

United States Department of the Interior

BUREAU OF LAND MANAGEMENT Battle Mountain Field Office 50 Bastian Road Battle Mountain, Nevada 89820 http://www.nv.blm.gov



SEP 0 6 2005

DEPARTMENT OF ADMINISTRATION

In Reply Refer To: 4160 (NV062) SEP 2 2005

Dear Interested Public:

On July 22, 2005, we sent you and the grazing permitees a copy of the Carico Lake Allotment Rangeland Health Evaluation. This evaluation analyzed monitoring data to determine whether or not livestock grazing, wild horse use and wildlife use have resulted in the attainment of Shoshone Eureka Resource Management Plan objectives and the Northeastern Great Basin Resource Advisory Counsel Standards and Guidelines. The Battle Mountain Field Office has worked diligently with you and the permittees through this process to develop meaningful management actions that will ensure that significant progress is made towards the standards for rangeland health and conform to the guidelines.

Please find enclosed the Proposed Multiple Use Decision for the Carico Lake Allotment. Also enclosed are the Conformance Determination and Environmental Assessment # NV-062-EA05-61. The Environmental Assessment (EA) is being issued for your review prior to the issuance of the Final Multiple Use Decision (FMUD) and Finding of No Significant Impact (FONSI). Please review these documents and contact either myself or Dan Fletcher, Rangeland Management Specialist at (775) 635-4000 if you have any questions.

Enclosed you will also find a list of those individuals that have received a copy of this information. Thank you for your involvement in this process and continued cooperation.

Sincerely marcul au

Douglat Furtado Assistant Field Manager Renewable Resources

Enclosures:

Carico Lake Allotment Proposed Multiple Use Decision1Conformance Determination1Environmental Assessment # NV-062-EA05-611Carico Lake Interested Publics List1

CARICO LAKE INTERESTED PUBLIC MAILING LIST				
Marie Jeanne Ansolabehere	Kevin Kirkeby (Senator John Ensign, U.S. Senate)			
Jim Bauman	Jerry Lancaster			
Randy Buffington	Lander County Commissioners			
Bureau of Land Management (Elko Field Office)	Laurel Marshall			
Bureau of Land Management (Carson City Field Office)	Gary McCuin (Nevada Department of Agriculture)			
Steven Carter	Mike Podborny (Nv Div. of Wildlife)			
Jim Collard (Cortez Gold Mines)	Charles Saulisberry			
Ken Conley	Ryan Shane			
District Ranger (USFS Austin Ranger District)	Carl Slagowski			
Eureka Co. Natural Resources Department	Michael Stafford (Budget and Planning Div., Nevada Clearinghouse)			
Eureka County Commissioners	Billy Stern (Forest Guardians)			
John Filippini (C-Ranches)	David Stine			
Henry Filippini Jr. (Filippini Ranching Company)	Larry Teske (Nevada Department of Wildlife)			
Katie Fite (Western Watersheds Project)	Jerry Todd			
Steve Foree (Nevada Division of Wildlife)	Pete Tomera (Julian Tomera Ranches, Inc.)			
Art Gale	U.S. Fish and Wildlife Service			
Jim and Ida Gallagher	Barbara Warner			
Bill Hall (Ellison Ranching Company)	Wild Horse Commission			
Paul Inchauspe (Silver Creek Ranch, Inc.)				



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In Reply Refer To: 4130/4160

PROPOSED MULTIPLE USE DECISION CARICO LAKE ALLOTMENT

INTRODUCTION:

The Carico Lake Allotment Rangeland Health Assessment analyzed monitoring data collected within the Carico Lake Allotment. The evaluation was sent to the interested public July 22, 2005 for review and comment. Refer to Appendix 1 for an overview of the Carico Lake Allotment. Monitoring data was collected to determine whether current livestock management practices, grazing systems and existing wild horse populations in the allotment are meeting the Shoshone Eureka Resource Management Plan (SERA RMP) objectives, Standards for Rangeland Health and multiple use objectives within the Carico Lake Allotment. Proposed management actions for livestock, wild horses and wildlife habitat are identified as an outcome of the assessment and evaluation process. A thirty day comment period was provided for the interested public to comment and provide input and recommendations regarding the evaluation, allotment specific objectives identified through the evaluation process and the proposed management actions.

There are seven permittees within the Carico Lake Allotment including: Cortez Joint Venture, C-Ranches, Doby George LLC., Ellison Ranching Company, Filippini Ranching Company, Julian Tomera Ranches, Inc. and Silver Creek Ranch, Inc. The Bald Mountain Herd Management Area and the South Shoshone Herd Management Area are located within the Carico Lake Allotment.

Following the public comment period for the Carico Lake Allotment Rangeland Health Assessment, the Battle Mountain Field Office carefully considered the comments that were received. The Conformance Determination is attached separately and addresses comments to the evaluation. Following the analysis, interpretation, and evaluation of monitoring data, it was determined, that SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives as identified in the evaluation are not being met within the Carico Lake Allotment. The evaluation also concluded that significant progress was not being made towards attainment of the standards. As a result of the evaluation of the monitoring data, Selected Management Actions have been developed that will ensure that Standards for Rangeland Health and multiple use objectives continue to be met, and that significant progress is made towards those that are not currently met. The selected management actions are analyzed in the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment (NV-062-EA05-61) and Finding of No Significant Impact (FONSI). The FONSI has determined that the proposed action that is specified in this decision will not have a significant impact on Air quality, Cultural-Paleontological Resources, Invasive, Non Native Species, Migratory Birds, Native American Religious Concerns, Threatened and/or Endangered Animals, Water Quality, Wetlands and Riparian Zones, Forest/Woodlands, Grazing Management, Minerals, Recreation, Socio-Economic Values, Soils, Special Status Species (plants and animals), Vegetation, Visual Resources, Wild Horses and Burros and Wildlife. These documents are included for your review.

At the conclusion of the protest period for the Proposed Multiple Use Decision (PMUD) process, the Final Multiple Use Decision (FMUD) will be issued and serve as the Decision Record (DR) for the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment (NV-062-EA05-61).

BACKGROUND:

The Carico Lake Allotment permittees and members of the interested public have met with the BLM on a continual basis throughout the allotment evaluation process. Intensive monitoring began in 1988. Discussions with permittees have focused on permittee livestock grazing operations and resource management issues within the Carico Lake Allotment. Annual operating plan meetings have occurred most recently from 2002-2005 to identify and reach agreements to identify best management practices for the protection of rangeland resources within the allotment. In 2004, allotment evaluation meetings between permittees and BLM occurred to discuss the evaluation process and the additional monitoring data that would be collected in the summer of 2004. Permittee meetings/discussions have continued to occur during 2005 as BLM worked to complete the evaluation. These meetings with the permittees have involved discussions pertaining to the development of management alternatives that will ensure the attainment of the Standards for Rangeland Health and conform with the guidelines, while also maintaining the viability of their livestock operations. As a result, verbal commitments or written agreements have been reached with most of the permittees.

In late 2002, Forest Guardians and Western Watersheds Project filed a lawsuit against the Bureau of Land Management in Nevada for failing to mitigate water quality problems in the Carico Lake Allotment as mandated under the Clean Water Act and documented in a water quality analyses report prepared by the Battle Mountain Field Office in 2000. The lawsuit blamed the imperiled water quality on domestic cattle and sheep grazing on public lands administered by the BLM Battle Mountain Field Office. The plaintiffs accused the Battle Mountain Field Office of allowing grazing to continue despite the report that concluded the impacts of cattle grazing were largely causing the poor water quality within the Carico Lake Allotment. The lawsuit also stated that the BLM, despite the findings and recommendations of its own report failed to enact any measures or projects to mitigate water quality problems in the allotment. Riparian areas are located throughout Carico Lake Allotment. However, no state water quality standards aside from

generic beneficial use standards have been identified by the Nevada Department of Environmental Protection (NDEP) in the Carico Lake Allotment. Riparian exclosures were constructed within the Cottonwood Basin area in 2002 to begin addressing the riparian and aspen habitat and water quality issues. These areas were identified for exclusion from grazing to restore quaking aspen stands and riparian areas that had been heavily impacted by livestock grazing. Management actions were identified in the Carico Lake Allotment Rangeland Health Assessment (CLARHA) to address the riparian and water quality issues throughout the allotment. These management actions were analyzed in the CLARHA Environmental Assessment NV-062-EA05-61. It was determined that these management actions will result in significant progress towards the attainment of Proper Functioning Condition (PFC) for all riparian areas within the Carico Lake Allotment. The majority of the riparian issues are within the Shoshone Mountain Use Area.

Consultation meetings and discussions with interest groups including Western Watersheds and Forest Guardians have occurred on a continual basis throughout the evaluation process. These meetings have focused on soliciting input, identifying their concerns and to provide these groups with an opportunity to review the monitoring data, our interpretation of the data and BLM's conclusions regarding the Standards and Guidelines within the allotment.

A Resource Advisory Council (RAC) tour was held with members of the RAC, permittees and interested public on July 14, 2005. This tour was held to discuss issues within the Carico Lake Allotment. The tour also provided participants an outline of the proposed grazing management actions, permitted use and terms and conditions that were identified in the Carico Lake Allotment Rangeland Health Evaluation.

Permittee and interested public coordination meetings will continue throughout the evaluation process until a Final Multiple Use Decision (FMUD) is issued in September 2005.

Following the analysis, interpretation and evaluation of monitoring data, it was determined that SERA RMP objectives, Standards for Rangeland Health and multiple use objectives were not being fully attained. The evaluation also concluded that significant progress towards the attainment of the Standards for Rangeland Health and multiple use objectives was not occurring throughout the allotment. It was determined that historic and current livestock and wild horse use were the causal factors for non-attainment of the SERA RMP objectives, Standards for Rangeland Health and multiple use objectives. As a result of the evaluation of the monitoring data, Proposed Management Actions have been developed that will ensure that Standards for Rangeland Health and multiple use objectives where they are met continue to be met and that significant progress is made towards those that are currently not met. Through the Carico Lake Allotment Rangeland Health Assessment, allotment 1 of the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61.

In order to ensure progress towards and achieve the Standard for Rangeland Health, SERA RMP objectives and the Carico Lake Allotment specific objectives that were identified in the Carico Lake Rangeland Health Evaluation, changes in current livestock and wild horse management are required. Refer to Attachment 1 of the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61.

Finding of No Significant Impact and Decision Record For Carico Lake Allotment Rangeland Health Assessment Project Number: NV-062-EA05-61

Environmental Assessment (EA) NV-062-EA05-61, dated August 2005 has been reviewed through the interdisciplinary team process. After consideration of the environmental effects described in the EA and supporting documentation, it has been determined that the Proposed Action identified in the EA is not a major Federal action and will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the area. No effects meet the definition of significance in context or intensity as described in 40 CFR 1508.27. Therefore, preparation of an Environmental Impact Statement (EIS) is not required as per Section 102 (2) © of the National Environmental Policy Act.

It has been determined that the Proposed Action is in conformance with the approved Shoshone-Eureka Resource Management Plan, and is consistent with the plans and policies of neighboring local, county, state, tribal and federal agencies and governments. This finding and conclusion is based on the consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR 1508.27), both with regard to the context and the intensity of impacts described in the EA.

Context:

The Carico Lake Allotment lies approximately 25 miles south of Battle Mountain, Nevada in Lander County, within the jurisdictional boundary of the Battle Mountain Field Office of the Bureau of Land Management (BLM). The allotment consists of portions of Reese River Valley, Carico Lake Valley, Grass Valley and Crescent Valley. In addition, portions of the Fish Creek Mountains, Shoshone Mountains and Toiyabe Mountains are within the allotment. The Carico Lake Allotment consists of approximately 563,736 acres of public land and 35,568 acres of private land. The Carico Lake Allotment Rangeland Health Assessment Evaluation was completed to summarize, analyze and interpret monitoring information that has been collected throughout the evaluation period to determine if livestock, wild horses and wildlife use within the Carico Lake Allotment are achieving Shoshone Eureka Resource Area Land Use Plan Objectives and the Nevada Northeastern Great Basin Resource Advisory Council (RAC) Standards for Rangeland Health.

Intensity:

1. Impacts that may be both beneficial and adverse.

The Environmental Assessment considered both beneficial and adverse impacts of the proposed management actions identified in the Carico Lake Allotment Rangeland Health Assessment. The elimination of hot season grazing in riparian areas throughout the majority of the allotment, deferred grazing throughout the majority of the upland

vegetative communities, proper use levels, management of wild horses at appropriate management levels, reduction in permitted use and the conversion of cattle to sheep in the Shoshone Mountains will be beneficial. Refer to pages 15-28 of the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61.

No measurable impacts will occur to cultural resources, Native American Religious Concerns, lands, recreation, sensitive species, or ecosystem and biodiversity. None of the environmental impacts disclosed above and discussed in detail in the EA are considered significant.

2. The degree to which the proposed action affects public health or safety.

The Proposed Action will not result in potentially substantial or adverse impacts to public health and safety.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The Carico Lake Allotment lies approximately 25 miles south of Battle Mountain, Nevada in Lander County, within the jurisdictional boundary of the Battle Mountain Field Office of the Bureau of Land Management (BLM). The allotment consists of portions of Reese River Valley, Carico Lake Valley, Grass Valley and Crescent Valley. In addition, portions of the Fish Creek Mountains, Shoshone Mountains and Toiyabe Mountains are within the allotment. There are no park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas in the area of analysis. The EA did not identify any significant impacts to unique species or their habitats that occur on the allotment, or historical or cultural resources.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

Public input is requested upon review of the EA prior to issuance of a final decision. All comments received will be addressed and incorporated as pertinent. The effects of livestock grazing management practices are well known and documented, are not highly controversial, and are employed to meet resource objectives. The proposed action would reduce permitted use, which may have a short term effect on ranching income. However, the expected improvements in rangeland health would provide for the long-term economic viability of the livestock operators (EA Chapter IV).

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

There are no known effects of the Proposed Action identified in the EA, which are considered uncertain or involve unique or unknown risks. The effects analysis

demonstrates the effects are not uncertain, and do not involve unique or unknown risk (EA Chapters IV & V).

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The proposed action will not establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration. Completion of the EA does not establish a precedent for other Rangeland Health Assessments and Decisions. Any future projects within the area or in surrounding areas will be analyzed on their own merits and implemented or not, independent of the actions currently selected.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

Past and present activities within the Carico Lake Allotment include livestock grazing, mining, hunting, wild horse grazing, wild horse removal operations, invasive weed treatment, firewood cutting, fire suppression activities, development of water sources, construction of electrical transmission lines, construction of communication sites, road construction and recreation.

No significant cumulative impacts have been identified in the EA. Past, present, and reasonably foreseeable future actions on-going in the cumulative impact assessment area would not result in cumulatively significant impacts (EA Chapter V).

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP or may cause loss or destruction of significant scientific, cultural, or historical resources.

A fully qualified archaeologist would monitor the installation process to mitigate potential disturbance to buried cultural deposits that may exist within the location of the riparian exclosures. The action complies with the National Historic Preservation Act. Implementation will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places because the large size of the project area relative to the limited number of permitted livestock will ensure that grazing is dispersed (EA Chapter IV). The action will also not cause loss or destruction of significant cultural, or historical resources (EA Chapter IV).

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the ESA of 1973.

The bald eagle occasionally migrates through the Carico Lake Allotment. Special status species known to be associated with habitat typical of the allotment are the Northern goshawk and Lewis' Woodpecker. The grazing management system and the establishment of Appropriate Management Level (AML) for wild horses will lead to the protection of the riparian and upland resources. This will improve wildlife habitat throughout the allotment. No additional species listed under the ESA of 1973 or BLM Special Status Species are known to occur within the area of analysis; and therefore, the project will not result in impacts to any listed species or their habitat. The action complies with the Endangered Species Act, in that potential effects of this decision on listed species have been analyzed and documented (EA Chapter IV). The action will not adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species act of 1973, as amended.

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The Proposed Action will not violate or threaten to violate any Federal, State, or local law or requirement imposed for the protection of the environment. Applicable laws and regulations were considered in the EA. Refer to page 2 of the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61

Douglas W. Furtado Assistant Field Manager, Renewable Resources Battle Mountain Field Office Date

Therefore, it is my decision to implement the management actions identified below for livestock, wild horse and wildlife management in the Carico Lake Allotment. These management actions will become effective at the conclusion of the appeal period for this decision.

PROPOSED LIVESTOCK GRAZING MANAGEMENT DECISION

Through the allotment evaluation process it was determined that the following management actions are appropriate to ensure significant progress towards the attainment of SERA RMP objectives, Standards for Rangeland Health and multiple use objectives within the Carico Lake Allotment.

Cortez Joint Venture

1. Establish the total active permitted use for Cortez Joint Venture Use Area at 1,741 AUMs. Place 1,679 AUMs into suspended use.

Rationale:

Use pattern mapping data was collected in accordance with the Nevada Rangeland Monitoring Handbook in 1988, 1989, 1990, 1991 and 1996. This data was used to analyze the carrying capacity. The carrying capacity was based on weighted average utilization and actual use. Refer to CLARHA Appendix 11. The carrying capacity was identified along with a grazing management plan to ensure that uniform distribution will be possible in the short-term. The following table illustrates the average actual livestock use compared to the weighted average utilization and the total acres that exceeded the Rangeland Program Summary utilization objective 60% by the end of the grazing year for the Carico Lake Allotment.

	1988	1989	1990	1991	1996
61-100% Utilization	132,940 acres	63,418 acres	145,280 acres	177,957 acres	14,453 acres
Average Actual Use (Livestock)	22,031 AUMs	24,097 AUMs	28,520 AUMs	31,441 AUMs	26,342 AUMs

Key management areas CL-35, CL-40 and CL-41 are located within the Cortez Joint Venture Use Area. Key area CL-40 has experienced a significant downward trend since 1998 as revealed by the frequency study. Trend could not be determined at CL-35 and CL-41 as a result of only having baseline frequency data. Furthermore, it was determined through the analysis of monitoring data that CL-40 and CL-41 were failing to meet Resource Advisory Council (RAC) Standard 3 habitat. Riparian areas within the use area are limited; however, these areas were failing to meet RAC Standard 2 Riparian and Wetland sites. Livestock were identified as a causal factor for non-attainment of RAC Standard 2 and RAC Standard 3. The average weighted average utilization for the use pattern maps was 45.8%. A reduction in permitted use is required due to this level of livestock use being identified as a causal factor for failure to meet the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives, allotment specific objectives and downward trend at the key management areas. For detailed analysis of monitoring data regarding these findings refer to the Carico Lake Allotment Rangeland Health Assessment Pages 42-245, Appendix 6, 7, 10 and 11 and the Carico Lake Conformance Determination.

Through the evaluation of monitoring data and the carrying capacity analysis a range of AUMs was provided to the permittee and was dependent upon commitment to

management. Carrying capacity was calculated allotment wide as the result of permittees throughout the allotment not submitting actual use reports by use area or pasture. The range of AUMs for Cortez Joint Venture was 1,741 AUMs desired carrying capacity and 2,221 AUMs potential carrying capacity. Although Cortez Joint Venture is not in the livestock business they have agreed to accept the desired carrying capacity of 1,741 AUMs.

The permitted use in addition to the implementation of the management actions will ensure that significant progress will be made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives provided that the Grazing Stipulations and the Terms and Conditions identified below are adhered to. Significant progress will be made when Annual Monitoring Standards for the Carico Lake Allotment are achieved. Monitoring data will continue to be collected to ensure that allotment specific objectives are being attained within the Cortez Joint Venture Use Area. Refer to Attachment 1 of the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61.

This management selection will implement Guidelines 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6, and 4.1 which have been developed for the Northeastern Great Basin Area of Nevada to establish significant progress toward conformance with the Standards for Rangeland Health for Upland Sites, Riparian and Wetland Sites, and Habitat.

2. Establish the Cortez Joint Venture Use Area within the Carico Lake Allotment. Refer to Attached Map.

The establishment of use areas will provide for the orderly administration of the range and ensure that significant progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the Cortez Joint Venture Use Area will occur. Use areas will improve livestock actual use information on an annual basis throughout the allotment. The submission of actual use by use area will provide information regarding management of livestock. This will aid in determining if future modifications to livestock management for each permittee in relation to their use areas are needed to attain SERA RMP objectives, multiple use objectives, allotment specific objectives and the Standards for Rangeland Health.

The establishment of use areas will be in conformance with the Northeastern Great Basin RAC Guidelines 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6 and 4.1.

3. Implement the following grazing management system with terms and conditions for the Cortez Joint Venture portion of the Carico Lake Allotment:

PASTURE	SEASON OF USE	KIND OF LIVESTOCK	PERCENT PUBLIC LAND	NUMBER OF LIVESTOCK	AUMS
Cortez Joint Venture Use Area	02/01 - 03/31	Cattle	100%	898	1,741

Terms and Conditions

- 1. All exclosures on public land including areas that have been fenced off for the purpose of mining or mine reclamation throughout the Cortez Joint Venture portion of the Carico Lake Allotment will be closed to livestock grazing unless grazing use is applied for by permittee and is authorized in writing by the authorized officer.
- 2. The permittee will be required to meet with the BLM prior to each grazing year in order to determine an annual grazing management plan that will ensure appropriate use throughout the use area.
- 3. Utilization of "Key Upland Forage Species" will not exceed 40% by the end of the grazing year.
- 4. Utilization of key riparian-wetland herbaceous species shall be limited to a minimum 4-inch stubble height by July 31st of each year. Utilization of key riparian-wetland herbaceous species shall be limited to a 6-inch stubble height by the end of the growing season, if grazing starts or extends past July 31st.
- 5. Utilization of riparian woody or browse key species shall be limited to 30% of available stems by the end of the growing season. (Aspen, elderberry, serviceberry)
- 6. Riparian bank shearing and trampling shall be limited to 10% (10 feet in 100 feet of bank).
- 7. Utilization of key shrub browse species shall be no greater than 25% during the critical growth period, and no more than 40% following the end of the growing season.
- 8. If annual monitoring standards reach specified objectives in any use area where measurable standards have been met, the permittee will be required to remove livestock from that area. The permittee will have 3-5 days upon notification to remove livestock.
- 9. The permittee will be allowed five days flexibility prior to and following the scheduled use dates to move livestock.
- 10. The season of use in the permittee use area may be temporarily modified from the proposed grazing management system at the discretion of the authorized officer on an annual basis if monitoring data indicates that changes are necessary to meet multiple use objectives and Standards for Rangeland Health. Any use in excess of the total permitted use for the permittee within the Carico Lake Allotment will constitute temporary non-renewable use.

11. In accordance with 43 CFR 4130.3-3: The authorized officer may modify terms and conditions of the permit or lease when the active use or related management practices are not meeting the land use plan, allotment management plan or other activity plan, or management objectives, or is not in conformance with the provision of subpart 4180 RAC Standards and Guidelines.

Rationale:

The proposed grazing management system will establish the season of use for this use area from February 1^{st} – March 31^{st} . This season of use will be primarily for cheatgrass control, which is present throughout the use area. Hot season grazing will be eliminated from riparian areas, which will result in improved riparian habitat. The elimination of hot season grazing will allow for adequate residual cover of riparian herbaceous species, which will limit bank trampling where appropriate and hoof action along stream banks and springs to facilitate the establishment of riparian species. The elimination of hot season grazing within the use area will improve water quality. In addition, the key perennial grasses that are present will not be grazed during the critical growing period. This will allow for these plants to increase vigor, productivity and seedling establishment. The elimination of grazing during the critical growing period will improve the vegetative community by allowing for sufficient key herbaceous plant seedling and young plant recruitment. The expected improvement in the vegetative community will enhance soil site stability, which will limit the redistribution of and loss of soil resources by wind and water. Hydrologic function will also be enhanced with improvement in the vegetative community. This will allow the site to adequately capture, store and release water from rainfall or snowmelt events. Furthermore, improvement in the plant community will improve the integrity of the biotic community, which will allow for the use area to resist loss of function and structure following disturbance allowing for recovery.

In addition, the grazing management system and the Terms and Conditions will provide for the orderly administration of the range and ensure that significant progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the Cortez Joint Venture Use Area will occur. Management actions and objectives conform with the *Management Guidelines for Sage Grouse and Sagebrush Ecosystems In Nevada* (BLM 2000) and to *Guidelines to Manage Sage Grouse Populations and Their Habitats* (Connelly et. al. 2000) also known as the Western Association of Fish and Wildlife Agencies (WAFAWA) *Guidelines for Sage Grouse Management*, until augmented or superseded by the State of Nevada's South Central Nevada Sage Grouse Conservation Plan, which is now under development.

The proposed grazing management system will be in conformance with the Northeastern Great Basin RAC Guidelines including 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6, 4.1 Vegetation Guidelines and BLM/WAWFA sage grouse guidelines.

4. Issue a ten year permit for the Cortez Joint Venture Use Area portion of the Carico Lake Allotment with the following terms and conditions.

Grazing use will be in accordance with the Cortez Joint Venture Use Area portion of the Carico Lake Allotment Final Multiple Use Decision dated ______.

Failure to pay grazing bills within 15 days of the due date specified in the bill shall result in a late fee assessment of \$25.00 or 10 percent of the grazing bill, whichever is greater, but no to exceed \$250.00. Payment made later than 15 days after the due date, shall include the appropriate late fee assessment. Failure to make payment within 30 days may be a violation of 43 CFR Sec. 4140.1(B) (1) and shall result in action by the authorized officer under 43 CFR Secs. 4150.1 and 4160.1-2.

Actual use information, for each pasture/use area will be submitted to the authorized officer within 15 days of completing grazing use as specified on the grazing permit and/or grazing licenses.

Permittee will be required to maintain all range improvement projects for which maintenance responsibility is assigned in accordance with 43 CFR 4140.

In order to improve livestock and rangeland management on the public lands, all salt and/or mineral supplements will not be placed within ¹/₄ mile of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless stipulated through a written agreement or decision.

All grazing permittees shall provide reasonable access across private and/or leased lands to the Bureau of Land Management for the orderly management and protection of the public lands.

The holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the 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 by the authorized officer.

All permits and leases shall be made subject to cancellation, suspension, or modification for any violation of these regulations or of any term or condition of the permit or lease

The terms and conditions of this permit may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.

Rationale:

Issuance of a new ten year permit is based on the analysis of the management actions in the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment

NV-062-EA05-61, the evaluation of monitoring data and the evaluation of Land Use Plan objectives, Standards for Rangeland Health and multiple use objectives. Refer to Attachment 1 of the Environmental Assessment for the Carico Lake Allotment specific objectives. The terms and conditions for grazing within the Cortez Joint Venture Use Area portion of the Carico Lake Allotment will result in the attainment of multiple use objectives and is consistent with the Northeastern Great Basin RAC standards and conforms with the guidelines. At the completion of the environmental assessment and Finding of No Significant Impact (FONSI) a Final Multiple Use Decision will authorize the issuance of a new ten year grazing permit and terms and conditions. These terms and conditions will ensure compliance with all applicable laws and regulations governing livestock grazing on public lands.

The proposed ten year permit and terms and conditions will be in conformance with the Northeastern Great Basin RAC Guidelines including 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6 and 4.1.

C-Ranches

1. Establish the total active permitted use for C-Ranches Use Area from 13,405 to 9,880 AUMs. Place 3,525 AUMs into suspended use.

Rationale:

Use pattern mapping data was collected in accordance with the Nevada Rangeland Monitoring Handbook in 1988, 1989, 1990, 1991 and 1996. This data was used to analyze the carrying capacity. The carrying capacity was based on weighted average utilization and actual use. Refer to CLARHA Appendix 11. The carrying capacity was identified along with a grazing management plan to ensure that uniform distribution will be possible in the short-term. The following table illustrates the average actual livestock use compared to the weighted average utilization and the total acres that exceeded the Rangeland Program Summary utilization objective 60% by the end of the grazing year for the Carico Lake Allotment.

	1988	1989	1990	1991	1996
61-100% Utilization	132,940 acres	63,418 acres	145,280 acres	177,957 acres	14,453 acres
Average Actual Use (Livestock)	22,031 AUMs	24,097 AUMs	28,520 AUMs	31,441 AUMs	26,342 AUMs

Key management areas CL-14, CL-16, CL-17, CL-18, CL-20, CL-21, CL-22, CL-23, CL-27, CL-28, CL-29, CL-31, CL-32, CL-34, CL-36, CL-37 and CL-39 are located within C-Ranches Use Area. Key management areas CL-14, CL-18, CL-20, CL-21, CL-22, CL-27, CL-28, CL-32, CL-34 and CL-37 have experienced a downward trend since 1996. Key areas CL-17 and CL-39 have experienced a slightly upward trend since 1996. Trend was not apparent at key areas CL-23, CL-29 and CL-36. Trend was not determined at CL-31 due to only having baseline data available. Furthermore, it was determined through the analysis of monitoring data that all of the key management areas

within the C-Ranches Use Area were failing to meet the Resource Advisory Council (RAC) Standard 3 habitat. In addition, the majority of riparian areas within the C-Ranches Use Area were failing to meet RAC Standard 2 Riparian and Wetland Sites. Livestock were identified as a causal factor for non-attainment of RAC Standard 2 and RAC Standard 3. The average weighted average utilization for the use pattern maps was 45.8%. A reduction in permitted use is required due to this level of livestock use being identified as a causal factor for failure to meet the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives, allotment specific objectives and downward trend at the key management areas. For detailed analysis of monitoring data regarding these findings refer to the Carico Lake Allotment Rangeland Health Assessment Pages 42-245, Appendix 6, 7, 10 and 11 and the Carico Lake Conformance Determination.

Through the evaluation of monitoring data and the carrying capacity analysis a range of AUMs was provided to the permittee and was dependant upon commitment to livestock management. Carrying capacity was calculated allotment wide as the result of permittees throughout the allotment not submitting actual use reports by use area or pasture. The range of AUMs for C-Ranches was 7,745 AUMs desired carrying capacity and 9,880 AUMs potential carrying capacity. On July 1st, 2005 BLM and C-Ranches had a meeting to discuss the range of AUMs and C-Ranches commitment to improve livestock management. The outcome of the meeting was that C-Ranches would support the potential carrying capacity provided that BLM commit to funding pasture fences in the future. BLM personnel explained the process to implement a proposed project. This process will include site specific analysis including NEPA, archeological clearances and public input prior to project initiation. The NEPA document will screen the proposals for compliance with all LUP objectives, pertinent laws, regulations, and bureau policies. Range improvement projects would also be subject to district priorities.

The permitted use in addition to the implementation of the management actions will ensure that significant progress will be made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives provided that the Grazing Stipulations and the Terms and Conditions identified below are adhered to. Significant progress will be made when Annual Monitoring Standards for the Carico Lake Allotment are achieved. Monitoring data will continue to be collected to ensure that allotment specific objectives are being attained within the C-Ranches Use Area. Refer to Attachment 1 of the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61.

This management selection will implement Guidelines 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6, and 4.1 which have been developed for the Northeastern Great Basin Area of Nevada to establish significant progress toward conformance with the Standards for Rangeland Health for Upland Sites, Riparian and Wetland Sites, and Habitat.

2. Establish the following use areas for C-Ranches portion of the Carico Lake Allotment. Refer to Attached Map.

USE AREAS				
Carico Lake Valley	Toiyabe Flat			
Shoshone Mountain	Toiyabe Mountain			

The establishment of use areas will provide for the orderly administration of the range and ensure that significant progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the C-Ranches Use Area will occur. Use areas will improve livestock actual use information on an annual basis throughout the allotment. The submission of actual use by use area will provide information regarding management of livestock. This will aid in determining if future modifications to livestock management for each permittee in relation to their use areas are needed to attain SERA RMP objectives, multiple use objectives, allotment specific objectives and the Standards for Rangeland Health.

The establishment of use areas will be in conformance with the Northeastern Great Basin RAC Guidelines 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6 and 4.1.

3. Implement the following grazing management system with terms and conditions for the C-Ranches Use Area within the Carico Lake Allotment.

PASTURE	SEASON OF	KIND OF	PERCENT	NUMBER OF	AUMS
	USE	LIVESTOCK	PUBLIC LAND	LIVESTOCK	
Cortez Use Area*	02/01-03/31	Cattle	100%	898	1,741
Toiyabe Mountain Use Area	04/01-06/30	Cattle	100%	490	1,466
Toiyabe Flat Use Area	07/01-11/15	Cattle	100%	490	2,223
Shoshone Mountain Use Area	04/01-06/30	Cattle	100%	490	1,466
Carico Lake Valley Use Area	07/01-11/15	Cattle	100%	490	2,223
Carico Lake Valley Use Area**	11/16-01/31	Cattle	100%	300	761

*Livestock use within the Cortez Use Area will have to be applied for each year and authorization will be at the discretion of the authorized officer.

**Livestock will be allowed to graze flat around private meadows and drift in and out of private land from 11/16-01/31.

Terms and Conditions

1. All exclosures on public land including areas that have been fenced off for the purpose of mining or mine reclamation throughout the C-Ranches and Cortez Joint Venture portion of the Carico Lake Allotment will be closed to livestock grazing unless grazing use is applied for by permittee and is authorized in writing by the authorized officer.

- 2. The permittee will be required to meet with the BLM prior to each grazing year in order to determine an annual grazing management plan that will ensure appropriate use throughout the use area.
- 3. Livestock use within the Cortez Use Area will be applied for each year and authorization will be at the discretion of the authorized officer.
- 4. Livestock will be allowed to graze flat around private meadows and drift in and out of private land from 11/16-01/31 within the Carico Lake Valley Use Area.
- 5. Utilization of "Key Upland Forage Species" will not exceed 40% by the end of the grazing year.
- 6. Utilization of key riparian-wetland herbaceous species shall be limited to a minimum 4-inch stubble height by July 31st of each year. Utilization of key riparian-wetland herbaceous species shall be limited to a 6-inch stubble height by the end of the growing season, if grazing starts or extends past July 31st.
- 7. Utilization of riparian woody or browse key species shall be limited to 30% of available stems by the end of the growing season. (Aspen, elderberry, serviceberry)
- 8. Riparian bank shearing and trampling shall be limited to 10% (10 feet in 100 feet of bank).
- 9. Utilization of key shrub browse species shall be no greater than 25% during the critical growth period, and no more than 40% following the end of the growing season.
- 10. If annual monitoring standards reach specified objectives in any use area where measurable standards have been met, the permittee will be required to remove livestock from that area. The permittee will have 3-5 days upon notification to remove livestock.
- 11. The permittee will be allowed five days flexibility prior to and following the scheduled use dates to move livestock.
- 12. The season of use in the permittee use area may be temporarily modified from the proposed grazing management system at the discretion of the authorized officer on an annual basis if monitoring data indicates that changes are necessary to meet multiple use objectives and Standards for Rangeland Health. Any use in excess of the total permitted use for the permittee within the Carico Lake Allotment will constitute temporary non-renewable use.
- 13. In accordance with 43 CFR 4130.3-3: The authorized officer may modify terms and conditions of the permit or lease when the active use or related management

practices are not meeting the land use plan, allotment management plan or other activity plan, or management objectives, or is not in conformance with the provision of subpart 4180 RAC Standards and Guidelines.

Rationale:

The proposed grazing management system will establish a season of use from February 1^{st} – March 31^{st} within the Cortez Joint Venture Use Area. This season of use will be primarily for cheatgrass control, which is present throughout the use area. In addition, the key perennial grasses that are present will not be grazed during the critical growing period. This will allow for these plants to increase vigor, productivity and seedling establishment. The elimination of grazing during the critical growing period will improve the vegetative community by allowing for sufficient key herbaceous plant seedling and young plant recruitment. Livestock use within the Cortez Joint Venture Use Area will have to be applied for each year and authorization will be at the discretion of the authorized officer.

The proposed grazing management system will establish a season of use from April 1st – June 30th in the Toiyabe Mountain Use Area and Shoshone Mountain Use Area. The season of use will eliminate hot season grazing within these use areas where the majority of riparian habitat exists within the C-Ranches Use Area. The elimination of hot season grazing will allow for the recovery of riparian areas throughout these use areas. The elimination of hot season grazing will allow for adequate residual cover of riparian herbaceous species, which will limit bank trampling where appropriate and hoof action along stream banks and springs to facilitate the establishment of riparian species. Furthermore, the elimination of hot season grazing accompanied by the new Terms and Conditions within the use areas will improve water quality by improving the vigor and production of riparian species, which will lead to greater vegetative cover on stream banks and floodplains. Water quality is expected to improve in the short-term, since year-round grazing impacts will be eliminated. This will allow riparian zones to increase capture of sediments and will decrease pollutants such as fecal colliform and turbidity, since livestock use along riparian zones will be significantly less or eliminated. These factors will ensure that significant progress is being made towards the attainment of Proper Functioning Condition (PFC). Although livestock grazing will occur during the critical growing period for upland herbaceous species, proper use levels have been identified for the season of use.

The proposed grazing management system will establish the season of use from July 1^{st} – November 15^{th} in the Toiyabe Flat Use Area and the Carico Lake Valley Use Area. Riparian areas are limited in these two use areas; however, where there is hot season grazing, riparian exclosures will need to be constructed. The majority of livestock will be in private meadows from November 16^{th} – January 31^{st} . Dry cows will be allowed to graze flats around private meadows and drift in and out of private land from November 16^{th} – January 31^{st} in the Carico Lake Valley Use Area. Grazing within the Toiyabe Flat Use Area and the Carico Lake Valley Use Area will be after completion of the critical growing period. The elimination of grazing during the critical growing period will

improve the vegetative community by allowing for sufficient key herbaceous plant seedling and young plant recruitment. This will allow for improvement in the plant communities by enhancing key perennial species productivity, which will in turn provide seed to repopulate the plant communities. The expected improvement in the vegetative community will enhance soil site stability, which will limit the redistribution of and loss of soil resources by wind and water. Hydrologic function will also be enhanced with improvement in the vegetative community. This will allow the site to adequately capture, store and release water from rainfall or snowmelt events. Furthermore, improvement in the plant community will improve the integrity of the biotic community, which will permit the use area to resist loss of function and structure following disturbance allowing for recovery.

In addition, the grazing management system and the Terms and Conditions will provide for the orderly administration of the range and ensure that significant progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the C-Ranches Use Area will occur. Management actions and objectives conform with the *Management Guidelines for Sage Grouse and Sagebrush Ecosystems In Nevada* (BLM 2000) and to *Guidelines to Manage Sage Grouse Populations and Their Habitats* (Connelly et. al. 2000) also known as the Western Association of Fish and Wildlife Agencies (WAFAWA) *Guidelines for Sage Grouse Management*, until augmented or superseded by the State of Nevada's South Central Nevada Sage Grouse Conservation Plan, which is now under development.

On July 1st and 8th, 2005, BLM met with C-Ranches to discuss a grazing management system. C-Ranches was in support of the grazing management system identified in this document.

The proposed grazing management system will be in conformance with the Northeastern Great Basin RAC Guidelines including 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6, 4.1 Vegetation Guidelines and BLM/WAWFA sage grouse guidelines.

4. Issue a ten year permit for the C-Ranches Use Area portion of the Carico Lake Allotment with the following terms and conditions:

Grazing use will be in accordance with the C-Ranches Use Area portion of the Carico Lake Allotment Final Multiple Use Decision dated _____.

Failure to pay grazing bills within 15 days of the due date specified in the bill shall result in a late fee assessment of \$25.00 or 10 percent of the grazing bill, whichever is greater, but no to exceed \$250.00. Payment made later than 15 days after the due date, shall include the appropriate late fee assessment. Failure to make payment within 30 days may be a violation of 43 CFR Sec. 4140.1(B) (1) and shall result in action by the authorized officer under 43 CFR Secs. 4150.1 and 4160.1-2. Actual use information, for each pasture/use area will be submitted to the authorized officer within 15 days of completing grazing use as specified on the grazing permit and/or grazing licenses.

Permittee will be required to maintain all range improvement projects for which maintenance responsibility is assigned in accordance with 43 CFR 4140.

In order to improve livestock and rangeland management on the public lands, all salt and/or mineral supplements will not be placed within ¹/₄ mile of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless stipulated through a written agreement or decision.

All grazing permittees shall provide reasonable access across private and/or leased lands to the Bureau of Land Management for the orderly management and protection of the public lands.

The holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the 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 by the authorized officer.

All permits and leases shall be made subject to cancellation, suspension, or modification for any violation of these regulations or of any term or condition of the permit or lease. The terms and conditions of this permit may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.

Rationale:

Issuance of a new ten year permit is based on the analysis of the management actions in the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61, the evaluation of monitoring data and the evaluation of Land Use Plan objectives, Standards for Rangeland Health and multiple use objectives. Refer to Attachment 1 of the Environmental Assessment for the Carico Lake Allotment multiple use objectives. The terms and conditions for grazing within the C-Ranches Use Area portion of the Carico Lake Allotment will result in the attainment of multiple use objectives and is consistent with the Northeastern Great Basin RAC standards and conforms with the guidelines. At the completion of the environmental assessment and Finding of No Significant Impact (FONSI) a Final Multiple Use Decision will authorize the issuance of a new ten year grazing permit and terms and conditions. These terms and conditions will ensure compliance with all applicable laws and regulations governing livestock grazing on public lands.

The proposed ten year permit and terms and conditions will be in conformance with the Northeastern Great Basin RAC Guidelines including 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6 and 4.1.

5. All projects on public land where C-Ranches has maintenance must be in proper working order by January 1, 2007.

Rationale:

Range improvements throughout C-Ranches Use Area are in disrepair. Ensuring proper maintenance will aid in the attainment of allotment specific objectives.

Doby George LLC.

1. Establish the total active permitted use for Doby George LLC. Use Area at 295 AUMs. Place 105 AUMs into suspended use.

Rationale:

Use pattern mapping data was collected in accordance with the Nevada Rangeland Monitoring Handbook in 1988, 1989, 1990, 1991 and 1996. This data was used to analyze the carrying capacity. The carrying capacity was based on weighted average utilization and actual use. Refer to CLARHA Appendix 11. The carrying capacity was identified along with a grazing management plan to ensure that uniform distribution will be possible in the short-term. The following table illustrates the average actual livestock use compared to the weighted average utilization and the total acres that exceeded the Rangeland Program Summary utilization objective 60% by the end of the grazing year for the Carico Lake Allotment.

	1988	1989	1990	1991	1996
61-100% Utilization	132,940 acres	63,418 acres	145,280 acres	177,957 acres	14,453 acres
Average Actual Use (Livestock)	22,031 AUMs	24,097 AUMs	28,520 AUMs	31,441 AUMs	26,342 AUMs

Key management areas CL-24, CL-25 and CL-37 are located within the Doby George LLC. Use Area. A downward trend has occurred since 1996 at key areas CL-24 and CL-37. A downward trend occurred since 1998 at key area CL-25. Furthermore, it was determined through the analysis of monitoring data that CL-24, CL-25 and CL-37 were failing to meet Resource Advisory Council Standard 3 habitat. Riparian areas within the use were also failing to meet RAC Standard 2 Riparian and Wetland Sites. Livestock were identified as a causal factor for the non-attainment of RAC Standard 2 and RAC Standard 3. The average weighted average utilization for the use pattern maps was 45.8%. A reduction in permitted use is required due to this level of livestock use being identified as a causal factor for failure to meet the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives, allotment specific objectives and downward trend at the key management areas. For detailed analysis of monitoring data regarding

these findings refer to the Carico Lake Allotment Rangeland Health Assessment Pages 42-245, Appendix 6, 7, 10 and 11 and the Carico Lake Conformance Determination.

