.6 miles east of the windmill lots of seedstalks were present on the wheatgrass with a look of overall light use. Juniper trees are generally widely scattered through the seeding and increase in density & cover up gradient to the east. At 0.3 miles south from the upper gate lots of young juniper and pinyon trees were observed with a healthy understory of black sagebrush and bluebunch wheatgrass. Crested wheatgrass was of good cured vigor in a utilization cage with seedstalks to 18". Lots of bluegrass was growing with the wheatgrass in portions of the seeding.

A compliance inspection form completed on December 11, 2002 stated that the North Preston Seeding shows heavy to severe use – not much growth in 2002 – currently very dry conditions – two utilization cages moved.

Forage Utilization – White Rock Allotment – South Four Pipe Native Pasture

On September 5, 2007 nine key forage plant method (KFPM) utilization transects were conducted in the South Four Pipe Native Pasture of the White Rock Allotment for use on key forage species up to date during the 2007 growth year. Several photographs were taken. Use of the key native bunchgrass Indian ricegrass ranged from 52% to 72% and averaged 62% for the four transects where Indian ricegrass was present. Use of the key native bunchgrass bluebunch wheatgrass ranged from 5% to 60% and averaged 39% for the six transects where it was present. Use of antelope bitterbrush was 36% at one transect.

Professional observations noted on the utilization forms included the following:

At transect no.1 north of the White Rock Road, approximately 90% of the current annual vegetative production was shrubs, primarily big sagebrush. Bottlebrush squirreltail was also used heavily in addition to ricegrass. Cow use, no elk sign. Could use treatment here, because of large decadent sagebrush. Light cheatgrass in the area < 2% of current annual production. Cheatgrass averages 4 inch growth this year. At study site WR-Z a productive sagebrush range was present with scattered p/j trees. Many young trees in the area. Good native grass + shrub component. Cheatgrass to 4 inches and < 1% of current annual production of plant community. Little elk sign present. At transect no. 3 sagebrush range is being encroached by young pinyon and juniper trees. Treatment needed to restore sagebrush range. Excellent bluebunch wheatgrass component present. Estimated 98% cow use, 2% elk use in area. Grasses and forbs estimated at 30% of current annual production. No cheatgrass. At key Area WR-03 (transect no. 4) bluebunch wheatgrass & ricegrass inside the utilization cage were of fair vigor, did not produce seed during 2007. Green leaves to 6". Biotic crusts were present, primarily beneath shrubs. Very little to no cheatgrass present. Stable gravel soils, no erosion. Slope is 0%. Trees are encroaching. At transect no. 5 neither cattle nor elk were using the area much. No cheatgrass, biotic crusts present between shrubs. Mix of black sagebrush & big sagebrush. Good range with a good native grass component but trees are invading. At transect no. 6 in Wyoming sagebrush/native perennial grass range pinyon and juniper trees were also invading. Estimated 85% use by cows, 15% use by elk. At transect no. 7 in native Wyoming sagebrush range a good perennial grass component was present. No cheatgrass. Use by cows. At transect no. 8 west of the Lund Group Well the perennial grass component was not as favorable as in other areas of the pasture. At transect no. 9 about 1 mile north of the Lund Group Well use by cattle was 60% on both ricegrass and bluebunch wheatgrass. No other notes.

On April 19, 2007 six key forage plant method (KFPM) utilization transects were conducted in the South Four Pipe Native Pasture of the White Rock Allotment for use on key forage species during the 2006 grazing year. Several photographs were taken. Use of the key native bunchgrass Indian ricegrass ranged from 37% to 68% and averaged 50% for the four transects where Indian ricegrass was present. Use of the key native bunchgrass bluebunch wheatgrass ranged from 26% to 46% and averaged 39% for the five transects where bluebunch was present. Professional observations noted on the utilization forms included the following:

At transect no. 1 in Wyoming sage range, a good diversity of native plants was present. Several types of native grass were present. Forbs were all present. 95% cattle use, 5% elk use. At Key Area WR-03, Indian ricegrass and bluebunch wheatgrass inside the utilization cage were of good vigor to 18" tall, with green leaves to 7" tall beneath the cured growth. Estimated 75% cattle use, 25% elk use. At transect no. 3, lots of young juniper trees were present in big sagebrush range. Fairly uniform moderate use indicated. Very gravelly, stable soil. Cattle & elk use, about 80% cattle use, 20% elk use. At transect no. 4, a good native perennial grass component was growing with Wyoming sagebrush. Lots of phlox & other forbs present. Good gravelly stable soil. No cheatgrass. Estimated 75% cattle use, 25% elk use. At transect no. 5, about 1 mile north of Lund Group Well, a mixture of black sagebrush, Wyoming sagebrush, and small rabbitbrush was present growing with native perennial grasses & forbs. No cheatgrass. Gravelly soil. Estimated 95% cattle use, 5% elk use. At transect no. 6, in black sagebrush/native grass range with scattered juniper trees, estimated 95% cattle use, 5% elk use.

On July 5, 2005 a utilization transect was read at study site WRB in the South Four Pipe Native Pasture, in conjunction with vegetation cover and ecological condition studies. 2005 was a very productive year. There was no use of bluegrass or bottlebrush squirreltail to date.

On June 8, 2005 a utilization transect was read at study site WRA in the South Four Pipe Native Pasture, in conjunction with vegetation cover and ecological condition studies. 2005 was a very productive year. There was no use of bluebunch wheatgrass and little to no use observed on all native grasses present.

On November 9, 2004 four key forage plant method (KFPM) utilization transects were conducted in the South Four Pipe Native Pasture of the White Rock Allotment for use on the key forage specie Indian ricegrass to date during the 2004 grazing year. Use of Indian ricegrass ranged from 8% to 74% and averaged 51% for four locations. Professional observations noted on the utilization forms included the following:

At 1 of 4, recent cow droppings + tracks present. No recent elk tracks. Fair native grass component at best. Several native grasses present. Also beginnings of cheatgrass. Many interspaces denuded of native grass/forbs. At 2 of 4, a fair perennial grass component was present. Squirreltail producing the most of all native grasses. Mainly use by cattle. Cheatgrass is a minor component. Cheatgrass also present on south facing slope of the nearby saddle. At 3 of 4, a fair to good herbaceous component of perennial grass + phlox. High moderate to low heavy use by cattle & a little elk use. At 4 of 4, a very limited perennial grass component was present with little use by livestock or elk.

Forage Utilization – White Rock Allotment – South Horse Camp Seeding

On April 19, 2007 nine key forage plant method (KFPM) utilization transects were conducted in the South Horse Camp Seeding for yearlong use on crested wheatgrass during the 2006 growth year. Use ranged from 14% to 88% and averaged 45% for the nine transects. Use was primarily by cattle and elk. Several photos were taken. Professional observations noted on the utilization forms included the following:

Near transect no. 1 in the northwest portion of the seeding about 3 acres of heavy and severe use was apparent however it was coming back nicely. Year long use estimated at 95% cow use, 5% elk use. Use on current year growth of agcr to April 19 slight or less by 2 or 3 elk. At transect no. 3, estimated 90% cow use, 10% elk use for 2006 growth year. At transect no. 4, about 30 acres of heavy/severe use was present with no stubble height or cured seedstalks left from last grazing year. Estimated 95% cattle use, 5% elk use. At transect no. 5 estimated 85% cow use, 15% elk use. At transect no. 6, estimated 85% cow use, 15% elk use. At no. 7, estimated 95% cow use, 5% elk use. At no. 8, estimated 85% cow use, 15% elk use. At No. 9, estimated 95% cow use, 5% elk use.

On November 1, 2007 six key forage plant method (KFPM) utilization transects were conducted in the South Horse Camp Seeding for use on crested wheatgrass during the 2007 growth year. Use ranged

from 82% to 88% and averaged 86% for the six transects. Use was by cattle and elk. Several photos were taken and a new key area utilization cage was established. Professional observations noted on the utilization forms included the following:

At the new cage location the seeding had the appearance of uniform heavy & severe use, with the agr stubble height averaging 1". The soil had a physical crust and many crested wheat plants were pedestalled. At transect no. 3 moderate use of many small rabbitbrush shrubs was noted. Abundant cured crested wheatgrass stems were on the ground providing good soil litter. Again at transect no. 4 abundant grass stems were on the ground providing soil protection. The same soil protection was noted at transects no. 5& 6. Stubble height averaged 1.5" at transect no. 5 and 0.5 inches at transect no. 6.

Mule Deer Habitat Studies

Two mule deer winter habitat studies were conducted in native range in the term permit renewal area in July, 2001. Both Line Intercept Vegetation Cover Studies and Density Board Form Studies were conducted at each of the two sites. Photographs were taken. The results are presented in Table 2 as follows:

Table 2. Mule Deer Winter Habitat Studies, White Rock Allotment

<i>Pasture</i>	<i>Study Area Name/Location</i>	<i>Ecological Site</i>	<i>Habitat Rating Score/Condition</i>	<i>Notes</i>
East Water Canyon Native	DW-WR-222-06/ T. 13N., R. 62E., Sec. 23 SE1/4 NW1/4	Wyoming sage site	72.03/Good	Soil surface 30-40% gravel with good cryptogamic crust.
South Four Pipe Native	DW-WR-222-03/ T. 12N., R. 64E., Sec. 18 NW1/4 SW1/4	Mountain brush site	60.27/Fair	Bitterbrush, Utah serviceberry, and wild currant shrubs all present