Through the evaluation of monitoring data and the carrying capacity analysis a range of AUMs was provided to the permittee and was dependant upon commitment to management. Carrying capacity was calculated allotment wide as the result of permittees throughout the allotment not submitting actual use reports by use area or pasture. The range of AUMs for Doby George LLC. was 231 AUMs desired carrying capacity and 295 AUMs potential carrying capacity. The potential carrying capacity of 295 was specified for Doby George LLC based on commitment to management.

The permitted use in addition to the implementation of the management actions will ensure that significant progress will be made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health and allotment specific objectives provided that the Grazing Stipulations and the Terms and Conditions identified below are adhered to. Significant progress will be made when Annual Monitoring Standards for the Carico Lake Allotment are achieved. Monitoring data will continue to be collected to ensure that allotment specific objectives are being attained within the Doby George LLC. Use Area. Refer to Attachment 1 of the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61.

This management selection will implement Guidelines 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6, and 4.1 which have been developed for the Northeastern Great Basin Area of Nevada to establish significant progress toward conformance with the Standards for Rangeland Health for Upland Sites, Riparian and Wetland Sites, and Habitat.

2. Establish the Doby George LLC. Use Area within the Carico Lake Allotment. A portion of the Shoshone Mountains is within the Doby George LLC. Use Area. Refer to Attached Map.

The establishment of use areas will provide for the orderly administration of the range and ensure that significant progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the Doby George LLC. Use Area will occur. Use areas will improve livestock actual use information on an annual basis throughout the allotment. The submission of actual use by use area will provide information regarding management of livestock. This will aid in determining if future modifications to livestock management for each permittee in relation to their use areas are needed to attain SERA RMP objectives, multiple use objectives, allotment specific objectives and the Standards for Rangeland Health.

The establishment of use areas will be in conformance with the Northeastern Great Basin RAC Guidelines 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6 and 4.1.

3. Implement the following grazing management system and terms and conditions for the Doby George LLC. Use Area.

PASTURE	SEASON OF USE	KIND OF LIVESTOCK	PERCENT PUBLIC LAND	NUMBER OF LIVESTOCK	AUMS
Doby George LLC., Use Area	04/01 - 06/30	Sheep	100%	493	295

Terms and Conditions

- 1. All exclosures including areas that have been fenced off for the purpose of mining or mine reclamation throughout the Doby George LLC., Use Area will be closed to livestock grazing unless grazing use is applied for by Doby George LLC., and is authorized in writing by the authorized officer.
- 2. Sheep camps will be moved every five days. No two (2) sheep camps will camp in the same area in a grazing season.
- 3. New bed grounds will be used every night. Sheep bedding grounds will be a minimum of one quarter (1/4) mile from permanent water, aspen stands and previous bed grounds.
- 4. Utilization of "Key Upland Forage Species" will not exceed 40% by the end of the grazing year.
- 5. Utilization of key riparian-wetland herbaceous species shall be limited to a minimum 4-inch stubble height by July 31st of each year. Utilization of key riparian-wetland herbaceous species shall be limited to a 6-inch stubble height by the end of the growing season, if grazing starts or extends past July 31st.
- 6. Utilization of riparian woody or browse key species shall be limited to 30% by the end of the growing season. (Aspen, elderberry, serviceberry)
- 7. Riparian bank shearing and trampling shall be limited to 10% (10 feet in 100 feet of bank).
- 8. Utilization of key shrub browse species shall be no greater than 25% during the critical growth period, and no more than 40% following the end of the growing season.
- 9. The permittee will be required to herd sheep throughout their established use area to utilize areas that have received slight and/or light use. If it is determined that utilization objectives are being met in any area, the permittee will be required to move sheep immediately upon notification to other areas of the use area that have not been grazed.

- 10. The permittee will be allowed five days flexibility prior to and following the scheduled use dates to move livestock.
- 11. The permittee will be required to meet with the BLM prior to each grazing year in order to determine an annual grazing management plan that will ensure appropriate use throughout the allotment.
- 12. The season of use in Doby George LLC., Use Area may be temporarily modified from the proposed grazing management system at the discretion of the authorized officer on an annual basis if monitoring data indicates that changes are necessary to meet allotment specific objectives and Standards for Rangeland Health. Any use in excess of the total permitted use for the Doby George LLC., Use Area within the Carico Lake Allotment will constitute temporary non-renewable use.
- 13. In accordance with 43 CFR 4130.3-3: The authorized officer may modify terms and conditions of the permit or lease when the active use or related management practices are not meeting the land use plan, allotment management plan or other activity plan, or management objectives, or is not in conformance with the provision of subpart 4180 RAC Standards and Guidelines.

Rationale:

The proposed grazing management system will establish a season of use from April 1st – June 30th within the Doby George LLC., Use Area. The proposed grazing management system will allow existing upland plants to increase vigor, productivity, cover and seedling establishment. Due to the nature of sheep grazing and herding, it is expected that a certain percentage of the Doby George LLC., Use Area will be deferred annually. Although livestock grazing will occur during the critical growing period for upland herbaceous species, proper use levels have been identified. This will limit use on native upland rangeland during the critical growing period, allow forage plants to gain in vigor, and produce seed. Proper vegetative management maintains or improves the plant community for protection of soil and water resources. Sufficient seedling and young plant recruitment is needed to maintain and increase herbaceous species in the plant community. Healthy plant communities must be able to complete their life cycle by preventing damage during the critical growth period. Critical growth period in a plant growth cycle occurs when food reserves are the lowest and grazing is the most harmful. The Doby George LLC. portion of the Shoshone Mountain Use Area is more suitable to sheep grazing due to topography, distance from water, composition of vegetation, riparian and aspen values. Sheep prefer to graze and bed on upland areas away from riparian areas, which will ensure that critical riparian, water quality and watershed issues are addressed within the Doby George LLC. portion of the Shoshone Mountain Use Area. Sheep will not concentrate on riparian areas due to herding and existing water developments throughout the use area. The elimination of hot season grazing will allow for adequate residual cover of riparian herbaceous species, which will limit bank trampling where appropriate and hoof action along stream banks and springs to facilitate the establishment of riparian species. Furthermore, the elimination of hot season grazing accompanied by the new Terms and Conditions within the use areas will improve water quality by improving the vigor and production of riparian species, which will lead to greater vegetative cover on stream banks and floodplains. Water quality is expected to improve in the short-term, since year-round grazing impacts will be eliminated. This will allow riparian zones to increase capture of sediments and will decrease pollutants such as fecal colliform and turbidity, since livestock use along riparian zones will be significantly less or eliminated. These factors will ensure that significant progress is being made towards the attainment of Proper Functioning Condition (PFC). The biodiversity of upland vegetative communities will be improved due to the intensive nature of sheep herding. Herding will ensure that better livestock distribution occurs within the use areas. Sheep are herded more effectively than cattle and utilize areas that will not normally be grazed by cattle.

The expected improvement in the vegetative community will enhance soil site stability, limiting the redistribution of and loss of soil resources by wind and water. Hydrologic function will also be enhanced with improvement in the vegetative community. This will allow the site to adequately capture, store and release water from rainfall or snowmelt events. Furthermore, improvement in the plant community will improve the integrity of the biotic community, which will allow the use area to resist loss of function and structure following disturbance allowing for recovery.

In addition, the grazing management system and the Terms and Conditions will provide for the orderly administration of the range and ensure that significant progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the Doby George LLC. Use Area will occur. Management actions and objectives conform with the *Management Guidelines for Sage Grouse and Sagebrush Ecosystems In Nevada* (BLM 2000) and to *Guidelines to Manage Sage Grouse Populations and Their Habitats* (Connelly et. al. 2000) also known as the Western Association of Fish and Wildlife Agencies (WAFAWA) *Guidelines for Sage Grouse Management*, until augmented or superseded by the State of Nevada's South Central Nevada Sage Grouse Conservation Plan, which is now under development.

The proposed grazing management system will be in conformance with the Northeastern Great Basin RAC Guidelines including 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6, 4.1 Vegetation Guidelines and BLM/WAWFA sage grouse guidelines.

4. Issue a ten year permit for the Doby George LLC., portion of the Carico Lake Allotment with the following terms and conditions:

Grazing use will be in accordance with the Doby George LLC., portion of the Carico Lake Allotment Final Multiple Use Decision dated _____.

Failure to pay grazing bills within 15 days of the due date specified in the bill shall result in a late fee assessment of \$25.00 or 10 percent of the grazing bill, whichever is greater, but no to exceed \$250.00. Payment made later than 15 days after the due date, shall include the appropriate late fee assessment. Failure to make payment within 30 days may be a violation of 43 CFR Sec. 4140.1(B) (1) and shall result in action by the authorized officer under 43 CFR Secs. 4150.1 and 4160.1-2.

Actual use information, for each pasture/use area will be submitted to the authorized officer within 15 days of completing grazing use as specified on the grazing permit and/or grazing licenses.

Permittee will be required to maintain all range improvement projects for which maintenance responsibility is assigned in accordance with 43 CFR 4140. In order to improve livestock and rangeland management on the public lands, all salt

and/or mineral supplements will not be placed within ¹/₄ mile of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless stipulated through a written agreement or decision.

All grazing permittees shall provide reasonable access across private and/or leased lands to the Bureau of Land Management for the orderly management and protection of the public lands.

The holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the 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 by the authorized officer.

All permits and leases shall be made subject to cancellation, suspension, or modification for any violation of these regulations or of any term or condition of the permit or lease

The terms and conditions of this permit may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.

Rationale:

Issuance of a new ten year permit is based on the analysis of the management actions in the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61, the evaluation of monitoring data and the evaluation of Land Use Plan objectives, Standards for Rangeland Health and allotment specific objectives. Refer to Attachment 1 of the Environmental Assessment for the Carico Lake Allotment specific objectives. The terms and conditions for grazing within the Doby George LLC. Use Area portion of the Carico Lake Allotment will result in the attainment of allotment specific objectives and is consistent with the Northeastern Great Basin RAC standards and conforms with the guidelines. At the completion of the environmental assessment and Finding of No Significant Impact (FONSI) a Final Multiple Use Decision will authorize the issuance of a new ten year grazing permit and terms and conditions. These terms and conditions will ensure compliance with all applicable laws and regulations governing livestock grazing on public lands.

The proposed ten year permit and terms and conditions will be in conformance with the Northeastern Great Basin RAC Guidelines including 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6 and 4.1.

Ellison Ranching Company

On July 11, 2005 a partial transfer occurred between Filippini Ranching Company and Ellison Ranching Company. Filippini Ranching Company transferred 11,299 AUMs of their total grazing preference of 12,077 AUMs to Ellison Ranching Company. In addition, 199 AUMs of suspended use was attached to the transfer to Ellison Ranching Company.

- 1. Implement the agreement between BLM and Ellison Ranching Company to establish the total active permitted use for the recently acquired Ellison Ranching Company grazing permit at 8,902 AUMs. Place 2,596 AUMs into suspended use.
- 2. Establish the total active permitted use for the Ellison Ranching Company historical grazing permit at 1,561 AUMs. Place 557 AUMs into suspended use.
- 3. The total active permitted use for the Ellison Ranching Company historical grazing permit and the recently acquired grazing permit will be 10,463 AUMs. Place a total of 3,153 AUMs into suspended use.

Rationale:

Use pattern mapping data was collected in accordance with the Nevada Rangeland Monitoring Handbook in 1988, 1989, 1990, 1991 and 1996. This data was used to analyze the carrying capacity. The carrying capacity was based on weighted average utilization and actual use. Refer to CLARHA Appendix 11. The carrying capacity was identified along with a grazing management plan to ensure that uniform distribution will be possible in the short-term. The following table illustrates the average actual livestock use compared to the weighted average utilization and the total acres that exceeded the Rangeland Program Summary utilization objective 60% by the end of the grazing year for the Carico Lake Allotment.

	1988	1989	1990	1991	1996
61-100% Utilization	132,940 acres	63,418 acres	145,280 acres	177,957 acres	14,453 acres
Average Actual Use (Livestock)	22,031 AUMs	24,097 AUMs	28,520 AUMs	31,441 AUMs	26,342 AUMs

Key management areas including CL-5, CL-6, CL-7, CL-8, CL-11, CL-13, CL-24, CL-25, CL-30, CL-33 and CL-38 are located within the Ellison Ranching Company historical use area and newly acquired use areas from Filippini Ranching Company. A downward trend has occurred at key areas CL-13, CL-24, and CL-30 since 1996. Key area CL-25

experienced a downward trend since 1998. An upward trend was experienced at key areas CL-11 and Cl-33 since 1996. Trend was static at CL-38. Trend was not determined at key areas CL-5, CL-6, CL-7 and CL-8 due to only having baseline frequency data available. In addition, it was determined through the analysis of monitoring data that CL-6, CL-7, CL-8, CL-11, CL-13, CL-24, CL-25, CL-30, CL-33 and CL-38 were failing to meet Resource Advisory Council (RAC) Standard 3. The majority of these key areas are within Ellison Ranching Company's newly acquired use areas. Riparian areas throughout the newly acquired Ellison Ranching Company Use Area from Filippini Ranching Company were failing to meet RAC Standard 2 Riparian and Wetland Sites. Livestock were identified as a causal factor for non-attainment of RAC Standard 2 and RAC Standard 3. The average weighted average utilization for the use pattern maps was 45.8%. A reduction in permitted use is required due to this level of livestock use being identified as a causal factor for failure to meet the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives, allotment specific objectives and downward trend at the key management areas. For detailed analysis of monitoring data regarding these findings refer to the Carico Lake Allotment Rangeland Health Assessment Pages 42-245, Appendix 6, 7, 10 and 11 and the Carico Lake Conformance Determination.

Through the evaluation of monitoring data and the carrying capacity analysis a range of AUMs was provided to the permittee and was dependant upon commitment to management. Carrying capacity was calculated allotment wide as the result of permittees throughout the allotment not submitting actual use reports by use area or pasture. The range of AUMs for Ellison Ranching Company was 8,202 AUMs desired carrying capacity and 10,463 AUMs potential carrying capacity. The potential carrying capacity of 10,463 AUMs was specified for Ellison Ranching Company based on commitment to livestock management.

In addition, the carrying capacity was identified along with a grazing management plan to ensure that uniform distribution will be possible in the short-term. The carrying capacity was implemented for this use area due to herding and the potential for sheep to use areas that were inaccessible to cattle due to slope and distance from water. Additionally, cattle grazing will be isolated to established pastures that have been burned by wildfire and rehabilitated. The majority of grazing within these pastures by cattle will be after the completion of the critical growing period in the fall and winter when herbaceous species are in dormancy. It has been determined that the carrying capacity for livestock grazing within the Ellison Ranching Company Use Area of the Carico Lake Allotment will attain allotment specific objectives.

The permitted use in addition to the implementation of the management actions will ensure that significant progress will be made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health and allotment specific objectives provided that the Grazing Stipulations and the Terms and Conditions identified below are adhered to. Significant progress will be made when Annual Monitoring Standards for the Carico Lake Allotment are achieved. Monitoring data will continue to be collected to ensure that allotment specific objectives are being attained within the Ellison Ranching Company Use Area. Refer to Attachment 1 of the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61.

This management selection will implement Guidelines 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6, and 4.1 which have been developed for the Northeastern Great Basin Area of Nevada to establish significant progress toward conformance with the Standards for Rangeland Health for Upland Sites, Riparian and Wetland Sites, and Habitat.

4. Establish the following use areas within the Ellison Ranching Company portion of the Carico Lake Allotment. Refer to Attached Map.

USE AREAS				
Antelope Pasture	Harry Canyon Use Area			
Cedars Pasture	Moss Fire Use Area			
Cedars North Pasture	Shoshone Mountain Use Area			
Cedars South Pasture	Wood Canyon Use Area			
Fish Creek Mountains Use Area				

The establishment of use areas will provide for the orderly administration of the range and ensure that significant progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the Ellison Ranching Company Use Area will occur. Use areas will improve livestock actual use information on an annual basis throughout the allotment. The submission of actual use by use area will provide information regarding management of livestock. This will aid in determining if future modifications to livestock management for each permittee in relation to their use areas are needed to attain SERA RMP objectives, multiple use objectives, allotment specific objectives and the Standards for Rangeland Health.

The establishment of use areas will be in conformance with the Northeastern Great Basin RAC Guidelines 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6 and 4.1.

5. Implement the agreement between BLM and Ellison Ranching Company to convert 6,403 AUMs of active use from cattle to sheep use in the Shoshone Mountain Use Area, Harry Canyon Use Area and the Moss Fire Use Area. Upon the conversion of AUMs, identify the appropriate terms and conditions for authorizing sheep in the Shoshone Mountain Use Area, Harry Canyon Use Area and the Moss Fire Use Area. 2,499 AUMs will remain available for cattle. Identify the appropriate terms and conditions for authorizing cattle in the Antelope Pasture, Cedars Pasture, Moss Fire Use Area, Wood Canyon Pasture, Cedars North Pasture and Cedars South Pasture.

Rationale:

The conversion of cattle AUMs to sheep AUMs will eliminate cattle grazing within the Shoshone Mountain Use Area and Harry Canyon Use Area. The evaluation of monitoring data has revealed that upland, riparian and water quality issues are prevalent throughout these two use areas. Hot season livestock grazing will be eliminated within the use areas, which will improve sensitive riparian and aspen habitat. The elimination of hot season grazing will allow for adequate residual cover of riparian herbaceous species, which will limit bank trampling where appropriate and hoof action along stream banks and springs to facilitate the establishment of riparian species. The Shoshone Mountain Use Area and the Harry Canyon Use Area are more suitable to sheep grazing due to topography, distance from water, composition of vegetation, riparian and aspen values. Sheep prefer to graze and bed on upland areas away from riparian areas, which will ensure that critical riparian, water quality and watershed issues are addressed within the Shoshone Mountain Use Area and the Harry Canyon Use Area. Sheep will not concentrate on riparian areas due to herding and existing water developments throughout the allotment. This level of livestock management will improve water quality throughout the two use areas. These factors will ensure that significant progress is being made towards the attainment of Proper Functioning Condition (PFC). The biodiversity of upland vegetative communities will be improved due to the intensive nature of sheep herding. Herding will ensure that better livestock distribution occurs within the use areas. Sheep are herded more effectively than cattle and utilize areas that will not normally be grazed by cattle. These areas can be influenced by topography and distance from water.

Sheep use will be permitted within the Moss Fire Use Area in the spring on an annual basis dependant on cheatgrass production. This will aid in controlling cheatgrass that is present throughout this use area. Sheep will be used to reduce the amount of fuel and reduce the vegetative height of cheatgrass. This will aid in creating a firebreak.

Due to the nature of sheep grazing and herding, it is expected that a certain percentage of the Ellison Ranching Company Use Area will be deferred annually. Although livestock grazing will occur during the critical growing period for upland herbaceous species proper use levels have been identified. This will limit use on native upland rangeland during the critical growing period, allow forage plants to gain in vigor, and produce seed. Proper vegetative management will maintain or improve the plant community for protection of soil and water resources. Sufficient seedling and young plant recruitment is needed to maintain and increase herbaceous species in the plant community. Healthy plant communities must be able to complete their life cycle by preventing damage during the critical growth period. Critical growth period in a plant growth cycle occurs when food reserves are the lowest and grazing is the most harmful.

Cattle use will occur in the Antelope Pasture, Cedars Pasture, Moss Fire Use Area, Wood Canyon Pasture, Cedars North Pasture and Cedars South Pasture. The majority of these pastures and use areas have been burned and rehabilitated. The season of use in these pastures and use areas will be from December 1^{st} – April 30th. The majority of use in

these pastures will be deferred until the dormant season. This will limit use on native upland rangeland during the critical growing period, allow forage plants to gain in vigor and produce seeds. Due to the number of pastures and use areas in the grazing management system the majority of livestock grazing on a year-to-year basis will be prior to the critical growing period. Although livestock grazing will occur during the critical growing period for upland herbaceous species in some pastures, proper use levels have been identified.

The proposed conversion of cattle to sheep AUMs will be in conformance with the Northeastern Great Basin RAC Guidelines including 1.1, 1.3, 3.1, 3.2, 3.3, 3.6, 4.1 Vegetation Guidelines and BLM/WAWFA sage grouse guidelines.

6. Implement the agreed upon grazing management system between BLM and Ellison Ranching Company and terms and conditions for the Ellison Ranching Company Use Area.

PASTURE	SEASON OF	KIND OF	PERCENT	NUMBER OF	AUMS
	USE	LIVESTOCK	PUBLIC LAND	LIVESTOCK	
*Fish Creek Mountains Use Area	02/15-02/28	Sheep	100%	1,218	112
	03/01-04/30	Sheep	100%	1,218	489
	11/01-02/28	Sheep	100%	1,218	960
**Shoshone Mountains Use Area	03/01-06/30	Sheep	100%	6,545	5,250
**Harry Canyon Use Area	11/01-02/28	Sheep	97%	1,507	1,153
**Antelope Pasture, Cedars	12/01-02/28	Cattle	100%	506	1,497
Pasture, Moss Fire Use Area,					
Wood Canyon Pasture, Cedars					
North Pasture and Cedars South					
Pasture					
**Antelope Pasture, Cedars	03/01-04/30	Cattle	100%	500	1,002
Pasture, Moss Fire Use Area,					
Wood Canyon Pasture, Cedars					
North Pasture and Cedars South					
Pasture					

*The Fish Creek Mountain Use Area is Ellison Ranching Company's historical use area within the Carico Lake Allotment. **These use areas belonged to Filippini Ranching Company prior to the July 11, 2005 transfer of grazing privileges to Ellison Ranching Company.

Terms and Conditions

- 1. All exclosures on public land including areas that have been fenced off for the purpose of mining or mine reclamation throughout the Ellison Ranching Company Use Area will be closed to livestock grazing unless grazing use is applied for by Ellison Ranching Company and is authorized in writing by the authorized officer.
- 2. Sheep camps will be moved every five days. No two (2) sheep camps will camp in the same area in a grazing season.

- 3. New bed grounds will be used every night. Sheep bedding grounds will be a minimum of one quarter (1/4) mile from permanent water, aspen stands and previous bed grounds.
- 4. Utilization of "Key Upland Forage Species" will not exceed 40% by the end of the grazing year.
- 5. Utilization of key riparian-wetland herbaceous species shall be limited to a minimum 4-inch stubble height by July 31st of each year. Utilization of key riparian-wetland herbaceous species shall be limited to a 6-inch stubble height by the end of the growing season, if grazing starts or extends past July 31st.
- 6. Utilization of riparian woody or browse key species shall be limited to 30% of available stems by the end of the growing season. (Aspen, elderberry, serviceberry)
- 7. Riparian bank shearing and trampling shall be limited to 10% (10 feet in 100 feet of bank).
- 8. Utilization of key shrub browse species shall be no greater than 25% during the critical growth period, and no more than 40% following the end of the growing season.
- 9. The permittee will be required to herd sheep throughout their established use area to utilize areas that have received slight and/or light use. If it is determined that utilization objectives are being met in any area, the permittee will be required to move sheep immediately upon notification to other areas of the use area that have not been grazed.
- 10. If annual monitoring standards reach specified objectives in any use area where measurable standards have been met, the permittee will be required to remove livestock (cattle) from that area. The permittee will have 3-5 days upon notification to remove livestock (cattle).
- 11. The permittee will be allowed five days flexibility prior to and following the scheduled use dates to move livestock.
- 12. The permittee will be required to meet with the BLM prior to each grazing year in order to determine an annual grazing management plan that will ensure appropriate use throughout the allotment.
- 13. The season of use in Ellison Ranching Company Use Area may be temporarily modified from the proposed grazing management system at the discretion of the authorized officer on an annual basis if monitoring data indicates that changes are necessary to meet allotment specific objectives and Standards for Rangeland Health. Any use in excess of the total permitted use for the Ellison Ranching

Company Use Area within the Carico Lake Allotment will constitute temporary non-renewable use.

14. In accordance with 43 CFR 4130.3-3: The authorized officer may modify terms and conditions of the permit or lease when the active use or related management practices are not meeting the land use plan, allotment management plan or other activity plan, or management objectives, or is not in conformance with the provision of subpart 4180 RAC Standards and Guidelines.

Rationale:

The grazing management system will establish the season of use for sheep within the Fish Creek Mountains Use Area from February 15^{th} – April 30^{th} and November 1^{st} – February 28^{th} . The Harry Canyon Use Area season of use for sheep will be from November 1^{st} – February 28th. The season of use for sheep within the Shoshone Mountain Use Area will be from March 1st – June 30th. The grazing management system will allow existing upland plants to increase vigor, productivity, cover and seedling establishment. Due to the nature of sheep grazing and herding, it is expected that a certain percentage of the Ellison Ranching Company Use Area will be deferred annually. Although livestock grazing will occur during the critical growing period for upland herbaceous species, proper use levels have been identified. This will limit use on native upland rangeland during the critical growing period, allow forage plants to gain in vigor, and produce seed. Proper vegetative management maintains or improves the plant community for protection of soil and water resources. Sufficient seedling and young plant recruitment is needed to maintain and increase herbaceous species in the plant community. Healthy plant communities must be able to complete their life cycle by preventing damage during the critical growth period. Critical growth period in a plant growth cycle occurs when food reserves are the lowest and grazing is the most harmful. The expected improvement in the vegetative community will enhance soil site stability, limiting the redistribution of and loss of soil resources by wind and water. Hydrologic function will also be enhanced with improvement in the vegetative community. This will allow the site to adequately capture, store and release water from rainfall or snowmelt events. Furthermore. improvement in the plant community will improve the integrity of the biotic community, which will allow the use area to resist loss of function and structure following disturbance allowing for recovery.

Riparian areas throughout the newly acquired Ellison Ranching Company Use Area from Filippini Ranching Company were failing to meet RAC Standard 2 Riparian and Wetland Sites and livestock were identified as a causal factor. Riparian and water quality issues within these use areas, which include the Shoshone Mountain Use Area, Harry Canyon Use Area and Fish Creek Mountains Use Area are prevalent. Livestock, specifically cattle, have been identified as the causal for the non-attainment of the standard. These use areas are more suitable to sheep grazing due to topography, distance from water, composition of vegetation, riparian and aspen values. Sheep prefer to graze and bed on upland areas away from riparian areas, which will ensure that critical riparian, water quality and watershed issues are addressed within the use areas. Sheep will not

concentrate on riparian areas due to herding and existing water developments throughout the allotment. The elimination of hot season grazing will allow for adequate residual cover of riparian herbaceous species, which will limit bank trampling where appropriate and hoof action along stream banks and springs to facilitate the establishment of riparian species. Furthermore, the elimination of hot season grazing accompanied by the new Terms and Conditions within the use areas will improve water quality by improving the vigor and production of riparian species, which will lead to greater vegetative cover on stream banks and floodplains. Water quality is expected to improve in the short-term, since year-round grazing impacts will be eliminated. This will allow riparian zones to increase capture of sediments and will decrease pollutants such as fecal colliform and turbidity, since livestock use along riparian zones will be significantly less or eliminated. These factors will ensure that significant progress is being made towards the attainment of Proper Functioning Condition (PFC). The biodiversity of upland vegetative communities will be improved due to the intensive nature of sheep herding. Herding will ensure that better livestock distribution occurs within the use areas. Sheep are herded more effectively than cattle and utilize areas that will not normally be grazed by cattle, which will improve distribution.

The proposed management system will also establish a season of use from December 1st – April 30th for cattle within the Ellison Ranching Company Use Area. Cattle use will occur in the Antelope Pasture, Cedars Pasture, Moss Fire Use Area, Wood Canyon Pasture, Cedars North Pasture and Cedars South Pasture. The majority of these pastures and use areas have been burned and rehabilitated. The majority of use in these pastures will be deferred until the dormant season. This will limit use on native upland rangeland during the critical growing period, allow forage plants to gain in vigor and produce seeds. Due to the number of pastures and use areas in the grazing management system the majority of livestock grazing on a year-to-year basis will be prior to the critical growing period. Although livestock grazing will occur during the critical growing period for upland herbaceous species in some pastures, proper use levels have been identified.

The expected improvement in the vegetative community will enhance soil site stability, limiting the redistribution of and loss of soil resources by wind and water. Hydrologic function will also be enhanced with improvement in the vegetative community. This will allow the site to adequately capture, store and release water from rainfall or snowmelt events. Furthermore, improvement in the plant community will improve the integrity of the biotic community, which will allow the use area to resist loss of function and structure following disturbance allowing for recovery.

In addition, the grazing management system and the Terms and Conditions will provide for the orderly administration of the range and ensure that significant progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the Ellison Ranching Company Use Area will occur. Management actions and objectives conform with the *Management Guidelines for Sage Grouse and Sagebrush Ecosystems In Nevada* (BLM 2000) and to *Guidelines to Manage Sage Grouse Populations and Their Habitats* (Connelly et. al. 2000) also known as the Western Association of Fish and Wildlife Agencies
(WAFAWA) *Guidelines for Sage Grouse Management*, until augmented or superseded by the State of Nevada's South Central Nevada Sage Grouse Conservation Plan, which is now under development.

The proposed grazing management system will be in conformance with the Northeastern Great Basin RAC Guidelines including 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6, 4.1 Vegetation Guidelines and BLM/WAWFA sage grouse guidelines.

7. All projects on public land where Ellison Ranching Company acquired maintenance from Filippini Ranching Company as part of the transfer of grazing privileges must be in proper working order by January 1, 2007.

Rationale:

Range improvements throughout the newly acquired portion of the Ellison Ranching Company Use Area are in disrepair. Ensuring proper maintenance will aid in the attainment of allotment specific objectives.

8. Issue a ten year permit for the Ellison Ranching Company portion of the Carico Lake Allotment with the following terms and conditions:

Grazing use will be in accordance with the Ellison Ranching Company portion of the Carico Lake Allotment Final Multiple Use Decision dated _____.

Failure to pay grazing bills within 15 days of the due date specified in the bill shall result in a late fee assessment of \$25.00 or 10 percent of the grazing bill, whichever is greater, but no to exceed \$250.00. Payment made later than 15 days after the due date, shall include the appropriate late fee assessment. Failure to make payment within 30 days may be a violation of 43 CFR Sec. 4140.1(B) (1) and shall result in action by the authorized officer under 43 CFR Secs. 4150.1 and 4160.1-2.

Actual use information, for each pasture/use area will be submitted to the authorized officer within 15 days of completing grazing use as specified on the grazing permit and/or grazing licenses.

Permittee will be required to maintain all range improvement projects for which maintenance responsibility is assigned in accordance with 43 CFR 4140.

In order to improve livestock and rangeland management on the public lands, all salt and/or mineral supplements will not be placed within ¹/₄ mile of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless stipulated through a written agreement or decision.

All grazing permittees shall provide reasonable access across private and/or leased lands to the Bureau of Land Management for the orderly management and protection of the public lands.

The holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the 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 by the authorized officer.

All permits and leases shall be made subject to cancellation, suspension, or modification for any violation of these regulations or of any term or condition of the permit or lease The terms and conditions of this permit may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.

Rationale:

Issuance of a new ten year permit is based on the analysis of the management actions in the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61, the evaluation of monitoring data and the evaluation of Land Use Plan objectives, Standards for Rangeland Health and multiple use objectives. Refer to Attachment 1 of the Environmental Assessment for the Carico Lake Allotment specific objectives. The terms and conditions for grazing within the Ellison Ranching Company Use Area portion of the Carico Lake Allotment will result in the attainment of allotment specific objectives and is consistent with the Northeastern Great Basin RAC standards and conforms with the guidelines. At the completion of the environmental assessment and Finding of No Significant Impact (FONSI) a Final Multiple Use Decision will authorize the issuance of a new ten year grazing permit and terms and conditions. These terms and conditions will ensure compliance with all applicable laws and regulations governing livestock grazing on public lands.

The proposed ten year permit and terms and conditions will be in conformance with the Northeastern Great Basin RAC Guidelines including 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6 and 4.1.

Filippini Ranching Company

1. Establish the total active permitted use for the Filippini Ranching Company Use Area at 777 AUMs.

Rationale:

Numerous meetings have occurred with representatives of Filippini Ranching Company and they have stated that 777 AUMs was what they planned on retaining following the transfer. Filippini Ranching Company applied to retain 777 AUMs as part of the transfer of grazing privileges to Ellison Ranching Company. BLM approved the transfer on July 14, 2005. A suitability analysis was calculated to derive the carrying capacity for the

Filippini Ranching Company Use Area. Monitoring studies including ecological site inventory, production, utilization, frequency and line-intercept were completed within the Filippini Ranching Company Use Area. A suitability analysis using ecological site inventory data was used to determine the carrying capacity within the Filippini Ranching Company Use Area. Due to the absence of use area specific actual use data, ecological site inventory data was used to determine the carrying capacity within the Filippini Ranching Company Use Area. The analysis of this data is supportive of the 777 AUMs that were applied for. Filippini Ranching Company has also agreed to use private property in conjunction with public land for the period of livestock use. A reduction in permitted use is required since current livestock grazing use levels were determined to be a causal factor for failing to meet the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. Key management areas CL-9, CL-10 and CL-12 are located within the Filippini Ranching Company Use Area. It was determined that CL-10 was in downward trend and CL-12 was in upward trend since 1996 as revealed by the frequency data. Trend was unable to be determined at key area CL-9 due to only having baseline frequency data available. Furthermore, it was determined through the analysis of monitoring data that CL-9, CL-10 and CL-12 were failing to meet RAC Standard 3 habitat and livestock were identified as a causal factor. For detailed analysis of monitoring data regarding these findings refer to the Carico Lake Allotment Rangeland Health Assessment Pages 42-245, Appendix 10 and 11 and the Carico Lake Conformance Determination.

The permitted use in addition to the implementation of the management actions will ensure that significant progress will be made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives provided that the Grazing Stipulations and the Terms and Conditions identified below are adhered to. Significant progress will be made when Annual Monitoring Standards for the Carico Lake Allotment are achieved. Refer to Attachment 1 of the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61. Monitoring data will continue to be collected to ensure that allotment specific objectives are being attained within the Filippini Ranching Company Use Area.

This management selection will implement Guidelines 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6, and 4.1 which have been developed for the Northeastern Great Basin Area of Nevada to establish significant progress toward conformance with the Standards for Rangeland Health for Upland Sites, Riparian and Wetland Sites, and Habitat.

2. Establish the Filippini Ranching Company Use Area within the Carico Lake Allotment as requested by Filippini Ranching Company and agreed on by Ellison Ranching Company. Refer to Attached Map for the Location of the New Rangeline.

The establishment of use areas will provide for the orderly administration of the range and ensure that significant progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the Filippini Ranching Company Use Area will occur. Use areas will improve livestock actual use information on an annual basis throughout the allotment. The submission of actual use by use area will provide information regarding management of livestock. This will aid in determining if future modifications to livestock management for each permittee in relation to their use areas are needed to attain SERA RMP objectives, multiple use objectives, allotment specific objectives and the Standards for Rangeland Health.

The establishment of use areas will be in conformance with the Northeastern Great Basin RAC Guidelines 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6 and 4.1.

3. Implement the following grazing management system and terms and conditions for the Filippini Ranching Company Use Area within the Carico Lake Allotment.

PASTURE	SEASON OF USE	KIND OF LIVESTOCK	PERCENT PUBLIC LAND	NUMBER OF LIVESTOCK	AUMS
Filippini Ranching Company Use Area	03/01-04/30	Cattle	100%	388	777

Terms and Conditions

- 1. All exclosures on public land including areas that have been fenced off for the purpose of mining or mine reclamation throughout the Filippini Ranching Company Use Area will be closed to livestock grazing unless grazing use is applied for by Filippini Ranching Company and is authorized in writing by the authorized officer.
- 2. The permittee will be required to meet with the BLM prior to each grazing year in order to determine an annual grazing management plan that will ensure appropriate use throughout the allotment.
- 3. Utilization of "Key Upland Forage Species" will not exceed 40% by the end of the grazing year.
- 4. Utilization of key riparian-wetland herbaceous species shall be limited to a minimum 4-inch stubble height by July 31st of each year. Utilization of key riparian-wetland herbaceous species shall be limited to a 6-inch stubble height by the end of the growing season, if grazing starts or extends past July 31st.
- 5. Utilization of riparian woody or browse key species shall be limited to 30% of available stems by the end of the growing season. (Aspen, elderberry, serviceberry)
- 6. Riparian bank shearing and trampling shall be limited to 10% (10 feet in 100 feet of bank).

- 7. Utilization of key shrub browse species shall be no greater than 25% during the critical growth period, and no more than 40% following the end of the growing season.
- 8. If annual monitoring standards reach specified objectives in any use area where measurable standards have been met, the permittee will be required to remove livestock from that area. The permittee will have 3-5 days upon notification to remove livestock.
- 9. The permittee will be allowed five days flexibility prior to and following the scheduled use dates to move livestock.
- 10. The season of use in Filippini Ranching Company Use Area may be temporarily modified from the proposed grazing management system at the discretion of the authorized officer on an annual basis if monitoring data indicates that changes are necessary to meet allotment specific objectives and Standards for Rangeland Health. Any use in excess of the total permitted use for the Filippini Ranching Company Use Area within the Carico Lake Allotment will constitute temporary non-renewable use.
- 11. In accordance with 43 CFR 4130.3-3: The authorized officer may modify terms and conditions of the permit or lease when the active use or related management practices are not meeting the land use plan, allotment management plan or other activity plan, or management objectives, or is not in conformance with the provision of subpart 4180 RAC Standards and Guidelines.

Rationale:

The proposed grazing management system will establish a season of use from March 1^{st} – April 30th within the Filippini Ranching Company Use Area. This season of use will be primarily for cheatgrass control, which is present throughout the use area. Proper use levels have been identified within the Filippini Ranching Company Use Area. This will allow for these plants to increase vigor, productivity and seedling establishment. The elimination of grazing during the critical growing period will improve the vegetative community by allowing for sufficient key herbaceous plant seedling and young plant recruitment.

Livestock grazing will occur prior to the critical growing period for upland herbaceous species. These changes will ensure that significant progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the Filippini Ranching Company Use Area will occur provided that the Terms and Conditions are adhered to. The majority of the Filippini Ranching Company Use Area is in a less than desirable state. Current literature and science support reducing utilization levels to 40% especially during the growing season to ensure improvement and significant progress towards the attainment of the SERA RMP objectives, multiple use objectives, allotment specific objectives and the Standards for Rangeland Health. Refer

to the Carico Lake Allotment Rangeland Health Assessment Pages 42-245, 10 and 11 and the Carico Lake Conformance Determination.

In addition, the grazing management system and the Terms and Conditions will provide for the orderly administration of the range and ensure that significant progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the Filippini Ranching Company Use Area will occur. Management actions and objectives conform with the *Management Guidelines for Sage Grouse and Sagebrush Ecosystems In Nevada* (BLM 2000) and to *Guidelines to Manage Sage Grouse Populations and Their Habitats* (Connelly et. al. 2000) also known as the Western Association of Fish and Wildlife Agencies (WAFAWA) *Guidelines for Sage Grouse Management*, until augmented or superseded by the State of Nevada's South Central Nevada Sage Grouse Conservation Plan, which is now under development.

The proposed grazing management system will be in conformance with the Northeastern Great Basin RAC Guidelines including 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6, 4.1 Vegetation Guidelines and BLM/WAWFA sage grouse guidelines.

4. All projects on public land where Filippini Ranching Company has maintenance must be in proper working order by January 1, 2007.

Rationale:

Range improvements within the Filippini Ranching Company Use Area are in disrepair. Ensuring proper maintenance will aid in the attainment of multiple use objectives.

5. Issue a ten year permit for the Filippini Ranching Company Use Area portion of the Carico Lake Allotment with the following terms and conditions:

Grazing use will be in accordance with the Filippini Ranching Company Use Area portion of the Carico Lake Allotment Final Multiple Use Decision dated _____.

Failure to pay grazing bills within 15 days of the due date specified in the bill shall result in a late fee assessment of \$25.00 or 10 percent of the grazing bill, whichever is greater, but no to exceed \$250.00. Payment made later than 15 days after the due date, shall include the appropriate late fee assessment. Failure to make payment within 30 days may be a violation of 43 CFR Sec. 4140.1(B) (1) and shall result in action by the authorized officer under 43 CFR Secs. 4150.1 and 4160.1-2.

Actual use information, for each pasture/use area will be submitted to the authorized officer within 15 days of completing grazing use as specified on the grazing permit and/or grazing licenses.

Permittee will be required to maintain all range improvement projects for which maintenance responsibility is assigned in accordance with 43 CFR 4140.

In order to improve livestock and rangeland management on the public lands, all salt and/or mineral supplements will not be placed within ¹/₄ mile of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless stipulated through a written agreement or decision.

All grazing permittees shall provide reasonable access across private and/or leased lands to the Bureau of Land Management for the orderly management and protection of the public lands.

The holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the 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 by the authorized officer.

All permits and leases shall be made subject to cancellation, suspension, or modification for any violation of these regulations or of any term or condition of the permit or lease

The terms and conditions of this permit may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.

Rationale:

Issuance of a new ten year permit is based on the analysis of the management actions in the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61, the evaluation of monitoring data and the evaluation of Land Use Plan objectives, Standards for Rangeland Health and multiple use objectives. Refer to Attachment 1 of the Environmental Assessment for the Carico Lake Allotment multiple use objectives. The terms and conditions for grazing within the Filippini Ranching Company Use Area portion of the Carico Lake Allotment will result in the attainment of multiple use objectives and is consistent with the Northeastern Great Basin RAC standards and conforms with the guidelines. At the completion of the environmental assessment and Finding of No Significant Impact (FONSI) a Final Multiple Use Decision will authorize the issuance of a new ten year grazing permit and terms and conditions. These terms and conditions will ensure compliance with all applicable laws and regulations governing livestock grazing on public lands.

The proposed ten year permit and terms and conditions will be in conformance with the Northeastern Great Basin RAC Guidelines including 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6 and 4.1.

Julian Tomera Ranches, Inc.

1. Establish the total active permitted use for Julian Tomera Ranches, Inc., Use Area at 914 AUMs. Place 326 AUMs into suspended use.