Licensed Use – White Rock Allotment NL Ranch & Joseph Peacock Permits

NL Ranch

Current active permitted use on the White Rock Allotment for NL Ranch is 394 AUMs. From 2000 through 2007, licensed cattle use in the allotment averaged 395 AUMs. Use ranged from a high of 462 AUMs in 2005 to a low of 254 AUMs in 2003. Temporary non-renewable grazing use has been authorized for NL Ranch in the crested wheatgrass seedings some years. From 1990 to 2007, licensed cattle use averaged 403 AUMs and ranged from a high of 596 AUMs in 1998 to a low of 254 AUMs in 2003. The permit has been activated every year since 1990.

From 2000 through 2007, the cattle turnout date has varied from April 1 to May 8. Cattle numbers have varied from 55 to 80 head of cattle during this period. The cattle off date has varied from October 3 to November 30 during this period. NL Ranch normal operation is to remove cattle from the public lands for four approximately four weeks during June.

Joseph Peacock

Current active permitted use on the White Rock Allotment for Joseph Peacock is 872 AUMs. From

2000 through 2007, licensed cattle use in the allotment averaged 767 AUMs. Use ranged from a high of 873 AUMs in 2001 to a low of 601 AUMs in 2005. From 1990 to 2007, licensed cattle use averaged 762 AUMs and ranged from a high of 873 AUMs in 2001 to a low of 601 AUMs in 2005. The permit has been activated every year since 1990.

From 2000 through 2007, the cattle turnout date has varied from March 16 to April 27. Cattle numbers have varied from 43 to 115 head of cattle during this period. The cattle off date has varied from September 30 to January 15 during this period.

Findings: *Monitoring data results describing current resource conditions for Key Areas and study sites in the term permit renewal area of the White Rock Allotment as they relate to the above Habitat Standard and habitat indicators are as follows:*

Ecological Condition

Ecological condition data for the term permit renewal area of the White Rock Allotment was gathered and reviewed for key areas on June 30, 2006 and June 22, 1999. Photos were taken and professional observations noted. The data is summarized below:

White Rock Allotment– Ecological Condition Summary

Study Site/ Date	Ecological Site	Location/ Pasture	Dominant Vegetation	Percent Native Shrubs	Percent Native Grass	Percent Native Forbs	Trend	Similarity* Index	Production** Lbs./acre
WR-03 6/8/2005	028BY094NV	N: 4307776 E: 688005 Four Pipe	Bluebunch Indian ricegrass Big sagebrush	77.0%	17.0%	6.0%	Improving	33%	1646
WR-03 6/25/1998	028BY094NV	N: 4298958 E: 754061 Four Pipe	Bluebunch Indian ricegrass Big sagebrush	73.8%	10.9%	15.3%	Not apparent	Mid to Late Seral	1370
WR-04 6/28/2007	028BY011NV	N: 4313712 E: 672193 Water Canyon	Black sagebrush Indian ricegrass Needleandthread	89.0%	10.6%	0.4%	Not apparent	56%	199
WR-04 6/24/1998	028BY011NV	N: 4313712 E: 672193 Water Canyon	Black sagebrush Indian ricegrass Needleandthread	87.1%	11.4%	1.5%	Not apparent	Mid Seral	730
EWC-01 6/28/2007	028BY011NV	N: 4315620 E: 673562 Water Canyon	Black sagebrush Indian ricegrass Needleandthread	96.1%	3.1%	0.8%	Not apparent	43%	256
SS WRA 6/8/2005	028BY094NV	N: 4305256 E: 688637 Four Pipe	Bluebunch Indian ricegrass Big sagebrush	70.0%	21.0%	9.0%	Improving	56%	1541

* The similarity index is a numerical value given to the resemblance between current vegetative composition & production and the ecological site potential composition & production. It is the percentage of a specific vegetation state plant community that is presently on a rangeland ecological site.

** Production in lbs. per acre is a measure of the production of all native species recorded at the Key Area within the ecological site. Normal year production for the 028BY094NV (calcareous loam 10-14”) is 700 lbs. per acre. Favorable year production is 900 lbs. per acre. Normal year production for the 028BY011NV (shallow calcareous loam 8-10”) is 450 lbs. per acre. Favorable year production is 600 lbs. per acre. Unfavorable year production is 250 lbs. per acre.

At WR-03 on 6/8/2005 there was no cheatgrass present. No use to date by cattle or elk. Good herbaceous component.

At WR-03 on 6/25/1998 there was no cheatgrass present.

At WR-04 on 6/28/2007 cheatgrass produced 36 lbs. per acre. Production for the site including cheatgrass was 235 lbs. per acre.