Rationale:

Use pattern mapping data was collected in accordance with the Nevada Rangeland Monitoring Handbook in 1988, 1989, 1990, 1991 and 1996. This data was used to analyze the carrying capacity. The carrying capacity was based on weighted average utilization and actual use. Refer to CLARHA Appendix 11. The carrying capacity was identified along with a grazing management plan to ensure that uniform distribution will be possible in the short-term. The following table illustrates the average actual livestock use compared to the weighted average utilization and the total acres that exceeded the Rangeland Program Summary utilization objective 60% by the end of the grazing year for the Carico Lake Allotment.

	1988	1989	1990	1991	1996
61-100% Utilization	132,940 acres	63,418 acres	145,280 acres	177,957 acres	14,453 acres
Average Actual Use (Livestock)	22,031 AUMs	24,097 AUMs	28,520 AUMs	31,441 AUMs	26,342 AUMs

Key management areas CL-24, CL-25, CL-29 and CL-37 are located within the Julian Tomera Ranches, Inc. Use Area. Key areas CL-24 and CL-37 experienced a downward trend since 1996 and CL-25 experienced a downward trend since 1998 as revealed by the frequency study. Trend was not apparent at key area CL-29. Furthermore, key areas CL-24, CL-25 and CL-37 were failing to meet Resource Advisory Council (RAC) Standard 3 habitat. Riparian areas throughout the Julian Tomera Ranches, Inc. Use Area were failing to meet RAC Standard 2 Riparian and Wetland Sites. Livestock were identified as a causal factor for non-attainment of RAC Standard 2 and RAC Standard 3. The average weighted average utilization for the use pattern maps was 45.8%. A reduction in permitted use is required due to this level of livestock use being identified as a causal factor for failure to meet the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives, allotment specific objectives and downward trend at the key management areas. For detailed analysis of monitoring data regarding these findings refer to the Carico Lake Allotment Rangeland Health Assessment Pages 42-245, Appendix 6, 7, 10 and 11 and the Carico Lake Conformance Determination.

Through the evaluation of monitoring data and the carrying capacity analysis a range of AUMs was provided to the permittee and was dependant upon commitment to management. Carrying capacity was calculated allotment wide as the result of permittees throughout the allotment not submitting actual use reports by use area or pasture. The range of AUMs for Julian Tomera Ranches, Inc. was 716 AUMs desired carrying capacity and 914 AUMs potential carrying capacity. The potential carrying capacity of 914 AUMs was specified for Julian Tomera Ranches, Inc. based on commitment to livestock management.

In addition, the carrying capacity was identified along with a grazing management plan to ensure that uniform distribution will be possible in the short-term. The carrying capacity was implemented for this use area due to herding and the potential for sheep to use areas that were inaccessible to cattle due to slope and distance from water. It has been determined that the carrying capacity for livestock grazing within the Julian Tomera Ranches, Inc. Use Area of the Carico Lake Allotment will attain allotment specific objectives.

The permitted use in addition to the implementation of the management actions will ensure that significant progress will be made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives provided that the Grazing Stipulations and the Terms and Conditions identified below are adhered to. Significant progress will be made when Annual Monitoring Standards for the Carico Lake Allotment are achieved. Monitoring data will continue to be collected to ensure that allotment specific objectives are being attained within the Julian Tomera Ranches, Inc. Use Area. Refer to Attachment 1 of the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61.

This management selection will implement Guidelines 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6, and 4.1 which have been developed for the Northeastern Great Basin Area of Nevada to establish significant progress toward conformance with the Standards for Rangeland Health for Upland Sites, Riparian and Wetland Sites, and Habitat.

2. Establish the Julian Tomera Ranches, Inc. Use Area within the Carico Lake Allotment. The Shoshone Mountains are within the Julian Tomera Ranches, Inc. Use Area. Refer to Attached Map.

The establishment of use areas will provide for the orderly administration of the range and ensure that significant progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the Julian Tomera Ranches, Inc. Use Area will occur. Use areas will improve livestock actual use information on an annual basis throughout the allotment. The submission of actual use by use area will provide information regarding management of livestock. This will aid in determining if future modifications to livestock management for each permittee in relation to their use areas are needed to attain SERA RMP objectives, multiple use objectives, allotment specific objectives and the Standards for Rangeland Health.

The establishment of use areas will be in conformance with the Northeastern Great Basin RAC Guidelines 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6 and 4.1.

3. Implement the following grazing management system and terms and conditions for the Julian Tomera Ranches, Inc. Use Area within the Carico Lake Allotment.

PASTURE	SEASON OF USE	KIND OF LIVESTOCK	PERCENT PUBLIC LAND	NUMBER OF LIVESTOCK	AUMS
Julian Tomera Ranches, Inc. Use Area	03/01-05/31	Sheep	100%	1,511	914

Terms and Conditions

- 1. All exclosures on public land including areas that have been fenced off for the purpose of mining or mine reclamation throughout the Julian Tomera Ranches, Inc., Use Area will be closed to livestock grazing unless grazing use is applied for by Julian Tomera Ranches Inc., and is authorized in writing by the authorized officer.
- 2. Sheep camps will be moved every five days. No two (2) sheep camps will camp in the same area in a grazing season.
- 3. New bed grounds will be used every night. Sheep bedding grounds will be a minimum of one quarter (1/4) mile from permanent water, aspen and previous bed grounds.
- 4. Utilization of "Key Upland Forage Species" will not exceed 40% by the end of the grazing year.
- 5. Utilization of key riparian-wetland herbaceous species shall be limited to a minimum 4-inch stubble height by July 31st of each year. (Aspen, elderberry, serviceberry)
- 6. Utilization of riparian woody or browse key species shall be limited to 30% of available stems by the end of the growing season. (Aspen, elderberry, serviceberry)
- 7. Riparian bank shearing and trampling shall be limited to 10% (10 feet in 100 feet of bank).
- 8. Utilization of key shrub browse species shall be no greater than 25% during the critical growth period, and no more than 40% following the end of the growing season.
- 9. The permittee will be required to herd sheep throughout their established use area to utilize areas that have received slight and/or light use. If it is determined that utilization objectives are being met in any area, the permittee will be required to move sheep immediately upon notification to other areas of the use area that have not been grazed.

- 10. The permittee will be allowed five days flexibility prior to and following the scheduled use dates to move livestock.
- 11. The permittee will be required to meet with the BLM prior to each grazing year in order to determine an annual grazing management plan that will ensure appropriate use throughout the allotment.
- 12. The season of use in Julian Tomera Ranches, Inc., Use Area may be temporarily modified from the proposed grazing management system at the discretion of the authorized officer on an annual basis if monitoring data indicates that changes are necessary to meet multiple use objectives and Standards for Rangeland Health. Any use in excess of the total permitted use for the Julian Tomera Ranches, Inc. Use Area within the Carico Lake Allotment will constitute temporary non-renewable use.
- 13. In accordance with 43 CFR 4130.3-3: The authorized officer may modify terms and conditions of the permit or lease when the active use or related management practices are not meeting the land use plan, allotment management plan or other activity plan, or management objectives, or is not in conformance with the provision of subpart 4180 RAC Standards and Guidelines.

Rationale:

The proposed grazing management system will establish a season of use from March 1^{st} – May 31^{st} within the Julian Tomera Ranches, Inc., Use Area. The proposed grazing management system will allow existing upland plants to increase vigor, productivity, cover and seedling establishment. Due to the nature of sheep grazing and herding, it is expected that a certain percentage of the Julian Tomera Ranches Inc., Use Area will be deferred annually. Although livestock grazing will occur during the critical growing period for upland herbaceous species, proper use levels have been identified. This will limit use on native upland rangeland during the critical growing period, allow forage plants to gain in vigor, and produce seed. Proper vegetative management maintains or improves the plant community for protection of soil and water resources. Sufficient seedling and young plant recruitment is needed to maintain and increase herbaceous species in the plant community. Healthy plant communities must be able to complete their life cycle by preventing damage during the critical growth period. Critical growth period in a plant growth cycle occurs when food reserves are the lowest and grazing is the most harmful.

The Julian Tomera Ranches, Inc. Use Area is within the Shoshone Mountain Use Area and is suitable to sheep grazing due to topography, distance from water, composition of vegetation, riparian and aspen values. Sheep prefer to graze and bed on upland areas away from riparian areas, which will ensure that critical riparian, water quality and watershed issues are addressed within the Shoshone Mountain Use Area. Sheep will not concentrate on riparian areas due to herding and existing water developments throughout the use area. The biodiversity of upland vegetative communities will be improved due to the intensive nature of sheep herding. Herding will ensure that better livestock distribution occurs within the use area. Sheep are herded more effectively than cattle and utilize areas that will not normally be grazed by cattle. These areas can be influenced by topography and distance from water.

The expected improvement in the vegetative community will enhance soil site stability, limiting the redistribution of and loss of soil resources by wind and water. Hydrologic function will also be enhanced with improvement in the vegetative community. This will allow the site to adequately capture, store and release water from rainfall or snowmelt events. Furthermore, improvement in the plant community will improve the integrity of the biotic community, which will allow the use area to resist loss of function and structure following disturbance allowing for recovery.

In addition, the grazing management system and the Terms and Conditions will provide for the orderly administration of the range and ensure that significant progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the Julian Tomera Ranches, Inc. Use Area will occur. Management actions and objectives conform with the *Management Guidelines for Sage Grouse and Sagebrush Ecosystems In Nevada* (BLM 2000) and to *Guidelines to Manage Sage Grouse Populations and Their Habitats* (Connelly et. al. 2000) also known as the Western Association of Fish and Wildlife Agencies (WAFAWA) *Guidelines for Sage Grouse Management*, until augmented or superseded by the State of Nevada's South Central Nevada Sage Grouse Conservation Plan, which is now under development.

The proposed grazing management system will be in conformance with the Northeastern Great Basin RAC Guidelines including 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6, 4.1 Vegetation Guidelines and BLM/WAWFA sage grouse guidelines.

4. Issue a ten year permit for the Julian Tomera Ranches, Inc., Use Area portion of the Carico Lake Allotment with the following terms and conditions:

Grazing use will be in accordance with the Julian Tomera Ranches, Inc., Use Area portion of the Carico Lake Allotment Final Multiple Use Decision dated _____.

Failure to pay grazing bills within 15 days of the due date specified in the bill shall result in a late fee assessment of \$25.00 or 10 percent of the grazing bill, whichever is greater, but no to exceed \$250.00. Payment made later than 15 days after the due date, shall include the appropriate late fee assessment. Failure to make payment within 30 days may be a violation of 43 CFR Sec. 4140.1(B) (1) and shall result in action by the authorized officer under 43 CFR Secs. 4150.1 and 4160.1-2.

Actual use information, for each pasture/use area will be submitted to the authorized officer within 15 days of completing grazing use as specified on the grazing permit and/or grazing licenses.

Permittee will be required to maintain all range improvement projects for which maintenance responsibility is assigned in accordance with 43 CFR 4140.

In order to improve livestock and rangeland management on the public lands, all salt and/or mineral supplements will not be placed within ¹/₄ mile of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless stipulated through a written agreement or decision.

All grazing permittees shall provide reasonable access across private and/or leased lands to the Bureau of Land Management for the orderly management and protection of the public lands.

The holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the 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 by the authorized officer.

All permits and leases shall be made subject to cancellation, suspension, or modification for any violation of these regulations or of any term or condition of the permit or lease

The terms and conditions of this permit may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.

Rationale:

Issuance of a new ten year permit is based on the analysis of the management actions in the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61, the evaluation of monitoring data and the evaluation of Land Use Plan objectives, Standards for Rangeland Health and multiple use objectives. Refer to Attachment 1 of the Environmental Assessment for the Carico Lake Allotment multiple use objectives. The terms and conditions for grazing within the Julian Tomera Ranches, Inc. Use Area portion of the Carico Lake Allotment will result in the attainment of multiple use objectives and is consistent with the Northeastern Great Basin RAC standards and conforms with the guidelines. At the completion of the environmental assessment and Finding of No Significant Impact (FONSI) a Final Multiple Use Decision will authorize the issuance of a new ten year grazing permit and terms and conditions. These terms and conditions will ensure compliance with all applicable laws and regulations governing livestock grazing on public lands.

The proposed ten year permit and terms and conditions will be in conformance with the Northeastern Great Basin RAC Guidelines including 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6 and 4.1.

Silver Creek Ranch, Inc.

1. Establish the total active permitted use for Silver Creek Ranch, Inc., Use Area at 884 AUMs. Place 316 AUMs into suspended use.

Rationale:

Use pattern mapping data was collected in accordance with the Nevada Rangeland Monitoring Handbook in 1988, 1989, 1990, 1991 and 1996. This data was used to analyze the carrying capacity. The carrying capacity was based on weighted average utilization and actual use. Refer to CLARHA Appendix 11. The carrying capacity was identified along with a grazing management plan to ensure that uniform distribution will be possible in the short-term. The following table illustrates the average actual livestock use compared to the weighted average utilization and the total acres that exceeded the Rangeland Program Summary utilization objective 60% by the end of the grazing year for the Carico Lake Allotment.

	1988	1989	1990	1991	1996
61-100% Utilization	132,940 acres	63,418 acres	145,280 acres	177,957 acres	14,453 acres
Average Actual Use (Livestock)	22,031 AUMs	24,097 AUMs	28,520 AUMs	31,441 AUMs	26,342 AUMs

Key management areas CL-22, CL-23, CL-31 and CL-34 are located within the Silver Creek Ranch, Inc. Use Area. Key areas CL-22 and CL-34 have experienced a downward trend since 1996. Trend was not apparent at CL-23 and was not determined at CL-31 due to only having baseline frequency data available. Furthermore, it was determined through the analysis of monitoring data that CL-22, CL-23, CL-31 and CL-34 were failing to meet RAC Standard 3 habitat. In addition, it was determined that riparian areas within the use area were failing to meet RAC Standard 2 Riparian and Wetland habitat. Livestock were identified as a causal factor for non-attainment of RAC Standard 2 and RAC Standard 3. The average weighted average utilization for the use pattern maps was 45.8%. A reduction in permitted use is required due to this level of livestock use being identified as a causal factor for failure to meet the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives, allotment specific objectives and downward trend at the key management areas. For detailed analysis of monitoring data regarding these findings refer to the Carico Lake Allotment Rangeland Health Assessment Pages 42-245, Appendix 6, 7, 10 and 11 and the Carico Lake Conformance Determination.

Through the evaluation of monitoring data and the carrying capacity analysis a range of AUMs was provided to the permittee and was dependant upon commitment to management. Carrying capacity was calculated allotment wide as the result of permittees throughout the allotment not submitting actual use reports by use area or pasture. The range of AUMs for Silver Creek Ranch, Inc. was 693 AUMs desired carrying capacity and 884 AUMs potential carrying capacity. The potential carrying capacity of 884 was specified for Silver Creek Ranch, Inc. based on commitment to livestock management.

In addition, the carrying capacity was identified along with a grazing management plan to ensure that uniform distribution will be possible in the short-term. The carrying capacity was implemented for this use area due to herding and the potential for sheep to use areas that were inaccessible to cattle due to slope and distance from water. It has been determined that the carrying capacity for livestock grazing within the Silver Creek Ranch, Inc. Use Area of the Carico Lake Allotment will attain allotment specific objectives.

The permitted use in addition to the implementation of the management actions will ensure that significant progress will be made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives provided that the Grazing Stipulations and the Terms and Conditions identified below are adhered to. Significant progress will be made when Annual Monitoring Standards for the Carico Lake Allotment are achieved. Monitoring data will continue to be collected to ensure that allotment specific objectives are being attained within the Silver Creek Ranch, Inc. Use Area. Refer to Attachment 1 of the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61.

This management selection will implement Guidelines 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6, and 4.1 which have been developed for the Northeastern Great Basin Area of Nevada to establish significant progress toward conformance with the Standards for Rangeland Health for Upland Sites, Riparian and Wetland Sites, and Habitat.

2. Establish the Silver Creek Ranch, Inc. Use Area within the Carico Lake Allotment. A portion of the Toiyabe Mountains are within the Silver Creek Ranch, Inc. Use Area. Refer to Attached Map.

The establishment of use areas will provide for the orderly administration of the range and ensure that significant progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the Silver Creek Ranch, Inc. Use Area will occur. Use areas will improve livestock actual use information on an annual basis throughout the allotment. The submission of actual use by use area will provide information regarding management of livestock. This will aid in determining if future modifications to livestock management for each permittee in relation to their use areas are needed to attain SERA RMP objectives, multiple use objectives, allotment specific objectives and the Standards for Rangeland Health.

The establishment of use areas will be in conformance with the Northeastern Great Basin RAC Guidelines 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6 and 4.1.

3. Implement the following grazing management system and terms and conditions for the Silver Creek Ranch, Inc. Use Area.

PASTURE	SEASON OF USE	KIND OF LIVESTOCK	PERCENT PUBLIC LAND	NUMBER OF LIVESTOCK	AUMS
Silver Creek Ranch, Inc. Use Area	04/01-06/30	Sheep	100%	1,477	884

Terms and Conditions

- 1. All exclosures on public land including areas that have been fenced off for the purpose of mining or mine reclamation throughout the Silver Creek Ranch, Inc. Use Area will be closed to livestock grazing unless grazing use is applied for by Silver Creek Ranch, Inc. and is authorized in writing by the authorized officer.
- 2. Sheep camps will be moved every five days. No two (2) sheep camps will camp in the same area in a grazing season.
- 3. New bed grounds will be used every night. Sheep bedding grounds will be a minimum of one quarter (1/4) mile from permanent water, aspen stands and previous bed grounds.
- 4. Utilization of "Key Upland Forage Species" will not exceed 40% by the end of the grazing year.
- 5. Utilization of key riparian-wetland herbaceous species shall be limited to a minimum 4-inch stubble height by July 31st of each year. Utilization of key riparian-wetland herbaceous species shall be limited to a 6-inch stubble height by the end of the growing season, if grazing starts or extends past July 31st.
- 6. Utilization of riparian woody or browse key species shall be limited to 30% of available stems by the end of the growing season. (Aspen, elderberry, serviceberry)
- 7. Riparian bank shearing and trampling shall be limited to 10% (10 feet in 100 feet of bank).
- 8. Utilization of key shrub browse species shall be no greater than 25% during the critical growth period, and no more than 40% following the end of the growing season.
- 9. The permittee will be required to herd sheep throughout their established use area to utilize areas that have received slight and/or light use. If it is determined that utilization objectives are being met in any area, the permittee will be required to move sheep immediately upon notification to other areas of the use area that have not been grazed.

- 10. The permittee will be allowed five days flexibility prior to and following the scheduled use dates to move livestock.
- 11. The permittee will be required to meet with the BLM prior to each grazing year in order to determine an annual grazing management plan that will ensure appropriate use throughout the allotment.
- 12. The season of use in Silver Creek Ranch, Inc., Use Area may be temporarily modified from the proposed grazing management system at the discretion of the authorized officer on an annual basis if monitoring data indicates that changes are necessary to meet multiple use objectives and Standards for Rangeland Health. Any use in excess of the total permitted use for the Silver Creek Ranch, Inc. Use Area within the Carico Lake Allotment will constitute temporary non-renewable use.
- 13. In accordance with 43 CFR 4130.3-3: The authorized officer may modify terms and conditions of the permit or lease when the active use or related management practices are not meeting the land use plan, allotment management plan or other activity plan, or management objectives, or is not in conformance with the provision of subpart 4180 RAC Standards and Guidelines.

Rationale:

The proposed grazing management system will establish a season of use from April 1st – June 30th within the Silver Creek Ranch, Inc., Use Area, which is located in the Toiyabe Mountains. The proposed grazing management system will allow existing upland plants to increase vigor, productivity, cover and seedling establishment. Due to the nature of sheep grazing and herding, it is expected that a certain percentage of the Silver Creek Ranch, Inc., Use Area will be deferred annually. Although livestock grazing will occur during the critical growing period for upland herbaceous species proper use levels have been identified. This will limit use on native upland rangeland during the critical growing period, allow forage plants to gain in vigor, and produce seed. Proper vegetative management maintains or improves the plant community for protection of soil and water resources. Sufficient seedling and young plant recruitment is needed to maintain and increase herbaceous species in the plant community. Healthy plant communities must be able to complete their life cycle by preventing damage during the critical growth period. Critical growth period in a plant growth cycle occurs when food reserves are the lowest and grazing is the most harmful. The Toiyabe Mountains are suitable to sheep grazing due to topography, distance from water, composition of vegetation, riparian and aspen values. Sheep prefer to graze and bed on upland areas away from riparian areas, which will ensure that critical riparian, water quality and watershed issues are addressed within the Silver Creek Ranch, Inc. portion of the Toiyabe Mountain Use Area. Sheep will not concentrate on riparian areas due to herding and existing water developments throughout the use area. The biodiversity of upland vegetative communities will be improved due to the intensive nature of sheep herding. Herding will ensure that better livestock distribution occurs within the use areas. Sheep are herded more effectively than cattle and utilize areas that will not normally be grazed by cattle. These areas can be influenced by topography and distance from water.

The expected improvement in the vegetative community will enhance soil site stability, limiting the redistribution of and loss of soil resources by wind and water. Hydrologic function will also be enhanced with improvement in the vegetative community. This will allow the site to adequately capture, store and release water from rainfall or snowmelt events. Furthermore, improvement in the plant community will improve the integrity of the biotic community, which will allow the use area to resist loss of function and structure following disturbance allowing for recovery.

In addition, the grazing management system and the Terms and Conditions will provide for the orderly administration of the range and ensure that significant progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the Silver Creek Ranch, Inc. Use Area will occur. Management actions and objectives conform with the *Management Guidelines for Sage Grouse and Sagebrush Ecosystems In Nevada* (BLM 2000) and to *Guidelines to Manage Sage Grouse Populations and Their Habitats* (Connelly et. al. 2000) also known as the Western Association of Fish and Wildlife Agencies (WAFAWA) *Guidelines for Sage Grouse Management*, until augmented or superseded by the State of Nevada's South Central Nevada Sage Grouse Conservation Plan, which is now under development.

The proposed grazing management system will be in conformance with the Northeastern Great Basin RAC Guidelines including 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6, 4.1 Vegetation Guidelines and BLM/WAWFA sage grouse guidelines.

4. Issue a ten year permit for the Silver Creek Ranch, Inc., portion of the Carico Lake Allotment with the following terms and conditions:

Grazing use will be in accordance with the Silver Creek Ranch, Inc., portion of the Carico Lake Allotment Final Multiple Use Decision dated _____.

Failure to pay grazing bills within 15 days of the due date specified in the bill shall result in a late fee assessment of \$25.00 or 10 percent of the grazing bill, whichever is greater, but no to exceed \$250.00. Payment made later than 15 days after the due date, shall include the appropriate late fee assessment. Failure to make payment within 30 days may be a violation of 43 CFR Sec. 4140.1(B) (1) and shall result in action by the authorized officer under 43 CFR Secs. 4150.1 and 4160.1-2.

Actual use information, for each pasture/use area will be submitted to the authorized officer within 15 days of completing grazing use as specified on the grazing permit and/or grazing licenses.

Permittee will be required to maintain all range improvement projects for which maintenance responsibility is assigned in accordance with 43 CFR 4140.

In order to improve livestock and rangeland management on the public lands, all salt and/or mineral supplements will not be placed within ¹/₄ mile of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless stipulated through a written agreement or decision.

All grazing permittees shall provide reasonable access across private and/or leased lands to the Bureau of Land Management for the orderly management and protection of the public lands.

The holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the 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 by the authorized officer.

All permits and leases shall be made subject to cancellation, suspension, or modification for any violation of these regulations or of any term or condition of the permit or lease

The terms and conditions of this permit may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.

Rationale:

Issuance of a new ten year permit is based on the analysis of the management actions in the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61, the evaluation of monitoring data and the evaluation of Land Use Plan objectives, Standards for Rangeland Health and multiple use objectives. Refer to Attachment 1 of the Environmental Assessment for the Carico Lake Allotment multiple use objectives. The terms and conditions for grazing within the Silver Creek Ranch, Inc. Use Area portion of the Carico Lake Allotment will result in the attainment of multiple use objectives and is consistent with the Northeastern Great Basin RAC standards and conforms with the guidelines. At the completion of the environmental assessment and Finding of No Significant Impact (FONSI) a Final Multiple Use Decision will authorize the issuance of a new ten year grazing permit and terms and conditions. These terms and conditions will ensure compliance with all applicable laws and regulations governing livestock grazing on public lands.

The proposed ten year permit and terms and conditions will be in conformance with the Northeastern Great Basin RAC Guidelines including 1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.6 and 4.1.

DECISION AUTHORITY: The authority for this decision is contained in Title 43 of the Code of Federal Regulations (CFR) including, but not limited to the following:

§4100.0-8 Land use plans.

The authorized officer shall manage livestock grazing on public lands under the principle of multiple use and sustained yield, and in accordance with applicable land use plans. Land use plans shall establish allowable resource uses (either singly or in combination), related levels of production or use to be maintained, areas of use, and resource condition goals and objectives to be obtained. The plans also set forth program constraints and general management practices needed to achieve management objectives. Livestock grazing activities and management actions approved by the authorized officer shall be in conformance with the land use plan as defined at 43 CFR 1601.0-5(b). [53 FR 10233, Mar. 29, 1988]

§4110.3 Changes in permitted use.

The authorized officer shall periodically review the permitted use specified in a grazing permit or lease and shall make changes in the permitted use as needed to manage, maintain or improve rangeland productivity, to assist in restoring ecosystems to properly functioning condition, to conform with land use plans or activity plans, or to comply with the provisions of subpart 4180 of this part. These changes must be supported by monitoring, field observations, ecological site inventory or other data acceptable to the authorized officer.

[60 FR 9963, Feb. 22, 1995]

§4120.3-1 Conditions for range improvements.

(a) Range improvements shall be installed, used, maintained, and/or modified on the public lands, or removed from these lands, in a manner consistent with multiple-use management.

(b) Prior to installing, using, maintaining, and/or modifying range improvements on the public lands, permittees or lessees shall have entered into a cooperative range improvement agreement with the Bureau of Land Management or must have an approved range improvement permit.

(c) The authorized officer may require a permittee or lessee to maintain and/or modify range improvements on the public lands under §4130.3-2 of this title.

(d) The authorized officer may require a permittee or lessee to install range improvements on the public lands in an allotment with two or more permittees or lessees and/or to meet the terms and conditions of agreement.

(e) A range improvement permit or cooperative range improvement agreement does not convey to the permittee or cooperator any right, title, or interest in any lands or resources held by the United States.

(f) Proposed range improvement projects shall be reviewed in accordance with the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. 4371 *et seq.*). The decision document following the environmental analysis shall be considered the

proposed decision under subpart 4160 of this part. [49 FR 6452, Feb. 21, 1984, as amended at 60 FR 9964, Feb. 22, 1995; 61 FR 4227, Feb. 5, 1996]

§4130.3-1 Mandatory terms and conditions

(a) The authorized officer shall specify the kind and number of livestock, the period(s) of use, the allotment(s) to be used, and the amount of use, in animal unit months, for every grazing permit or lease. The authorized livestock grazing use shall not exceed the livestock carrying capacity of the allotment.

(b) All permits and leases shall be made subject to cancellation, suspension, or modification for any violation of these regulations or of any term or condition of the permit or lease.

(c) Permits and leases shall incorporate terms and conditions that ensure conformance with subpart 4180 of this part.

[49 Fr 6453, Feb. 21, 1984, as amended at 53 FR 10234, Mar.29, 1988. Redesignated at 60 FR 9965, Feb. 22, 1995, and amended at 60 FR 9966, Feb. 22, 1995]

§4110.3-2 Decreasing permitted use.

(a) Permitted use may be suspended in whole or in part on a temporary basis due to drought, fire, or other natural causes, or to facilitate installation, maintenance, or modification of range improvements.

(b) When monitoring or field observations show grazing use or patterns of use are not consistent with the provisions of subpart 4180, or grazing use is otherwise causing an unacceptable level or pattern of utilization, or when use exceeds the livestock carrying capacity as determined through monitoring, ecological site inventory or other acceptable methods, the authorized officer shall reduce permitted grazing use or otherwise modify management practices.

[53 FR 10234, Mar. 29, 1988, as amended at 60 FR 9963, Feb. 22, 1995]

§4110.3-3 Implementing reductions in permitted use.

(a) After consultation, cooperation, and coordination with the affected permittee or lessee, the State having lands or managing resources within the area, and the interested public, reductions of permitted use shall be implemented through a documented agreement or by decision of the authorized officer. Decisions implementing §4110.3-2 shall be issued as proposed decisions pursuant to §4160.1, except as provided in paragraph (b) of this section.

(b) When the authorized officer determines that the soil, vegetation, or other resources on the public lands require immediate protection because of conditions such as drought, fire, flood, insect infestation, or when continued grazing use poses an imminent likelihood of significant resource damage, after consultation with, or a reasonable attempt to consult with, affected permittees or lessees, the interested public, and the State having lands or responsible for managing resources within the area, the authorized officer shall close allotments or portions of allotments to grazing by any kind of livestock or modify authorized grazing use notwithstanding the provisions of paragraph (a) of this section. Notices of closure and decisions requiring modification of authorized grazing use may be issued as final decisions effective upon issuance or on the date specified in the decision. Such decisions shall remain in effect pending the decision on appeal unless a stay is granted by the Office of Hearings and Appeals in accordance with 43 CFR 4.21. [60 FR 9963, Feb. 22, 1995]

§4130.3 Terms and conditions.

Livestock grazing permits and leases shall contain terms and conditions determined by the authorized officer to be appropriate to achieve management and resource condition objectives for the public lands and other lands administered by the Bureau of Land Management, and to ensure conformance with the provisions of subpart 4180 of this part. [60 FR 9966, Feb. 22, 1995]

§4130.3-1 Mandatory terms and conditions.

(a) The authorized officer shall specify the kind and number of livestock, the period(s) of use, the allotment(s) to be used, and the amount of use, in animal unit months, for every grazing permit or lease. The authorized livestock grazing use shall not exceed the livestock carrying capacity of the allotment.

(b) All permits and leases shall be made subject to cancellation, suspension, or modification for any violation of these regulations or of any term or condition of the permit or lease.

(c) Permits and leases shall incorporate terms and conditions that ensure conformance with subpart 4180 of this part.

[49 FR 6453, Feb. 21, 1984, as amended at 53 FR 10234, Mar. 29, 1988. Redesignated at 60 FR 9965, Feb. 22, 1995, and amended at 60 FR 9966, Feb. 22, 1995]

§4130.3-2 Other terms and conditions.

The authorized officer may specify in grazing permits or leases other terms and conditions which will assist in achieving management objectives provide for proper range management or assist in the orderly administration of the public rangelands. These may include but are not limited to:

(a) The class of livestock that will graze on an allotment;

(b) The breed of livestock in allotments within which two or more permittees or lessees are authorized to graze;

(c) Authorization to use, and directions for placement of supplemental feed, including salt, for improved livestock and rangeland management on the public lands;

(d) A requirement that permittees or lessees operating under a grazing permit or lease submit within 15 days after completing their annual grazing use, or as otherwise specified in the permit or lease, the actual use made;

(e) The kinds of indigenous animals authorized to graze under specific terms and conditions;

(f) Provision for livestock grazing temporarily to be delayed, discontinued or modified to allow for the reproduction, establishment, or restoration of vigor of plants, provide for the improvement of riparian areas to achieve proper functioning condition or for the protection of other rangeland resources and values consistent with objectives of applicable land use plans, or to prevent compaction of wet soils, such as where delay of spring turnout is required because of weather conditions or lack of plant growth;

(g) The percentage of public land use determined by the proportion of livestock forage available on public lands within the allotment compared to the total amount available from both public lands and those owned or controlled by the permittee or lessee; and (h) A statement disclosing the requirement that permittees or lessees shall provide reasonable administrative access across private and leased lands to the Bureau of Land Management for the orderly management and protection of the public lands.

[49 FR 6453, Feb. 21, 1984; 49 FR 12704, Mar. 30, 1984. Redesignated at 60 FR 9965, Feb. 22, 1995, and amended at 60 FR 9966, Feb. 22, 1995]

§4130.3-3 Modification of permits or leases.

Following consultation, cooperation, and coordination with the affected lessees or permittees, the State having lands or responsible for managing resources within the area, and the interested public, the authorized officer may modify terms and conditions of the permit or lease when the active use or related management practices are not meeting the land use plan, allotment management plan or other activity plan, or management objectives, or is not in conformance with the provisions of subpart 4180 of this part. To the extent practical, the authorized officer shall provide to affected permittees or lessees, States having lands or responsibility for managing resources within the affected area, and the interested public an opportunity to review, comment and give input during the preparation of reports that evaluate monitoring and other data that are used as a basis for making decisions to increase or decrease grazing use, or to change the terms and conditions of a permit or lease.

[60 FR 9966, Feb. 22, 1995]

§4160.1 Proposed decisions.

(a) Proposed decisions shall be served on any affected applicant, permittee or lessee, and any agent and lien holder of record, who is affected by the proposed actions, terms or conditions, or modifications relating to applications, permits and agreements (including range improvement permits) or leases, by certified mail or personal delivery. Copies of proposed decisions shall also be sent to the interested public.

(b) Proposed decisions shall state the reasons for the action and shall reference the pertinent terms, conditions and the provisions of applicable regulations. As appropriate, decisions shall state the alleged violations of specific terms and conditions and provisions of these regulations alleged to have been violated, and shall state the amount due under \$4130.8 and 4150.3 and the action to be taken under \$4170.1.

(c) The authorized officer may elect not to issue a proposed decision prior to a final decision where the authorized officer has made a determination in accordance with §4110.3-3(b) or §4150.2(d).

[60 FR 9968, Feb. 22, 1995]

§4160.2 Protests.

Any applicant, permittee, lessee or other interested public may protest the proposed decision under §4160.1 of this title in person or in writing to the authorized officer within 15 days after receipt of such decision.

[47 FR 41713, Sept. 21, 1982, as amended at 49 FR 6455, Feb. 21, 1984; 61 FR 4227, Feb. 5, 1996]

§4180.1 Fundamentals of rangeland health.

The authorized officer shall take appropriate action under subparts 4110, 4120, 4130, and 4160 of this part as soon as practicable but not later than the start of the next grazing year upon determining that existing grazing management needs to be modified to ensure that the following conditions exist.

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

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

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

(d) Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.

[60 FR 9969, Feb. 22, 1995]

§4180.2 Standards and guidelines for grazing administration.

(c) The authorized officer shall take appropriate action as soon as practicable but not later than the start of the next grazing year upon determining that existing grazing management practices or levels of grazing use on public lands are significant factors in failing to achieve the standards and conform with the guidelines that are made effective under this section. Appropriate action means implementing actions pursuant to subparts 4110, 4120, 4130, and 4160 of this part that will result in significant progress toward fulfillment of the standards and significant progress toward conformance with the guidelines. Practices and activities subject to standards and guidelines include the development of grazing-related portions of activity plans, establishment of terms and conditions of permits, leases and other grazing authorizations, and range improvement activities such as vegetation manipulation, fence construction and development of water.

PROTEST

In accordance with 43 CFR 4160.2, any applicant, permittee, lessee or other interested public may protest the Proposed Decision under 4160.1 of this title, in person or in

writing to the authorized officer (Douglas W. Furtado, Assistant Field Manager, Renewable Resources, 50 Bastian Road, Battle Mountain, Nevada 89820) within 15 days after receipt of such decision. The protest, if filed, must clearly and concisely state the reason(s) as to why the Proposed Decision is in error.

In accordance with 43 CFR 4160.3 (b), should a timely protest be filed with the authorized officer, the authorized officer, at the conclusion to his review of the protest shall serve his Final Decision on the protestant and the interested public.

WILD HORSE MANAGEMENT DECISION

Selected Management Actions for Wild Horse Management within the Carico Lake Allotment

1. Establish an Appropriate Management Level range for wild horses within the Bald Mountain Herd Management Area of 129-215 (1,548-2,580 AUMs) wild horses year-round.

Use pattern mapping data was collected in accordance with the Nevada Rangeland Monitoring Handbook in 1988, 1989, 1990, 1991 and 1996. This data was used to analyze the carrying capacity. The carrying capacity was based on weighted average utilization and actual use. Refer to CLARHA Appendix 11. The carrying capacity was identified to ensure that uniform distribution will be possible in the short-term. The following table illustrates the average actual wild horse use compared to the weighted average utilization objective 60% by the end of the grazing year for the Carico Lake Allotment.

	1988	1989	1990	1991	1996
61-100% Utilization	132,940 acres	63,418 acres	145,280 acres	177,957 acres	14,453 acres
Average Actual Use (Wild Horses)	3,036 AUMs	3,732 AUMs	6,396 AUMs	7,656 AUMs	5,892 AUMs

Key management areas including CL-16, CL-20, CL-21, CL-22, CL-23, CL-27, CL-28, CL-31, CL-32, CL-34 and CL-36 are located within the Bald Mountain Herd Management Area. Key areas CL-20, CL-21, CL-22, CL-27, CL-28, CL-32 and CL-34 have experienced a downward trend since 1996 as indicated by the frequency data. Trend was not apparent act CL-16 and CL-23. Trend was not determined at CL-31 due to only having baseline frequency data available. Trend appears to be upward at CL-36 as revealed by the frequency study.

All key management areas within the Bald Mountain HMA were failing to meet Resource Advisory Council (RAC) Standard 3 habitat. Riparian areas throughout the Bald Mountain Herd Management Use Area were failing to meet RAC Standard 2 Riparian and Wetland Sites. Wild horses were identified as a causal factor for nonattainment of RAC Standard 2 and RAC Standard 3. The average weighted average utilization for the use pattern maps was 45.8%. An Appropriate Management Level for wild horses is required due to this level of wild horse use being identified as a causal factor for failure to meet the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives, allotment specific objectives and downward trend at the key management areas. For detailed analysis of monitoring data regarding these findings refer to the Carico Lake Allotment Rangeland Health Assessment Pages 42-245, Appendix 6, 7, 10 and 11 and the Carico Lake Conformance Determination.

Bald Mountain HMA records indicate that wild horses have concentrated near Hot Springs Point causing deterioration of the resources. Records from the 1980's state that wild horses frequently use water at the hot springs in the summer months. Little use by wild horses has been documented at Summit Spring. Wild horses have heavily depended upon Sheep Corral Spring, and have utilized Dead Ox Canyon Spring, Red Mountain Springs, and Dry Canyon Spring. The Riparian Proper Functioning Condition Assessment specifically identified wild horse use and hoof action as contributing to negative impacts and poor ratings on Wenban Spring Complexes, Copper Canyon (north), and Dead Ox East Spring. AML does not currently exist, which inhibits the ability to manage wild horses in balance with range resources within the HMA. Use pattern maps revealed that heavy utilization was occurring throughout the HMA in 1988, 1989, 1990 and 1991. Livestock and wild horse use have been identified as the causal factors of the non-attainment of the riparian and habitat standard in addition to the heavy utilization as indicated by the use pattern maps.

Wild horse population distribution is not uniform throughout the HMA. The majority of the population has historically been concentrated on the southeast portion of the HMA in the vicinity of Hot Springs Point and Copper Canyon. Distribution maps indicate that this has been especially pronounced in the winter months. This concentration of large numbers of wild horses has contributed to over utilization, which has lead to the disappearance of key perennial grasses resulting in deficient herbaceous species production throughout the HMA.

Significant progress towards meeting the standard will occur with the establishment and achievement of an AML within the Bald Mountain HMA. This will result in a thriving natural ecological balance, improved herd distribution and reduced concentration of animals. Significant progress will result in the attainment of short-term and long-term key management area objectives and riparian objectives within the HMA.

The Appropriate Management Level (AML) for wild horses will ensure that significant progress will be made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. Significant progress will be made when Annual Monitoring Standards for the Carico Lake Allotment are achieved. Monitoring data will continue to be collected to ensure that allotment specific objectives are being attained within the Bald Mountain Herd Management Area. Refer to Attachment 1 of the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61.

2. Establish an Appropriate Management Level range for wild horses within the South Shoshone Herd Management Area of 60-100 (720-1,200 AUMs) wild horses year-round.

Use pattern mapping data was collected in accordance with the Nevada Rangeland Monitoring Handbook in 1988, 1989, 1990, 1991 and 1996. This data was used to analyze the carrying capacity. The carrying capacity was based on weighted average utilization and actual use. Refer to CLARHA Appendix 11. The carrying capacity was identified to ensure that uniform distribution will be possible in the short-term. The following table illustrates the average actual wild horse use compared to the weighted average utilization and the total acres that exceeded the Rangeland Program Summary utilization objective 60% by the end of the grazing year for the Carico Lake Allotment.

	1988	1989	1990	1991	1996
61-100% Utilization	132,940 acres	63,418 acres	145,280 acres	177,957 acres	14,453 acres
Average Actual Use (Wild Horses)	3,036 AUMs	3,732 AUMs	6,396 AUMs	7,656 AUMs	5,892 AUMs

Key management areas CL-24, CL-25, CL-26, CL-29 and CL-37 are located within the South Shoshone Herd Management Area. Key areas CL-24, CL-26 and CL-37 experienced a downward trend since 1996 and CL-25 experienced a downward trend since 1998 as revealed by the frequency study. Trend was not apparent at key area CL-29. Furthermore, key areas CL-24, CL-25 and CL-37 were failing to meet Resource Advisory Council (RAC) Standard 3 habitat. Riparian areas throughout the South Shoshone Herd Management Use Area were failing to meet RAC Standard 2 Riparian and Wetland Sites. Wild horses were identified as a causal factor for non-attainment of RAC Standard 2 and RAC Standard 3. The average weighted average utilization for the use pattern maps was 45.8%. The Appropriate Management Level for wild horses is required due to this level of wild horse use being identified as a causal factor for failure to meet the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives, allotment specific objectives and downward trend at the key management areas. For detailed analysis of monitoring data regarding these findings refer to the Carico Lake Allotment Rangeland Health Assessment Pages 42-245, Appendix 6, 7, 10 and 11 and the Carico Lake Conformance Determination.

Census and distribution flights have documented movement patterns that reveal wild horses utilize springs and riparian areas in the northern portion of the HMA infrequently. The northern portion of this HMA has the highest concentration of perennial springs; however, these areas have been minimally impacted by wild horses. Water sources are not as plentiful in the southern portion of the HMA; however, this is where the majority of the wild horse concentration occurs. Cedar Springs located north of Wood Canyon is used by wild horses. The riparian Functioning Condition Assessment specifically identified wild horse use and hoof action as contributing to negative impacts and poor ratings on these springs. Wild horses have also been identified as contributing to negative impacts in Cottonwood Creek.

Due to the inability to control the wild horse populations by gathering excess numbers the population has exceeded the capacity of the land. In addition, census and distribution

flights reveal that uniform distribution of wild horses within the HMA has not occurred. The majority of the wild horses have historically concentrated in the far southern portion of the HMA, which has caused moderate to heavy utilization as indicated by use pattern maps collected in 1988-1991. Monitoring data reveals that key perennial grasses are absent from the majority of key management areas within the HMA. It has been determined that livestock and wild horses are the causal factor for the absence of these grasses.