At WR-04 on 6/24/1998 cheatgrass produced 95 lbs. per acre. Production for the site including cheatgrass was 825 lbs. per acre.

At EWC-01 on 6/28/2007 cheatgrass produced 13 lbs. per acre. Production for the site including cheatgrass was 269 lbs. per acre.

At SS WRA on 6/8/2005 there was no cheatgrass present.

Ecological Processes

Direct measures of the status of ecological processes are difficult or expensive to measure due to the complexity of the processes and their interrelationships. Therefore, biological and physical attributes are often used as indicators of the functional status of ecological processes and site integrity. Based on the positive vegetative attributes of the allotment as presented by monitoring data, the hydrologic cycle, nutrient cycle, and energy flow are being maintained. In addition to range monitoring data, qualitative observations and professional judgment indicate ecological processes are adequate for the vegetative communities.

Vegetation Distribution

Professional observation as well as soil mapping unit data and ecological site descriptions indicates vegetation distribution (patchiness, corridors) to be appropriate in the term permit renewal area. The vegetation composition changes along the elevation gradient and plant communities are separated by hills and washes on both sides of the Egan Mountains. There is a mosaic and a “mix” of plant communities and ecological sites, including sites dominated by black sagebrush, Wyoming sagebrush, big sagebrush, greasewood, mountain mahogany, and crested wheatgrass. Pinyon and juniper trees and associated understory species are scattered through the upper elevations of the allotment. Mountain brush plant communities occur on the east side of the Egan Mountains. There are many travel corridors present for grazing animals in the washes and drainage bottoms between the hills. Escape cover is present for grazing animals in these areas.

Vegetation Nutritional Value

It is assumed that nutritional value of the available forage in the area is adequate to sustain animal needs, even in the winter period. No losses of cattle due to malnutrition have been reported by the cattle operators in this allotment. Cattle seem to thrive on this allotment. The condition of cattle has been excellent in the preston and South Horse Camp Seedings. Deer habitat has been reported to be good. Deer and elk winter range in the Four Pipe Native Pasture has been observed to be excellent, with an abundance of native browse present.

Native Plant Species - White Rock Allotment

A combination of all of the range monitoring studies accomplished in the term permit renewal area over the last few years indicate a diversity of native upland vegetation is present in those four pastures of the White Rock Allotment grazed by NL Ranch and Joseph Peacock. The following table lists the native upland plant species that have been observed in the term permit renewal area:

Table 3. Native Plant Species - White Rock Allotment – Grasses, Forbs, and Shrubs

Common Name	Symbol	Common Name	Symbol
Indian ricegrass	Achy	Indian paintbrush	Casti2
Needleandthread	Heco26	Prince’s plume	Stan1
Galleta grass	Hija	Lupine	Lupin
Squirreltail grass	Sihy		
Sandberg’s blueg.	Pose	Littleleaf mahogany	Cein7
Bluebunch	Pssp	Curleaf mahogany	Cele3
Threeawn grass	Arist	Mountain sagebrush	Artrv
Canby bluegrass	Poca	Big sagebrush	Artr2
Thurber’s needleg.	Acth7	Black sagebrush	Arno4
Nevada bluegrass	Pone	Wyoming sagebrush	ArtrW
Muttongrass	Pofe	Shadscale	Atco
Western wheatg.	Pasm	Winterfat	Krla
Basin wildrye	Leci4	Bud sagebrush	Pide4
Thickspike	Elma7	Greasewood	Save4
		Bailey greasewood	SaveB
		Mormon tea	Epne
Hawksbeard	Crac2	Douglas rabbitbrush	Chvi8
Balsamroot	Basa3	Downy rabbitbrush	Chvip4
Globemallow	Sphae	Fourwing saltbush	Atca2
Penstemon	Penst	Broom Snakeweed	Gusa2
Eriogonum	Eriog	Horsebrush	Tetra3
Phlox	Phlox	Spiny hosage	Grsp
Loco (milkvetch)	Astra	Antelope bitterbrush	Putr
Aster	Aster	Pricklygilia	Lepu
Goldenweed	Haplo2	Serviceberry	Amut
Scarlet globem.	Spco	Cliffrose	Come
White stoneseed	Liru4	Kochia	Kochia
Eriogonum	Eriog	Wax currant	Rice
		Desert snowberry	Sylo

The following precipitation data by year is presented for the Ely Weather Station (Yelland Field) as summarized by the National Oceanic and Atmospheric Administration. The precipitation totals are for crop year precipitation, or that moisture (including snow) measured from September through June. This is effective moisture for plant growth. The average crop year precipitation for the Ely Station for the thirty year period 1977 – 2006 is 8.44 inches. Nine of the eleven years listed below are below this average. This represents drought conditions.

Year	Crop Year Precipitation
1997	7.83
1998	10.00
1999	7.18
2000	6.70
2001	5.26
2002	4.42
2003	6.88
2004	5.45
2005	12.20

2006	8.32
2007	5.62
2008	4.14

**Appendix II
Grazing Permit Terms and Conditions**

Terms and Conditions of Authorized Use – NL Ranch Permit – Proposed Action

Allotment Number	Name/ Pasture	Livestock Number/Kind		Grazing Period Begin End		% Public Land	Type Use	AUMs
0902	White Rock							
	Water Canyon Native	15	Cattle	03/01 – 05/31		100	Active	45
	Water Canyon native	15	Cattle	10/16 – 01/01		100	Active	38
	North Preston Seeding	25	Cattle	03/01 – 05/31		100	Active	76
	North Preston Seeding	22	Cattle	10/16 – 01/01		100	Active	56
	Four Pipe Native	19	Cattle	06/01 – 10/15		100	Active	86
	South Horse Camp Seeding	19	Cattle	06/01 – 10/15		100	Active	86

Terms and Conditions of Authorized Use – NL Ranch Permit – Change in Season Alternative

Allotment Number	Name/Pasture	Livestock Number/Kind		Grazing Period Begin End		% Public* Land (Billing)	Type Use	AUMs**
0902	White Rock/ Water Canyon Native	22	Cattle	04/01 – 05/31		100	Active	45
		15	Cattle	10/16 – 01/01		100	Active	38
	North Preston Seeding	25	Cattle	03/01 – 05/31		100	Active	76
		22	Cattle	10/16 – 01/01		100	Active	56
	Four Pipe Native	19	Cattle	06/01 – 10/15		100	Active	86
	South Horse Camp Sdng.	24	Cattle	07/01 – 10/15		100	Active	86
	Total							387

The allotment summary is as follows:

<u>Allotment</u>	<u>Active</u>	<u>Suspended</u>	<u>Total</u>
0902 White Rock	394	0	394

The grazing permit is for 394 active AUMs authorized use.

Terms and Conditions:

In accordance with 43 CFR 4130.3-2, the following terms and conditions will be included in the grazing permit for NL Ranch on the White Rock Allotment:

Stipulations Common To All Allotments:

1. Livestock numbers identified in the term grazing permit are a function of seasons of use and permitted use for each allotment. Deviations from those livestock numbers and seasons of use may be authorized on an annual basis where such deviations would not prevent attainment of the Multiple-Use Objectives for the allotment.
2. Deviations from specified grazing use dates will be allowed when consistent with Multiple-Use Objectives. Such deviations will require an application and written authorization from the authorized officer prior to grazing use.
3. Pursuant to 43 CFR 10.4 (G) the holder of this authorization must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined at 43 CFR 10.2). Further, pursuant to 43 CFR 10.4 (C) and (D), you must stop activities in the immediate vicinity of the discovery and protect it from your activities for 30 days or until notified to proceed by the authorized officer.
4. The authorized officer is requiring that an actual use report (Form 4130-5) be submitted within 15 days after completing your annual grazing use.
5. The payment of your grazing fees is due on or before the date specified in the grazing bill. This date is generally the opening date of your allotment. If payment is not received within 15 days of the due date, you will be charged a late fee assessment of \$25 or 10 percent of the grazing bill, whichever is greater, not to exceed \$250. Payment with Visa, MasterCard or American Express is accepted. Failure to make payment within 30 days of the due date may result in trespass action.
6. Grazing use will be in accordance with the Northeastern Great Basin Area Standards and Guidelines for grazing administration as developed by the Northeastern Great Basin Resource Advisory Council and approved by the Secretary of the Interior on February 12, 1997. Grazing use will also be in accordance with 43 CFR Sub-part 4180 - Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration.
7. If future monitoring data indicates that Standards and Guidelines for Grazing Administration are not being met, the permit will be reissued subject to revised terms and conditions.
8. The permittee must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of any hazardous or solid wastes as defined in 40 CFR Part 261.
9. The permittee is responsible for all maintenance of assigned range improvements including wildlife escape ramps for both permanent and temporary water troughs.

Additional Terms and Conditions:

The following allowable use levels apply for all herbivory – cattle, elk, deer, antelope, rabbit, or other animal use.

1. An allowable use level will be established as 40% of the current year's growth by weight for spring use (3/1 – 5/31 or 4/1 – 5/31 depending upon the alternative) of the key native species Indian ricegrass in the East Water

Canyon Native Pasture of the White Rock Allotment. This is to help achieve sage grouse habitat objectives in the pasture. An allowable use level will be established as 50% of the current year's growth by weight for yearlong use in the East Water Canyon Native Pasture. Utilization will be measured at established key grazing areas or other sites representative of the dominant vegetation in the allotment.