Significant progress towards meeting the standard will occur with the establishment and achievement of an AML within the South Shoshone HMA. This will result in a thriving natural ecological balance, improved herd distribution and reduced concentration of animals. Significant progress will result in the attainment of short-term and long-term key management area objectives and riparian objectives within the HMA.

The Appropriate Management Level (AML) for wild horses will ensure that significant progress will be made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. Significant progress will be made when Annual Monitoring Standards for the Carico Lake Allotment are achieved. Monitoring data will continue to be collected to ensure that allotment specific objectives are being attained within the South Shoshone Herd Management Area. Refer to Attachment 1 of the Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61.

Rationale Common to the Bald Mountain and South Shoshone HMAs:

In order to allow for improved range health conditions and upward trend throughout the allotment, AML will remain at the level established in this document until these HMAs are re-evaluated. Monitoring data will continue to be collected at the existing monitoring studies within the HMAs to evaluate rangeland health and ensure that significant progress is being made toward the attainment of SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. This information will be utilized to determine if AML should be adjusted in the future to maintain thriving natural ecological balance and a healthy wild horse population.

Periodic gathers will be required to maintain the wild horse population at the established AML. This will require either removing the annual increase in population each year or gathering less frequently and removing larger numbers. Removing only a few horses per year is far less desirable for the following reasons:

- 1. Gathering once a year to remove excess wild horses would be cost prohibitive and could not be accomplished with the numerous HMAs gathered annually in Nevada.
- 2. Annual gathers would have more severe impacts to herd stability and band integrity.

- 3. Frequent gathers make the animals far more difficult to capture and greatly increases the chances for more horses to be injured or killed.
- 4. The Wild Free Roaming Horse and Burro Act require that "all management actions shall be at the minimum feasible level".

For these reasons, the AML for the two HMAs will be established as a range, which will ensure maintenance of a thriving natural ecological balance, reduced frequency of gathers and minimal stress to the wild horse population as a result of gathers. Implementation of the proposed AML ranges would allow 3-4 years to pass after each gather before the upper range of AML is exceeded.

AUTHORITY: The authority for this decision is contained in Sec. 3 (a), Wild Horse and Burro Act (P.L. 92-195) and Title 43 of the Code of Federal Regulations including, but not limited to the following:

§4180.1 Fundamentals of rangeland health.

The authorized officer shall take appropriate action under subparts 4110, 4120, 4130, and 4160 of this part as soon as practicable but not later than the start of the next grazing year upon determining that existing grazing management needs to be modified to ensure that the following conditions exist.

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

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

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

(d) Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.

[60 FR 9969, Feb. 22, 1995]

§4180.2 Standards and guidelines for grazing administration.

(c) The authorized officer shall take appropriate action as soon as practicable but not later than the start of the next grazing year upon determining that existing grazing management practices or levels of grazing use on public lands are significant factors in failing to achieve the standards and conform with the guidelines that are made effective under this section. Appropriate action means implementing actions pursuant to subparts 4110, 4120, 4130, and 4160 of this part that will result in significant progress toward fulfillment of the standards and significant progress toward conformance with the guidelines. Practices and activities subject to standards and guidelines include the development of grazing-related portions of activity plans, establishment of terms and conditions of permits, leases and other grazing authorizations, and range improvement activities such as vegetation manipulation, fence construction and development of water.

§4700.0-6 Policy

(a) Wild horses and burros shall be managed as self-sustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat.

(d) In administering these regulations, the authorized officer shall consult with Federal and State wildlife agencies and all other affected interest, to involve them in planning for and management of wild horses and burros on the public lands.

§4710.3-1 Herd Management Areas

In delineating each herd management area, the authorized officer shall consider the appropriate management level for the herd, the habitat requirements of the animals, the relationships with other users of the public and adjacent private lands, and the constraints contained in 4710.4. The authorized officer shall prepare a herd management area plan, which may cover one or more herd management areas.

§4710.4 Constraints on Management

Management of wild horses and burros shall be undertaken with the objective of limiting the animals' distribution to herd areas. Management shall be at the minimum level necessary to attain the objectives identified in approved land use plans and herd management area plans.

§4720.1 Removal of excess animals from public lands

Upon examination of current information and a determination by the authorized officer that an excess of wild horses or burros exists, the authorized officer shall remove the excess animals immediately in the following order.

(a) Old, sick, or lame animals shall be destroyed in accordance with subpart 4730 of this title;

(b) Additional excess animals for which an adoption demand by qualified individuals exists shall be humanely captured and made available for private maintenance in accordance with subpart 4750 of this title; and

(b) Remaining excess animals for which no adoption demand by qualified individuals exists shall be destroyed in accordance with subpart 4730 of this part. *However, the appropriation language has prohibited the use of government funds to destroy healthy excess wild horses.*

WILDLIFE MANAGEMENT DECISION

Selected Management Actions for Wildlife Management within the Carico Lake Allotment

1. Retain short-term big game numbers 1,241 AUMs in the Carico Lake Allotment.

Rationale:

Monitoring data indicated that the Standards for Rangeland Health were not being attained at the majority of key management area and riparian areas within the Carico Lake Allotment; therefore, short-term reasonable numbers of wildlife AUMs will be retained. Monitoring data will continue to be collected throughout the allotment to ensure that multiple use objectives are being attained.

AUTHORIZED OFFICER'S SIGNATURE:

If future monitoring indicates that SERA Land Use Plan objectives, RPS objectives Carico Lake Allotment specific objectives and RAC Standards are not being achieved, further adjustments will be made accordingly. Likewise, if future monitoring indicates that RAC Standards, LUP, and RPS objectives are being met, and that increase in the number of AUMs are warranted, this decision will be evaluated and amended as appropriate.

These decisions are consistent with 43 CFR 4180 and the Northeastern Great Basin RAC Standards and Guidelines for rangeland health and healthy wild horse and burro populations.

Douglas W. Furtado Assistant Field Manager Renewable Resources Date



UNITED STATES DEPARTMENT OF THE INTERIOR Bureau of Land Management Battle Mountain District

September 2005



Battle Mountain Field Office 50 Bastian Road Battle Mountain, Nevada 89820

CARICO LAKE ALLOTMENT Rangeland Health Assessment NV-062-EA05-61





Carico Lake Allotment Rangeland Health Assessment Environmental Assessment NV-062-EA05-61

I. Introduction

The Carico Lake Allotment lies approximately 25 miles south of Battle Mountain, Nevada in Lander County, within the jurisdictional boundary of the Battle Mountain Field Office of the Bureau of Land Management (BLM). The allotment consists of portions of Reese River Valley, Carico Lake Valley, Grass Valley and Crescent Valley. In addition, portions of the Fish Creek Mountains, Shoshone Mountains and Toiyabe Mountains are within the allotment. The Carico Lake Allotment consists of approximately 563,736 acress of public land and 35,568 acress of private land. The Bureau of Land Management (BLM) Battle Mountain Field Office (BMFO) proposes to implement the actions identified in the Carico Lake Allotment Rangeland Health Assessment (CLARHA) and developed through consultation with the interested public. The assessment was sent to the interested public July 22, 2005 for a 30-day review and comment period.

A. Purpose of and Need for Action

The Carico Lake Allotment Rangeland Health Assessment and Conformance Determination concluded that Allotment Objectives, and Standards for Rangeland Health and Grazing Management developed by the Northeastern Great Basin Resource Advisory Council (RAC) were not being met throughout the allotment. Historic and current livestock and wild horse management were determined to be contributing factors to the non-attainment of the standards. Refer to pages 246-256, Appendix 6 and Appendix 10 of the CLARHA. Based on the technical recommendations, livestock and wild horse management alternatives would be developed and analyzed in this Environmental Assessment.

The purpose of the proposed action is to:

- 1. Issue a ten year grazing permit to the seven Carico Lake Allotment permittees to administer grazing and implement grazing management practices within the Carico Lake Allotment that would ensure compliance with the Standards and Guidelines for Rangeland Health and Grazing Management developed by the Northeastern Great Basin Resource Advisory Council (RAC) and be consistent with the attainment of objectives in the Shoshone-Eureka Resource Management Plan (SERA RMP) Record of Decision (1986) and the Shoshone-Eureka Rangeland Program Summary (RPS) (1988).
- 2. Establish an Appropriate Management Level (AML) for the South Shoshone and Bald Mountain Wild Horse Herd Management Areas (HMAs).

- 3. Enhance water quality and riparian issues throughout the allotment through the exclusion of riparian areas to livestock and wild horses through the construction of riparian exclosures where use occurs in the hot season.
- 4. Construct upland reference area exclosures that have not been grazed by livestock to serve as comparison for similar range sites throughout the allotment.

Land Use Plan Conformance

The proposed action and alternatives described below are in conformance with the Shoshone-Eureka Resource Management Plan (RMP) Record of Decision (ROD) (1986), Shoshone-Eureka RMP Amendment ROD (1987), and the Shoshone-Eureka Rangeland Program Summary (RPS) (1988). The allotment Selective Management Category, designated in the Shoshone-Eureka Resource Management Plan (RMP) Amendment is "Improve." Refer to the CLARHA to review the RMP objectives and allotment specific objectives identified within the RPS for management of wildlife, livestock, and wild horses.

Additional Guidance

Grazing use of the Carico Lake Allotment, as well as the requirement to conduct grazing activities in a manner consistent with the principles of multiple use and sustainable yield in an ecologically sound manner, are found in the following provisions: Taylor Grazing Act of 1934, the Federal Land Policy and Management Act of 1976 (FLPMA), Code of Federal Regulations 4180, the Standards and Guidelines for Rangeland Health and Grazing Management as developed by the Northeastern Great Basin Resource Advisory Council (NGBRAC), and approved by the Secretary of the Interior, on February 12, 1997, the Wild Free Roaming Horse and Burro Act, 1971 as amended (PL-92-195); Endangered Species Act (ESA) of 1973, Management Guidelines for Sage Grouse and Sagebrush Ecosystems In Nevada (BLM, 2000); Guidelines to Manage Sage Grouse Populations and Their Habitats (Connelly et. al. 2000) also known as the Western Association of Fish and Wildlife Agencies (WAFAWA) Guidelines for Sage Grouse Management, the Wild Horse Strategy to Achieve Healthy Lands and Healthy Herds (BLM, 2001), Wild Horse Revised Nevada Tactical Plan (BLM, 2001); and the Strategic Plan for Management of Wild Horses and Burros on Public Lands (BLM, 1992); as well as other federal laws and the Code of Federal Regulations. Grazing use would be consistent with Carico Lake Allotment specific objectives that were developed through the evaluation process and within the remaining pertinent Rangeland Program Summary (RPS) objectives for the Carico Lake Allotment. Refer to CLARHA Appendix 10 and Attachment 1.

This EA analyzes the impacts of the proposed management actions identified following the issuance and public review of the CLARHA and would incorporate relevant portions of the Evaluation by reference where applicable. Following issuance of this EA and the Proposed Multiple Use Decision (PMUD), the BMFO would issue the Finding of No Significant Impact (FONSI) and the Final Multiple Use Decision (FMUD). Should a protest of the PMUD be received, the BMFO would consider the issues identified in the protest. Should this result in substantial changes to the proposed action, the modified EA and Finding of No Significant Impact (FONSI) would be issued with the FMUD.

II. Alternatives Including the Proposed Action

B. Proposed Action

A ten year grazing permit would be issued to seven livestock operators within the Carico Lake Allotment. In addition, the proposed action would establish a livestock grazing management plan with a season of use identified for each livestock operator. The management plans would exist as Terms and Conditions on each of the seven grazing permits. The livestock grazing management plans would eliminate hot season (July 1st - October 15th) grazing in sensitive riparian areas throughout the majority of the allotment. Riparian areas that would still be grazed in the hot season by livestock would be fenced to exclude livestock use. If appropriate and feasible, separate, future projects could be pursed to develop spring sources to provide a reliable water source for wildlife, livestock and wild horses. Reference exclosures would be constructed in locations that are ungrazed by livestock, to serve as a reference area for similar range sites throughout the allotment.

The proposed livestock grazing management plans for each of the permittees would consist of the following use areas, number of livestock, AUMs, season of use for each use area/pasture and terms and conditions.

1. Cortez Joint Venture (Cattle Operation)

Issue a ten year grazing permit for Cortez Joint Venture that would:

- Establish the total permitted use for Cortez Joint Venture Use Area at 1,741 AUMs. Place 1,679 AUMs into suspended use.
- Implement the following grazing management system and grazing terms and conditions for the Cortez Joint Venture Use Area within the Carico Lake Allotment. Refer to pages 8-9 for Grazing Terms and Conditions Common to Livestock (Cattle) Operators.

PASTURE	SEASON OF USE	KIND OF LIVESTOCK	PERCENT PUBLIC LAND	NUMBER OF LIVESTOCK	AUMS
Cortez Joint Venture Use Area	02/01 - 03/31	Cattle	100%	898	1,741

2. C-Ranches (Cattle Operation)

Issue a ten year grazing permit for C-Ranches that would:

- Establish the total permitted use for C-Ranches Use Area at 9,880 AUMs. Place 3,525 AUMs into suspended use.
- Implement the following grazing management system and terms and conditions for the C-Ranches Use Area within the Carico Lake Allotment. Refer to pages 8-9 for Grazing Terms and Conditions Common to Livestock (Cattle) Operators.

PASTURE	SEASON OF	KIND OF	PERCENT	NUMBER OF	AUMS
	USE	LIVESTOCK	PUBLIC LAND	LIVESTOCK	
Cortez Use Area*	02/01-03/31	Cattle	100%	898	1,741
Toiyabe Mountain Use Area	04/01-06/30	Cattle	100%	490	1,466
Toiyabe Flat Use Area	07/01-11/15	Cattle	100%	490	2,223
Shoshone Mountain Use Area	04/1-06/30	Cattle	100%	490	1,466
Carico Lake Valley Use Area	07/01-11/15	Cattle	100%	490	2,223
Carico Lake Valley Use Area**	11/16-01/31	Cattle	100%	300	761

*Livestock use within the Cortez Use Area would have to be applied for each year and authorization would be at the discretion of the authorized officer and require concurrence from Cortez Mining Company.

**Livestock would be allowed to graze flat around private meadows and drift in and out of private land from 11/16-01/31.

3. Doby George LLC. (Sheep Operation)

Issue a ten year grazing permit for Doby George LLC. that would:

- Establish the total permitted use for Doby George LLC. Use Area at 295 AUMs. Place 105 AUMs into suspended use.
- Implement the following grazing management system and terms and conditions for the Doby George LLC. Use Area. Refer to pages 7-8 for Grazing Terms and Conditions Common to Livestock (Sheep) Operators.

PASTURE	SEASON OF USE	KIND OF LIVESTOCK	PERCENT PUBLIC LAND	NUMBER OF LIVESTOCK	AUMS
Doby George LLC., Use Area	04/01 - 06/30	Sheep	100%	493	295

4. Ellison Ranching Co. (Sheep and Cattle Operation)

On July 11, 2005 a partial transfer occurred between Filippini Ranching Company and Ellison Ranching Company. Filippini Ranching Company transferred 11,299 AUMs of their total grazing preference of 12,077 AUMs to Ellison Ranching Company. Through the analysis of monitoring data Ellison Ranching Company's potential carrying capacity for their existing permit and their newly acquired permit is 10,463 AUMs.
Issue a ten year grazing permit for Ellison Ranching Company that would:

- Establish the total permitted use for the Ellison Ranching Company use area at 10,463 AUMs. Place a total of 3,153 AUMs into suspended use.
- Convert 6,403 AUMs of active use from cattle to sheep use in the Shoshone Mountain Use Area, Harry Canyon Use Area and the Moss Fire Use Area. Upon the conversion of AUMs, identify the appropriate terms and conditions for authorizing sheep in the Shoshone Mountain Use Area, Harry Canyon Use Area and the Moss Fire Use Area. 2,499 AUMs would remain available for cattle. Identify the appropriate terms and conditions for authorizing cattle in the Antelope Pasture, Cedars Pasture, Moss Fire Use Area, Wood Canyon Pasture, Cedars North Pasture and Cedars South Pasture.
- Implement the following grazing management system and terms and conditions for the Ellison Ranching Company Use Area. Refer to pages 7-8 for Grazing Terms and Conditions Common to Livestock (Sheep) Operators and pages 8-9 for Grazing Terms and Conditions Common to Livestock (Cattle) Operators.

PASTURE	SEASON OF	KIND OF	PERCENT	NUMBER OF	AUMS
	USE	LIVESTOCK	PUBLIC LAND	LIVESTOCK	
*Fish Creek Mountains Use	02/15-02/28	Sheep	100%	1,218	112
Area	03/01-04/30	Sheep	100%	1,218	489
	11/01-02/28	Sheep	100%	1,218	961
**Shoshone Mountains Use	03/01-06/30	Sheep	100%	6,545	5,250
Area					
**Harry Canyon Use Area	11/01-02/28	Sheep	97%	1,507	1,153
**Antelope Pasture, Cedars	12/01-02/28	Cattle	100%	506	1,497
Pasture, Moss Fire Use Area,					
Wood Canyon Pasture, Cedars					
North Pasture and Cedars South					
Pasture					
**Antelope Pasture, Cedars	03/01-04/30	Cattle	100%	500	1,003
Pasture, Moss Fire Use Area,					
Wood Canyon Pasture, Cedars					
North Pasture and Cedars South					
Pasture					

*The Fish Creek Mountain Use Area is Ellison Ranching Company's historical use area within the Carico Lake Allotment.

**The Antelope, Cedars, Cedars North, Cedars South and Wood Canyon Pastures and the Harry Canyon, Moss Fire and Shoshone Mountain Use Areas belonged to Filippini Ranching Company until Ellison Ranching Company acquired these use areas on July 11, 2005 through a transfer of grazing privileges from Filippini Ranching Company.

5. Filippini Ranching Company (Cattle Operation)

Issue a ten year grazing permit for Filippini Ranching Company that would:

- Establish the total permitted use for the Filippini Ranching Company Use Area at 777 AUMs.
- Implement the following grazing management system and terms and conditions for the Filippini Ranching Company Use Area within the Carico Lake Allotment. Refer to pages 8-9 for Grazing Terms and Conditions Common to Livestock (Cattle) Operators.

PASTURE	SEASON OF USE	KIND OF LIVESTOCK	PERCENT PUBLIC LAND	NUMBER OF LIVESTOCK	AUMS
Filippini Ranching Company Use Area	03/01-04/30	Cattle	100%	388	777

6. Julian Tomera Ranches, Inc. (Sheep Operation)

Issue a ten year grazing permit for Julian Tomera Ranches, Inc. that would:

- Establish the total permitted use for Julian Tomera Ranches, Inc., Use Area at 914 AUMs. Place 326 AUMs into suspended use.
- Implement the following grazing management system and terms and conditions for the Julian Tomera Ranches, Inc., Use Area within the Carico Lake Allotment. Refer to pages 7-8 for Grazing Terms and Conditions Common to Livestock (Sheep) Operators.

PASTURE	SEASON OF USE	KIND OF LIVESTOCK	PERCENT PUBLIC LAND	NUMBER OF LIVESTOCK	AUMS
Julian Tomera Ranches, Inc. Use Area	03/01-05/31	Sheep	100%	1,511	914

7. Silver Creek Ranch, Inc. (Sheep Operation)

Issue a ten year grazing permit for Silver Creek Ranch, Inc., that would:

- Establish the total permitted use for Silver Creek Ranch, Inc., Use Area at 884 AUMs. Place 316 AUMs into suspended use.
- Implement the following grazing management system and terms and conditions for the Silver Creek Ranch, Inc. Use Area. Refer to pages 7-8 for Grazing Terms and Conditions Common to Livestock (Sheep) Operators.

PASTURE	SEASON OF USE	KIND OF LIVESTOCK	PERCENT PUBLIC LAND	NUMBER OF LIVESTOCK	AUMS
Silver Creek Ranch, Inc. Use Area	04/01-06/30	Sheep	100%	1,477	884

Grazing Terms and Conditions Common to Livestock (Sheep) Operators -(Doby George LLC., Ellison Ranching Company, Julian Tomera Ranches, Inc. and Silver Creek Ranch, Inc.)

Terms and Conditions

- 1. All exclosures on public land including areas that have been fenced off for the purpose of mining or mine reclamation throughout the permittees use areas would be closed to livestock grazing unless grazing use is applied for by the permittee and is authorized in writing by the authorized officer.
- 2. Sheep camps would be moved every five days. No two (2) sheep camps would camp in the same area in a grazing season.
- 3. New bed grounds would be used every night. Sheep bedding grounds would be a minimum of one quarter (1/4) mile from permanent water, aspen stands and previous bed grounds.
- 4. Utilization of "Key Upland Forage Species" would not exceed 40% by the end of the grazing year.
- 5. Utilization of key riparian-wetland herbaceous species would be limited to a minimum 4-inch stubble height by July 31st of each year. Utilization of key riparian-wetland herbaceous species would be limited to a 6-inch stubble height by the end of the growing season, if grazing starts or extends past July 31st.
- 6. Utilization of riparian woody or browse key species would be limited to 30% by the end of the growing season. (Aspen, elderberry, serviceberry)
- 7. Riparian bank shearing and trampling would be limited to 10% (10 feet in 100 feet of bank).
- 8. Utilization of key shrub browse species would be no greater than 25% during the critical growth period, and no more than 40% following the end of the growing season.
- 9. The permittee would be required to herd sheep throughout their established use area to utilize areas that have received slight and/or light use. If it is determined that utilization objectives are being met in any area, the permittee would be required to move sheep immediately upon notification to other areas of the use area that have not been grazed.

- 10. The permittee would be allowed five days flexibility prior to and following the scheduled use dates to move livestock.
- 11. The permittee would be required to meet with the BLM prior to each grazing year in order to determine an annual grazing management plan that would ensure appropriate use throughout the allotment.
- 12. The season of use in the permittees use area may be temporarily modified from the proposed grazing management system at the discretion of the authorized officer on an annual basis if monitoring data indicates that changes are necessary to meet multiple use objectives and Standards for Rangeland Health. Any use in excess of the total permitted use for the permittee within the Carico Lake Allotment would constitute temporary non-renewable use.
- 13. In accordance with 43 CFR 4130.3-3: The authorized officer may modify terms and conditions of the permit or lease when the active use or related management practices are not meeting the land use plan, allotment management plan or other activity plan, or management objectives, or is not in conformance with the provision of subpart 4180 RAC Standards and Guidelines.

Grazing Terms and Conditions Common to Livestock (Cattle) Operators -(Cortez Joint Venture, C- Ranches, Ellison Ranching Company and Filippini Ranching Company)

Terms and Conditions

- 1. All exclosures on public land including areas that have been fenced off for the purpose of mining or mine reclamation throughout the Carico Lake Allotment would be closed to livestock grazing unless grazing use is applied for by permittee and is authorized in writing by the authorized officer.
- 2. The permittee would be required to meet with the BLM prior to each grazing year in order to determine an annual grazing management plan that would ensure appropriate use throughout the use area.
- 3. Utilization of "Key Upland Forage Species" would not exceed 40% by the end of the grazing year.
- 4. Utilization of key riparian-wetland herbaceous species would be limited to a minimum 4-inch stubble height by July 31st of each year. Utilization of key riparian-wetland herbaceous species would be limited to a 6-inch stubble height by the end of the growing season, if grazing starts or extends past July 31st.
- 5. Utilization of riparian woody or browse key species would be limited to 30% of available stems by the end of the growing season. (Aspen, elderberry, serviceberry)

- 6. Riparian bank shearing and trampling would be limited to 10% (10 feet in 100 feet of bank).
- 7. Utilization of key shrub browse species would be no greater than 25% during the critical growth period, and no more than 40% following the end of the growing season.
- 8. If annual monitoring standards reach specified objectives in any use area where measurable standards have been met, the permittee would be required to remove livestock from that area. The permittee would have 3-5 days upon notification to remove livestock.
- 9. The permittee would be allowed five days flexibility prior to and following the scheduled use dates to move livestock.
- 10. The season of use in the permittee use area may be temporarily modified from the proposed grazing management system at the discretion of the authorized officer on an annual basis if monitoring data indicates that changes are necessary to meet multiple use objectives and Standards for Rangeland Health. Any use in excess of the total permitted use for the permittee within the Carico Lake Allotment would constitute temporary non-renewable use.
- 11. In accordance with 43 CFR 4130.3-3: The authorized officer may modify terms and conditions of the permit or lease when the active use or related management practices are not meeting the land use plan, allotment management plan or other activity plan, or management objectives, or is not in conformance with the provision of subpart 4180 RAC Standards and Guidelines.

The proposed action would establish AML for wild horses within the Bald Mountain and South Shoshone HMAs as follows:

- Establish an Appropriate Management Level (AML) range for wild horses within the Bald Mountain Herd Management Area of 129-215 (1,548-2,580 AUMs) wild horses year-round.
- Establish an Appropriate Management Level (AML) range for wild horses within the South Shoshone Herd Management Area of 60-100 wild horses (720-1,200 AUMs).

The proposed action would establish wildlife AUMs within the Carico Lake Allotment as follows:

• Retain short-term reasonable numbers of 1,241 AUMs for wildlife in the Carico Lake Allotment as identified in the SERA RMP.

C. No Action (Existing System) Alternative

The no action alternative would continue the existing livestock and wild horse management within the allotment. The proposed management actions identified in the CLRHA would not be implemented. Refer to pages 17-19 in the CLRHA for a detailed discussion of the current permitted use for livestock, season of use and the current population levels for wild horses and wildlife.

D. Alternatives Considered but Eliminated from Detailed Analysis

Eliminate livestock grazing within the Carico Lake Allotment

The Battle Mountain Field Office is required to manage public lands in conformance with the Shoshone-Eureka RMP and Amendments as approved in the Shoshone-Eureka ROD. The RMP provides for livestock grazing use, and that livestock grazing use is to be managed so that resource management objectives would be achieved within the Carico Lake Allotment.

It is the intent of the proposed action to implement a multiple use decision designed to establish and meet allotment specific objectives for livestock management, meet RAC Standards for Rangeland Health and provide habitat for wildlife and wild horses. The Shoshone-Eureka RMP/ROD, Shoshone-Eureka RMP Amendment ROD, and the Shoshone-Eureka RPS established objectives for livestock grazing and provides for the establishment of a rangeland monitoring program to determine if management objectives are being met and to adjust grazing management systems and livestock numbers as required. The "No Grazing" alternative was considered, but eliminated from further analysis in the Land Use Planning process. The no grazing alternative is not analyzed in this EA due to this alternative being in conflict with the Shoshone-Eureka RMP and Amendments as approved in the Shoshone-Eureka ROD. Furthermore, FLMPA and the Taylor Grazing Act recognize grazing as a valid use of the public lands and require BLM to manage livestock grazing in the context of multiple use. It is expected that desired resource conditions, upward trends and management objectives can reasonably be met through the proposed action identified in this document.

Increase in Livestock Grazing Alternative

Following the analysis, interpretation and evaluation of monitoring data, it was determined that SERA RMP objectives, Standards for Rangeland Health and multiple use objectives were not being fully attained. The evaluation also concluded that progress towards the attainment of the Standards for Rangeland Health and multiple use objectives was not occurring throughout the allotment. An increase in livestock and wild horse numbers may be authorized in the future through a re-evaluation if it is determined through further monitoring that additional forage has become available and that SERA RMP objectives, Standards for Rangeland Health and multiple use objectives, Standards for Rangeland Health and multiple use objectives are being met. The authorization of a grazing increase would be dependent upon further monitoring, NEPA analysis, and issuance of a Decision.

Further decrease in Livestock Grazing Alternative

Following the analysis, interpretation and evaluation of monitoring data, it was determined that SERA RMP objectives, Standards for Rangeland Health and multiple use objectives were not being fully attained. The evaluation also concluded that progress towards the attainment of the Standards for Rangeland Health and multiple use objectives was not occurring throughout the allotment and livestock grazing was a causal factor for failing to make progress. Through the carrying capacity analysis a range of AUMs was identified for each permittee. The identified carrying capacity was based on each permittee's commitment to manage livestock within the allotment. A further livestock grazing decrease may be authorized in the future if it is determined through further monitoring that progress towards the attainment of the SERA RMP objectives, Standards for Rangeland Health and multiple use objectives is not occurring. The authorization of a further grazing decrease would be dependent upon further monitoring, NEPA analysis, and issuance of a Decision.

Reintroduction of Bighorn Sheep Alternative

Following the analysis, interpretation and evaluation of monitoring data, it was determined that SERA RMP objectives, Standards for Rangeland Health and multiple use objectives were not being fully attained. The evaluation also concluded that progress towards the attainment of the Standards for Rangeland Health and multiple use objectives was not occurring throughout the allotment.

Bighorn sheep do not currently inhabit Carico Lake Allotment. The nearest bighorn population exists in the Sheep Creek Mountains approximately 20 miles to the north. A map of estimated bighorn sheep distribution in 1860 that appears in the Nevada Division of Wildlife Bighorn Sheep Management Plan (NDOW, 2001) depicts much of the Carico portion of the Shoshone Range as historic, as well as potential, bighorn sheep range. Those NDOW distribution estimates were based on historical and archeological records, as well as on judgments about the suitability of the habitat. Likewise, Pippin (1977) concludes widespread bighorn sheep distribution throughout Nevada mountain ranges based on abundant archeological evidence.

Bighorn and domestic sheep are essentially incompatible. Contact between domestic sheep and bighorn sheep inevitably results in catastrophic mortality in the latter. Deadly strains of Pasturella (bacterial pneumonia) carried by, and harmless to, domestic sheep, apparently cause catastrophic mortality in bighorn sheep (BLM, 1998 a., Foundation for North American Wild Sheep, 1998)

BLM guidelines (BLM, 1998 b.) advise that domestic and wild sheep should be spatially separated by at least 13.5 kilometers (9 miles) to reduce the potential of interspecies contact. The guidelines also advise that unless a cooperative agreement has been reached to the contrary, native wild sheep should only be reintroduced into areas where domestic sheep grazing is not permitted.

The existence of domestic sheep within the Carico Lake Allotment and other neighboring allotments makes the possibility of reintroducing bighorn sheep to the allotment even more remote. Habitat quality for most other wildlife species is expected to improve markedly (especially given anticipated changes in season of use and grazing systems). This is the position of both BMFO and NDOW (Teske, 2005) wildlife biologists.

III. Affected Environment

Scoping and Issue Identification

Refer to CLARHA pages 4-5 and pages 37-42 for a summary of BLM's efforts to Consult, Cooperate and Coordinate (CCC) with the permittees and the interested public. The CLARHA was issued on July 22, 2004 for a 30-day review and comment period for all parties that requested to be on the interested public list. The 30-day comment period ended on August 22, 2005.

General Setting

The allotment consists of portions of Reese River Valley, Carico Lake Valley, Grass Valley and Crescent Valley. In addition, portions of the Fish Creek Mountains, Shoshone Mountains and Toiyabes Mountains are within the allotment. Vegetation communities are variable throughout the allotment and range from salt desert shrub to Wyoming big sagebrush to riparian and pinyon/juniper woodlands. Refer to pages 17-37 in the CLARHA for a detailed allotment description and delineated geographical area subject to this analysis. In addition, refer to Carico Lake Allotment map for an overview.

Critical Elements of the Human Environment

To comply with the National Environmental Policy Act (NEPA), the Bureau of Land Management is required to address specific elements of the environment that are subject to requirements specified in statute or regulation or by executive order (BLM 1988, BLM 1997). The following table outlines the critical elements that must be addressed in all environmental assessments, as well as other resources deemed appropriate for evaluation by the BLM, and denotes if the Proposed Action or No Action Alternative affects those elements.

Critical Element	Present Yes/No	Affected Yes/No	Rationale
Air Quality	Yes	No	Not Affected
ACECs	No	No	ACECs are not present within the allotment.
Cultural-Paleontological Resources	Yes	Yes	Cultural resources are present within the allotment. All projects that may be
			tiered to this evaluation would be cleared by a fully qualified archaeologist prior
			to implementation.
Environmental Justice	No	No	No impacts to Environmental Justice are associated with the proposal.
Flood Plains	No	No	Not Affected
Invasive, Non Native Species	Yes	Yes	Discussed in detail below.
Migratory Birds	Yes	Yes	Discussed in detail below.
Native American Religious Concerns	Yes	No	Not Affected (Consultation is ongoing)
Prime or Unique Farmlands	No	No	Not present
Threatened and/or Endangered Species (Plants)	No	No	Not present

Critical Element	Present Yes/No	Affected Yes/No	Rationale
Threatened and/or Endangered (Animals)	Yes	Yes	Discussed in detail below.
Wastes, Hazardous or Solids	No	No	Not present
Water Quality	Yes	Yes	Discussed in detail below.
Wetlands and Riparian Zones	Yes	Yes	Discussed in detail below.
Wild and Scenic Rivers	No	No	Not present
Wilderness	No	No	Not present

The following critical elements of the human environment are not present or would not be affected by the proposed action or alternatives of this Environmental Assessment.

- Air Quality
- ACECs
- Environmental Justice
- Flood Plains
- Native American Religious Concerns (consultation ongoing)
- Prime or Unique Farmlands
- Threatened and/or Endangered (Plants)
- Wastes, Hazardous or Solids
- Wild and Scenic Rivers
- Wilderness

Other Resources

Other resources of the human environment that have been considered for this environmental assessment (EA) are listed in the table below. Elements that may be affected are further described in the EA. Rationale for those elements that would not substantially or adversely be affected by the proposed action and alternative is listed in the table below.

Other Resources	Present Yes/No	Affected Yes/No	Rationale
Forest/Woodlands	Yes	Yes	Discussed in detail below.
Grazing Management	Yes	Yes	Discussed in detail below.
Land Use Authorization	Yes	No	Project area is located on public land, with no special use authorizations.
Minerals	Yes	No	Not Affected
Recreation	Yes	Yes	Discussed in detail below.
Socio-Economic Values	Yes	Yes	Discussed in detail below.
Soils	Yes	Yes	Discussed in detail below.
Special Status Species (plants and animals)	Yes	Yes	Discussed in detail below.
Vegetation	Yes	Yes	Discussed in detail below.
Visual Resources	Yes	No	Discussed in detail below.
Wild Horses and Burros	Yes	Yes	Discussed in detail below.
Wildlife	Yes	Yes	Discussed in detail below.

Bureau specialists have further determined that the following resources although present in the project area are not affected by the proposed action.

• Land Use Authorizations

- Minerals
- Visual Resources

RESOURCES PRESENT AND BROUGHT FORWARD FOR ANALYSIS

GRAZING MANAGEMENT

Affected Environment

There are seven grazing permittees within the Carico Lake Allotment. Refer to page 17 of the CLARHA for a summary of each permittee's current livestock operation.

WILD HORSES

Affected Environment

The Bald Mountain HMA and South Shoshone HMA are within the Carico Lake Allotment. Refer to CLARHA pages 17-19 and pages 238-245 for a detailed discussion of the HMAs.

WILDLIFE (INCLUDING THREATENED AND ENDANGERED, MIGRATORY BIRDS and SENSITIVE SPECIES)

Affected Environment

A diverse wildlife population exists within the Carico Lake Allotment. Refer to CLARHA pages 21-35 for a thorough discussion of the wildlife that are present and the habitat requirements for each species and pages 49-237 for current habitat conditions within the Carico Lake Allotment.

CULTURAL RESOURCES

Affected Environment

Refer to the cultural resource section in the CLARHA on pages 36-37 for a summary of cultural resources that have been documented within the allotment. Paleontological resources and cultural sites are distributed across the Carico Lake Allotment and are located within a variety of physiographic zones. The majority prehistoric sites contain cultural materials that are generally located on or just below the soil surface. A few prehistoric sites in the allotment are comprised of standing structures and or features, but also contain subsurface materials. Historic sites generally follow the above pattern (located on or just below the soil surface). Remnants or complete historic structures, foundations and features associated with mining, ranching and transportation are common at historic sites within the analysis area. Since their introduction over 100 years

ago within the Carico Lake Allotment, livestock and wild horses have likely created some level of impacts to cultural resources.

Both prehistoric and historic surface and subsurface cultural deposits are susceptible to disturbance or destruction by natural processes (erosion and weathering). Above ground structures, foundations and features, whether historic or prehistoric, are also subject to similar natural degradation processes.

Erosion and weathering processes can occur naturally at sites if there is a reduction in vegetative cover and an increase in soil disturbance. The later natural degradation process affecting above ground cultural resources is acerbated by livestock and wild horses milling, rubbing and trampling on or at a particular cultural site. Both of the above processes occur most frequently in areas where livestock and wild horses are or have been concentrated for long durations, such as around springs.

Common un-natural disturbance or destruction processes to cultural sites are spring developments. Since riparian areas are usually the main sources of water for livestock and wild horses, developing a spring in areas containing a site can in some cases be considered an averse affect or an un-natural degradation process affecting the integrity of a Historic Register eligible site. Prior to developing a spring, a Class III inventory would be conducted and mitigation measures would be taken if a determination of Adverse Affect is made.

In summary, riparian areas have the highest potential for cultural resource sites and thus sites located in these areas are the most susceptible to the highest amount of impact due to the increased numbers of livestock and wild horses as compared to other non- riparian areas. Cultural resources located near and within riparian areas also have an increased probability of being affected by water developments.

INVASIVE, NON-NATIVE SPECIES

Affected Environment

Noxious weeds are defined by the State of Nevada and are typically non-native invasive plants. When noxious weeds are introduced into an area they can quickly dominate the landscape and are difficult to control. Invasive plants may proliferate, forming monocultures, which can crowd out other plants that provide biodiversity and benefit to wildlife and domestic animals. The potential for noxious weed infestation intensifies with increased weed populations and as a result of man's activities. Grazing intensity, vegetative condition and trend can affect the magnitude of noxious weed invasions. Invasive species are aggressive, ecologically damaging, undesirable plants, which severely threaten biodiversity, habitat quality, and ecosystems. Due to their aggressive nature, invasive species can eventually spread into established plant communities.

Invasive weeds typically establish in disturbed and high traffic areas. Any surface disturbance activity such as road construction and maintenance, pipeline trenching,

grazing near salt licks and riparian areas, or fence building can create a potential environment for invasive species. Vehicles, wind, livestock, birds, campers, hikers, wildlife, and waterways spread invasive species seeds.

Noxious weeds are very aggressive introduced plants that occupy disturbed sites along roads or burned areas. Noxious weeds are highly competitive and can compete with and replace native perennial plant species. Once noxious weeds become established, a monoculture of weeds can develop. The development of noxious weeds leads to declining resource values including the lack of plant diversity, declining wildlife habitat, and declining livestock and wild horse forage. Noxious weed infestation can also negatively impact aesthetic values and reduce recreational enjoyment.

Refer to CLARHA Page 41 for a list of noxious weeds present in the Carico Lake Allotment.

WATER QUALITY/WETLANDS AND RIPARIAN ZONES

Affected Environment

Livestock graze riparian areas due to the presence of water, shade and succulent vegetation. Riparian areas are vulnerable to the effects of overgrazing due to heavy concentration of livestock within these areas. Livestock and wild horse use can alter the chemical, physical and biological integrity of the water. Grazing impacts may also modify the hydrologic response of watersheds by reducing infiltration and vegetative cover, increasing stream channel/floodplain degradation, accelerated erosional processes, surface roughness and increase compaction. Grazing can change, reduce or eliminate vegetation through processes such as channel widening and degradation or lowering of the water table. Negative effects on fish habitat include the reduction of shade cover, which increases in water temperature, changes in stream morphology and addition of sediment due to soil erosion. All of these impacts can be documented through monitoring, sampling and lab analysis. Through the development of mitigation measures and monitoring, the impacts to water resources can be minimized and grazing can coexist with other multiple uses of the public land.

Refer to CLARHA Page 36, Pages 220-228, Appendix 6 and Appendix 7 for a detailed discussion of the condition of riparian areas within the allotment.

SOILS/VEGETATION

Affected Environment

Refer to CLARHA Pages 20-21, 49-237, Appendix 2, 3, 4, 5, 6, 7, 8 and 10 for a detailed discussion of soils and vegetation within the Carico Lake Allotment.

FORESTRY/WOODLANDS

Affected Environment

Refer to Pages 35-36 and pages 236-237 and Table 1 in the CLARHA for a detailed discussion of forest and woodland resources within the allotment.

RECREATION

Affected Environment

The majority of recreation occurs in the fall during hunting season in the Carico Lake Allotment. Recreational activities include: four-wheel driving, dirt bike riding, deer and upland game bird hunting, camping, sight seeing, wild horse and wildlife viewing. There are no developed recreation facilities or sites in the area. No commercial or competitive Special Recreation Permit (SRP) events occur within the immediate area. At this time the Carico Lake Allotment is located in an area designated "open" to off-highway vehicle use.

SOCIOECONOMIC VALUES

Affected Environment

The Carico Lake Allotment is located within Lander County, NV. Employment within the county is generally provided by industries, businesses and agencies such as mining, government, trade services, manufacturing, construction, finance, insurance and real estate. The Carico Lake Allotment is utilized by seven grazing permittees. The existing grazing permit includes 33,453 AUMs of Active Use. Grazing permits are not property, but rather provide revocable privileges to harvest forage from public lands. For a detailed summary of Lander County Socioeconomics, please refer to the Pipeline/South Pipeline Expansion Project issued December 2004.

Located in north central Nevada, Lander County encompasses 5,621 square miles. Over 85 percent of the County is currently public land managed by federal agencies. Interstate 80 traverses the County in an east-west fashion on the northern end, as does Highway 50 on the southern end. State Highway 305, which runs north and south, bisects the center of Lander County. This highway links the cities of Battle Mountain (the County Seat) and Austin. The town of Kingston is located in the southern part of Lander County on Highway 376.

The total population of Lander County in 2002 was estimated to be 5691, an approximate 115% increase from 1970. The population density is relatively .99 persons per square mile. Approximately 85 percent of Lander County residents live in the northern portion of the County; 65% of the residents live in an urban setting.

In recent years Lander County's economy has been dominated by mining. Agriculture

also plays a significant role in the local economy. High quality alfalfa and alfalfa seed is produced. Although the mining industry has declined in Lander County in recent years, it is still the dominant sector of the local economy.

Socio-demographically, Lander County is 84 percent white, with the 50 - 54 year old age group growing the fastest. Sixty-seven percent of residents were born in the State. Housing in the county is affordable – according to national standards. Seventy-five percent of residents working in Lander County and almost 60 percent of residents worked in the town in which they lived, with 55% of residents commuting to work in less than 20 minutes.

Twenty-one percent of Lander County residents 25 and older have less than a high school degree; three percent have an advanced college degree.

Average earnings per job are about \$37,000 annually and the majority of job-related income is derived from the mining sector (30 percent). Net income from farming and ranching dropped from \$3 million in 1970 to \$1 million in 2000. Per Capita income in 1999 was \$16,998 and in real terms, average earnings per job have risen by 4 percent since 1970.

The unemployment rate for the County was 9.6 percent in 2001, higher than the State and the U.S. In contrast to the State, job growth in Lander County has declined over the past 10 years; most of the new jobs and new income were in the mining sector.

In terms of farm income, 52 percent of gross income was from livestock, while 32 percent was derived from crop sales. Total net income from farming and ranching in Lander County dropped from \$3.3 million in 1970 to \$1 million in 2000; realized net farm income was less than \$1 million.

Due to financial disclosure concerns on individual ranching operations, grazing allotment-specific financial information is unavailable.

IV. ENVIRONMENTAL CONSEQUENCES

GRAZING MANAGEMENT

Proposed Action Alternative

1. Cortez Joint Venture Use Area Livestock Management

The proposed action would establish the season of use for the Cortez Joint Venture Use Area from February 1^{st} – March 31^{st} . A ten year grazing permit would be issued for Cortez Joint Venture, which would establish the total permitted use for the Cortez Joint Venture Use Area at 1,741 AUMs and place 1,679 AUMs into suspended use.

The season of use would be primarily for cheatgrass control, which is the dominant vegetation throughout the use area. In addition, the key perennial grasses that are present would not be grazed during the critical growing period. This would allow for these plants to increase vigor, productivity and seedling establishment. The elimination of grazing during the critical growing period would improve the vegetative community by allowing for sufficient key herbaceous plant seedling and young plant recruitment.

The proposed action would ensure that progress is made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health and multiple use objectives throughout the Cortez Joint Venture Use Area. Refer to Attachment 1 for a detailed discussion of monitoring standards throughout the Carico Lake Allotment.

2. C-Ranches Use Area Livestock Management

The proposed action would establish the season of use for the C-Ranches Use Area from April 1^{st} – January 31^{st} . A ten year grazing permit would be issued for C-Ranches, which would establish the total permitted use for the C-Ranches Use Area at 9,880 AUMs and place 3,525 AUMs into suspended use.

The proposed grazing management system would establish a season of use from February 1^{st} – March 31^{st} within the Cortez Joint Venture Use Area. This season of use would be primarily for cheatgrass control, which is the dominant vegetation throughout the use area. In addition, the key perennial grasses that are present would not be grazed during the critical growing period. This would allow for these plants to increase vigor, productivity and seedling establishment. The elimination of grazing during the critical growing period would improve the vegetative community by allowing for sufficient key herbaceous plant seedling and young plant recruitment. Livestock use within the Cortez Use Area would have to be applied for each year and authorization would be at the discretion of the authorized officer.

The proposed grazing management system would establish a season of use from April 1^{st} – June 30^{th} in the Toiyabe Mountain Use Area and Shoshone Mountain Use Area. The season of use would eliminate hot season (July 1^{st} - October 15^{th}) grazing within these use areas where the majority of riparian habitat exists within the C-Ranches Use Area. The elimination of hot season grazing would allow for the recovery of riparian areas throughout these use areas. This would ensure that progress is being made towards the attainment of Proper Functioning Condition (PFC) for riparian areas and that water quality issues are addressed. Although livestock grazing would occur during the critical growing period for upland herbaceous species proper use levels would be identified for the season of use.

The proposed grazing management system would establish the season of use from July 1^{st} – November 15^{th} in the Toiyabe Flat Use Area and the Carico Lake Valley Use Area. The majority of livestock would be in private meadows from November 16^{th} – January 31^{st} . Dry cows would be allowed to graze flat around private meadows and drift in and out of private land from November 16^{th} – January 31^{st} in the Carico Lake Valley Use

Area. Grazing within the Toiyabe Flat Use Area and the Carico Lake Valley Use Area would be after completion of the critical growing period. The elimination of grazing during the critical growing period would improve the vegetative community by allowing for sufficient key herbaceous plant seedling and young plant recruitment. This would allow for improvement in the plant communities by enhancing key perennial species productivity, which would in turn provide seed to repopulate the plant communities. The expected improvement in the vegetative community would enhance soil site stability, which would limit the redistribution of and loss of soil resources by wind and water. Hydrologic function would also be enhanced with improvement in the vegetative community. This would allow the site to adequately capture, store and release water from rainfall or snowmelt events. Furthermore, improvement in the plant community would improve the integrity of the biotic community, which would permit the use area to resist loss of function and structure following disturbance allowing for recovery. As a result of hot season grazing occurring within the Toiyabe Flat Use Area and the Carico Lake Valley Use Area riparian areas would be excluded from livestock grazing through the construction of riparian exclosures. Refer to Appendix 1 for locations of the riparian exclosures. Water would be piped out of the exclosures and made accessible to wildlife, wild horses and livestock. The proposed action would ensure that progress is made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health and multiple use objectives throughout the C-Ranches Use Area. Refer to Attachment 1 for a detailed discussion of monitoring standards throughout the Carico Lake Allotment.

3. Doby George LLC. Livestock Management

The proposed grazing action would establish the season of use for the Doby George LLC., Use Area from April1st – June 30th. A ten year grazing permit would be issued for Doby George LLC., which would establish the total permitted use for the Doby George LLC., Use Area at 295 AUMs and place 105 AUMs into suspended use. In addition, the proposed action would implement a grazing management system that would be based on herding, to distribute sheep throughout the Doby George LLC. Use Area. The evaluation of monitoring data revealed that upland, riparian and water quality issues are prevalent throughout the use area. Hot season (July 1st - October 15th) livestock grazing would be eliminated within the use area, which would improve sensitive riparian and aspen habitat.

The proposed action would ensure that progress is made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health and multiple use objectives throughout the Doby George LLC. Use Area. Refer to Attachment 1 for a detailed discussion of monitoring standards throughout the Carico Lake Allotment.

4. Ellison Ranching Company Livestock Management

Ellison Ranching Company recently acquired Filippini Ranching Company's Use Area through a transfer of grazing preference. The proposed action would establish the season of use for the Ellison Ranching Company Use Area for sheep from November 1^{st} – June 30^{th} and December 1^{st} – April 30^{th} for cattle. A ten year grazing permit would be issued

for Ellison Ranching Company, which would establish the total permitted use for the Ellison Ranching Company at 10,463 AUMs and place 3,153 AUMs into suspended use.

The proposed action would also convert 6,403 AUMs of active use from cattle to sheep use in the Shoshone Mountain Use Area, Harry Canyon Use Area and the Moss Fire Use Area. These use areas were in the Filippini Ranching Company prior to the July 11, 2005 transfer. 2,499 AUMs would remain available for cattle. Cattle use would be in the Antelope Pasture, Cedars Pasture, Moss Fire Use Area, Wood Canyon Pasture, Cedars North Pasture and Cedars South Pasture. The conversion of cattle AUMs to sheep AUMs would eliminate cattle grazing within the Shoshone Mountain Use Area and Harry Canyon Use Area. The evaluation of monitoring data revealed that upland, riparian and water quality issues are prevalent throughout these two use areas. Hot season (July 1st -October 15th) livestock grazing would be eliminated within the use areas, which would improve sensitive riparian and aspen habitat. The Shoshone Mountain Use Area and the Harry Canyon Use Area are more suitable to sheep grazing due to topography, distance from water, composition of vegetation, riparian and aspen values. Sheep prefer to graze and bed on upland areas away from riparian areas, which would ensure that critical riparian, water quality and watershed issues are addressed within the Shoshone Mountain Use Area and the Harry Canyon Use Area. Sheep would not concentrate on riparian areas due to herding and existing water developments throughout the allotment. The biodiversity of upland vegetative communities would be improved due to the intensive nature of sheep herding. Herding would ensure that better livestock distribution occurs within the use areas. Sheep are herded more effectively than cattle and utilize areas that would not normally be grazed by cattle. These areas can be influenced by topography and distance from water.

Sheep use would be permitted within the Moss Fire Use Area in the spring on an annual basis dependant on cheatgrass production. This would aid in controlling cheatgrass that is present throughout the area. Sheep would be used to reduce the amount of fuel and reduce the vegetative height of cheatgrass. This would aid in creating a firebreak.

Cattle use would occur in the Antelope Pasture, Cedars Pasture, Moss Fire Use Area, Wood Canyon Pasture, Cedars North Pasture and Cedars South Pasture. The majority of these pastures and use areas have been burned by wildfire and rehabilitated. The season of use in these pastures and use areas would be from December 1^{st} – April 30th. The majority of use in these pastures would be deferred until the dormant season. This would limit use on native upland rangeland during the critical growing period, allow forage plants to gain in vigor and produce seeds. Due to the number of pastures and use areas in the grazing management system, the majority of livestock grazing on a year-to-year basis would be prior to the critical growing period. Although livestock grazing would occur during the critical growing period for upland herbaceous species in some pastures on a year-to-year basis proper use levels would be identified.

The proposed action would ensure that progress is made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health and multiple use objectives

throughout the Ellison Ranching Company Use Area. Refer to Attachment 1 for a detailed discussion of monitoring standards throughout the Carico Lake Allotment.

5. Filippini Ranching Company Livestock Management

The proposed action would establish the season of use for the Filippini Ranching Company Use Area from March 1^{st} – April 30^{th} . A ten year grazing permit would be issued for Filippini Ranching Company, which would establish the total permitted use for the Filippini Ranching Company Use Area at 777 AUMs.

The proposed action would ensure that progress is made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health and multiple use objectives throughout the Filippini Ranching Company Use Area. Refer to Attachment 1 for a detailed discussion of monitoring standards throughout the Carico Lake Allotment.

6. Julian Tomera Ranches, Inc. Livestock Management

The proposed action would establish the season of use for the Julian Tomera Ranches, Inc. Use Area from March 1^{st} – May 31^{st} . A ten year grazing permit would be issued for Julian Tomera Ranches, Inc., which would establish the total permitted use for the Julian Tomera Ranches, Inc. Use Area at 914 AUMs and place 326 AUMs into suspended use.

The evaluation of monitoring data revealed that upland, riparian and water quality issues are prevalent throughout the use area. Hot season (July 1^{st} - October 15^{th}) livestock grazing would be eliminated within the use area, which would improve sensitive riparian and aspen habitat.

The proposed action would ensure that progress is made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health and multiple use objectives throughout the Julian Tomera Ranches, Inc. Use Area. Refer to Attachment 1 for a detailed discussion of monitoring standards throughout the Carico Lake Allotment.

7. Silver Creek Ranch, Inc.

The proposed action would establish the season of use for the Silver Creek Ranch, Inc. Use Area from April 1^{st} – June 30^{th} . A ten year grazing permit would be issued for Silver Creek Ranch, Inc., which would establish the total permitted use for the Silver Creek Ranch, Inc. Use Area at 884 AUMs and place 316 AUMs into suspended use.

The evaluation of monitoring data revealed that upland, riparian and water quality issues are prevalent throughout the use area. Hot season (July 1^{st} - October 15^{th}) livestock grazing would be eliminated within the use area, which would improve sensitive riparian and aspen habitat.

The proposed action would ensure that progress is made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health and multiple use objectives

throughout the Silver Creek Ranch, Inc. Use Area. Refer to Attachment 1 for a detailed discussion of monitoring standards throughout the Carico Lake Allotment.

Environmental Consequences - Effects Common to Cortez Joint Venture and Filippini Ranching Company

The season of use within the Cortez Joint Venture and Filippini Ranching Company Use Areas would be primarily for cheatgrass control, which is present throughout each use area. Hot season (July 1st - October 15th) grazing would be eliminated from riparian areas, which would result in improved riparian habitat. In addition, the key perennial grasses that are present would not be grazed during the critical growing period within the Cortez Joint Venture Use Area. Although livestock grazing would occur within the critical growing period within the Filippini Ranching Company Use Area, proper use levels would be initiated. This would allow for the perennial plants in both use areas to increase vigor, productivity and seedling establishment. The grazing management system is expected to improve the vegetative community by allowing for sufficient key herbaceous plant seedling and young plant recruitment. The expected improvement in the vegetative community would enhance soil site stability, which would limit the redistribution of and loss of soil resources by wind and water. Hydrologic function would also be enhanced with improvement in the vegetative community. This would allow the site to adequately capture, store and release water from rainfall or snowmelt events. Furthermore, improvement in the plant community would improve the integrity of the biotic community, which would allow for the use area to resist loss of function and structure following disturbance allowing for recovery. The proposed action would ensure that progress is made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health and multiple use objectives. Refer to Attachment 1 for a detailed discussion of monitoring standards throughout the Carico Lake Allotment.

Environmental Consequences - Effects Common to Doby George LLC., Julian Tomera Ranches Inc., and Silver Creek Ranch, Inc.

The proposed grazing management system would allow existing upland plants to increase vigor, productivity, cover and seedling establishment. Due to the nature of sheep grazing and herding, it is expected that a certain percentage of the Julian Tomera Ranches Inc. Use Area and the Silver Creek Ranch, Inc. Use Area would be deferred annually. This would limit use on native upland rangeland during the critical growing period, allowing forage plants to gain in vigor, and produce seed. The grazing management system is expected to improve the vegetative community by allowing for sufficient key herbaceous plant seedling and young plant recruitment. The expected improvement in the vegetative community would enhance soil site stability, which would limit the redistribution of and loss of soil resources by wind and water. Hydrologic function would also be enhanced with improvement in the vegetative community. This would allow the site to adequately capture, store and release water from rainfall or snowmelt events. Furthermore, improvement in the plant community would improve the integrity of the biotic community, which would allow for the use area to resist loss of function and structure following disturbance allowing for recovery. The proposed action would ensure that progress is made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health and multiple use objectives. Refer to Attachment 1 for a detailed discussion of monitoring standards throughout the Carico Lake Allotment.

No Action Alternative (Existing System)

The no action alternative would allow for current livestock and wild horse management practices to continue. The current permitted use for the Carico Lake Allotment is 33,453 In addition, the current grazing permit provides for year-round grazing AUMs. throughout the allotment. Refer to CLARHA pages 17-19 for a detailed discussion of current wild horse and livestock management. SERA RMP objectives, Standards for Rangeland Health and multiple use objectives are not being met throughout the allotment. Refer to pages 49-256 and Appendix 10 for a detailed discussion. The direct impact of the no action alternative would be the continued non-attainment of the SERA RMP objectives, Standards for Rangeland Health and multiple use objectives within the allotment. The non-attainment of the standards would not provide for wildlife, wild horse and livestock habitat requirements throughout the allotment. In addition, refer to 43 CFR 4180 – Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration. This states that the authorized officer shall take appropriate action under subparts 4110, 4120, 4130 and 4160 of this part as practicable, but not later than the start of the next grazing year upon determining that existing grazing management needs to be modified to ensure that the following conditions exist:

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

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

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

(d) Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.

WILD HORSES

Proposed Action Alternative

The proposed action would establish an Appropriate Management Level range for wild horses within the Bald Mountain Herd Management Area of 129-215 (1,548-2,580 AUMs) wild horses year-round. The proposed action would also establish an Appropriate Management Level range for wild horses within the South Shoshone Herd Management Area of 60-100 wild horses (720-1,200 AUMs). The implementation and maintenance of the AML range established for the Bald Mountain HMA and South Shoshone HMA in the Proposed Action would result in the achievement of a thriving natural ecological balance between wild horses, wildlife, and livestock; and utilization of range and riparian resources in a manner that would avoid deterioration of the range.

Gathers would be conducted within the Bald Mountain and South Shoshone HMAs to remove animals down to the low range of the AML, and then allow animals to increase through annual reproduction to the high point of the AML before another gather was scheduled. All population management directly impacting wild horses within these HMAs would be preceded by a level of analysis consistent with the National Environmental Policy Act (NEPA) to determine impacts associated with gathers.

The primary direct impact to the wild horse populations as a result of the implementation of the AMLs through wild horse gathers would be a total reduction in the overall population of animals throughout the HMA. Indirect impacts of achieving the AML ranges would consist of reduced competition between bands and would likely improve overall distribution of animals across the landscape.

Carrying capacity analysis determined that the wild horse AMLs for the Bald Mountain HMA and South Shoshone HMA would result in utilization levels consistent with multiple-use objectives allowing vegetation resources to improve due to reduced concentrations of wild horses on a year-round basis. Maintaining the AMLs within the HMAs would allow upland and riparian vegetation resources to improve; thereby, improving habitat available to wild horses and wildlife, as well as improving the types of forage available to livestock during the season of use. A healthy, genetically viable, and self-sustaining wild horse population would continue to exist within the HMAs with the maintenance of the AML. Improved range condition and increased forage availability would result in healthy viable, self-sustaining populations of wild horses able to achieve the genetic potential of the herd. Refer to Appendix 11 in CLARHA for carrying capacity calculations.

Managing wild horse populations within the HMAs in balance with the forage and water resources available and the multiple-use concept would ensure that populations are less dramatically impacted by severe changes in climatic patterns such as drought. The establishment of AML would ensure the long-term health and viability of wild horses in a thriving natural ecological balance with other resources in the allotment.

Implementation of the proposed AML ranges would eliminate the need to conduct annual gathers in response to annual reproduction, which would minimize direct short-term impacts to the population associated with gathers. The establishment of the AML ranges would result in periodic removals every 3-5 years dependent on funding levels. The Wild Free Roaming Horse and Burro Act requires that "All management actions shall be at the minimum feasible level". The proposed AML ranges are consistent with the Act.

The proposed action would also exclude livestock and wild horses from riparian areas through the construction of riparian exclosures within portions of the Bald Mountain and South Shoshone HMAs to protect sensitive riparian areas. Water would be piped out of the exclosures and made available to wild horses, wildlife and livestock. As a result, increased quantity and quality of water would be available to wild horses throughout the year, further improving habitat used by wild horses.

The proposed livestock actions would have indirect impacts to wild horses. Livestock grazing typically does not affect management of wild horses with the exception of impacts to the vegetation, which provides forage for wild horses. The proposed livestock grazing systems for the Carico Lake Allotment, in addition to the proposed terms and conditions, grazing stipulations and adjustments to permitted use would result in improvements in vegetation communities, which would also improve habitat and forage utilized by wild horses. Improvement in vegetation communities, reduced invasion of annual and invasive species, increased production of key species and upward trends would have the effect of improving forage availability and forage quality to wild horses, contributing to healthy self-sustaining populations.

The proposed action to retain short-term AUMs for big game would have no direct or indirect affect on habitat condition and wild horses.

The proposed action would ensure that significant progress is made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health and multiple use objectives. Refer to Attachment 1 for a detailed discussion of monitoring standards throughout the Carico Lake Allotment.

No Action Alternative (Existing System)

The direct impact of the no action alternative would be that appropriate management level would not be established within the Bald Mountain and South Shoshone HMAs. There would be no active management to control the size of the population. This alternative would result in a steady increase in wild horse numbers, which would greatly exceed the carrying capacity of the habitat to provide adequate forage and water.

The no action alternative would be unacceptable to the BLM and most members of the public. The BLM realizes that some members of the public advocate "letting nature take its course"; however, allowing horses to die of dehydration and starvation would be inhumane treatment and clearly indicates that an overpopulation of horses exists in the HMA. The Wild Free-Roaming Horse and Burro Act of 1971 mandates the Bureau to

"prevent the range from deterioration associated with overpopulation", and "remove excess horses in order to preserve and maintain a thriving natural ecological balance and multiple use relationships in that area". Additionally, Promulgated Federal Regulations at Title 43 CFR 4700.0-6 (a) state "Wild horses shall be managed as selfsustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat" (emphasis added).

Furthermore, this alternative would not comply with the Northeastern Great Basin RAC Standards and Guidelines for Rangeland Health and Healthy Wild Horse and Burro Populations, which require that "Wild horses and burros exhibit characteristics of a healthy, productive, and diverse population. Age structure and sex ratios are appropriate to maintain the long term viability of the population as a distinct group. Herd management areas are able to provide suitable feed, water, cover and living space for wild horses and burros and maintain historic patterns of habitat use".

The no action alternative would violate the Wild Free Roaming Horse and Burro Act, Federal Regulations, BLM Policy and Resource Advisory Council Standards and Guidelines.

The indirect impact of the no action alternative would be the non-attainment of the SERA RMP objectives, Standards for Rangeland Health and multiple use objectives. The non-attainment of the standards would not provide for wildlife, wild horse and livestock habitat requirements throughout the allotment.

WILDLIFE (INCLUDING THREATENED AND ENDANGERED, MIGRATORY BIRDS and SENSITIVE SPECIES)

Proposed Action

The proposed action would retain short-term big game numbers 1,241 AUMs in the Carico Lake Allotment. The short-term AUMs were retained due to the non-attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The proposed action to retain short-term AUMs for big game would have no direct or indirect affect on wildlife populations, habitat condition or wildlife in general.

The proposed action would initiate a livestock grazing management plan for each of the seven permittees within the allotment. In addition, an appropriate management level would be established for wild horses in the Bald Mountain and South Shoshone HMAs. The indirect impact to wildlife would be that the management actions would ensure that progress towards the attainment of the multiple use objectives, allotment specific objectives and the Standards for Rangeland Health throughout the Carico Lake Allotment would occur.

The proposed action would ensure sustainable livestock, wild horse, and wildlife stocking rates. Refer to Appendix 11 in the CLARHA. Hot season (July 1st - October 15th)

livestock grazing would be eliminated from the majority of riparian areas throughout the allotment. The livestock grazing management plan would improve distribution throughout the allotment and the majority of the allotment would be deferred until the completion of the critical growing period. The proposed action would result in spring rest in low and moderate elevation areas. This would result in providing residual herbaceous cover of perennial species to provide for the needs of wildlife including sage grouse, antelope and non game species.

The reduction of permitted use would result in the attainment of the annual monitoring standards and long-term objectives. The annual monitoring standards would be initiated to monitor livestock and wild horse use throughout the allotment.

The proposed action is expected to improve the vegetative community by enhancing soil site stability through limiting the redistribution of and loss of soil resources by wind and water. Hydrologic function would also be enhanced with improvement in the vegetative community. This would allow the site to adequately capture, store and release water from rainfall or snowmelt events. Furthermore, improvement in the plant community would improve the integrity of the biotic community by allowing the use areas to resist loss of function and structure following disturbance allowing for recovery. The expected improvements in upland and riparian habitats as a result of the grazing management plan and achievement of AML for wild horses, would be beneficial for wildlife. Threatened and endangered wildlife, migratory birds, sensitive species and general wildlife habitats are expected to improve throughout the allotment as a result of the proposed action.

The proposed action would also exclude livestock and wild horses from using riparian areas through the construction of riparian exclosures within portions of the Carico Lake Allotment to protect sensitive riparian areas. Water would be piped out of the exclosures and made available to wild horses, wildlife and livestock.

The proposed action would allow for the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The attainment of the standards would provide for wildlife habitat requirements throughout the allotment. Refer to Attachment 1 of this document for monitoring objectives and the monitoring plan for the Carico Lake Allotment.

No Action Alternative (Existing System)

The no action alternative would retain short-term big game numbers 1,241 AUMs in the Carico Lake Allotment. The direct impact of the no action alternative would be that a grazing management system, adjustment in stocking levels and appropriate management for wild horses would not be implemented. The continuation of current management, which includes hot season (July 1st - October 15th) grazing in riparian areas by cattle, would not improve upland or riparian condition. The majority of the allotment would not be deferred until the completion of the critical growing period. The no action would not result in spring rest in low and moderate elevation areas. The limitations in residual herbaceous cover of perennial species would not provide for the needs of wildlife

including sage grouse, antelope and non game species. The no action alternative would not allow for the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The non-attainment of the standards would not provide for wildlife, wild horse and livestock habitat requirements throughout the allotment. Refer to CLARHA pages 42-256, Appendix 6, 7, 10 and 11.

CULTURAL RESOURCES

Proposed Action Alternative

Implementation of the livestock grazing management system and appropriate management level for wild horses would reduce negative impacts to riparian areas, which generally contain cultural resources. It is expected that through the proposed action, including, deferred and/or rotational grazing; the elimination of hot season grazing in the majority of riparian areas; the conversion of cattle to sheep; and the reduction of livestock and wild horses in upland and riparian areas, the direct impact to springs and other riparian/wetland areas would decrease, therefore reducing indirect impacts to cultural resources.

Future range improvements such as fencing, water developments and water haul sites would also assist in decreasing and eliminating impacts, but would be subject to Class III cultural surveys and potential mitigation measures. Projects would be designed to either avoid impacts to cultural resources, or measures would be taken to mitigate potential damage to Historic Register eligible sites.

Sites distributed in areas other than near or at spring developments would also benefit from the proposed action. Seasonal use across elevational zones would reduce the over all time livestock congregate at sites within these zones.

During fence construction, spring development or installation of range improvements, if any materials are encountered they are not to be collected, moved, or modified until a qualified cultural resource specialist provides a determination. Cultural and archeological resources are protected under the Archaeological Resources Protection Act (16 U.S.C. 740ii) and the Federal Land Management Act (43 U.S.C. 1701).

The proposed action would allow for the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The attainment of the standards would provide for improvements in riparian and upland conditions, which would protect cultural resources from disturbance.

No Action Alternative (Existing System)

Under the no action alternative, it is expected that indirect impacts to cultural resources would continue at the same level as in the past. The continuation of current management, which includes hot season (July 1^{st} through October 15^{th}) grazing in riparian areas by

livestock, would not improve upland or riparian conditions and thus erosion at cultural sites would continue. Not managing wild horses at Appropriate Management Levels would also continue to facilitate site erosion and degradation.

The no action alternative would not allow for the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The non-attainment of the standards would not provide for improvements in riparian and upland conditions, which would protect cultural and paleontological resources from additional disturbances. Finally, under the no action alternative, riparian areas would not be excluded from grazing and riparian areas would not be constructed, and developments such as trough placement or piping water away from significant cultural resource areas would not occur.

INVASIVE, NON-NATIVE SPECIES

Proposed Action Alternative

The direct impact of the proposed action is expected to provide for proper vegetative management, which would create favorable conditions that would reduce the spread of invasive species in the Carico Lake Allotment.

The indirect impact of the proposed action would be the following: Implementation of a grazing management plan would increase distribution of livestock within the allotment helping to alleviate overgrazing near riparian areas. A livestock grazing management system and the achievement of AML for wild horses would reduce soil compaction and aid in proper permeability and infiltration rates. Reduced soil compaction would increase the production of the dominant and/or co-dominant native perennial grass and forb components on the range sites. The elimination of hot season grazing within the majority of riparian areas would result in livestock grazing prior to seed ripe of noxious weeds including thistle. Sheep use throughout the allotment would occur in the spring, which would minimize the spread of weed seeds. The improved range conditions would over time provide increased competition against future invasive species infestations.

The proposed action would allow for the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The attainment of the standards would provide for wildlife, wild horse and livestock habitat requirements throughout the allotment.

No Action Alternative (Existing System)

The direct impact of the no action alternative would be the continuation of existing management that would result in further upland and riparian degradation, which may result in an increase of noxious weeds within the Carico Lake Allotment. The no action alternative would not eliminate hot season grazing within the majority of riparian areas. This may further facilitate the spread of invasive species around riparian areas as a result of the congregation around these areas by livestock. The indirect impact of the no action

alternative would not allow for the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The non-attainment of the standards would not provide for wildlife, wild horse and livestock habitat requirements throughout the allotment.

WATER QUALITY/WETLANDS AND RIPARIAN ZONES

Proposed Action

The direct impacts of the proposed action would be the following: A livestock grazing management plan would be initiated for the seven permittees within the Carico Lake Allotment. In addition, AML would be established for the Bald Mountain and South Shoshone HMAs where the majority of the riparian areas are within the allotment. The livestock grazing management plan would eliminate hot season (July 1st - October 15th) grazing in riparian areas throughout the majority of the allotment. The conversion of cattle AUMs to sheep AUMs would eliminate hot season cattle grazing within the Ellison Ranching Company portion of the Shoshone Mountain Use Area and Harry Canyon Use Area. Hot season grazing by cattle would be eliminated in the C-Ranches portion of the Shoshone Mountain Use Area. Futhermore, the grazing management plan would eliminate hot season grazing by livestock within the Toiyabe Mountain Use Area. The evaluation of monitoring data revealed that upland, riparian and water quality issues are prevalent throughout these use areas. The elimination of hot season grazing accompanied by the new Terms and Conditions is expected to improve sensitive riparian and aspen habitat while improving water quality throughout the allotment. Improvement in water quality would be the result of improved vigor and production of riparian species, which would lead to greater vegetative cover on stream banks and floodplains. Water quality is expected to improve in the short-term, since year-round grazing impacts would be eliminated. This would allow riparian areas to increase capture of sediments and would decrease pollutants such as fecal colliform and turbidity since livestock use along riparian zones would be significantly reduced or eliminated. Improvements in upland vegetation and riparian vegetation would allow runoff to slow and absorb into the soil and also act as sediment capture, reducing the potential for sediment to enter the stream. Riparian vegetation would stabilize the stream channel, protecting it from extreme flow events and temperature fluctuations. Riparian annual monitoring standards as identified in Attachment 1 would be initiated in areas where hot season grazing would continue to occur in the allotment. In addition, 10-20 riparian areas would be exclude livestock and wild horses through the construction of riparian exclosures that are grazed in the hot season. It is expected that the proposed action would improve riparian habitat and water quality throughout the allotment.

The indirect impact of the proposed action would allow for the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The attainment of the standards would allow improvement in sensitive riparian areas and provide for wildlife, livestock and wild horse habitat requirements throughout the allotment. Refer to Attachment 1 of this document for monitoring objectives and the monitoring plan for the Carico Lake Allotment.

No Action Alternative (Existing System)

The direct impact of the no action alternative would be the following: The carrying capacity for wild horses and livestock would not be initiated. A livestock grazing management plan would not be developed to promote healthy riparian habitats. The conversion of cattle to sheep would not occur in the newly acquired Ellison Ranching Company permit within the Shoshone Mountain Use Area. Hot season (July 1st - October 15th) grazing in riparian areas would continue to occur throughout the allotment, which is expected to lead to continued detrimental impacts to water quality and overall riparian condition. Wild horse populations would continue to increase within both HMAs and existing impacts to riparian areas by wild horses would continue to increase. Improved vigor and production of riparian species would not be realized due to livestock use occurring throughout the allotment on a year-round basis. Improvements in vegetative cover on stream banks and floodplains would not occur due to livestock congregating around these areas in the hot season. Improvements in uplands and riparian conditions would not occur due to year-round grazing by livestock and wild horse populations in excess of the capability of the land. This would result in the reduction of the capability of soils throughout the allotment to capture sediment; thereby, reducing the potential for sediment to enter the stream.

The indirect impact of the no action alternative would be the non-attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The non-attainment of the standards would not allow improvement in sensitive riparian areas and provide for wildlife, livestock and wild horse habitat requirements throughout the allotment.

SOILS/VEGETATION

Proposed Action

The direct impact of the proposed action would be the following: The proposed action would allow the majority of upland vegetative communities to be deferred until after the critical growing period. In addition, hot season (July 1st - October 15th) livestock grazing in riparian areas would be eliminated throughout the majority of the allotment. Proper use levels would be identified throughout the allotment as revealed by Attachment 1. Furthermore, Appropriate Management Level would be established for wild horses, which would ensure that populations would result in a thriving natural ecological balance between wild horses and other resource values.

The conversion of cattle to sheep in the Shoshone Mountain Use area and the identification of proper use levels throughout the allotment would allow for improvement in upland and riparian communities. A grazing rotation system would reduce soil compaction and aid in proper permeability and infiltration rates. Soils within the higher elevation areas that would be used by cattle and sheep in the spring within the allotment are rocky and less susceptible to compaction. The low elevation areas within the allotment would be deferred until after soils are dry. The deferment of livestock grazing

would allow these soils to dry prior to livestock turnout, which would result in less soil compaction. In addition, the key herbaceous species within these areas would complete the critical growing period prior to livestock use. Proper vegetative management maintains or improves the plant community for protection of soil and water resources. Sufficient seedling and young plant recruitment is needed to maintain or increase status of species in the community. Reduced soil compaction would increase the production of the dominant and/or co-dominant native perennial grass and forb components on the range sites.

Improved ecological condition would increase productivity, litter, soil fertility, infiltration and nutrient cycling. Healthy plant communities must be able to complete their life cycle by preventing damage during the critical growth period. Critical growth period in a plant growth cycle is when food reserves are the lowest and grazing is the most harmful. This critical growth period begins with the boot stage and closes with complete mature seed. Hot season grazing in riparian areas would be eliminated from the majority of the allotment.

Scientific literature reports that livestock grazing could have negative impacts to microbiotic crusts and that grazing should occur when crusts are less vulnerable to shearing and compaction. Therefore, season of use determines the degree of impact to the microbiotic crusts. Throughout the majority of the Carico Lake Allotment, grazing use by livestock would occur during the periods when biological crusts are least vulnerable. The proposed action would primarily authorize grazing use during the summer, fall, and winter months when soil moisture is low or when the soil is frozen. Where grazing would occur during the spring or when soils are moist, the proposed action would result in light to moderate stocking of these areas. Spring use would occur in the Fish Creek Mountain Use Area, Shoshone Mountain Use Area and Toiyabe Mountain Use; however, distribution of livestock would be enhanced with the proposed action, it is expected that the frequency of livestock impacts to microbiotic crusts would be minimized throughout the Carico Lake Allotment.

Riparian areas would exclude livestock and wild horses from using riparian zones through the construction of riparian exclosures where use occurs in the hot season. Water would be piped out of the exclosures to provide a reliable water source for wildlife, wild horses and livestock. It is expected that the proposed action would allow upland and riparian plants to increase in vigor, productivity, cover and seedling establishment. In addition, reference areas would be constructed in locations that have not been grazed by livestock to serve as comparison for similar range sites throughout the allotment.

The indirect impact of the proposed action would allow for the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The attainment of the standards would allow improvement in upland and riparian areas and provide for wildlife, livestock and wild horse habitat requirements throughout the allotment. Refer to Attachment 1 of this document for monitoring objectives and the monitoring plan for the Carico Lake Allotment.

No Action Alternative (Existing System)

The direct impact of the no action alternative would be that current livestock management, which includes year-round grazing and hot season grazing within riparian areas, would continue throughout the Carico Lake Allotment. In addition, the conversion of cattle to sheep within the Shoshone Mountain Use Area and the Harry Canyon Use Area would not occur. Although soils within high elevation areas are rocky and less susceptible to compaction these areas would be used on a year-round basis by cattle. In addition, the low elevation areas throughout the allotment would continue to be used on a year-round basis. The no action alternative would not provide for deferment of livestock grazing until after the completion of the critical growing period or proper use levels, which would result in less soil compaction. Grazing during the critical growth period and the hot season in cases of riparian areas would result in the degradation of riparian, upland, browse and aspen habitat. Appropriate Management Level for wild horses would not be established. Continuation of existing conditions may result in compacted soils, which would reduce infiltration and permeability leading to soil erosion. Increased soil erosion could result in decreased production of dominant and/or co-dominant native perennial grass and perennial forb components, which would negatively impact upland and riparian habitats.

Microbiotic crusts would continue to be degraded due to year-round livestock grazing throughout the allotment. Livestock grazing would occur during the spring when soils are moist throughout the entire allotment when microbiotic crusts are most vulnerable. Appropriate Management Level for wild horses would not be established. In addition, proper use levels would not be identified under the no action alternative.

The indirect effects of the no action alternative would be the non-attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The non-attainment of the standards would not allow for the improvement in upland and riparian areas, which would provide for wildlife, livestock and wild horse habitat requirements throughout the allotment.

FOREST/WOODLANDS

Proposed Action

The direct impacts of the proposed action would be the following: The proposed action would convert cattle to sheep and eliminate hot season (July 1st - October 15th) grazing in the Shoshone Mountain Use Area where remnant aspen stands are present. In addition, hot season grazing would be eliminated in upper elevations throughout the allotment where the majority of riparian areas are located. The majority of the allotment would be deferred until after the completion of the critical growth period. Furthermore, Appropriate Management Level would be established for wild horses, which would ensure that populations would result in a thriving natural ecological balance between wild horses and other resource values. Proper use levels would be established, which is expected to improve the aspen and browse species regeneration throughout the allotment.

Refer to Attachment 1 for monitoring and management objectives for the Carico Lake Allotment.

The indirect impact of the proposed action would allow for the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The attainment of the standards would ensure improved wildlife, livestock and wild horse habitat requirements throughout the allotment. Refer to Attachment 1 of this document for monitoring objectives and the monitoring plan for the Carico Lake Allotment.

No Action Alternative (Existing System)

The direct impact of the no action alternative would be a continuation of current livestock and wild horse management within the allotment. Cattle would not be converted to sheep in the Shoshone Mountain Use Area and hot season (July 1^{st} - October 15^{th}) grazing would continue in the woodland or mountainous areas throughout the allotment. Utilization of aspen root-sprouts and the seedling/saplings of other tree species would continue to occur throughout the allotment, which would further degrade these species.

The indirect impact of the no action alternative would be the non-attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The non-attainment of the standards would not allow for the improvement in upland and riparian areas, which would provide for wildlife, livestock and wild horse habitat requirements throughout the allotment.

RECREATION

Proposed Action

The indirect impacts of the proposed action are the following: The proposed action is expected to improve recreational values throughout the Carico Lake Allotment. The implementation of a grazing management system would eliminate hot season (July 1^{st} - October 15^{th}) grazing in the majority of riparian areas, which is expected to be beneficial for riparian habitat. In addition, the grazing system would initiate proper use levels throughout the year, which is expected to be beneficial to upland conditions. Improvement in upland and riparian habitat would be expected to improve recreational experiences in the allotment. Furthermore, the implementation of Appropriate Management Level for wild horses is expected to result in the maintenance of healthy wild horse populations. This would result in offering recreationists the opportunity to view healthy wild horses in contrast to viewing unhealthy animals that may be in distress as a result of shortages in forage or water. In addition, the improvements to the vegetative communities are expected to enhance wildlife viewing throughout the allotment.

The proposed action would allocate or retain short-term big game AUMs within the Carico Lake Allotment. The proposed action to retain short-term or allocate long-term AUMs for big game would have no direct or indirect affect on habitat condition.

The proposed action would allow for the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The attainment of the standards would provide for improved recreational opportunities throughout the allotment.

No Action Alternative (Existing System)

The indirect impact of the no action alternative would be the following: The no action alternative would continue hot season (July 1^{st} - October 15^{th}) grazing in riparian areas throughout the allotment, which would continue to result in negative impacts to riparian vegetation. This would negatively affect the recreation experience due to the degraded conditions of rangeland and riparian resources. The lack of AML for wild horses and resulting increases in population size would increase wild horse populations. If the population exceeds the capacity of the habitat, wild horses would decrease in body condition, which would detract from the quality of the wild horse viewing experiences.

The no action alternative would not allow for the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The non-attainment of the standards would not improve upland and riparian areas, which may not provide for a positive recreation experience.

SOCIOECONOMIC VALUES

Proposed Action

The direct impacts of the proposed action would be the following: Ranching revenues would continue based on the issuance of ten-year permits There would be some expense to the permittees to maintain existing range improvements. By implementing a grazing management system in the affected allotment, the proposed action may affect individual ranching operations that hold the grazing permits on those allotments. The proposed action would reduce livestock carrying capacities on the allotment, in order to attain Rangeland Health Standards.

The extent to which individual ranching operations would be economically impacted depends to a large degree on the ability of the operator to adjust to the changing conditions. If rangeland conditions were deteriorating, operations would necessarily have to adjust, regardless of any actions taken by this effort and the operator may have to voluntarily remove livestock or adjust carrying capacity to reflect the rangeland degradation. The proposed action would allow the operator to remain viable during drought years and maintain consistent herd sizes, which would provide for meeting financial goals of the operation and the Standards for Rangeland Health.

The proposed action would improve rangeland conditions throughout the allotment. This would improve the sustainability of the livestock operators within the allotment. Improvement in current conditions would be reflected by the attributes of Rangeland Health and would ultimately lead to healthier vegetative communities and upward trends throughout the Carico Lake Allotment. These improvements would ensure the attainment of Desirable Plant Community (DPC) objectives. The proposed action would reduce permitted use, which may have a temporary effect on ranching income. However, the expected improvements in rangeland health would provide for the long-term viability of the livestock operators.

Slight long-term impacts to the regional economy may be realized, as individual ranch operators reduce livestock numbers and therefore, require fewer services and ranch equipment from local retail providers.

While there are social values associated with Nevada's wild horses and burros, overall impacts to Nevada's resident horse and burro population are expected to be minimal.

The indirect impacts of the proposed action would provide for the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The attainment of the standards would provide for improved vegetative conditions throughout the allotment. The improvement in rangeland health may result in increases to permitted use, which would improve potential revenues of the permittees. Monitoring data would continue to be collected within the Carico Lake Allotment to determine if future adjustments to permitted use are reasonable.

No Action Alternative (Existing System)

The direct impacts of the no action alternatives would be the following: Ranching revenues would continue to be based on the issuance of ten-year permits retaining current permitted use. There would be some expense to the livestock operators to maintain existing range improvements. The proposed grazing management systems would not be implemented, which would negatively impact upland and riparian resources. Appropriate Management Level would not be established for wild horses. This would allow populations to exceed a thriving ecological balance within the allotment, which would negatively impact upland and riparian resources. Continued degradation of the vegetative communities would pose risk to future sustainability of ranching operations within the Carico Lake Allotment.

The indirect impacts of the no action would not provide for the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The non-attainment of the standards would not provide for improved vegetative conditions within the allotment. The continuation of the non-attainment of the standards and objectives would not result in an increase to permitted use. In addition, the long-term viability of the livestock operators may be in doubt due to non-attainment of the standards. Monitoring data would continue to be collected within the Carico Lake Allotment to determine if future adjustments to permitted use are necessary.

V. CUMULATIVE IMPACTS

The Council of Environmental Equality (CEQ) regulations implementing NEPA defines cumulative impacts as: "...The impact on the environment which results from incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (Federal or Non-Federal) or person undertakes such actions. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time (40 CFR 1508.7).

The Carico Lake Allotment consists of four hydrographic areas (HA). HA 54 – Crescent Valley, HA 55 – Carico Lake Valley, HA 58 – Lower Reese Valley, HA 59 – Middle Reese Valley and a portion of HA 138-Grass Valley from the Central Region is found in the southeast corner of the allotment. Refer to Appendix 6 of the CLARHA for a detailed discussion.