2. An allowable use level will be established as 50% of the current year's growth by weight for summer/fall use (6/1 – 10/15) of the key native species Indian ricegrass and bluebunch wheatgrass in the Four Pipe Native Pasture of the White Rock Allotment. Utilization will be measured at established key grazing areas or other sites representative of the dominant vegetation in the allotment.

3. An allowable use level will be established as 50% of the current year's growth by weight for spring use of crested wheatgrass in the North Preston Seeding. An allowable use level will be established as 60% for use through 01/01.

4. An allowable use level will be established as 60% of the current year's growth by weight for summer/fall use of crested wheatgrass in the South Horse Camp Seeding.

5. Cattle will graze the East Water Canyon Native Pasture and the North Preston Seeding for the period 3/1 to 5/31 (or 4/1 to 5/31 in the East Water Canyon Native Pasture) and for the period 10/16 to 01/01. Annual permitted use will not exceed 83 AUMs on the East Water Canyon Pasture and 133 AUMs on the North Preston Seeding. Beginning 6/1, cattle will be turned into the Four Pipe Pasture and the South Horse Camp Seeding (or 7/1 in the South Horse Camp Seeding). Annual permitted use will not exceed 89 AUMs in the Four Pipe Pasture and 89 AUMs in South Horse Camp Seeding.

6. Grazing use on the White Rock Allotment shall be in accordance with the final multiple use decision dated July 17, 2000.

7. The permittee(s) will be responsible for continued maintenance of the existing fences and water developments as assigned in the June 1994 agreement.

8. Salt and supplements will be allowed within ¼ mile on specific stock waters (i.e. Water Canyon Creek) for livestock management purposes.

Terms and Conditions of Authorized Use – Joseph Peacock Permit – Proposed Action

Allotment Number	Name/ Pasture	Livestock Number/Kind	Grazing Period		% Public Land	Type Use	AUMs
			Begin	End			
0902	White Rock						
	Water Canyon Native	29 Cattle	03/01	05/31	100	Active	88
	Water Canyon native	36 Cattle	10/16	01/01	100	Active	92
	North Preston Seeding	50 Cattle	03/01	05/31	100	Active	151
	North Preston Seeding	56 Cattle	10/16	01/01	100	Active	144
	Four Pipe Native	44 Cattle	06/01	10/15	100	Active	198
	South Horse Camp Seeding	44 Cattle	06/01	10/15	100	Active	198

Terms and Conditions of Authorized Use – Joseph Peacock Permit – Change In Season Alternative

Allotment Number	Name/ Pasture	Livestock Number/Kind	Grazing Period		% Public Land	Type Use	AUMs
			Begin	End			

0902 White Rock						
Water Canyon Native	44	Cattle	04/01 – 05/31	100	Active	88
Water Canyon native	36	Cattle	10/16 – 01/01	100	Active	92
North Preston Seeding	50	Cattle	03/01 – 05/31	100	Active	151
North Preston Seeding	56	Cattle	10/16 – 01/01	100	Active	144
Four Pipe Native	44	Cattle	06/01 – 10/15	100	Active	198
South Horse Camp Seeding	56	Cattle	07/01 – 10/15	100	Active	198

The allotment summary is as follows:

<u>Allotment</u>	<u>Active</u>	<u>Suspended</u>	<u>Total</u>
0902 White Rock	872	0	872

The grazing permit is for 872 active AUMs authorized use.

Terms and Conditions:

In accordance with 43 CFR 4130.3-2, the following terms and conditions will be included in the grazing permit for Joseph Peacock on the White Rock Allotment:

Stipulations Common To All Allotments:

1. Livestock numbers identified in the term grazing permit are a function of seasons of use and permitted use for each allotment. Deviations from those livestock numbers and seasons of use may be authorized on an annual basis where such deviations would not prevent attainment of the Multiple-Use Objectives for the allotment.
2. Deviations from specified grazing use dates will be allowed when consistent with Multiple-Use Objectives. Such deviations will require an application and written authorization from the authorized officer prior to grazing use.
3. Pursuant to 43 CFR 10.4 (G) the holder of this authorization must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined at 43 CFR 10.2). Further, pursuant to 43 CFR 10.4 (C) and (D), you must stop activities in the immediate vicinity of the discovery and protect it from your activities for 30 days or until notified to proceed by the authorized officer.
4. The authorized officer is requiring that an actual use report (Form 4130-5) be submitted within 15 days after completing your annual grazing use.
5. The payment of your grazing fees is due on or before the date specified in the grazing bill. This date is generally the opening date of your allotment. If payment is not received within 15 days of the due date, you will be charged a late fee assessment of \$25 or 10 percent of the grazing bill, whichever is greater, not to exceed \$250. Payment with Visa, MasterCard or American Express is accepted. Failure to make payment within 30 days of the due date may result in trespass action.