A. Past, Present, and Reasonably Foreseeable Future Actions

The Past, Present, and Reasonably Foreseeable Future Actions applicable to the assessment area are the following:

- Issuance of multiple use decisions and grazing permits for ranching operations through the allotment evaluation process and the reassessment of the Carico Lake Allotment.
- Wild horse gathers/decisions
- Constructing exclosures around springs or other riparian resources
- South Pipeline and Pediment Projects
- Cortez Hills Mining Project
- Mineral exploration
- Reclamation of Abandoned Mine Lands
- Off Highway Vehicle (OHV) trail system
- Woodcutting and pine nut harvesting
- Construction of fences in certain locations within the allotment
- Sage grouse habitat improvement projects
- Establishment of wildlife guzzlers
- Wildfire suppression
- Wildfire rehabilitation
- Invasive Weed treatment
- Vegetation rehabilitation treatments

B. Effects of Past, Present and Reasonably Foreseeable Future Actions of the proposed action and no action alternatives on the resources:

Grazing Management

Livestock grazing has occurred within the Carico Lake Allotment for over 100 years. The Carico Lake Allotment has never had a Rangeland Health Assessment conducted in its history. The effects of past and present livestock and wild horse management have been determined to be the causal factors for the non-attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. The livestock grazing management system identified in the proposed action, which includes the elimination of hot season grazing within the majority of riparian areas, the deferment of livestock grazing until after the completion of the critical growth period throughout the majority of the allotment, carrying capacity, season of use, conversion of cattle to sheep in the Harry Canyon and Shoshone Mountain Use Areas. In addition, riparian areas would exclude livestock and wild horses from using riparian zones through the construction of riparian exclosures where use occurs in the hot season. These actions would ensure that progress is made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives throughout the allotment. Furthermore, the attainment of AML as identified in the proposed action would ensure that progress is made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives throughout the allotment. Progress toward the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives would ensure the improvement of upland and riparian communities throughout the allotment. This improvement would have a beneficial affect for all resources present within the allotment.

The effects of the reasonable and foreseeable future actions for the proposed action are as follows: Riparian exclosures, invasive weed treatment, fencing wildfire rehabilitation, and vegetation rehabilitation treatments would also be beneficial for livestock management. These projects would provide for the long-term sustainability of the livestock operators due to increased forage production, ability to manage livestock, protection of riparian areas, which would lead to the attainment of the Standards for Rangeland Health.

The OHV trail may have an adverse effect on livestock management within portions of the Shoshone Mountain Use Area. OHV users would increase use of this area and may have detrimental effects to the permittee ability to herd sheep and during lambing. In addition, OHV users may negatively impact livestock management throughout the area due to increased disturbance of sheep and cattle, which may result in areas that receive excessive utilization.

Mining has occurred within the Carico Lake Allotment since 1862. Recent mining operations include McCoy Cove (Newmont Corporation), which is currently in the closure/reclamation stage of operations, Pipeline Project, Cortez and Gold Acres Project

(Cortez Gold Mine). Existing and historic mining operations have disturbed approximately 8,585 acres or ½ percent of the allotment. The majority of the 8,585 acres would be reclaimed within the Carico Lake Allotment. A total of 674 livestock AUMs have been suspended in the Carico Lake Allotment as a result of mining operations. Refer to page 17 of the CLARHA. Disturbance by mining is generally isolated and not widespread within the allotment. Past and present mining has not resulted in the non-attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives or allotment specific objectives within the allotment.

Wildfire has burned approximately 62,000 acres of public land since 1980 within the Carico Lake Allotment. These wildfires have in some cases converted native rangeland to areas that are dominated by annual species. Following the 1999 wildfires, intensive rehabilitation efforts were undertaken to limit acres that were converted to annual species. As identified in the CLARHA the wildfires have contributed to the non-attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives within the allotment

Wildfire suppression would be beneficial to livestock management by providing a means of controlling the number of acres that are burned. Following a wildfire, a short-term adverse impact would occur. This would be primarily the temporary reduction of AUMs and closure of the area that is burned while the area is rehabilitated. Wildfire may convert native range to non-native species. Fencing may be initiated to aid in the ability of the livestock operator to control livestock. Rehabilitation may vary in degrees of success and may provide additional forage if successful

Past and present range improvements including fences, exclosures, well, pipelines and wildfire rehabilitation seedings have been completed in the allotment. These projects provide a means to work towards the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives within the allotment. This is in the form of improved livestock distribution, control, establishment of season of use, etc.

Wild Horses

Wild horses have been present within the Bald Mountain and South Shoshone areas since before the passage of the Wild Free Roaming Horses and Burros Act in 1971. The SERA RMP established these areas as Herd Management Areas and identified them for long term management of wild horses. The SERA RMP Rangeland Program Summary further established initial stocking levels for wild horses. Refer to page 19 of the CLARHA. The only legally mandated wild horse gather to be conducted within the area was completed in 1981.

The effects of past and present action were discussed in the Affected Environment and Environmental Consequences sections of this document and the Grazing Management portion of the Cumulative impacts section. The effects of the reasonable and foreseeable future actions are as follows: Riparian exclosures and invasive weed treatment would be
beneficial to wild horse management. These projects would provide for the long-term sustainability and health of the wild horse herds due to increased forage production and water availability, which would lead to the attainment of the Standards for Rangeland Health. The OHV trail may have an adverse effect on wild horses within the Shoshone Mountain Herd Management Area. OHV users would increase use of this area and may have detrimental effects to wild horses during foaling. In addition, OHV users may negatively impact the ability of wild horses to maintain long-term viability as a distinct group. Users may negatively impact the ability of the herd management areas to provide suitable feed, water, cover and living space for wild horses and maintain historic patterns of habitat use. Increased competition by OHV users for space within the HMA may concentrate wild horses in isolated areas and result in excessive utilization. Wildfire suppression would be beneficial to wild horses by providing a means of controlling the number of acres that are burned. Following a wildfire, emergency wild horse gathers may have to be conducted to remove animals from acres that have been burned. This would occur until the area that is burned is rehabilitated. Reintroduction of wild horses into these areas may have temporary negative effects on the populations. Wildfire may convert native range to non-native species. Rehabilitation may vary in degrees of success and may provide additional forage if successful. Mining projects may result in the loss of wild horses to roam free in historical use areas within the HMA. Mining may also negatively impact the availability of groundwater.

Wildlife (Including Threatened and Endangered, Migratory Birds and Sensitive Species)

The effects of past and present actions were discussed in the Affected Environment and Environmental Consequences section of this document and the Grazing Management portion of the Cumulative impacts section. The effects of the reasonable and foreseeable future actions are as follows: Establishment of wildlife guzzlers, riparian exclosures, vegetation rehabilitation treatments, sage grouse habitat improvement projects, reclamation of abandoned mine lands, riparian exclosures and invasive weed treatment would be beneficial to wildlife throughout the allotment. These projects would provide for the long-term sustainability and health of wildlife due to increased forage production and water availability, which would lead to the attainment of the Standards for Rangeland Health. The OHV trail may have an adverse effect on wildlife within the Shoshone Mountain Herd Management Area. OHV users would increase use of this area and may have detrimental effects to wildlife throughout the year. In addition, OHV users may negatively impact the ability of wildlife to maintain long-term viability. Users may negatively impact the ability of the Shoshone Mountain Use Area to provide suitable feed, water, cover and living space for wildlife and maintain historic patterns of habitat use. Increased competition by OHV users for space within the area may concentrate wildlife in isolated areas and result in excessive utilization. Wildfire suppression would be beneficial to wildlife by providing a means of controlling the number of acres that are burned and eliminating habitat fragmentation. Following a wildfire rehabilitation of the burned area would occur, which is expected to improve wildlife habitat through the prevention of cheatgrass and other invasive species. Mining projects may result in the loss of wildlife to access historical use areas in the allotment. Mining may also negatively impact the availability of groundwater.

Cultural Resources

The effects of past and present action were discussed in the Environmental Consequences section of this document and the Grazing Management portion of this section. The effects of the reasonable and foreseeable future actions are as follows: The livestock grazing management plan and setting of AML for wild horses would be expected to have a positive impact on cultural resources. The effects of the reasonable and foreseeable future actions are as follows: A cultural resources inventory would be completed prior to the establishment of wildlife guzzlers, vegetation rehabilitation treatments, sage grouse habitat improvement projects, reclamation of abandoned mine lands, mining, OHV trail, wildfire suppression, wildfire rehabilitation and riparian exclosures.

Invasive weed treatment

Limited treatment of invasive species has been completed on some roads within the Carico Lake Allotment. Invasive species are located on roads and riparian areas in portions of the allotment. The effects of past and present actions were discussed in the Affected Environment and Environmental Consequences section of this document and the Grazing Management portion of the Cumulative impacts section. The effects of the reasonable and foreseeable future actions are as follows: Riparian exclosures, invasive weed treatment, fencing, wildfire rehabilitation, and vegetation rehabilitation treatments would also be beneficial to invasive species management. These projects would provide for control of areas that are susceptible to presence of invasive species, which would lead to the attainment of the Standards for Rangeland Health. The OHV trail may increase the proliferation of invasive species due to disturbance of native plant communities. OHV users would increase use of this area and may have detrimental effects to natural plant communities if they stray off established trails. In addition, OHV users may negatively impact livestock and wild horses throughout the area due to increased disturbance, which may result in areas that receive excessive utilization. This may lead to an increase in invasive species where over utilization occurs as a result of the concentration of animals. Wildfire suppression would be beneficial for the control of invasive species by providing a means of controlling the number of acres that are burned. Wildfire may convert native range to non-native species. Rehabilitation may vary in degrees of success and may control invasive species. Mining projects may result in a proliferation of invasive species; however, these areas would be isolated and controllable.

Water Quality/Wetlands and Riparian Zones

The effects of past and present actions were discussed in the Affected Environment and Environmental Consequences section of this document and the Grazing Management portion of the Cumulative impacts section. The effects of the reasonable and foreseeable future actions are as follows: Riparian exclosures, invasive weed treatment, fencing, wildfire rehabilitation, and vegetation rehabilitation treatments would also be beneficial to Water Quality/Wetlands and Riparian Zones. These projects would provide for protection of sensitive riparian areas and lead to the attainment of the Standards for Rangeland Health. The OHV trail may impact riparian zones due to disturbance. OHV users would increase use of this area and may have detrimental effects to natural plant communities if they stray off established trails. In addition, OHV users may negatively impact livestock and wild horses throughout the area due to increased disturbance, which may result in areas that receive excessive utilization. This may lead to an increase in invasive species where over utilization occurs as a result of the concentration of animals. Wildfire suppression would be beneficial for the protection of riparian areas by providing a means of controlling the number of acres that are burned. Riparian zones may be susceptible to erosion following wildfire in a watershed. Wildfire may convert native range to non-native species, which could lead to proliferation of invasive weeds in riparian areas. Rehabilitation may vary in degrees of success and may control invasive species. Mining projects may negatively impact the availability of groundwater through dewatering.

Soil/Vegetation

The effects of past and present actions were discussed in the Affected Environment and Environmental Consequences section of this document and the Grazing Management portion of the Cumulative impacts section. The effects of the reasonable and foreseeable future actions are as follows: Riparian exclosures, invasive weed treatment, fencing, wildfire rehabilitation, and vegetation rehabilitation treatments would also be beneficial to soils and vegetation. These projects would provide for protection of sensitive riparian, allow for improved livestock management, etc., and lead to the attainment of the Standards for Rangeland Health. The OHV trail may impact soil and vegetative communities through disturbance. OHV users would increase use of this area and may have detrimental effects to natural plant communities, which may lead to soil erosion if they stray off established trails. In addition, OHV users may negatively impact livestock and wild horses throughout the area due to increased disturbance, which may result in areas that receive excessive utilization. This may lead to an increase in invasive species where over utilization occurs as a result of the concentration of animals. Wildfire suppression would be beneficial for the protection of soil and vegetative communities by providing a means of controlling the number of acres that are burned. Upland and riparian zones may be susceptible to erosion following wildfire in a watershed. Wildfire may convert native range to non-native species, which could lead to proliferation of invasive weeds in these areas. Rehabilitation may vary in degrees of success and may control invasive species. Mining projects may result in erosion and the conversion of native communities resulting in the proliferation of invasive species; however, these areas would be isolated and controllable. Mining projects may negatively impact the availability of groundwater through dewatering, which may convert riparian areas to nonnative species.

Forest/Woodlands

The total acreage currently permitted for woodcutting within the Carico Lake Allotment is approximately 18,000 acres. Woodcutting within this area is widely dispersed. Past and present woodcutting has not resulted in the non-attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives or allotment specific objectives within the allotment. The effects of past and present actions were discussed in the Affected Environment and Environmental Consequences section of this document and the Grazing Management portion of the Cumulative impacts section. The effects of the reasonable and foreseeable future actions are as follows: Riparian exclosures, invasive weed treatment, fencing, wildfire rehabilitation, and vegetation rehabilitation treatments would also be beneficial to forest and woodland communities. These projects would provide for protection of sensitive riparian, allow for improved livestock management, etc., and lead to the attainment of the Standards for Rangeland Health. The OHV trail may impact forest and woodland communities through disturbance. OHV users would increase use of this area and may have detrimental effects to natural plant communities, which may lead to soil erosion if they stray off established trails. In addition, OHV users may negatively impact livestock and wild horses throughout the area due to increased disturbance, which may result in areas that receive excessive utilization. This may lead to an increase in invasive species where over utilization occurs as a result of the concentration of animals. Wildfire suppression would be beneficial for the protection of forest and woodland communities by providing a means of controlling the number of acres that are burned. Upland and riparian zones may be susceptible to erosion following wildfire in a watershed. Wildfire may convert native range to nonnative species, which could lead to proliferation of invasive weeds in these areas. Rehabilitation may vary in degrees of success and may control invasive species. Mining projects may result in erosion and the conversion of native communities resulting in the proliferation of invasive species; however, these areas would be isolated and controllable. Mining projects may negatively impact the availability of groundwater through dewatering, which may convert riparian areas to non-native species.

Recreation

The effects of past and present actions were discussed in the Affected Environment and Environmental Consequences section of this document and the Grazing Management portion of the Cumulative impacts section. The effects of the reasonable and foreseeable future actions are as follows: Riparian exclosures, invasive weed treatment, fencing, wildfire rehabilitation, and vegetation rehabilitation treatments would also be beneficial to recreation through the improvement of upland and riparian communities. These projects would provide for protection of sensitive riparian, allow for improved livestock management, etc., and lead to the attainment of the Standards for Rangeland Health. The OHV trail would create additional recreational opportunities within the allotment. Wildfire suppression would be beneficial to recreation by providing a means of controlling the number of acres that are burned. Rehabilitation may vary in degrees of success and may control invasive species, which would be beneficial to recreation. Mining projects would reduce the amount of public land that is accessible to recreation.

Mining projects may negatively impact the availability of groundwater through dewatering, which may convert riparian areas to non-native species, which would be detrimental to recreationists

Socioeconomic

The effects of past and present actions were discussed in the Affected Environment and Environmental Consequences section of this document and the Grazing Management portion of the Cumulative impacts section. The effects of the reasonable and foreseeable future actions are as follows: Riparian exclosures, invasive weed treatment, fencing, wildfire rehabilitation, and vegetation rehabilitation treatments would be beneficial to soils and vegetation. These projects would provide for protection of sensitive riparian, allow for improved livestock management, etc., and lead to the attainment of the Standards for Rangeland Health. This is also expected to aid in the long-term viability of the livestock operators. The OHV trail may impact soil and vegetative communities through disturbance. OHV users would increase use of this area and may have detrimental effects to natural plant communities, which may lead to soil erosion if they stray off established trails. In addition, OHV users may negatively impact livestock and wild horses throughout the area due to increased disturbance, which may result in areas that receive excessive utilization. This may lead to an increase in invasive species where over utilization occurs as a result of the concentration of animals. OHV users may generate additional revenues for local economies. Wildfire suppression would be beneficial for the protection of soil and vegetative communities by providing a means of controlling the number of acres that are burned. Upland and riparian zones may be susceptible to erosion following wildfire in a watershed. Wildfire may convert native range to non-native species, which could lead to proliferation of invasive weeds in these areas. Rehabilitation may vary in degrees of success and may control invasive species. Mining projects may result in erosion and the conversion of native communities resulting in the proliferation of invasive species; however, these areas would be isolated and controllable. Mining projects may negatively impact the availability of groundwater through dewatering, which may convert riparian areas to non-native species.

No Action Alternative (Existing System)

The effects of past and present livestock management has been determined to be the causal factors for the non-attainment of the of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. Refer to the Affected Environment and Environmental Consequences section of this document and the Grazing Management portion of the Cumulative impacts section. The no action alternative would not make progress towards the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. Past and present livestock grazing management including year-round use, hot season grazing, etc., which has been detrimental to upland and riparian communities and determined to be a causal factor for the non-attainment of the Standards and Guidelines, would continue throughout the allotment. Past and present wild horse management has also been determined to be a causal factor of the non-attainment of the

Standards and Guidelines. Wild horse AML would not be set and wild horse gathers would not occur, which would have negative impacts on upland and riparian conditions. Riparian exclosures would not be constructed, which would allow for the continuation of hot season grazing in riparian areas throughout the allotment.

C. Summary of Past, Present, And Reasonably Foreseeable Future Actions

The effects of past and present livestock and wild horse management have been determined to be the causal factors for the non-attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. Through the analysis of monitoring data the current vegetative condition of the Carico Lake Allotment is a considerable departure from the ecological description. This is the result of the absence of key perennial grasses, excessive composition and production of annual species and the dominance of shrubs throughout the vegetative communities within the Carico Lake Allotment. Refer to CLARHA pages 42-256, Appendix 4, 5, 6, 7, 10 and 11.

The proposed action alternative would modify historic and current livestock and wild horse management throughout the allotment. The proposed action identifies season of use changes, a grazing management system, elimination of hot season grazing from the majority of riparian areas, deferment of the majority of upland vegetative communities until the completion of the critical growing period, AML for wild horses and the conversion of cattle to sheep. The proposed action would improve upland and riparian vegetative communities. The improvement would be in the form of attainment of annual monitoring standards and the attainment of long-term objectives. Refer to Attachment 1. The proposed action would provide for the attainment of these standards and objectives by allowing key perennial grasses that are present in the vegetative communities to be grazed following the critical growth period for the majority of the allotment. In areas where grazing is prior to the completion of the critical growth period proper use levels would be initiated. Elimination of hot season grazing in the majority of riparian areas would allow for the improvement of these sensitive areas. Riparian exclosures would be constructed in areas that would remain available for livestock and wild horse grazing to protect these resources. The proposed action would allow for key herbaceous species to increase vigor, productivity and seedling establishment. This would improve upland and riparian vegetative communities by allowing for sufficient key herbaceous plant seedling and young plant recruitment.

Reasonably Foreseeable Future Actions including reclamation of abandoned mining lands, construction of fences in certain locations within the allotment, sage grouse habitat improvement projects, establishment of wildlife guzzlers, wildfire suppression, wildfire rehabilitation, invasive weed treatment and vegetation rehabilitation treatments would be expected to aid in the attainment of the Standards for Rangeland Health. Reasonable Foreseeable Future Actions including mining projects, mineral exploration and the Off Highway Vehicle (OHV) trail system would not be expected to aid in the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives.

It is expected that the proposed action and the reasonably foreseeable future actions would make significant progress towards the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives.

No Action

The no action alternative would continue historic and current livestock and wild horse management throughout the allotment. This would result in continued adverse effects to upland and riparian vegetative communities. These adverse effects would result in a further departure from the ecological description within the allotment. These adverse effects would be in the form of additional loss of key herbaceous species. This would lead to further invasion by annual species and range sites dominated by shrubs throughout the allotment.

Reasonably Foreseeable Future Actions and expected outcomes for the no action alternative are different than the proposed action. This is primarily because the no action alternative would be a continuation of past and present livestock and wild horse management. The proposed action identifies season of use changes, a grazing management system, elimination of hot season grazing from the majority of riparian areas, deferment of the majority of upland vegetative communities until the completion of the critical growing period, AML for wild horses and the conversion of cattle to sheep.

Reasonably Foreseeable Future Actions including reclamation of abandoned mining lands, construction of fences in certain locations within the allotment, sage grouse habitat improvement projects, establishment of wildlife guzzlers, wildfire suppression, wildfire rehabilitation, invasive weed treatment and vegetation rehabilitation treatments would be expected to aid in the attainment of the Standards for Rangeland Health. Reasonable Foreseeable Future Actions including mining projects, mineral exploration and the Off Highway Vehicle (OHV) trail system would not be expected to aid in the attainment of the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives.

VI. Monitoring

Conduct the necessary monitoring to periodically evaluate the effects of livestock grazing and determine if progress is being made in the attainment of multiple use objectives and standards for rangeland health. Monitoring would be in accordance with BLM policy as outlined in the Nevada Rangeland Monitoring Handbook, and other BLM technical references.

BLM would continue to collect monitoring data on the Carico Lake Allotment in order to determine the effectiveness of the management actions being proposed in this evaluation. Progress would be attained through meeting the short term objectives being proposed. At

a minimum, the monitoring plan for the allotment would include the following studies in upland and riparian areas. Refer to Attachment 1 for a detailed discussion.

VII. List of Preparers, Consultation and Coordination

The following individuals either provided consultation and/or coordination during the preparation of this EA or were responsible for the preparation of the document.

Douglas Furtado	Assistant Field Manager, Renewable Resources
Dan Fletcher	Rangeland Management Specialist, Project Lead
Duane Crimmins	Lead Natural Resource Specialist/Wildlife Biologist
Tom Crawford	Economist
Gerald Dixon	Native American Religious Concerns
Caleb Hiner	Geologist
Richard Kurtz	Invasive weeds and pest management
Rob Perrin	Recreation/Wilderness Specialist
Michael Peterson	Cultural Resources
Joe Ratliff	Soil Scientist/Forester
Shawna Richardson	Wild Horse and Burro Specialist
Mike Stamm	Wildlife Biologist
Desna Young	Environmental Coordinator
Donovan Walker	Fire Ecologist
Christopher Worthington	Environmental Coordinator
Jim Collard	Carico Lake Allotment Permittee
Henry Filippini Jr.	Carico Lake Allotment Permittee
John Filippini	Carico Lake Allotment Permittee
Bill Hall	Carico Lake Allotment Permittee
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Pete Tomera	Carico Lake Allotment Permittee
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John Marvel	Western Watersheds
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Jim and Ida Gallagher	Barbara Warner	
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UNITED STATES DEPARTMENT OF THE INTERIOR Bureau of Land Management Battle Mountain District

September 2005



Battle Mountain Field Office 50 Bastian Road Battle Mountain, Nevada 89820

> CARICO LAKE ALLOTMENT Rangeland Health Assessment Conformance Determination





I. Introduction and Responses to Comments

Comments from Katie Fite, Western Watersheds received August 9, 2005	2-24
Comments from Ellison Ranching Company received August 11, 2005	25-26
Comments from Forest Guardians received August 15, 2005	26-29
Comments from Hank and Marian Filippini received August 22, 2005	30-31
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II. Carico Lake Allotment Conformance Determination......55-63

I. Introduction and Responses to Comments

This Conformance Determination is in conformance with BLM H 4180-1 Rangeland Health Standards and in accordance with 43 CFR 4180. This document responds to public comments and identifies the management actions selected for the Carico Lake Allotment.

Monitoring information was collected from 1989 – 2003 and was analyzed in the Carico Lake Allotment Rangeland Health Assessment (July 2004) to determine if management practices were meeting SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives as identified in the evaluation.

The Carico Lake Allotment Rangeland Health Assessment was sent to the interested public July 22, 2005 for a thirty day review and comment period. Meetings with affected parties have been held following the issuance of the Carico Lake Allotment Rangeland Health Assessment.

Public comments pertaining to the issues identified in the CLARHA are addressed below.

Comments from Western Watersheds received August 9, 2005

Comment 1: In reviewing the maps of the Use Areas associated with each permittee, it is not clear if all areas are fenced, and if fence maintenance occurs. How will each be segregated? We request that there be large, non-grazed "reference areas" set up in the allotment, also, of a scale comparable to Use Areas shown on the Map.

Response 1: Refer to the table on page 254 of the Carico Lake Allotment Rangeland Health Assessment (CLARHA). A pasture means that the area is fenced and a use area is typically partially fenced or unfenced. Non-grazed reference areas are proposed to be built within the allotment to serve as a comparison to areas utilized by livestock and wild horses.

Comment 2: We are concerned that BLM has used Use Pattern Mapping by IRC. How have you verified its accuracy? Why is there no recent use pattern mapping? As Use Pattern Mapping appears to be used later in the Appendices to calculate carrying capacity, we are very concerned that as it was collected by a consultant, it may be heavily biased towards the interests of the permittees.

Response 2: Use pattern mapping data was collected by Battle Mountain Field Office (BMFO) personnel.

Comment 3: Who were the permittees who did not take a voluntary reduction?

Response 3: Filippini Ranching Company

Comment 4: Please describe the time period when Ecological sites, which are based on soil inventories, were established. We have a major concern that BLM may be using Soil Survey Information that was developed using as its baseline 1960s-1980s presence of vegetation, and which did not take into account removal of vegetation over time.

Response 4: Nevada Ecological Site Descriptions were developed by the Soil Conservation Service U.S. Department of Agriculture and are based on site potential. Relic sites were and still are used for establishing the potential vegetation by soil type. Range site descriptions are continually updated.

Comment 5: We understand that in the past BLM has used Utilization Classes based on the Nevada Rangeland Monitoring Handbook. These are outdated, as your own later references to Holechek utilization levels demonstrate. You keep using these –as on "Key Forage Utilization" on page 8.

Response 5: The BLM in conjunction with its cooperators are currently reviewing the Nevada Rangeland Monitoring Handbook with the goal of revising it to more accurately reflect the most recent information available to us as land managers. Although the Nevada Rangeland Monitoring Handbook as well as existing BLM technical references categorize moderate use as being within 41-60 percent utilization, no where does it require field offices to establish utilization objectives at this level provided the selected objective is in accordance with the existing land use plan, BLM policy, and accompanied by rationale. We agree that heavy utilization is harmful to plants. If trend data indicates that any level of use whether the use is described as "light" or "heavy" is causing a downward trend, BLM is required to modify grazing management to reverse the downward trend. Changes in utilization objectives and the subsequent stocking rate must be supported by monitoring data. The proposed management actions identified in the evaluation are designed to minimize or eliminate growing season use through appropriate stocking levels, implementation of grazing systems and through specific terms and conditions for grazing.

Comment 6: While you refer to "potential weighted average utilization", it is inapplicable to the Carico Lake allotment, and nearly every BLM wild land allotment, as it relies to: the level of use that could be achieved on a management unit given uniform distribution patterns".....

Response 6: BLM has provided a range of AUMs to each permittee. The potential weighted average takes into account the permittees commitment to improved livestock management. In addition, BLM has identified season of use for use areas and pastures, elimination of hot season grazing, conversion of cattle to sheep for a significant amount of AUMs, etc...

Comment 7: How are exotics or invasive species factored into the various monitoring, condition class and techniques described here?

Response 7: Perennial herbaceous species are used to determine condition classes. Refer to pages 50-219 of the CLARHA for a detailed analysis. In addition, refer to BLM Technical Reference 1734-6.

Comment 8: Discussion of PNC. We are concerned that dominant woody veg. on a site at the time that soil surveys were conducted in the 60s or 70s formed the basis for determining what is claimed to be the dominant woody plant species on a site.

Response 8: Ecological site descriptions were developed by the SCS (now NRCS) using relic sites throughout the Great Basin. Site descriptions are continually updated reflecting the best science available. Refer to Response 4.

Comment 9: We are very interested in any analysis for your existing data that may show changes in exotic or invasive species presence over time. What additional techniques could be used to extract, display or obtain this information?

Response 9: Monitoring data will continue to be collected to determine if there are changes in invasive species populations in the allotment.

Comment 10: Stubble height discussion. We are concerned that BLM is portraying stubble heights as "restrictive". They are "protective", not restrictive, and it is the duty of the public lands livestock industry to comply with such minimal protection for lands – especially lands as sorely damaged as those across the Carico Lake, Argenta and other nearby allotments.

Response 10: BMFO recognizes that stubble heights are protective. The statement 'some may see this as restrictive' was an attempt to describe stubble height in comparison to the commonly used percent utilization objective. Refer to pages 334-335 for riparian stubble height and bank shearing rationale.

Comment 11: Please do not resort to constructing a small series of band-aid type exclosures. Closure of pastures or watersheds until a minimum of PFC is obtained is critical.

Response 11: Riparian exclosures would be examined on a case by case basis. The majority of riparian areas throughout the allotment will not be grazed in the hot season; however, riparian areas that would be grazed in the hot season would be excluded from grazing to protect and enhance these areas and attain at the minimum PFC.

Comment 12: Please provide an estimate of how much the perennial wetted area of springs, seeps and streams has been reduced in area extent over time, due to the impacts of livestock. Please provide a similar estimate for wet meadows.

Response 12: No quantitative data is available. There is no doubt that a substantial loss of lentic hydric soils and lotic flood plains has occurred throughout the Great Basin in the last 130+ years. In order to quantify the loss, detailed soil sampling and mapping would

be necessary. The process would be expensive and while it could be completed on a few sites, it would be impractical and cost prohibitive to quantify the loss at all sites.

Comment 13: We request that two cages be placed at monitoring sites across the allotment. One or more cages should be permanently placed at each monitoring area. A second cage should be moved on an annual basis.

Response 13: Agreed.

Comment 14: For more reference areas, we request that large livestock-free areas or watersheds across representative plant communities of the allotment be put in place as an outcome of this decision making process.

Response 14: Refer to response 1.

Comment 15: How did you measure microbiotic crusts in the rangeland health evaluation? How great is the degree of departure in crusts from reference conditions at all sites? Please include the extensive literature on livestock trampling or other soil disturbance impacts to crusts. This includes BLM's Technical Bulletin.

Response 15 The evaluation analyzed, interpreted and evaluated available monitoring data and information to determine the estimated carrying capacity and whether or not the RAC Standards and Guidelines have been met. The rationale provided for the conclusions include vegetation, soils and other attributes that are currently indicative of the range conditions within the allotment. Refer to Appendix 10 of the CLARHA

Comment 16: How much of the MA lies within the allotment? Where are critical ranges? Are these identified in the Land Use Plan?

Response 16: Total acreage within the Carico Lake Allotment for Management Unit 14 is 34,128 acres and Management Unit 15 is 565,175 acres.

Comment 17: We note that you state that studies examining winter mortality in Nevada conclude that deer wintering in pj woodlands suffer **less mortality**. Yet, you go on to claim that woodlands become too dense, so deer have nothing to eat. An extensive study of mule deer winter diets in Owyhee County Idaho in the 1970s demonstrated that on DEGRADED ranges, (the whole Carico Lake allotment), western juniper comprised around 50% of mule deer winter diets.

Response 17: The section discussing mule deer use of PJ Woodlands is referenced to a NDOW publication. The author was referring to the use of PJ as thermal cover. PJ woodlands with no understory do not provide adequate forage for wintering mule deer. Browse species (black sagebrush, Wyoming big sagebrush, bitterbrush, or other mountain brush species) located within, on the perimeter, and/or in islands within PJ woodlands provide forage. The Owyhee Co. range you mentioned must have truly been DEGRADED or snow was so deep that mule deer could not dig down to existing browse.

This is a fairly common occurrence on higher elevation ranges, where no alternative lower elevation winter range is available during hard winters, as is available in most of Central Nevada. Use of juniper as a primary winter forage by mule deer normally results in abortion of fetuses. We should have said: "However, increasingly dense stands of PJ have eliminated most understory vegetation, making large continuous blocks of dense PJ stands devoid of forage for mule deer – except of course for the PJ itself, which normally constitutes well under 50% of the diet when more palatable plants are available."

Comment 18: We also take serious issue with the claim that competition is slight. What do you mean by competition? Behavioral displacement of mule deer from summer habitats has been well-documented. Deer seek areas without livestock. This behavioral interference or displacement applies to many other species of wildlife, too.....

Response 18: The 'claim' was that competition is normally slight (i.e. on good condition range) and that there is considerable competition between mule deer and livestock on poor condition ranges. Actually, there is little documentation evidence of behavioral displacement of mule deer. The behavior referred to may actually have been the absence or presence of preferred forage species (ie poor range conditions or use of areas unsuitable to livestock due to distance from water, terrain, or steepness of slope). We acknowledge (page 19) that drought and/or over-utilization by livestock can cause increased dietary competition (in addition to generalized habitat degradation). Competition is largely dependent upon stocking rate, which is excessive (as documented in the CLARHA) with respect to cattle on the Carico Lake allotment.

Comment 19: For all wildlife species here, we are very concerned about the terrible quality of water, and the pollution of water needed by wildlife by copious quantities of livestock waste likely harboring all manner of pathogens.

Response 19: BMFO is also concerned about the quality of water for wildlife, wild horses and livestock. The proposed management actions identified in the CLARHA on pages 257-307 have identified grazing management systems that would eliminate hot season grazing in the majority of riparian areas. This would undoubtedly have a very positive impact on the quality of water throughout the allotment.

Comment 20: We are concerned that your description of pinyon-jay and juniper titmouse does not emphasize the importance of Nevada pinyon pine to populations of these species. Nevada's importance is heightened by the large-scale die-off of pinyon in the Southwest and Colorado. What is the current mortality of pinyon pine and juniper across the allotment and this part of the Battle Mountain Field office?

Response 20: The pinyon jay and juniper titmouse are described as PJ obligates in the CLARHA. The term, obligate, pretty much emphasizes the importance of PJ to these species. In fact, it has been well established that abusive livestock grazing encourages PJ woodland expansion, by eliminating competition from grasses and to a lesser extent shrubs. In addition, use by livestock, wild horse, burro, or wildlife has no direct and very little indirect affect on PJ Woodlands.

Currently, the BMFO has no objective data on P/J mortality for the allotment or the district. However, we have contracted with UNR to inventory and analyze P/J woodlands; district-wide and a preliminary report will be available this winter. Field observations over the last 8 years indicates wide-spread P/J mortality with concurrent increases in mistletoe, bark beetle and boring insect infestations. The causative factors are most likely related to long-term drought conditions and associated environmental conditions. The die-off is within the range of response expected during an extended drought.

Comment 21: What role has or does livestock browsing pressure play in introducing fungal pathogens to aspen clones?

Response 21: Unknown. However, aspen exclosures have been constructed in the allotment to exclude these areas from livestock grazing. Fungal pathogens such as *Fomes igniarius var. populus* are found in almost every aspen stand throughout the west. Fomes can be identified by the conk, which grows on the truck. This species does considerable damage to the heart wood while leaving the cambium layers untouched. There is also a fungus known as "Alligator Rust" which infests aspen through mechanical damage to the bark and cambium. It is unknown, but unlikely that sheep and cattle cause this type of damage. They concentrate on browsing the leaves of the young sprouts and saplings.

Comment 22: Have you ever tested the existing sheep-grazed lands of the allotment for Q fever, or other pathogens?

Response 22: No. Livestock pathogens, particularly Q fever, are the responsibility of the State of Nevada Department of Agriculture. Any occurrence of Q fever is required by law to be reported to the State for appropriate action.

Comment 23: Limited and careful mechanical removal of pinyon-juniper in the vicinity of leks and nesting areas should be conducted by hand. Typically, leks are lower elevation and burning trees in such sites will lead to proliferation of cheatgrass and weeds. There is no need for any widespread treatment" of pj or sagebrush in this allotment. Sagebrush is grossly mischaracterized, especially in Nevada, and especially fostered by ag interests of UNR, as being "decadent" and needing manipulation. This is very often false – as in the case of the mowed sagebrush strips we just visited in the Antelope Range. Looking at this sagebrush revealed it was diverse in age classes – just hammered by livestock.

Response 23: A proposed project will not be implemented without a thorough <u>site</u> <u>specific</u> NEPA analysis, including public review. The NEPA document will screen the proposals for compliance with all LUPs, pertinent laws, regulations, and bureau policies. The CLARHA does not authorize proposed projects or management actions, but is a vehicle to identify a number of possible solutions to improve existing resource conditions. The next step in the overall Evaluation process is for Management to determine if the data shows conformance with RAC Standards (CFR §4180) and to select those solutions that will achieve RAC Standards. The selected solutions go forward as

the proposed actions in the Environmental Analysis (EA). The EA will only carry those actions, which are necessary to achieve RH objectives. In most cases, this includes changes in stocking rate, use periods (seasons-of-use), utilization levels, and vegetative and other monitoring objectives. Very seldom will an EA for a multiple use decision (MUD) include proposed projects, if it does, it would include only those proposed projects essential for system function (e.g. riparian exclosures). Including all the necessary site specific information for large projects into the MUD EA would further bloat an already large document and more importantly, the BLM cannot guarantee that projects identified in a MUD will ever be implemented due to the uncertainty of funding.

Comment 24: We note that restoration may require complete removal of livestock for 5-10 years, to allow natives to become fully established. And following that, only the most conservative stocking rates should be applied, if grazing resumes at all. A critical failure in past success of low elevation native seedings has been livestock grazing resumption before native vegetation is established.

Response 24: Livestock grazing is generally closed for a three year time period or until objectives are met. Once a seeding is approved for reopening to livestock a conservative stocking level is established based on monitoring data along with a season of use and utilization objectives.

Comment 25: Can the powerline here be buried?

Response 25: Burying utility lines, given the expense, distances and small population bases supported in rural Nevada, is extremely unlikely. Much less expensive and more feasible, would be the widespread installation of anti-perching devices in sage grouse habitats. Unfortunately, the designs (our own, since nothing useful is commercially available) that we've tried to date, have been less effective than we had hoped.

Comment 26: Please describe where 7"-9" residual grass stubble height (required by sage grouse for successful nesting) may have been present in spring across the allotment?

Response 26: The only monitored sites with 7"-9" inch stubble height were fire rehab seedings, which do not have a sagebrush component and are therefore unsuitable, at this time, as sage grouse habitat. See response to Comment 27.

Comment 27: Where are leks in the allotment, or within 6-10 miles? How has the numbers of leks, active leks, bird attendance at leks, etc. changed over time? Where is the wintering habitat? What can be done to improve it? Where is the current nesting habitat located across the allotment? What grasses dominate the plant understories?

Response 27: Known sage grouse leks on Carico Lake Allotment are concentrated on the eastern base of the Shoshone Range in the Cook's Creek and Wilson Creek areas. See Figure 1., page 30 of the CLARHA for available information regarding lek attendance over time. Sage grouse winter at high elevations of the allotment, reportedly in Cottonwood Basin and on Horse Mountain, which is typical based on our recent

telemetry work in the nearby Fish Creek and Battle Mountains. Proposed changes in grazing management should contribute substantially to habitat improvement. The location of nesting habitats is extremely important but unknown. Native *Poa secunda* dominates the understory grasses on most parts of the allotment. Grass (and forb) diversity increases with slope and distance from water.

Comment 28: We are extremely concerned that BLM is relying on the Sage Grouse Planning Group to rate factors threatening sage grouse in the allotment. Local groups are often dominated by ranchers, and ignore livestock impacts at all costs. Their primary focus in Nevada in many areas seems to still be on killing – everything from pinyon-juniper to sagebrush to predators. This all serves as a kind of displacement activity and an excuse to ignore the profound impacts of livestock on altering vegetation and landscapes to the detriment to of sage grouse.

Response 28: The Population Management Unit (PMU) risk factor matrix shown in Table A. was assembled by NDOW biologists. In fact, livestock grazing is rated as a greater threat to sage grouse in the Shoshone PMU (which includes most of Carico Lake allotment) than P-J encroachment.

Comment 29: Please provide a detailed account of fire rehab projects, and failed projects, in the allotment. How much have taxpayers spent on post-fire seeding, fencing, etc., and what has been the success of all seeding efforts?

Response 29: Refer to CLARHA pages 49-219.

Comment 30: Pygmy rabbit. BLM must identify all the many impacts of livestock on pygmy rabbits and their habitats.

Response 30: The following language regarding pygmy rabbits was inadvertently omitted from the CLRHA:

"Pygmy rabbits are not presently known to occupy the Carico Lake allotment though it is quite possible that small colonies exist there undetected. Pygmies have recently been sighted in the Fish Creek and Battle Mountains – mountains where they were not previously known to exist - during nighttime sage grouse capture efforts.

Pygmy rabbits were not observed during a ground search of an old recorded site near the north end of the Carico Lake Allotment. Pygmies do inhabit a small area along Indian Creek, a few miles to the north of the allotment in the same mountain range."

There is no doubt that livestock grazing, especially excessive livestock grazing, has potential to negatively affect pygmy rabbits and their habitat in numerous direct and indirect ways. Given the apparent absence of pygmy rabbits on Carico Lake Allotment, however, assessment of grazing effects to historic or potential habitats would be highly speculative.

Comment 31: We urge BLM to adopt browse/breakage standards for sagebrush, and not just bitterbrush. This is critical, as you plan to graze more sheep here. Sheep on degraded ranges (like this allotment) may consume significant amounts of shrubs. It is also critical as livestock have eliminated ALL shrubs from large areas of the lower elevation salt desert and Wyoming big sagebrush communities on the allotment and the neighboring Argenta allotment, too. We suggest requiring a 10% annual breakage or browsing standard for sagebrush and other native shrubs as a Term and Condition of the permit – along with other measurable use standards for riparian and upland areas. This should be put in place for a decade before you contemplate ANY manipulation of sagebrush.

Response 31: Shrub breakage by livestock will be recorded as utilization. See EA for Terms and Conditions for sheep permits for shrub/browse utilization limits.

Comment 32: We are very concerned that no baseline studies for special status plant and animal species have been conducted across the allotment, and believe these must be conducted as part of this assessment process if BLM is to understand impacts of its actions or management outcomes on these important species.

Response 32: Inventories and monitoring of various types have been conducted over the years by BLM and NDOW biologists and others for various plant and animal species, particularly sage grouse, breeding birds, bats, pygmy rabbits, mule deer, raptors, and springsnails. We also have access to, and regularly make use of, the Nevada Natural Heritage database.

Comment 33: How much Wyoming big sagebrush habitat has been converted to weedlands, or exotic seedings, in the allotment?

Response 33: The majority of wildfires that have occurred in the Carico Lake Allotment were located in a salt desert shrub community.

Comment 34: Where are all vegetation manipulation (herbicide, chaining, disking, cutting, burning, plow and seed, etc.) located in the allotment? When were they conducted? What is their condition, and current productivity?

Response 34: There are no vegetation manipulations within the Carico Lake Allotment with the exception of fire rehabilitation seedings.

Comment 35: Where are lands in or near the allotment that contain important pinyon pine nut harvest areas? Are there any maturing trees that may become important?

Response 35: There are no commercial pinyon-nut harvest areas within the Carico Lake Allotment. The nearest commercial pine nut harvesting area is located in the Toiyabe Range, south of the allotment. The public can harvest up to 25 pounds of nuts, without charge, throughout the Battle Mountain District. Yes, every stand has maturing trees and these are important for a number of reasons.

Comment 36: Please describe the full array of livestock grazing impacts to cultural sites, such as – soil erosion and surface exposure or loss, displacement of artifacts, disruption of site stratigraphy, rubbing on petroglyphs, etc.

Response 36: The impacts to cultural artifacts are primarily found around riparian areas. The proposed grazing management plan would eliminate the majority of hot season grazing, which is expected to improve these areas. Furthermore, prior to the implementation of any proposed projects a cultural inventory will be completed and if necessary mitigated. Before vegetation manipulations would occur site specific NEPA analysis and coordination with the Native American tribes would occur.

Comment 37: We commend Battle Mountain BLM for having the foresight to contract with Dr. Charles Kay to study aspen condition and trend across BM lands. We are very concerned that exclosures will be trespassed, and believe significant reductions in livestock and aspen browse use standards of less than 10% as triggers for removal of livestock from pastures should be applied as Terms and Conditions of the grazing permit.

Response 37: Aspen are confined to the Elephant Head Basin area within the Carico Lake Allotment. This area is proposed to be converted to sheep and hot season grazing is to be eliminated. Exclosures will continue to be monitored for trespass livestock and appropriate measures will be taken.

Comment 38: BLM should inventory of all projects, and study of their harmful impacts to soils, vegetation, watersheds, water tables, water sources, important wildlife habitats, special status species habitats, etc. Following evaluation of impacts, we ask that BLM prioritize removal of facilities that are having significant harmful impacts – particularly to native vegetation communities or special status species habitats. The poor maintenance and care taken in the past demonstrated that BLM can not put its faith in structural projects to limit livestock use. I also recall the purposeful livestock trespass of the new aspen country livestock exclosures two years ago. Please include a review of all the non-compliance that has occurred in this allotment over the past decade.

Response 38: BLM continues to assess the condition of range improvements throughout the allotment. If projects are identified that are not allowing for attainment of allotment specific objectives they will be removed.

Comment 39: We understand that wild horses impact large areas of the allotment. However, in Nevada Decision after Decision, horses get blamed for damage to riparian and upland areas where cattle and/or sheep are the PRIMARY causes of ecological degradation. Often, BLM has no way separate the impacts of horses from cattle, and always ends up fulfilling permittee wishes to set low horse numbers, and does not reduce livestock by any level approaching the cuts in horses.

Response 39: Refer to Appendix 10 and 11 carrying capacity analysis.

Comment 40: Why do horses breach the fence to get to the Cedars Pasture? What is drawing them there --- to an area where they die? Is there systematic harassment or aerial killing of horses occurring in this part of the state, fueled by the animosity of permittees towards "competition" with horses for forage?

Response 40: The Cedars Pasture has not been breached by wild horses within at least the last 3 years. In the 1970's when the Carico Lake Allotment boundary fence was constructed, it impeded movement of wild horses on historically used trails. As a mitigation measure, a wild horse crossing structure was installed. Though wild horses did not use the structure, they continued to jump the fence and enter the Austin Allotment portion of the HMA especially in the spring. Water was and still is limited in this portion of the HMA. During the latest census flight in March 2005 only 3 wild horses were located in the Cedars Pasture. There are no indications that wild horses entered the area as a result of harassment. Additionally, harassment and/or aerial killing of wild horses have not been documented by the BLM in this HMA since the late 1970's, when hundreds of wild horses were shot throughout Nevada. Reports of dead wild horses are investigated by BLM staff and BLM Law Enforcement officers if illegal activity is suspected. Additionally, any evidence of disease or other illness would also be quickly investigated. Wild horses in both the HMAs appear healthy and in good body condition, and no sign of disease or other sickness has been observed. Through the CLARHA and FMUD, the Appropriate Management Level for wild horses will be established. Herd Management Area boundary adjustments would be completed through future Land Use Planning activities. Future adjustments to AML would be accomplished through the evaluation of monitoring data and consideration of livestock, wildlife and other uses within the HMAs. Though the Cedars Pasture is part of the South Shoshone HMA, it is managed for 0 wild horses and there are no current plans to remove the allotment boundary fence.

Comment 41: We are encouraged that you recognize that riparian system and function have been compromised throughout the allotment, and that composition and function have been negatively affected. We support reestablishment of a fishery in Fish Creek.

Response 41: The riparian problems have been identified and it is expected that the proposed grazing management system will result in improvement of these sensitive resources. Reestablishment of a fishery in Fish Creek will take a considerable amount of time and effort from BMFO; however, we are fully committed.

Comment 42: While you describe the presence of white top, scotch thistle and musk thistle in the allotment, we can not find a map where you show infestation areas, or assess how widespread they are, or the problems they are causing.

Response 42: A map is unavailable at this time. It is estimated that there are less than 75 acres of noxious weeds in the allotment. BMFO will continue to monitor noxious weeds throughout the district to ascertain if management changes should be made.

Comment 43: Wildfire potential. We too are concerned about wildfire. But – BLM has never adequately assessed or taken measures to address the role of livestock grazing in causing fuels problems, and aggravating tree densities, removal of understories, etc. In addition, recent research in the southwest is showing that pinyon-juniper may fail to return to sites post-treatment

Response 43: BMFO has assessed the role of livestock grazing in causing fuel problems refer to key area data analysis pages 49-219 and Appendix 10 in the CLARHA. BMFO response for improvement of vegetative communities to enhance these communities can be found in the proposed management action section pages 257-343. The management plan would ensure that vegetative communities improve throughout the allotment and that these communities can resist loss of function and structure due to disturbance and recover following disturbance.

Comment 44: We are alarmed at the possibility of an OHV trail here. These proposals are cropping up in allotment level decisions in several areas of Nevada. This will open the door to rapid weed spread into areas that are not yet weeded, harassment of wildlife, including special status species already suffering from habitat problems, and many other conflicts. Please consider this to be an initial comment on any OHV trail proposal here.

Response 44: This proposal is still in the initial phases. BMFO is still in the public scoping process. A site specific EA and cultural resources inventory would be completed prior to the development of the trail.

Comment 45: The Key Area data (pages 49-218) information paints a bleak picture of livestock-caused ecological devastation at a landscape level in the Carico allotment. Doesn't this also widespread violations of the Taylor Grazing Act mandates to protect soils and vegetation? An essential part of suitability and capability of the land relates to forage production. A cow drinks 15 gallons of water a day, right, and consumes about 34 pounds per day of forage. Across many of the lands of the allotment, a grazing animal has to spend a large amount of its roaming to find food, and thus trampling impacts are much greater on degraded ranges such as Carico. Animals likely have poor weight gain, abort calves, etc. Plus, the Key Area descriptions contain site after site where annual weeds (an unreliable and unsustainable forage source) are abundant to extreme in composition, and includes plants that are poisonous to livestock. In fact, in some sites, halogeton which is poisonous to sheep at certain times of year, dominates many of the Key Areas. This lack of edible vegetation also means that the rancher who sentences livestock to roaming these depauperate lands is likely losing money on the whole operation. We understand that payments of various sorts from mines, and not grazing, may be the major source of income for permittees, and realistically, they are likely losing money grazing these damaged lands.

Response 45: BMFO recognizes the condition of the Carico Lake Allotment. Refer to the proposed management action section on pages 257-343 of the CLARHA. BMFO has identified an intensive livestock management system, which is expected to improve upland and riparian conditions throughout the allotment. The management system

includes deferring livestock use on the majority of the allotment until after the critical growing period, elimination of hot season grazing within the majority of riparian areas, setting proper utilization levels and the identified carrying capacity. The management actions would ensure that significant progress is made towards the attainment of the SERA RMP objectives, Standards for Rangeland Health and multiple use objectives throughout the allotment.

Comment 46: BLM should set a threshold for grazing suitability, based on sustainable production of native perennial vegetation. This threshold should be 200 lbs/acre sustainable allowable production, and all lands with less than 200 lbs/acre should not be grazed, and no AUMs allocated to these lands. As part of this process, BLM should provide the public with a map showing all areas of all pastures with less than this amount of production. In the Carico Lake allotment, many Key Areas have levels such as19 lbs/acre ALLOWABLE production, which BLM brackets as being the total production minus the invaders, and the total production is typically 70-90 lbs/acre. How much weight does a cow lose wandering from weed patch to weed patch out there??? And how much soil trampling disturbance to microbiotic crusts, soil compaction, etc. is occurring?

Response 46: Refer to pages 257-343 and Appendix 11 of the CLARHA.

Comment 47: We also are concerned that BLM, by continuing stocking lands where it considers exotic shrubs like forage kochia to provide a forage base, is dooming chances for native vegetation to become established. Forage kochia may be able to withstand extreme grazing pressure, so by the time cattle are removed from kochia expanses, any natives that may persist, or are trying to become re-established, will likely be grazed/browsed to the point of at a minimum loss of vigor, and more likely – death. This, too, is what occurs with stocking lands based on crested wheatgrass utilization or production.

Response 47: The North and South Pastures were planted to forage kochia following the 1999 wildfires that occurred in these areas. Refer to the proposed management action section pages 275-284 of the CLARHA. The majority of use in these pastures would be deferred until the dormant season. This would limit use on native upland rangeland during the critical growing period, allow forage plants to gain in vigor and produce seeds. Due to the number of pastures and use areas in the grazing management system the majority of livestock grazing on a year-to-year basis would be prior to the critical growing period. Although livestock grazing would occur during the critical growing period for upland herbaceous species in some pastures proper use levels would be identified.

Comment 48: A conversion to sheep AUMs of a large number of cattle AUMs will intensify and shift use to remaining native shrubs across the allotment (in many areas, salt desert shrubs and sagebrush have been killed and no longer occur due to cattle and sheep grazing already). Now, even more pressure will be put on shrubs by sheep, as we can expect de-stabilization of soils and depletion of vegetation in steeper areas of degraded watersheds. P. 219 confirms our fears, as the ESI discussion states that in the majority of

sites the plant community was dominated by shrubs, and shrubs comprised a significant amount of the allowable production. The shrubs, which provide critical habitat for special status species, are the only thing left to eat.

Response 48: Refer to pages 275-284 of the CLARHA for a detailed rationale concerning the conversion.

Comment 49: We are very concerned at the lack of microbiotic crusts across many of the Key Areas – this further demonstrates the poor shape the entire watershed is in, and how vulnerable lands are to weed invasion – as crusts help keep weeds from invading.

Response 49: BMFO is very concerned about this as well. Refer to the proposed management action section on pages 257-343 of the CLARHA.

Comment 50: BLM should use Federal Fire funds on the Carico Lake allotment to rehab. cheatgrass and weed-dominated sites, and not use them for projects like prescribed fire in the Seven Mile and Red Hills that will only result in more disturbance and opening the door for weeds.

Response 50: Projects including Seven Mile and Red Hills are funded under the Hazardous Fuel Reduction Operations Subactivity (2823). This says that funds are to be used to implement prescribed fire, mechanical and chemical treatments to reduce hazardous fuels and to restore fire to its natural role in ecosystems.

Comment 51: We commend you for undertaking the new ESI. Was there an older effort?

Response 51: No, this was the first intensive ESI effort in the allotment.

Comment 52: Please see our comments in a separate letter concerning necessary information on springs, seeps, springbrooks. We understand that Nevada BLM collected information on flow rates of springs in the 1970s or 1980s. How have flows changed?

Response 52: We are in the process of converting spring locations from allocate-parts (T. R. Sec) to point locations (UTMs) in GIS. In addition, no real comparison can be made using point in time data. Spring flows in Nevada vary considerably and are often different from month to month or year to year depending on the timing and amount of precipitation and the underground system involved.

Comment 53: What can be done to restore springs, seeps and springbrooks damaged by livestock water developments?

Response 53: There are very few authorized water developments in the CLA. The majority of the waters are open to grazing without development. In addition, most of these waters have some form of private water rights or claim. BLM policy requires that

we follow State water law, which prohibits a landowner from denying access to water held under a water right or vested interest by another party.

The management actions proposed would eliminate most hot-season use, convert cattle use to sheep on the west slope of the Toiyabe Range, provide stipulations for limited sheep use in riparian areas, and in those cases where hot-season use cannot be eliminated (lower elevations), fencing of riparian areas. These actions along with a reduced stocking rate and reduced wild horse numbers will make significant progress towards attainment of PNC for springs, streams, and meadows within the CLA.

Comment 54: How does inter-related public and private land grazing affect all snails listed in Table page 228-229 – are all springs on private fenced separately from BLM? Are they wholly, or partly, de-watered or diverted for livestock using BLM lands? The discussion here is confusing. It appears that private land springs may have been inventoried as part of the mining DEIS, but not all of the springs on public land? Are there possibly undiscovered springsnails on uninventoried BLM lands?

Response 54: Thank you for pointing out the omission of the land status by species. The snails and pea clam mentioned as inventoried for the mining EIS are located in or along Elder, Chicken, and Indian Creek that are interspersed private and public lands. Private lands on these creeks are not fenced and are open to grazing. Springs containing springsnails, located on public lands (Moss Canyon and Fish Creek), will be protected from grazing, either by fencing, closure to grazing, or eliminating hot-season use by livestock.

Comment 55: The Water Quality Monitoring Table does not allow a reader to understand or trace what is occurring with particular springs and seeps. Is there any other way to present this information – why not just present the values/levels by water body each time sampled?

Response 55: Tables containing each spring and its water quality are located in Appendix 7. This information is also available in the document-"Surface Water Analysis of the Carico Lake Allotment." (Ratliff and Keeports, 1999) and subsequent water analyses conducted in later years for the allotment. All of which are available upon request at the BMFO.

Comment 56: Please describe the condition of the Fish Creek watershed as a whole, and any portions of the watershed that may be located in other allotments.

Response 56: Refer to pages 71-80 and 105-109 in the CLARHA. These three key management areas are representative of the Fish Creek watershed within the Carico Lake Allotment. Buffalo Valley Allotment also lies within the Fish Creek watershed.

Comment 57: This data shows alarming levels of browse use occurring across the allotment. Converting cattle AUMs to sheep AUMs will only exacerbate such us. This

further demonstrates the need to dramatically reduce stocking rates, as well as provide livestock-free reference areas for watershed recovery and healthy wildlife populations.

Response 57: Refer to pages 258-341 in the CLARHA. Year-round livestock grazing has taken place throughout the Carico Lake Allotment. The management actions identify season of use by use area/pasture, reduce stocking levels and initiate proper use levels for upland and riparian areas.

Comment 58: How were these sage grouse monitoring sites chosen? Why are there only two sites? We bet they represent some of the very best habitat on the allotment, and that the rest is in far worse shape. Please provide a systematic survey of sg habitat components across the allotment.

Response 58: The sites presented were selected randomly within Wyoming big sagebrush sites (nesting habitat) located on the east side of the Shoshone Range. The study was initiated in 1992 as an internal resource area-wide study, therefore only two samples were taken within the CLA. Since that time, it has become apparent that the tall, more productive, native perennial grass species are missing from a majority of the nesting habitats within the Shoshone-Eureka Resource Area. We do not have monitoring sites chosen specifically for sage grouse. Monitoring sites were chosen to be typically representative of ecological sites present on the allotment. Those sites are used to determine conformance to RAC standards and guidelines, which address habitat needs of wildlife and sensitive species. The sites to which you refer were simply identified by staff biologists as being especially important to sage grouse. Data concerning frequency of occurrence and production is collected during range site monitoring. This information is used as an indicator of nesting or brood rearing habitat condition. See page 235 last paragraph.

Comment 59: The degree of loss of aspen communities across the allotment is staggering. Here, too, we request watershed-level livestock-free reference areas to allow some degree of recovery of a functioning system. Given that livestock have extirpated aspen clones - and many are permanently gone across the allotment, and other Battle Mountain lands – that is the least that the public can expect. Do you have an estimate of the number of clones that have been extirpated, and the area extent of loss of aspen communities in the allotment? Across Nevada?

Response 59: Unknown. However, aspen exclosures have been constructed in the allotment to exclude these areas from livestock grazing. In the Elephant Head Basin and throughout the RA, extensive loss of clones was established in the KAY study, but was not quantified. Aspen logs are recorded when found.

Comment 60: We ask that the several smaller exclosures that you constructed in recent years be combined into one large livestock-free aspen recovery zone. WWP also recommends that an Aspen and Spring Recovery ACEC be established in the Carico Lake allotment so that BLM can place special management emphasis on this

Response 60: Aspen in the allotment are isolated within the Elephant Head (Cottonwood Basin) area and have been totally excluded from livestock grazing.

Comment 61: What are the levels of livestock use, and relative severity of livestock impacts, in lands favored by horses in or near the HMAs (South Shoshone, Bald Mountain)? Why are these lands primary horse use areas? Has mining activity cut into any horse use areas? Will new mining, facilities, developments, de-watering, etc. impact horses and their wild and free roaming nature?

Response 61: Livestock actual use reports have not been turned in by use area throughout this allotment. The management actions define use areas for each permittee and actual use data will be documented by the permittees by the use area. In addition, sixteen of the key areas for the Carico Lake Allotment were established within the HMA boundaries to monitor vegetation in response to livestock and wild horses as well as wildlife. Wild horse use is identified in the introduction for Key Areas that are located within an HMA in pages 49-210 of the CLARHA. Additionally, refer to the Key Area map and the HMA map located within the CLARHA. The South Shoshone and Bald Mountain Herd Management Areas were originally identified as Herd Areas following the passage of the Wild Free Roaming Horses and Burros Act of 1971. Early aerial surveys identified wild horses within these areas at the passage of the Act. The Shoshone-Eureka LUP further identified these areas for long-term management of wild horses by designating them as Herd Management Areas. Although mining activity does exist within the HMAs, census and distribution data does not suggest that mining activity has greatly influenced wild horses. Future mining proposals within the HMAs will be evaluated for potential impacts to wild horses through appropriate NEPA documentation and public participation.

Furthermore, livestock actual use reports and the collection of future monitoring will further assess the HMAs in the future.

Comment 62: How can you claim that you have "partially met" the Improved Ecological Condition Objective? There is no previous ESI data/baseline to use as a basis to show any improvement.

Response 62: In addition, to the ESI data, ecological condition was assessed at the key management areas. Refer to rationale on page 246.

Comment 63: We do not believe that BLM can support its claim that Watershed Mgmt Obj" #1, #2. reduce and prevent soil erosion, has been met. Both wind and water erosion occurs on disturbed soils in arid lands.

Response 63: Excessive erosion was not noted within the allotment. Refer to pages 258-341 in the CLARHA. BLM recognizes that the majority of the plant communities within the allotment is a significant departure from the biotic community and is not functioning properly. The attributes for rangeland health identify three interrelated attributes including soil/site stability, hydrologic function and the integrity of the biotic community.

Through the evaluation process BLM determined that the majority of the key management and riparian areas are in degraded condition and developed management actions including the elimination of hot season riparian grazing throughout the majority of the allotment, proper use levels and the deferment of the majority of the allotment until after the critical growth period. This is expected to enhance the upland and riparian communities throughout the allotment, which will improve soils, riparian areas and vegetation communities.

Comment 64: There is large-scale soil erosion occurring with headcutting riparian areas, and collapsing streambanks across the allotment.

Response 64: BLM recognizes the negative livestock impacts to riparian areas. The BLM is proposing to eliminate hot season grazing in the majority of the riparian areas throughout the allotment. In addition, stubble height standards will also be initiated. Refer to pages 257-342 in the CLARHA.

Comment 65: Wildlife Mgmt Objective. #3. We do not believe you can claim improvement in wildlife habitat, based on saying that higher elevation habitats are in fairly good condition. You have not shown that there has been much, or any, improvement in these areas – just that they may not yet have been overrun with weeds. I have observed large bare soil interspaces, and few grasses or forbs in interspaces – at higher elevations of the allotment – where the combined impacts of sheep and cattle use are taking a heavy toll already.

Response 65: Refer to rationale on page 249 of the CLARHA. This objective is not met. Furthermore, refer to pages 250-255, Appendix 6, Appendix 10 and pages 49-219 for a detailed discussion of wildlife habitat.

Comment 66: The overwhelming majority of the Key Area data does not support the standard being Met at 31 out of 35 Key Areas. Larger-sized grasses and native forbs are absent. Shallow-rooted annual weeds predominate. Large areas of bare ground devoid of microbiotic crusts are present.

Response 66: Refer to Appendix 10 for a detailed discussion. The standard states that upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate and land form. Indicators are canopy and ground cover, including litter, live vegetation and rock, appropriate to the potential of the site. The majority of the key areas were dominated by shrubs. Factors including current vegetative composition, litter, cover, soil characteristics were examined to assess the standard.

Comment 67: We strongly disagree with the conclusion that you will fix the water quality problems with the small-modest change in livestock numbers that you are proposing. We are particularly alarmed at the pathogens associated with more sheep disturbance, as well as slope de-stabilization of currently less grazed portions of the watershed.

Response 67: Refer to pages 257-306 in the CLARHA for a detailed discussion. In addition, an adjustment in permitted use is not the only management action that is presented. The CLARHA has identified season of use for use areas and pastures, deferred grazing, proper use levels, measurable utilization standards, elimination of hot season grazing throughout the majority of riparian areas within the allotment, conversion of cattle to sheep, etc...

Comment 68: The Cultural standard "Met" is a joke. We have previously commented on many livestock impacts to cultural sites –especially here where so many of the riparian areas are suffering extreme livestock grazing and trampling impacts. Elsewhere, where rip. areas are so degraded, and cultural artifacts are being trampled, exposed, broken, etc. Cultural Objectives are not Met.

Response 68: Based on the evaluation of existing information pertaining to range improvements and grazing, cultural resources are being recognized within the context of multiple-use management within the Carico Lake Allotment. BLM has recognized the degraded condition of riparian resources where cultural resources have a high probability of being located. Cultural resources will be protected from disturbance through implementation of the proposed grazing management plan, which includes the elimination of hot season grazing throughout the majority of the riparian areas within the allotment in addition to the construction of riparian exclosures in areas where hot season grazing would remain.

Comment 69: Pages 257-308. This entire section is a HUGE disappointment.

Response 69: Management Actions were identified that would make significant progress towards meeting the Standards and Guidelines for Rangeland Health. BLM has determined that the management actions identified in this section will improve the condition of the allotment. BLM has identified season of use, proper use levels, eliminated hot season grazing in the majority of riparian areas, deferred the majority of the upland vegetative communities, adjusted permitted use, converted cattle to sheep in a portion of the allotment, identified utilization objectives that are based on current science, etc.. BLM believes that these management actions will result in improvement in soil/site stability, hydrologic function and the integrity of the biotic community. Refer to rationale throughout this section of the CLARHA.

Comment 70: Why are there no measurable standards of any use that BLM includes in the Terms and Conditions of the Grazing Permits, at 257-308? This violates the grazing regulations. Measurable standards of use must be applied as Terms and Conditions. Why, in other recent evaluation processes, were measurable standards of use applied, and not here?

Response 70: Agreed. Measurable standards will be applied to the Terms and Conditions of the grazing permits.

Comment 71: We believe you have not reduced AUMs under this proposal to anywhere near the level needed to satisfy rangeland health standards.

Response 71: Refer to Appendix 11 for detailed carrying capacity analysis. In addition, this allotment has been grazed historically and currently year round. The proposed management actions identified in the CLARHA have identified seasons of use, proper use levels, conversion of a substantial portion of cattle AUMs to sheep AUMS, etc.., which is expected to make significant progress towards meeting the Standards for Rangeland Health in the short term and in the long term attain these standards. Refer to pages 258-343 for a detailed discussion and rationale of the proposed management actions.

Comment 72: The Cortez season of use will maximize soil compaction, and will occur during the period when remaining native grasses and shrubs are actively growing.

Response 72: The season of use was identified in the Cortez Use Area primarily for cheatgrass control. However, proper use levels (utilization levels) will be initiated for key herbaceous species that remain in the use area.

Comment 73: p. 265. For C-Ranches, and all others, please provide a basis for setting stocking rates shown in Tables. Example: Toiyabe Mtn Use Area 1466 AUMs. How many acres in the Toiyabe (or any other Use Area) are suitable for grazing? What is the production per acre across all use areas? Distance from water? Etc.

Response 73: The carrying capacity for the use areas was derived using the results of five use pattern maps that had been collected in the allotment. Refer to Appendix 11 for a detailed discussion. In addition, monitoring data will continue to be collected to determine if further adjustments are needed.

Comment 74: After ALL of the information on widespread degradation, how could you contemplate issuing a permit that did not have mandatory measurable standards of use? There is NO certainty that ANY objectives or goals will be met.

Response 74: Measurable standards identified in the proposed management action section pages 257-342 in the CLARHA will be brought forward into the decision.

Comment 75: Also, it appears you have already set out on a pre-determined path of season of use, and stocking rates. This effort requires preparation of an EIS, and analysis of a full range of alternative actions.

Response 75: The proposed management actions are recommendations developed by an interdisplinary team. Alternatives will be analyzed in the EA and any comments from the interested public will be considered prior to issuing a decision.

Comment 76: You can't rely on claims like "it is expected that Ellison use would be deferred annually". BLM must specify, quantify, require, etc. as Terms of the Permit --- and not "expect".

Response 76: Utilization levels will be established in the permit to ensure that perennial plants are being provided adequate rest. In addition, refer to grazing stipulations on pages 280-281 in the CLARHA.

Comment 77: p. 303. What is the basis of the carrying capacity analysis for horses referred to here? You claim that monitoring data indicates the proposed AML is appropriate - yet you have provided no data that separates horse and cattle use. Why not, as an alternative, allocate 1/3 of any cattle/sheep AUMs to horses?

Response 77: Refer to Appendix 11 for detailed analysis and rationale for carrying capacity.

Comment 78: p. 306. WWP requests that you allocate half the AUMs to wildlife as part of this process. Why are you sticking to such a tiny amount for wildlife?

Response 78: Wildlife habitat is expected to improve dramatically as a result of the proactive steps that BLM is taking to manage livestock on the allotment. Adjustments in livestock and wild horse carrying capacity, season of use for pastures and use areas, elimination of hot season grazing from the majority of riparian areas, conversion of cattle to sheep, etc... are expected to improve the overall health of the allotment. This will have a positive impact on wildlife habitat throughout the allotment.

Comment 79: The Objectives are far too meager for a land so devastated by livestock. What do you mean be "significant" increase? Would you be satisfied with a change from 2% to 3 % of POSA? How could that be significant, in light of the degraded conditions nearly everywhere? You should specify a quantifiable objective that provides a really meaningful objective for improvement – such as "improvement of 20% in condition class for native perennials", "50% reduction in annual weeds", "10% increase in larger-statured native bunchgrasses", etc. These should not just be nebulous long-term objectives, but instead a percent age of progress towards a goal should be required during each year of normal or above precipitation.

Response 79: Refer to the DPC objectives on pages 306-340 of the CLARHA.

Comment 80: If by "achieve the ecological condition consistent with the DPC in ten years", you hope to attain 20% native perennial grasses on a site that now has 2%, you have to set some measurable goals and objectives, and apply specific standards of use as triggers for livestock removal as Permit Terms and Conditions.

Response 80: Measurable standards/objectives will be applied to each permit

Comment 81: Thank you for including a "Range Improvement Inspection Report". There are conditions such as "Dry Well" that are far beyond normal maintenance. Our observations of range projects in the allotment lead us to believe that many of the projects where "normal" is used – need drastic maintenance, or are not longer functional, or able to be restored to functionality without extensive damage and expense. For example, why re-pipe water to dilapidated troughs if the piping/development is de-watering spring flows? How many of the projects have wildlife escape ladders that are functional?

Response 81: The majority of the projects within the allotment need to be cleaned up, i.e. trash hauled away from the site and disposed of. A significant amount of the troughs are non-functional and need to be replaced. The majority of water developments pipe water into holding ponds.

Comment 82: ESI Maps. Do these ESI sites represent the primary "suitable" grazing lands in the allotment? We notice that no ESI data was collected on sites with rugged contours, or many highly degraded low elevation sites where an AUM may have to roam vast distances and lose wait doing it. In the calculation of carrying capacity, did you subtract non-suitable acreage in pastures from the total acreage in making the calculation?

Response 82: An intensive two year ESI data collection was initiated that moved across the allotment to complete as many acres as possible. The goal was to collect ESI data throughout the whole allotment; however, time and funding were the shortfalls.

Comment 83: Appendix 2 describes impacts of late winter or early spring grazing use to some native grasses. The grazing periods and proposals put forth by BLM in the Evaluation document would continue damage grazing during these periods. It is critical that BLM identify impacts to these species under its proposals, and provide the public a clear understanding of the periods when grazing harm is most likely to occur.

Response 83: Proper use levels for season of use would be established in the permit.

Comment 84: You falsely portray crested wheatgrass as "highly palatable". It is palatable (and not "highly") very briefly in the spring – and the rest of the year, it is our observation that livestock will eat anything other than cwg. Plus, it is known to deplete soils (Lesica and DeLuca 1998), and in some areas invade native sites to some extent. As part of this process, we ask that you focus on removal of cwg and restoration of natives to cwg seedings.

Response 84: Refer to Appendix 2, which states that palatability and nutritional values decline as the plant matures. In addition, refer to pages 210-219 in the CLARHA for detailed analysis of areas that were recently rehabilitated following wildfire. Crested wheatgrass was in the seed mix and failed to establish.

Comment 85: Appendix 6. Please note that PFC is a MINIMUM for which riparian areas should be managed, and often PFC does not result in adequate habitat for aquatic

species. These pictures of degraded springs and seeps are astonishing. They are for complete closure of the allotment until PFC is achieved in all areas. This should be one of the alternatives considered in the EIS.

Response 85: The proposed management actions will be analyzed in detail to determine if additional measures need to be taken. It is expected that the elimination of hot season grazing within the majority of riparian areas in addition to constructing exclosures in areas where hot season grazing will continue to occur will dramatically improve riparian areas throughout the allotment.

Comment 86: Appendix 8. "Fire/Fuels Assessment". We are very concerned that the inclusion of the Fire/Fuels assessment means that BLM is planning more manipulation of woody vegetation here, instead of focusing on restoring native perennial vegetation ---- instead of flammable weeds that result in extreme levels of fine fuel across the landscape.

Response 86: The Fire/Fuels Assessment is part of the overall Rangeland Health evaluation. There are no plans at this time for any manipulation of woody vegetation within the allotment. If at such time this is deemed necessary site specific analysis would occur.

Comment 87: Appendix 9. Where did the Vegetation Guidelines come from? Was there a public review process, or EA, conducted on them?

Response 87: Refer to 4180.2 Standards and guidelines for grazing administration. The public has access to all Resource Advisory Council meetings to discuss amendments to the Standards and Guidelines. The meetings are published in newspapers and this action was posted in the Federal register informing the interested public that the Vegetation Guidelines were being discussed. LUP conformance determination and NEPA analysis has been completed.

Comment 88: How do you allocate trailing vs. grazing AUMs? How are they separated here?

Response 88: A trailing AUM is the same as a regular AUM.

Comment 89: What types of predator control have been conducted, or are being planned, to accommodate the desires of livestock operators on these allotments? How does any predator control affect species or viable populations of native wildlife?

Response 89: Unknown

Comment 90: Hog wire/Sheep Fence. Is there any hogwire/sheep fence? If so, we would like to see this removed. How does this fence impede/kill deer, antelope, etc.? Impair rec. uses? Trammel wild landscapes?

Response 90: There is no hogwire/sheep fence within the Carico Lake Allotment.

Comments from Bill Hall -Ellison Ranching Company (ERC) received August 11, 2005

Comment 1: We have documentation of pulling sheep off the allotment in 1998, accepting that there was a major drought problem and feed source availability. We also took similar action in 2003, agreeing to take a major percentage temporary cut to facilitate improvement in the drought conditions in the allotment. ERC has not grazed their sheep on the east side of the highway 305 from 1992 to the spring of 2005. We have primarily used our Carico Lake AUMS to trail the sheep north along the west side. For these reason we feel it is unnecessary to cut our historical (original) AUMs by the proposed 23% in the Carico Lake Allotment.

Response 1: Through the analysis of monitoring data and the carrying capacity calculations, the BLM has determined that Standards and Guidelines for Rangeland Health are failing to be met throughout the majority of the allotment. It is BLM's contention that measures have to be taken to make significant progress towards meeting the standards. These include adjustments in permitted use, seasons of use by pasture, conversion of sheep to cattle, etc.... The level of use that has occurred in the allotment in addition to the grazing management practices has been detrimental to the overall health of the rangelands throughout the allotment. BLM's has determined that adoption of the management actions identified in the CLARHA that overall rangeland health will improve in the short/long term. Monitoring data will continue to be collected throughout the allotment and when improvement occurs in a use area or pasture AUMs may be increased through another evaluation and multiple use decision. This will dependant on the attainment of the Standards and Guidelines. BLM appreciates Ellison Ranching Company's long history of cooperation and commitment to livestock management within the Carico Lake Allotment. This commitment will result in the short-term and long-term attainment of the Standards and Guidelines within the Carico Lake Allotment.

Comment 2: On Page 42 of the evaluation it indicates that planning has begun for Off Highway Vehicle trails in the Shoshone Mountain area. This is a major concern to us in our managing the grazing preference areas we are associated with in this area. It states on page 40 of the evaluation that "no action on public lands jeopardizes a threatened or endangered or proposed species. The OHV trails on the east side of Harry Canyon might have an impact. We also have concerns with having trails in the vicinity of designated Key Management Areas, CL-6, CL-8 and CL-13. This would have an impact on ERC managing these areas. We all know the impact disturbance has on wild horses. OHV trails in the Shoshone Mountains would greatly impact the natural movement and distribution of horses throughout the allotment. The evaluation, page 242, indicates that most of the horses are already in the south end of the HMA.

Response 2: This proposal is still in the initial phases. BMFO is still in the public scoping process. A site specific EA and cultural resources inventory would be completed if the trail is proposed for development.

Comment 3: The evaluation, page 341, states that a fence is being considered to separate the retained Filippini allotment and the ERC allotment just acquired. We feel this is a separation of two completely different allotments that are a result of a change in ownership and should be considered outside the evaluation.

Response 3: Agreed, this proposed fence would aid in the protection of Fish Creek and is a high priority for the BLM and we feel that this fence is a necessary range improvement. However, no proposed project will be implemented without a thorough <u>site specific</u> NEPA analysis, including public review. The NEPA document will screen the proposals for compliance with all LUPs, pertinent laws, regulations, and bureau policies. The CLARHA does not authorize proposed projects or management actions, but is a vehicle to identify a number of possible solutions to improve existing resource conditions. The next step in the overall Evaluation process is for Management to determine if the data shows conformance with RAC Standards (CFR §4180) and to select those solutions that will achieve RAC Standards. The selected solutions go forward as the proposed actions in the Environmental Analysis (EA).

General Comments (Ellison Ranching Company): As is stated in the evaluation, sheep are herded and controlled in a manner that allows for limited grazing to be accomplished and for utilization levels to be controlled. It is our concern that ERC that the deterioration in the condition of the Carico Lake Allotment was not caused by sheep grazing. We have documentation of management strategies throughout the years to support this conclusion. We feel it is extremely important to abide by the BLM standards and guidelines for rangeland health in a multiple use area. While not being the culprit in contributing to the present range condition we are a major player and feel our efforts and management schemes using sheep and cattle will accomplish a health range environment.

Comments from Forest Guardians received August 15, 2005.

Comment 1: The various sections on water quality (p. 225-231 etc) make it clear that the various sampling that has occurred show that the levels of fecal coliform and turbidity are above acceptable standards for the state's water quality criteria. The evaluation argues that this should not be considered a violation of State Water Quality Law. We have difficulty with this interpretation. The best available data consistently show fecal coliform and turbidity above acceptable criteria. While the number of samples may not meet the specific requirements of NAC445A.119, state water quality laws and enforcement are based on the Clean Water Act. If the state had clear evidence of exceedences, why was no further testing or insufficient testing done? It clearly appears that the BLM and State have decided to ignore the best available data and not do sufficient testing and chosen instead to allow the loophole of sampling requirements in NAC445A.119 to allow them to say that consistent exceedences of water quality standards are not a violation of the law. We believe that this evaluation is not truly complete without sufficient sampling being undertaken in those streams where the best available data indicates that fecal coliform and turbidity levels are above the acceptable
criteria. The failures to meet acceptable criteria in 39% of samples of fecal coliform and 44% of turbidity on cold-water streams cannot be ignored. Even if certain changes are made to improve conditions in these areas, post change sampling must be included to insure that these changes do in fact lead to consistent fecal coliform and turbidity levels that are within the acceptable criteria.

Response 1: Refer to pages 257-343 of the CLARHA. The allotment has currently and historically been grazed by livestock on a year round basis. The proposed management action identified in the CLARHA have identified a grazing management plan with season of use, eliminated hot season grazing in the majority of riparian areas, adjusted stocking levels for livestock and wild horses, converted cattle AUMs to sheep AUMs, initiated proper use levels based on current science, etc..... These management actions are expected to improve upland and riparian conditions quickly, which will result in improving water quality throughout the allotment. Water quality data will be collected in the fall of 2006 to determine if water quality objectives have been met. If it is found that water-quality criteria for beneficial uses has not been met appropriate action will be taken. Multiple samplings were not collected due to limitation in funding. BLM has recognized the water quality issues throughout the allotment and has taken substantial steps to ensure that improvement in upland, riparian and water quality conditions is achieved.

Comment 2: We are especially concerned with exceedences on Fish Creek, which has potential as a trout fishery. Fish Creek has clear problems with excess temperature, along with other exceedences that prevent it from being considered.

Response 2: Fish Creek has historically been utilized on a year-round basis by cattle. The proposed action would eliminate cattle grazing in Fish Creek. Sheep use would occur in the Fish Creek Use Area between February 15^{th} - April 30^{th} and November 1^{st} – February 28^{th} . Due to small size of the Fish Creek canyon, use would be limited to trailing, along the road between CLA and the Buffalo Allotment. Hot season grazing by livestock would be eliminated from Fish Creek. This is expected to drastically improve the condition of the creek. Refer to pages 229-232 of the CLARHA for a detailed discussion of Fish Creek.

Comment 3: We note the overall conclusions of the evaluation show that Riparian and Wetland Standards are not being met and that there is no significant progress being made towards meeting these standards (p. 251). Again, without restating the detailed information in the evaluation, it is clear that Fish Creek and most riparian areas within this allotment are in unacceptable conditions and throughout the allotment, appear to violate RAC Standard 2. Even if certain changes are made to slightly reduce use in an effort to improve conditions on the allotment, we are concerned that ANY continue grazing in these key riparian areas will prevent or significantly hinder any potential recovery. The analysis states (p246) that overall, "The majority of riparian-wetland-aquatic habitats are in poor condition due to livestock and wild horse degradation, 93.6 (12.24 miles) of the lotic and 97.1% (59.3 acres) of the lentic were not a PC." Utilization information for these areas shows use from heavy (60-80%) to severe. Even if permitted

reductions and some type of rotation occur, the simple truth is that cattle tend to congregate in riparian and aquatic zones, especially in arid hot environments. We see nothing in the proposed changes that will protect and restore these areas.

Response 3: Improvement in riparian areas is expected to occur due to the conversion of cattle to sheep in the Shoshone Mountain and Harry Canyon Use Areas, elimination of hot season grazing in the majority of riparian areas, cattle within the Ellison Ranching Company Use Area utilizing pastures with no riparian areas, construction of riparian exclosures in pastures where hot season grazing would continue to occur, etc..... These proposed actions have been successfully used in other grazing allotments to improve riparian condition. Riparian areas are very resilient and improvement will be achieved during the first full year, under the proposed grazing system.

Comment 4: We note the overall conclusions of the evaluation show that Habitat Standards were being met in only three of 35 key management areas (8.6%) and that there is significant progress being made towards meeting these standards (p 253). Current and historic livestock grazing were causal factors that have resulting in this non-attainment. The evaluation also shows that cattle have significantly impacted aquatic habitat on the allotment, including that of various species of springsnails, including the large and small gland Carico springsnails. We do not believe the proposed changes will have significant enough effects to protect these species and improve their habitat.

Response 4: The proposed management action that will be further assessed in the EA. This allotment has historically been and is currently grazed by livestock on a year-round basis. The establishment of a grazing management plan with strict seasons of use by use area, elimination of hot season grazing in the majority of riparian areas, adjustments to stocking levels for wild horses and livestock, conversion of cattle to sheep, etc.... are expected to dramatically improve the wildlife habitat throughout the allotment.

Comment 5: While the management proposal does include a partial change in livestock from cattle to sheep for one permittee and an allotment pastures/use areas rotation, we strongly believe that overstocking is the fundamental problem on this allotment. Further, it is not explained how this allotment-wide rotation would work, as it is our understanding that there are few fences in the allotment. The reduction in permitted numbers, small change to sheep and rotation may reduce further damage to the allotment in and possibly very minor improvements in local areas, but it is clear that this allotment needs significant recovery throughout.

Response 5: Refer to Response 4. In addition, refer to pages 308-343 of the CLARHA for a detailed discussion of the monitoring plan. The evaluation identified proper use levels in conjunction with a grazing management plan that provides for deferment, proper use levels for season of use, conversion of cattle to sheep for a significant portion of the allotment, elimination of hot season grazing, etc....., which is expected to have a profound positive impact on upland and riparian conditions throughout the allotment.

Comment 6: Bringing the permitted numbers down to the average use will still mean that much of the allotment will have to be used at 60% or greater to sustain that level of animal use. This is inconsistent with the proposed annual monitoring standards that would reduce allowable utilization to 40% in most areas and 25% in some areas. Those utilization levels would only sustain the proposed permitted numbers in the absolute wettest years, or if livestock distribution was absolutely perfect throughout the allotment and possibly not even then. Permittees generally try to run livestock levels at the permitted use numbers, but in this case if they do so and utilization levels are enforced, they are likely to consistently be left with no where to go at the end of the year.

Response 6: Refer to Appendix 11 for a detailed discussion of the carrying capacity. Note that the new utilization objective of 40% was used to calculate the new carrying capacity. Five use pattern maps were used for this analysis, which takes into account different precipitation levels that occur over a period of time. Permittees run the risk of having to relocate their livestock when utilization objectives are met/exceeded. Permittees that manage livestock properly are rewarded by being able to utilize the permit to its full extent.

Comment 7: We must also contest the formulas used to calculate the carrying capacity of this allotment. We do not believe that the series of formulas presented in Appendix 11 have any factual or scientific basis? Normally, the potential forage production of an area is based on measuring the actual ungrazed production for a small area during the course of a year, then using that as a basis to determine allowable pounds/acre in various pastures/ keys areas/ecological units. The total production of theses various units is then added to get the total forage potential for the allotment. Then management decisions are made to decide how much is to be left unconsumed to protect the ecology of the area and how much can be consumed by wildlife, livestock and in the case wild horses. The formulas presented here have no such basis in reality. Simply put, allow continued use at those levels will keep the allotment in its current unacceptable condition and fail to improve water quality, riparian conditions and provide wildlife habitat.

Response 7: Refer to BLM Technical Reference 4400-7 Analysis, Interpretation and Evaluation for a detailed discussion of the methodology for calculating carrying capacity. In addition, refer to response 6. Furthermore, refer to pages 257-343 in the CLARHA. Season of use, elimination of hot season grazing in riparian areas, deferment of uplands in portions of the allotment until after the critical growth period, proper use levels established for areas grazed prior to the critical growth period, conversion of a significant amount of cattle AUMs to sheep AUMs, etc..., in conjunction with the adjustments in permitted use are expected to improve water quality, riparian conditions and provide benefits for wildlife habitat.