6. Grazing use will be in accordance with the Northeastern Great Basin Area Standards and Guidelines for grazing administration as developed by the Northeastern Great Basin Resource Advisory Council and approved by the Secretary of the Interior on February 12, 1997. Grazing use will also be in accordance with 43 CFR Sub-part 4180 - Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration.

7. If future monitoring data indicates that Standards and Guidelines for Grazing Administration are not being met, the permit will be reissued subject to revised terms and conditions.

8. The permittee must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of any hazardous or solid wastes as defined in 40 CFR Part 261.

9. The permittee is responsible for all maintenance of assigned range improvements including wildlife escape ramps for both permanent and temporary water troughs.

Additional Terms and Conditions:

The following allowable use levels apply for all herbivory – cattle, elk, deer, antelope, rabbit, or other animal use.

1. An allowable use level will be established as 40% of the current year's growth by weight for spring use (3/1 – 5/31 or 4/1 – 5/31 depending upon alternative) of the key native species Indian ricegrass in the East Water Canyon Native Pasture of the White Rock Allotment. This is to help achieve sage grouse habitat objectives in the pasture. An allowable use level will be established as 50% of the current year's growth by weight for yearlong use in the East Water Canyon Native Pasture. Utilization will be measured at established key grazing areas or other sites representative of the dominant vegetation in the allotment.

2. An allowable use level will be established as 50% of the current year's growth by weight for summer/fall use (6/1 – 10/15) of the key native species Indian ricegrass and bluebunch wheatgrass in the Four Pipe Native Pasture of the White Rock Allotment. Utilization will be measured at established key grazing areas or other sites representative of the dominant vegetation in the allotment.

3. An allowable use level will be established as 50% of the current year's growth by weight for spring use of crested wheatgrass in the North Preston Seeding. An allowable use level will be established as 60% for use through 01/01.

4. An allowable use level will be established as 60% of the current year's growth by weight for summer/fall use of crested wheatgrass in the South Horse Camp Seeding.

5. Cattle will graze the East Water Canyon Native Pasture and the North Preston Seeding for the period 3/1 to 5/31 (or 4/1 to 5/31 in the East Water Canyon Native Pasture) and for the period 10/16 to 01/01. Annual permitted use will not exceed 180 AUMs on the East Water Canyon Pasture and 296 AUMs on the North Preston Seeding. Beginning 6/1, cattle will be turned into the Four Pipe Pasture and the South Horse Camp Seeding (or 7/1 in the South Horse Camp Seeding). Annual permitted use will not exceed 198 AUMs in the Four Pipe Pasture and 198 AUMs in South Horse Camp Seeding.

6. Grazing use on the White Rock Allotment shall be in accordance with the final multiple use decision dated July 17, 2000.

7. The permittee(s) will be responsible for continued maintenance of the existing fences and water developments as assigned in the June 1994 agreement.

8. Salt and supplements will be allowed on private ground within ¼ mile of Water Canyon Creek for livestock management purposes.

RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS
Term Grazing Permit Renewals for NL Ranch & Joseph Peacock
White Rock Allotment
White Pine County, Nevada

On January 24th, 2008 a Noxious & Invasive Weed Risk Assessment was completed for NV-040-08-10 term grazing permit renewals for NL Ranch and Joseph Peacock in the White Rock allotment in White Pine County, NV approximately 20 miles south and west of Ely, Nevada. The current term permit for NL Ranch authorizes 394 AUMs of cattle use with a season of use from 3/01 to 10/15. The current term permit for Joseph Peacock authorizes 872 AUMs of cattle use with a season of use from 3/01 to 10/15. Grazing use occurs in four fenced pastures of the allotment and cattle numbers and season of use vary by pasture. The issuance of the new term grazing permits would be for a period of ten years. At this time the proposed action would be to renew the permit without any changes to the terms and conditions, however changes to the terms and conditions of the permit may be proposed, depending on the evaluation of the range monitoring data.

No field weed surveys were completed for this project. Instead the Ely District weed inventory data was consulted. The following species are found within the boundaries of and along roads leading to the White Rock allotment:

<i>Acroptilon repens</i>	Russian knapweed
<i>Carduus nutans</i>	Musk thistle
<i>Centaurea stoebe</i>	Spotted knapweed
<i>Cirsium vulgare</i>	Bull thistle
<i>Hyoscyamus niger</i>	Black henbane
<i>Lepidium draba</i>	Hoary cress
<i>Lepidium latifolium</i>	Tall whitetop
<i>Onopordum acanthium</i>	Scotch thistle
<i>Tamarix spp.</i>	Salt cedar

There is also probably cheatgrass (*Bromus tectorum*), halogeton (*Halogeton glomerus*), and Russian thistle (*Salsola kali*) scattered along roads in the area.

Factor 1 assesses the likelihood of noxious/invasive weed species spreading to the project area.

None (0)	Noxious/invasive weed species are not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious/invasive weed species in the project area.
Low (1-3)	Noxious/invasive weed species are present in the areas adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious/invasive weeds into the project area.
Moderate (4-7)	Noxious/invasive weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious/invasive weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious/invasive weeds within the project area.
High (8-10)	Heavy infestations of noxious/invasive weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions, are likely to result in the establishment and spread of noxious/invasive weeds on disturbed sites throughout much of the project area.

For this project, the factor rates as Moderate (4) at the present time. The proposed action could increase the populations of the noxious and invasive weeds already within the allotment and could aid in the introduction of weeds from surrounding areas. Within the term permit renewal area, watering locations and salt block sites (if present) are of particular concern of new weed infestations due to the concentration of livestock around those sites and the amount of ground disturbance associated with that.

Factor 2 assesses the consequences of noxious/invasive weed establishment in the project area.

Low to Nonexistent (1-3)	None. No cumulative effects expected.
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Moderate (4-7)	Possible adverse effects on site and possible expansion of infestation within the project area. Cumulative effects on native plant communities are likely but limited.
High (8-10)	Obvious adverse effects within the project area and probable expansion of noxious/invasive weed infestations to areas outside the project area. Adverse cumulative effects on native plant communities are probable.

This project rates as High (8) at the present time. If new weed infestations establish within the White Rock allotment this could have an adverse impact to the native plant communities since the most of the allotment is currently considered to be weed-free. Also, any increase of cheatgrass could alter the fire regime in the area.

The Risk Rating is obtained by multiplying Factor 1 by Factor 2.

None (0)	Proceed as planned.
Low (1-10)	Proceed as planned. Initiate control treatment on noxious/invasive weed populations that get established in the area.
Moderate (11-49)	Develop preventative management measures for the proposed project to reduce the risk of introduction of spread of noxious/invasive weeds into the area. Preventative management measures should include modifying the project to include seeding the area to occupy disturbed sites with desirable species. Monitor the area for at least 3 consecutive years and provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.
High (50-100)	Project must be modified to reduce risk level through preventative management measures, including seeding with desirable species to occupy disturbed site and controlling existing infestations of noxious/invasive weeds prior to project activity. Project must provide at least 5 consecutive years of monitoring. Projects must also provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.

For this project, the Risk Rating is Moderate (32). This indicates that the project can proceed as planned as long as the following measures are followed:

- Prior to entering public lands, the BLM will provide information regarding noxious weed management and identification to the permit holders affiliated with the project. The importance of preventing the spread of weeds to uninfested areas and importance of controlling existing populations of weeds will be explained.
- The range specialist for the allotment will include weed detection into project compliance inspection activities. If the spread of noxious weeds is noted, appropriated weed control procedures will be determined in consultation with BLM personnel and will be in compliance with the appropriate BLM handbook sections and applicable laws and regulations.
- To eliminate the introduction of noxious weed seeds, roots, or rhizomes all interim and final seed mixes, hay, straw, hay/straw, or other organic products used for feed or bedding will be certified free of plant species listed on the Nevada noxious weed list or specifically identified by the BLM Ely District Office.
- Grazing will be conducted in compliance with the Ely District BLM noxious weed schedules. The scheduled procedures can significantly and effectively reduce noxious weed spread or introduction into the project area.
- Any newly established populations of noxious/invasive weeds discovered will be communicated to the Ely District Noxious and Invasive Weeds Coordinator for treatment.

Reviewed by: _____
 Bonnie Waggoner
 Ely District Noxious & Invasive Weeds Coordinator

 xx/xx/2008
 Date

Appendix IV - List of References

REFERENCES TO ENVIRONMENTAL ASSESSMENT AND STANDARDS DETERMINATION DOCUMENT

- USDA- NRCS. 2005. Soil Survey of White Pine County, Nevada.
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- USDI-BLM. 2000. Interpreting Indicators of Rangeland Health. Version 3. Technical Reference 1734-6. BLM/WO/ST-00/001+1734. National Science and Technology Center Information and Communications Group, Denver, Colorado.
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- Federal Land Policy and Management Act (FLPMA) 1976. Public Law 94-190.
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- BLM Manual 8561 - Wilderness Management Plans.
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- Executive Order 13186 (1/11/2001). Concerning migratory birds.
- University of Idaho. Targeted Grazing, a Handbook. 2007.
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- James A. Young & B. Abbott Sparks – Cattle in the Cold Desert. Utah State University Press 1985.
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- DOI-BLM -2008. Ely District Record of Decision and Approved Resource Management Plan