Comment 8: Further, any use of this allotment without complete exclosure of riparian areas will fail to improve these areas.

Response 8: Elimination of hot season livestock grazing throughout the majority of the riparian areas within the allotment is expected to and has been proven to have positive

benefits to riparian areas. Riparian exclosures would be constructed in areas where riparian areas are still grazed by livestock and wild horses in the hot season.

Comments from Hank and Marian Filippini -Filippini Ranching Company (FRC) received August 22, 2005.

We are writing this letter to comment on the Carico Lake Evaluation and Rangeland Health Assessment.

We have been ranching on the Carico Lake Allotment for many years. (Hank for over sixty years and Marian for fifty four years.) Until 1969 we were working for Henry Filippini, Sr. and Ranched on both the Carico Valley and the Reese River sides. Since 1969 we have been on the Reese River side.

The condition of the range has always been a main concern. Our livelihood has depended on it. Over the years we have made many range improvements, developed water sources and drilled well that have benefited not only livestock but also wild game and the wild horses.

The highway 305 right of way that is fenced on both sides and runs the entire length of our allotment is a prime example. There has been no livestock grazing for twenty years and the right of ways are no better than the adjacent areas that have been grazed every year.

There are dry years and wet years and average years but in the last sixty five years the allotment is much improved. There are more water developments, pipelines and wells that open up areas of grazing that could not be used before. If you read the chronicles of the pioneers going to California, it was much worse in the 1800's.

When I was a young man there were many more cattle 12,000 head of sheep trailing from north to south in the fall and from south to north in the spring. There was also a band of bucks in the Mill Creek-Harry Canyon Area all summer and fall plus a large number of mustangs in the allotment.

The economy of the region should also be considered. Traditionally the ranches have been steady while the mining industry has a history of booms and busts. Both industries are very important to the economy of counties in Northern Nevada. Ranchers need all of their AUMs to stay in business, pay their bills and taxes.

This year, 2005, is one of the best years we have ever seen and proves that after the last few very dry years, moisture or lack of is the key to forage production. The excessive forage produced this year has also caused an extreme fire danger. More cattle should be turned out to reduce the fire threat. We will be sending pictures later.

Filippini Ranching Company has attempted to work with you to make a fair agreement. Therefore we believe Filippini Ranching Co. or Ellison Ranching Co. should not be cut one AUM

Thank you for you consideration of these comments.

Sincerely

Hank Filippini

Comments from Shawn Mariluch -Filippini Ranching Company (FRC) received August 22, 2005.

This letter is in response to the Carico Lake evaluation.

First, I would like to start by saying the Filippini Ranching Company has not done anything to breach the Allotment Management Plan that is in effect at this time. I would also like it to be known that I believe this allotment is in good condition.

Right now, there is a water quality lawsuit going on in the Carico allotment. Filippini Ranching Company has worked very hard with the BLM to take care of issues that were brought in this case. I personally do not agree with their concerns, due to how and where the samples were taken in the Carico water quality study.

I believe that the BLM has caved to Western Watershed lawsuit. Hank, Marion, Angie and I have tried our hardest to work with the BLM and still have a viable operation. We have decided that the cattle rotation coming out of the high country and a cut in numbers would make it so the ranch would go under.

The grass this year is so tall and thick that it is a fire hazard, and there is absolutely no reason why it should not be grazed.

With all this in mind, I do not believe there should be a cut in the AUM's on the Filippini Ranching Company-Ellison portion of the allotment

Sincerely,

Shawn Mariluch

Comments from Bob Schweigert (Intermountain Range Consultants received August 23, 2005.

Comment 1: Conclusory remarks in the "Description" of the Allotment, including those relating to sage grouse and including "The Fish Creek Watershed will require a complete cessation of grazing in order to recover (Eval p. 40) are unwarranted.

Response 1: Refer to page 40 of the CLARHA. Improvement to the watershed would require a change in livestock type, stocking rate, season-of-use, and/or fencing of the watershed to reestablish vegetation, improve streambank stability, decrease width-depth ration, increase sinuosity, increase number of pools and decrease summer water temperatures. The sentence which states a complete cessation of grazing in order to recover will be stricken from the evaluation.

Comment 2: The discussion of species composition, species presence on a site and species cover under the "Assessment" section of the document focuses entirely on departure of the vegetative community away from "pristine" condition (aka "excellent condition, aka Potential Natural Community or PNC). However, such departure is not demonstrated to be a new condition, but instead existed at the time of publication of the Land Use Plan and a reasonable review of the available data conclude that such departure is NOT the result of CURRENT livestock management practices. The LUP recognized that the Carico Lake Allotment and others within the Resource Area were not in pristine condition. Instead, the LUP prescribed measurable objectives to be achieved (or progress made) over time. The LUP objective is not for "pristine condition" (aka PNC) throughout the Carico Lake Allotment, but is rather for PNC ("excellent condition") to be achieved on 3,158 acres within the allotment.

Response 2: As identified in the Resource Management Plan Record of Decision the Carico Lake Allotment has been identified as an "I" (<u>Improve</u> the current unsatisfactory condition) allotment. Category "I" allotments will receive the highest priority for development because grazing management is most needed to improve the basic resources and/or resolve serious resource use conflicts. In addition, refer to the CLARHA pages 42-256, Appendix 6, 7, and 10. Historic and current livestock grazing has been determined to be the causal factors for non-attainment of the standards. In addition, the frequency study revealed that 17 key management areas were in downward trend, 5 were slightly upward trend, 5 trend not apparent and undetermined on 8 key areas due to only having baseline data available. Although five key areas were in arguably upward trend, the condition of the vegetative community at these sites is well below the capability and does not represent a desirable plant community. The downward trend indicated by the frequency study can be attributed to current livestock management.

The SERA RMP objectives including the following were not met:

1. Initially manage livestock use at existing levels and determine if such use can be maintained. The current grazing permit is for 33,453 AUMs of livestock use.

Average actual use during the evaluation period was 25,012 AUMs. Use pattern map data indicated that utilization objectives were exceeded throughout the allotment in 1988, 1989, 1990, 1991 & 1996 as indicated by use pattern mapping data.

- 2. Establish a grazing management program designed to provide key forage plants with adequate rest from grazing during the critical growth period. A grazing management system has not been formally established for the Cortez Joint Venture Use Area portion of the Carico Lake Allotment.
- 3. Achieve through the management of livestock and wild horses, utilization levels to allow more plants to complete growth cycles and to increase storage of reserves for future growth. A grazing management system has not been formally established for the Carico Lake Allotment. Current season of use is year-round throughout the Cortez Joint Venture portion of the Carico Lake Allotment. Use pattern map data indicated that utilization objectives were exceeded throughout the allotment in 1988, 1989, 1990, 1991 & 1996 as indicated by use pattern mapping data.
- 4. Increase vegetation production for all grazing animals while protecting sensitive resource values. The majority of the key management areas within the allotment were dominated by shrubs. The absence of key perennial grasses was noted at many key areas, which negatively affected the sites productivity.
- 5. Maintain and improve wildlife habitat and reduce habitat conflicts while providing for other appropriate resource values. The majority of the key management areas within the allotment were dominated by shrubs. The absence of key perennial grasses was noted at many key areas, which negatively affected the sites productivity. The majority of riparian-wetland-aquatic habitats are in poor condition due to livestock and wild horse degradation. 93.6% (12.24 miles) of the lotic and 97.1% (59.3 acres) of the lentic were not at PFC. Aspen groves are in poor condition, with some stands failing to regenerate due to over use by large ungulates.
- 6. Improve selected riparian and stream habitat to good or better condition. The majority of riparian-wetland-aquatic habitats are in poor condition due to livestock and wild horse degradation. 93.6% (12.24 miles) of the lotic and 97.1% (59.3 acres) of the lentic were not at PFC.
- 7. Provide habitat sufficient to allow big game populations to achieve reasonable numbers in the long-term. The majority of the key management areas within the allotment were dominated by shrubs. The absence of key perennial grasses was noted at many key areas, which negatively affected the sites productivity. The majority of riparian-wetland-aquatic habitats are in poor condition due to livestock and wild horse degradation. 93.6% (12.24 miles) of the lotic and 97.1% (59.3 acres) of the lentic were not at PFC. Aspen

groves are in poor condition, with some stands failing to regenerate due to over use by large ungulates.

8. Improve and maintain habitat for state-listed sensitive species and federally listed threatened and endangered species. The majority of the key management areas within the allotment were dominated by shrubs. The absence of key perennial grasses was noted at many key areas, which negatively affected the sites productivity. The majority of riparian-wetland-aquatic habitats are in poor condition due to livestock and wild horse degradation. 93.6% (12.24 miles) of the lotic and 97.1% (59.3 acres) of the lentic were not at PFC. Aspen groves are in poor condition, with some stands failing to regenerate due to over use by large ungulates.

BLM recognizes that to manage immediately to obtain PNC conditions throughout the allotment is an unattainable goal in the short-term and may be impossible without a vegetation treatment or restoration. However, refer to the CLARHA pages 308-340 for Desired Plant Communities (DPC). It has been determined that these goals can be achieved through the identified carrying capacity, season of use, conversion of cattle to sheep, etc. DPC objectives were set at conservative obtainable levels. In instances where the standards were met the DPC was set at a minimum to continue the attainment of the Standard. It is expected that attainment of these objectives would make significant progress towards the attainment of the Standards for Rangeland Health and towards meeting DPC objectives in the long-term.

Comment 3: Where the available data show that improved ecological condition exists, the Evaluation attempts to diminish such achievement with phrases such as "the mid seral rating can be attributed to the excessive composition and production of shadscale at this key area (Eval, p. 57). However, such subjective diminishment is unwarranted, because the "allowable production" or allowable composition" of any species is limited by the Methodology, so that "excessive composition" of any one species CANNOT "override" the similarity index. This attempt to excuse success" within the Evaluation also appears to betray an agenda to find failure when none exists.

Response 3: Refer to the CLARHA pages 42-256, Appendix 6, 7, and 10. The collection of monitoring data revealed that key perennial grass species were missing, annual species were present in excessive levels and the sites were dominated by shrubs. This reveals that range conditions are an issue at the key areas. In addition, the Major Land Resource Handbook reveals that in many of the range sites that shrub dominance, absence of key perennial grasses and the invasion of a site by annual species is an indicator of abusive management.

Comment 4: The Evaluation attempts to establish a new definition of what is a "desired plant community" that is not the standard established by the LUP. This new definition cannot be met unless all Key Areas are at pristine range condition and in addition be being in pristine condition, each Key Area must demonstrate species composition that is "just right" according to the new definition. The intangible, nebulous and amorphous

standard is not the standard established by the LUP, and (aside from the fact that "perfection" is nearly impossible to attain), it is unreasonable for the Evaluation to simultaneous create a standard that has not existed in the past and evaluate past data against the standard. This is analogous to getting an "A" on a test by achieving the standard established by the teacher before the test, only to receive an "F" because the teacher didn't like your penmanship.

Response 4: Refer to response 2. Refer to page 10 of the Resource Management Plan Amendment Record of Decision. This states the following for short-term management actions: Continue existing rangeland monitoring studies and establish new studies as necessary to determine what adjustments in livestock use and wild horse numbers are needed to meet the objectives of this amendment. Actions include, but will not be limited to, change in season-of-use, implementation of deferment and rest rotation grazing systems, change in livestock numbers, correction of livestock distribution problems, alteration of the number of wild horses and development of range improvements. Specific measures to improve wildlife habitat could include, but not limited to, restricting livestock use along streams to late summer or fall, limiting grazing use on riparian areas to moderate levels, fencing meadows and stream corridors, limiting grazing use on bitterbrush to moderate levels by winter in crucial mule deer winter range, constructing wildlife guzzlers for water and planting desirable shrub and forb species in vegetation manipulation projects.

Comment 5: The skewing of the utilization information to exclude from consideration any areas use to a degree less than "moderate", together with using 40% as the allowable utilization level (contrary to the LUP prescription of 60% at the end of the grazing year), appears again to betray an agenda to find failure where none exists and to impose on the permittees within the allotment a reduction of permitted livestock use.

Response 5: Refer to the CLARHA pages 42-256, Appendix 6, 7, and 10. BLM has determined that the level of use as prescribed by the LUP has resulted in the non-attainment or exceeding the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives and allotment specific objectives. Refer to pages 22 and 23 of the Nevada Rangeland Monitoring Handbook which states the following at the time of its creation: "Allowable use is the degree of utilization desirable, given our best understanding of proper use and attainable on various parts of the range or allotment considering the present nature and condition of the resource, management objectives and level of management. Proper use is a degree of utilization of current year's growth which, if continued, will maintain or improve the long-term productivity of the site. Proper use varies with season, the ecological site, the physiological requirement of the plant species and other factors."

"Determination of allowable use is part of the planning process. Local specification for acceptable degree of use should be based upon research data and on the experience of the manager and range user."

"The degree of allowable use identified for a key species for one or more years serves as a guideline or reference point to evaluate the impacts grazing may be having on the overall welfare of the plant community. In monitoring degrees of utilization, the primary concern is the trend in the plant community resulting from various levels of use."

Through the evaluation of monitoring data it was determined that the Standards for Rangeland Health were not being attained throughout the allotment. Historic and current livestock grazing has been determined to be the causal factors for non-attainment of the standards. This level of use as revealed by the frequency study has led to 17 key management areas in downward trend, 5 were slightly upward trend, 5 trend not apparent and undetermined on 8 key areas due to only having baseline data available. Although five key areas were in arguably upward trend, the condition of the vegetative community at these sites is well below the capability and does not represent a desirable plant community. The downward trend indicated by the frequency study can be attributed to current livestock management.

Refer to response 2 and refer to page 10 of the Resource Management Plan Amendment Record of Decision. In addition, In addition, refer to 43 CFR 4180 – Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration. This says that the authorized officer shall take appropriate action under subparts 4110, 4120, 4130 and 4160 of this part as practicable, but not later than the start of the next grazing year upon determining that existing grazing management needs to be modified to ensure that the following conditions exist:

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

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

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

(d) Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.

The 40% utilization objective was based on current literature and science and is expected to make significant progress towards the attainment of the standards. This states that Salt desert shrubland 4-8" average annual precipitation of which a significant portion of the Carico Lake Allotment falls in should have utilization objectives between 25-35%. It

was determined that the 40% utilization objective in conjunction with the changes in season of use, conversion of cattle to sheep, the deferment of the majority of the allotment until after the critical growth period and proper use levels that significant progress towards the Standards for Rangeland Health would occur. Refer to Range Management Principles and Practices by Jerry L. Holechek, Rex D. Piper and Carlton H. Herbel. Refer to Appendix 2 in the CLARHA.

Comment 6: The Evaluation fails at this section to report the utilization summaries and other data within the records and files of the BLM, which have been provided to BLM for the numerous key areas within at least the West Side, between 1996 and 2003. This section of the document also fails to recognize and apply BLM's own utilization monitoring at key areas in several years including 2004.

Response 6: BLM utilized all monitoring data collected by BLM personnel throughout the evaluation. Historic and current livestock and wild horse use has been determined to be the causal factors for non-attainment of the standards. This level of use as revealed by the frequency study has led to 17 key management areas in downward trend, 5 were slightly upward trend, 5 trend not apparent and undetermined on 8 key areas due to only having baseline data available. Although five key areas were in arguably upward trend, the condition of the vegetative community at these sites is well below the capability and does not represent a desirable plant community. The downward trend indicated by the frequency study can be attributed to current livestock and wild horse management. In many cases downward trends have been documented at key areas that received light to moderate use.

Comment 7: The evaluation incorrectly states that the crop year runs from October – June. The Crop Year begins with September precipitation.

Response 7: We disagree.

Comment 8: Prior to 1996, the Use Pattern Mapping was a subjective determination not calibrated by means of clipping and weighing the species in question and/or the use of a utilization gauge. At the commencement of 1996 use pattern mapping conducted by BLM and IRC, the BLM representative, prior to calibration began the mapping by describing the utilization of certain key species as "heavy" utilization. However, after several calibration exercises, actually measuring the grazed and ungrazed plant stubble heights and comparing the measurements to known height:weight relationships, the BLM representative changed his assessment of the degree of utilization to "slight-to-light".

Response 8: Use pattern mapping data was collected in accordance with the Nevada Rangeland Monitoring Handbook and the appropriate Technical References.

Comment 9: The Evaluation rationale (page 7) for determining "desired carrying capacity" is not reasonably applicable to the Carico Lake Allotment. Although such rationale "might be" reasonable if exactly the same degree and pattern of utilization were observed year after year after year on the allotment, such circumstance is not the case

within the Carico Lake Allotment, as demonstrated by the UPMs. The UPMs show changing patterns and levels of utilization in the different areas of the allotment in different years. This fact shows that livestock, wildlife and wild horses are for the most part not hampered by topography or distance from water on the allotment and also that management actions taken by the permittees in the short term improved distribution of livestock from year to year.

Furthermore, using only "moderate" and "heavy" utilization classes unreasonably skews the data to the heavy end of the spectrum. In fact, with such a rationale, unless 100% of the allotment is "moderate" utilization or less, the exercise will automatically lead to a determination of average utilization that is erroneously skewed to the high end and grazing capacity that is erroneously skewed to the low end of the spectrum. As an example and assuming a 60% allowable utilization level on a 600,000 acre allotment, BLM maps 599, 998 acres as "light" utilization, 0 acres as "moderate" utilization and heavy (1 acre) utilization level to determine the average utilization and determines the "desired" utilization averages 70%. BLM then applies the actual use as though all of the actual use (AUMs) occurred only on the heavily grazed acreage and determines that a reduction in permitted use is warranted. This is not reasonable.

Response 9: Actual use reports have not been turned in by use area or pasture throughout the Carico Lake Allotment. Actual use was applied allotment wide due to the negligence of the permittees to submit actual use reports properly or the failure to move livestock from one area to another in favor of unmanaged year-round grazing. Refer to Technical Reference 4400-7 Analysis, Interpretation and Evaluation for detailed account of calculating carrying capacity. The carrying capacity was identified along with a grazing management plan to ensure that uniform distribution will be possible in the shortterm. Through the carrying capacity analysis a range of AUMs was provided and the total permitted AUMs was based on permittee commitment to improve management. Through the analysis of monitoring data it was determined that historic and current livestock and wild horse grazing were the causal factors for non-attainment of the standards. This level of use as revealed by the frequency study has led to 17 key management areas in downward trend, 5 were slightly upward trend, 5 trend not apparent and undetermined on 8 key areas due to only having baseline data available. Although five key areas were in arguably upward trend, the condition of the vegetative community at these sites is well below the capability and does not represent a desirable plant community. The downward trend indicated by the frequency study can be attributed to current management.

Comment 10: The Land Use Plan objectives for the Carico Lake Allotment do not include any objectives relating to the "frequency of occurrence" of any forage species, but rather the allotment specific LUP objectives relate to ecological condition of the rangeland within the allotment. While changes in "frequency of occurrence" might serve as a trip-switch for BLM to monitor the ecological condition of the site, changes in "frequency of occurrence" are not directly correlated to changes in ecological condition, because of the interaction of all of the species on site and changes in frequency do not determine changes in ecological condition. In fact, as demonstrated by the Evaluation's

numerous frequency tables, several species may be exhibiting upward frequency trends, while others are simultaneously exhibiting downward frequency trends, due to the interaction and competition between species in the natural setting.

An example of the non-correlation of frequency to ecological condition is demonstrated by Key Area CL-10, in which four species showed no change in frequency, three species showed a downward trend in frequency and only one species showed an upward trend in frequency between 1996 and 2003. Yet the ecological condition of Key Area CL-10 improved from Mid Seral ecological condition in 1996 and Potential Natural Community in 2003. Eval, p. 124.

Response 10: Refer to Response 2, 3 and 5.

Comment 11: The evaluation only tells a portion of the story regarding "microbiotic crusts". While they may help stabilize soils, the crusts can also inhibit germination and/or emergence of desirable forage species.

Response 11: Refer to Technical Reference 1730-2 (2001) which states biological crusts can affect vascular plant germination. While small cracks and crannies on the soil surface are generally sufficient for small-seeded plants to lodge and germinate, most large-seeded plants need soil or plant litter cover to germinate. In deserts where plant litter is often limited in interspaces, large native seeds generally have self-burial mechanisms (such as hygroscopic awns) or are cached by rodents. Many exotic species, however, lack self-burial mechanisms. Because biological crusts stabilize soils, germination of such seeds can be inhibited in sites with well-developed crusts and low plant litter, as was recently demonstrated for the annual exotic grass, cheatgrass, in both the field and laboratory (Larsen 1995; Kaltenecker et. al. 1999a; Belnap, unpublished data). Though crusts can reduce germination of some seeds, seedling germination per se has not been shown to limit species density in desert plant communities. Rather, studies worldwide show vascular plant cover and structure are most often controlled by water and/or nutrient availability rather than other site factors (Mabbutt and Fanning 1987; Tongway and Ludwig 1990; Dunkerley and Brown 1995).

Comment 12: The Evaluation implies at page 21 that a lack of forage exists within the allotment on Mule Deer range. However, the production data and utilization data do not support a conclusion of any "lack of forage" within the allotment as a whole nor within the mule deer areas of use. This is especially evident as it relates to mule deer diets, which are composed primarily of shrub species. The Evaluation concludes that "most of" the Key Areas are dominated by shrub species.

Response 12: Refer to CLARHA page 23 for the requirements of Mule deer. In addition, while mule deer and domestic livestock diets overlap little under ideal conditions and moderate stocking rates, loss of forbs (which are important in mule deer nutrition and fawn survival) and grasses from the plant community, degradation of riparian and aspen habitats, loss of fawning and hiding cover, and general loss of species diversity, decrease in palatable species (all of which have been documented in the

CLRHA) have negative consequences for mule deer (as well as other wildlife species, especially riparian-dependent species). (See Wallmo 1981, and Wasley, 2004. for more complete discussions of mule deer/livestock competition and the scientific literature that pertains to it).

While forage quality on the allotment increases with distance from water, that forage is largely unavailable to deer during the hot months. A large body of literature (Brownlee, 1963; Mackie 1970; Wood, et. al. 1970; Anthony 1976; Wallmo 1981; Eberhardt 1983; Hervert and Krausman 1986) clearly documents not only the mule deer dependence on water during the hot months, but also the powerful influence that water exerts upon mule deer numbers, distribution, movements and habitat use. In essence, mule deer won't regularly travel more than about 1.5 miles from water during the hot months.

Anthony, R. G. 1976. Influence of drought on diets and numbers of desert deer. J. Wildl. Manage. 40:140-44

Brownlee, S. 1963. Trans-Pecos game management survey. P-R project W-57-R-11 Job 8. Austin: Texas parks and Wildlife Dept. 6 p.

Eberhardt, L. E. 1983. Movement and activity patterns of mule deer in the sagebrushsteppe region. J. Mammalogy 65:404-410

Hervert, J. J. and P. R. Krauseman. 1986. Desert mule deer use of water developments in Arizona. J. Wildl. Manage. 50: 670-676.

Mackie, R. J. 1970. Range ecology and relations of mule deer and cattle in the Missouri River breaks. Wildl. Mono. 20:79 p.

Wallmo, O. C. (Ed.) 1981. Mule and blacktailed deer of North America. Univ. Nebraska Press, Lincoln. 605 p.

Wood, J. E.; T. S. Bickle; W. Evans; J. C. Germany; and V. W. Howard, Jr. 1970. The Fort Stanton mule deer herd. New Mexico State Univ. Agri. Exper. Bull. 567. 32 p.

Wasley, T., 2004. Mule deer population dynamics: issues and influences. Biological Bulletin No. 14, Nevada Division of Wildlife. Reno.

Wallmo, O. C. (Ed.) 1981. Mule and blacktailed deer of North America. Univ. Nebraska Press, Lincoln. 605 p.

Refer to the CLARHA for a list of references pertinent to the Carico Lake Allotment Rangeland Health Assessment.

Comment 13: The Evaluation claims at page 30 that sage grouse have disappeared from the west slope of the Shoshone Range, due to a combination of rangeland fires, an electrical transmission line that facilitates raptor and raven perching and hunting, and

livestock over-use. As to "livestock overuse", the available utilization data do not support a conclusion that CURRENT livestock "over-use" of the forage resource is occurring.

Response 13: Refer to the CLARHA pages 42-256, Appendix 6, 7, and 10. The level of use that has occurred within the Carico Lake Allotment has resulted in downward trends at the key areas and poor range condition. The frequency study revealed that 17 key management areas were in downward trend, 5 were slightly upward trend, 5 trend not apparent and undetermined on 8 key areas due to only having baseline data available. Although five key areas were in arguably upward trend, the condition of the vegetative community at these sites is well below the capability and does not represent a desirable plant community.

Comment 14: The Evaluation claims at page 31 that willows, cottonwoods, and aspen are "entirely lacking or much of the Carico Lake Allotment as a result of a long history of hot-season grazing". This statement is false, and BLM knows it is false, because BLM initiated aspen studies in 2000 and followed up with aspen enclosures in 2002. See also Eval, p. 35. The Evaluation at page 31 goes on to state that meadows within the Cottonwood Basin and along Fish Creek have been "drained by downcutting". The conclusion is wrong, and is further not supported *by* the Evaluation itself, which reports that any downcutting that has occurred has primarily been due natural hydrologic events that occurred decades ago (Eval, p. 229). Notwithstanding any downcutting which may have occurred, natural meadows do exist (and are not drained) within both the Cottonwood and Fish Creek drainages. These kinds of irresponsible and inflammatory statements are unwarranted in a document that purports to be based upon data collected over time.

The Evaluation claims at page 35 that the aspen in the Cottonwood Basin are "struggling". it is unknown what is intended by this term, but what is clear is that BLM has enclosed all of the aspen stands in the Cottonwood Basin as of 2002. Again, BLM should refrain from such inflammatory prose, and stick to the data and facts.

The Evaluation is also incorrect as to usage of the aspen being primarily by cattle. While cattle utilize aspen sprouts, so do other animal species. I can personally attest to the fact that, prior to the expansion of the upper Cottonwood exclosure and construction of others, BLM maintains the (pro-expanded) Cottonwood exclosure, and no use by livestock occurred. However, the following spring, nearly all of the aspen sprouts had been severely grazed by mule deer, and mule deer sign was abundant inside the aspen enclosure. Nevertheless, none of the aspen enclosures within the Carico Lake Allotment are built to exclude access by mule deer,

Response 14: The aspen studies (Kay, 2001) to which you refer clearly documented the poor condition and overuse, by livestock, of aspen on the allotment (see photos at Figures 2 through 8 in that report for graphic illustration of this conclusion). Aspen clones that remain have clearly shrunken over time as evidenced by the distribution of dead trunks. Cottonwoods are largely non-existent on the allotment and willows thrive

only where protected by fencing or steep banks. Kay, Charles. 2001 - The condition and trend of aspen communities on BLM administered lands in Central Nevada. Bureau of Land Management, Battle Mountain Field Office.

We don't believe that the word "struggling" is by any means, an exaggeration and while *most* of the aspen on the allotment was fenced, several of the fences have been breached by snow and/or cutting every year since construction, with resulting moderate to heavy browsing of aspen suckers inside of the exclosures.

During the extensive planning stages of the Cottonwood Basin Aspen Exclosures (1998-2001), BMFO personnel made dozens of field trips to the basin. Hundreds of photos and observations documented that the aspen communities and springs were being heavily overutilized, overwhelmingly by cattle, and not mule deer. On numerous occasions, more than 100 cattle were observed congregating in the aspen stands and wet, spring areas. Subsequently, the majority of springs and stream terraces exhibited thousands of deep hoof-hummocks, resulting primarily from large numbers of cattle (not mule deer, sheep or wild horses).

Dr. Kay, who conducted the aspen study has measured aspen throughout the western U.S. and Canada, and is highly regarded for his integrity and willingness to attribute cause and effect in spite of political ramifications. Pages 132 - 134 of his 2001 report (The condition and trend of aspen communities on BLM administered lands in Central Nevada.) articulate the convincing reasons for his conclusion that wildlife (particularly deer) did not contribute significantly to the aspen herbivory that he observed.

During the planning phase of the Cottonwood Basin Aspen Exclosures(prior to 2002), Joe Ratliff-BMFO Project Lead- met with Bob Schweigert and Hank Filippini on site to discuss the project and solicit recommendations and comments from them. At that time, both Ratliff and Schweigert agreed that the majority of problems associated with ungulate browsing of aspen sprouts in the basin were associated with cattle and not mule deer. Mr. Filippini did not agree. However, both Ratliff and Schweigert pointed out that there was no current sign of deer at the site, but there was significant cattle feces, hoof prints and hummocking.

Comment 15: The Evaluation incorrectly implies that livestock grazing occurs throughout the whole of the allotment on a year-round basis, and incorrectly states that there exists a lack of grazing management system. At least as to the West side, Filippini Ranching Company (FRC) has followed a grazing management system for many years, and has informed BLM of the system in numerous correspondence and filings. The Evaluation is completely silent as to FRC's rotation management, and to FRC's repeated management proposals to BLM beginning at least in 1995 (including 319(h) proposals) for improving the allotment infrastructure (including the exclosures of numerous riparian areas and development of off-site water facilities) to further improve the livestock management system. Again the silence of the Evaluation on this point seems to betray an intent to create a "crisis" where none exists.

Response 15: Actual use reports have not been turned in by pasture or use area, which reveals that the grazing management system has not been formally initiated. There has been no agreement or decision implementing a grazing management system. The majority of the use in the last several years has occurred within the Moss and Antelope Use Areas, which has rendered these areas devoid of vegetation by the end of the summer.

Comment 16: Filippini Ranching Company has made several applications in the past to graze so as to reduce the fine fuel loading on the West Side of the Allotment. BLM has denied those requests.

Response 16: Temporary Non-Renewable grazing is examined on a case by case basis. FRC has grazed the Moss Fire Use Area on a year-round basis, which has eliminated cheatgrass fine fuel loadings.

Comment 17: (Pg. 49-219) This section of the Evaluation uses as a standard the ecological condition, plant species composition, and cover expected under pristine range condition, and most of the descriptions focus on departure of the plant community from pristine (i.e., "potential natural community, of PNC). However, such departure has not occurred under current livestock grazing, but was instead the environment at the time BLM published the Shoshone-Eureka RMP/ROD/RPS. The LUP recognized the conditions existing at the time of its publication and set management objectives to maintain or change the ecological condition of the allotment. The LUP objectives for the Carico Lake Allotment call for "pristine condition", or PNC, (aka "excellent" condition) to be achieved on 99,038 acres (Eval, p. 249). The LUP does not prescribe "excellent" condition (PNC) to be achieved throughout the allotment.

Response 17: BLM recognizes that the LUP does not prescribe PNC condition throughout the allotment. Refer to Response 2. BLM's intent is to manage livestock and wild horses to achieve standards in addition to the LUP. Standards and Guidelines were determined by the Nevada State Directors to be in conformance with the LUP in 1997. The BMFO then completed a LUP maintenance action to include the Standards and guidelines with the LUP. The attainment of DPC would be at a minimum, a plant community that is consistent with meeting the standards. DPC's are not necessarily PNC.

Comment 18: The summary of the ecological site inventory is incorrect. IRC obtained the ecological site write-ups from the 2001 and 2002 ESI inventory, and examined the condition ratings reported by BLM relative to at least the "Loamy 5-8" range site within the West Side of the Carico Lake Allotment. In numerous cases, BLM erroneously and/or arbitrarily changed the ecological condition rating (Similarity Index) from what was actually reported by the field data and in all cases but one, the changes arbitrarily decreased the rating from what the similarity index actually showed.

Response 18: Upon further review of the ecological site write-ups prior to the completion of the evaluation BLM recognized this error. Corrections were made. It is important to note that the majority of the site write-up areas, the plant community was dominated by shrubs and the perennial grass component was either absent or present in levels far below the capability of the site, which is not representative of a desirable plant community. Furthermore, invasive annual species including cheatgrass, halogeton and other annual forbs were present within the majority of the site write-up areas. The allowable production was well below what is expected at the majority of the range sites.

Due to the shear volume of data sheets associated with this intensive monitoring study analysis and interpretation of each data sheet is not included, but will be made available upon request.

Comment 19: There exists no LUP objectives prescribing utilization restrictions on riparian areas of the Carico Lake Allotment.

The evaluation purports to report utilization data collected in mid-November, 2004. However, the data shown depict "median" stubble heights, not "average" stubble heights. Further, the table showing stubble height versus ungrazed stubble height does not include a height:weight ratio, which is necessary to make any conclusion of utilization.

Finally, as to this point, to the extent that BLM deems the level of utilization unacceptable at the locations depicted at pages 221-223, we again reference BLM to FRC's numerous management proposal submissions, including the FRC 319(h) proposals, which have been submitted since at least 1995.

Response 19: Refer to Response 18. Proposals are submitted by permittees throughout the district. These proposals are ranked by the BMFO to determine the district priorities. These proposals do not excuse the permittees from proper livestock management and decision making. BLM applauds FRC pursuit of funding for the 319(h) proposals to address riparian issues. This funding became available in 2003 following the Full Force and Effect drought decision and BLM began the process to authorize these projects. Water rights issues are being worked out currently with regard to these projects. In the meantime FRC has sold the majority of base property and all the AUMs within these use areas. BLM and Ellison Ranching Company (ERC) will continue to work together to identify some of these areas for further development. The funding through 319(h) was not transferred to the new permittee. BLM has made the commitment to ERC to continue the process to develop these areas.

Comment 20: FRC and/or IRC have made previous comments to the level, quantity, quality and location of purported water quality monitoring by BLM, which sampling has included such inapplicable as well heads, troughs, mud puddles in the non-flowing Reese River drainage and irrigation conveyance ditches. We incorporate all such references herein.

Response 20: BMFO water quality sampling in the Carico Lake Allotment never took

place at well heads, troughs and mud puddles. One sample location was in a man-made channel located in the lower Fish Creek drainage, just up-gradient of the Fish Creek Ranch. A number of additional samples were taken in locations in the upper Fish Creek drainage (miles away from the lower location).

Comment 21: The reason for reporting the information in this section is unknown, since the RPS contains no fisheries objectives regarding Fish Creek in the Carico Lake Allotment. Nevertheless, the data presented in this section of the Evaluation demonstrate that the percent optimum habitat of the stream (which includes bank cover, bank stability, percent desirable stream bottom materials, percent pool quality and several other factors), has improved since 1987, the inception year of the LUP and significantly so since 1992, under the current livestock authorization and management practices.

Response 21: Based on your comment it is unclear how livestock management has changed since 1992. Livestock are present within the Fish Creek area throughout the hot season.

Comment 22: The monitoring data collected from 1996-2004 do not support the conclusion of a lack of sufficient understudy cover for nesting by sage grouse. This is in part due to the fact that the data do not reflect under-shrub understory cover, which is the specific requirement of sage grouse nesting issue. The reliance by the Evaluation on "most sites" is not well-placed either, since "most sites" monitored are in the Loamy 5-8 range site (shadscale overstory), the Sodic Terrace 6-8 range site (greasewood overstory) and/or other sites not dominated by sagebrush. Therefore, "most sites" are not sage grouse nesting habitat.

Response 22: Sage grouse leks are located in close proximity to CL-14, CL-20, CL-21, CL-24, CL-25, CL-31 and CL-37. Refer to CLARHA pages 42-256 for range site descriptions and monitoring data for these key areas. These key areas are Wyoming sagebrush sites, which is sage grouse habitat. BLM regrets not including a map of sage grouse leks to assist with the understanding of key areas selection.

Comment 23: The evaluation fails to report: (1) that aspen stands studied by Dr. Kay have all been enclosed by fencing in 2002, and; (2) any monitoring data collected after the enclosure of the aspen stands discussed at this page.

Response 23: Refer to CLARHA page 38. There has been improvement in sprout survival in some of the stands; however, continued maintenance of these exclosures will be required to ensure that livestock do not resume grazing on the young sprouts. BLM expects improvement in these areas in the long-term due to ERC accepting maintenance of the exclosures and the fact that sheep use will occur in these areas. This will ensure that livestock are excluded from these areas due to intensive herding.

Comment 24: The conclusion as to the short-term utilization objectives not being met is wrong. The rationale stating that utilization objectives "were exceeded throughout the allotment in 1988, 1989, 1990, 1991 and 1996 is wrong. Assuming that the utilization

pattern maps are reasonably relied upon by BLM, the weighted average utilization of the allotment in the subject years was: 47% in 1998, 44% in 1989, 54% in 1990, 52% in 1991 and 32% in 1996.

Response 24: The weighted average utilization takes into account slight/light, moderate, heavy and severe utilization within the allotment. This is the average utilization that occurred in the allotment. The following table illustrates the percentage of use by utilization category.

UTILIZATION	1988		1989		1990		1991		1996	
(RANGE)	Total Acres	Percentage of Total Acres								
Slight/Light (0- 40%)	206,736	37	228,815	41	53,972	10	123,054	22	516,269	92
Moderate (41- 60%)	213,624	38	266,183	47	316,718	56	199,103	36	32,574	6
Heavy (61- 100%)	132,940	24	63,418	11	145,280	26	177,957	32	14,453	3
No Data Collected	7,681	1	4,833	1	35,516	8	53,508	10	0	0

A reduction in permitted use is required due to this level of livestock use being identified as a causal factor for failure to meet the SERA RMP objectives, Standards for Rangeland Health, multiple use objectives, allotment specific objectives and downward trend at the key management areas. For detailed analysis of monitoring data regarding these findings refer to the Carico Lake Allotment Rangeland Health Assessment Pages 42-245, Appendix 6, 7, 10 and 11.

Comment 25: In addition, utilization data collected after seed dissemination and at or after, the end of livestock grazing year at Key Areas do not support the conclusion. See data summaries for 1996-2003, previously supplied to BLM by FRC and/or IRC. Further, the 2004 monitoring by BLM and IRC showed the utilization objective to be currently met at all Key areas, at least as it pertains to the West Side. The current livestock authorization and associated management practices continue to meet the LUP prescribed utilization levels.

Response 25: Although the utilization objectives were met at the key management areas in 2004 actual use was only 7,412 AUMs. In addition, the majority of livestock were isolated to the Moss Fire Use Area and the Fish Creek Mountain and Fish Creek Mountain Flat Use Areas according to actual use reports. In addition, the level of use since 1996 has resulted in a downward trend across the allotment. The frequency study revealed that 17 key management areas were in downward trend, 5 were slightly upward trend, 5 trend not apparent and undetermined on 8 key areas due to only having baseline data available. Although five key areas were in arguably upward trend, the condition of the vegetative community at these sites is well below the capability and does not represent a desirable plant community.

Comment 26: The Allotment specific objective for ecological condition is to achieve 99,038 acres in good condition and 3,158 acres in excellent condition. The RPS does not specify where or in which range site the objective is to be achieved.

The range site mapping and 2003/2004 ecological condition data show that the Sodic Terrace 6-8 range site comprises 29,603 acres of the allotment. BLM selected two key areas to represent this range site within the allotment, namely CL-10 of the West Side and CL-39 on the East Side. CL-10 has achieved Potential Natural Community. It appears therefore, on the basis of 1 of 2 Key Areas having achieved LUP objective, that approximately ½ of the 29,603 acres (or 14,802 acres) can be estimated to have so achieved the objective. We realize that areas represented by the two sites may vary and that acreage actually represented by CL-10 may be larger (or smaller) than ½ the total acreage. However, BLM has represented to the RAC tour this summer that this range site represents "miles" of the Reese River Valley and "several thousand" acres within the West Side. BLM should clarify the number of acres of Sodic Terrace 6-8 range site on the West Sid and East Sid of the allotment.

Response 26: Refer to CLARHA pages 121-130. These sites are marginal at best for livestock grazing. Discussions with FRC have revealed that this range site is used minimally due to the lack of perennial grasses within this portion of the newly established Filippini Ranching Company use area.

Comment 27: The range site mapping and 2004 ecological condition data show that the Loamy 5-8 range site comprises 202,659 acres of the allotment. BLM selected 17 key areas to represent this range site within the allotment, but 3 was not determined, at least in two cases because they have been altered by wildfires and/or wildfire rehabilitation (seeding). Of the 14 Key areas at which BLM did determine ecological condition in 2004, 7 of 14 were in Late Seral Condition. It appears therefore, on the basis of $\frac{1}{2}$ of the Key Areas having achieved the LUP objective, that approximately $\frac{1}{2}$ of the 202,659 acres (or 101,330 acres) can be estimated to have so achieved the objective. We realize that the areas represented by the tree sites which were altered by wildfire and/or rehabilitation will reduce the total stated above and that acreage actually represented by the various Key Areas may be larger (or smaller) than $\frac{1}{2}$ of the total acreage. However, the conclusion must be that the objective has been achieved or significant progress has been made toward its achievement etc.....

Response 27: The majority of the key management areas throughout the allotment were a significant departure from the ecological site description. The key areas were dominated by shrubs and annual species. In addition, the absence of key perennial grasses and the abnormally low production and composition of these grasses reveals poor condition. Refer to CLARHA pages 42-256 for a complete analysis of monitoring data. Furthermore, the level of use since 1996 has resulted in a downward trend across the allotment. The frequency study revealed that 17 key management areas were in downward trend, 5 were slightly upward trend, 5 trend not apparent and undetermined on 8 key areas due to only having baseline data available. Although five key areas were in arguably upward trend, the condition of the vegetative community at these sites are well below the capability and do not represent a desirable plant community. Refer to the CLARHA for the range site descriptions. These descriptions state that where management results in abusive use by livestock key perennial grasses decrease while Sandberg bluegrass increases. In addition, shrubs species and annual species including cheatgrass, halogeton, etc. increase. The majority of key areas within the allotment lack key perennial grasses and were dominated by Sandberg bluegrass, shrubs and annual species. This indicates that these key areas are in poor condition.

Comment 28: The Evaluation conclusion and rationale are wrong. Sufficient forage exists on a sustained basis (as supported by monitoring over time) to support at least 30,892 AUMs of livestock forage within the LUP approved allowable utilization levels. The rationale that average actual use has been less than the current grazing permits is not a reasonable standard by which to assess the objective, but rather the actual use/utilization formula, together with the LUP approved allowable utilization levels is the proper and reasonable standard and in all years the actual use/utilization formula (properly applied) shows that more than sufficient forage exists within the allotment to support the LUP objective AUMs for livestock

Response 28: Refer to CLARHA pages 42-256 and Appendix 6, Appendix 7 and Appendix 10. The level of use since 1996 has resulted in a downward trend across the allotment. The frequency study revealed that 17 key management areas were in downward trend, 5 were slightly upward trend, 5 trend not apparent and undetermined on 8 key areas due to only having baseline data available. Although five key areas were in arguably upward trend, the condition of the vegetative community at these sites are well below the capability and do not represent a desirable plant community.

Comment 29: Standard 1. The Evaluation conclusion and rationale are neither reasonable nor rational. Notwithstanding our objections to the Evaluation basing its conclusion upon parameters of rangeland in pristine condition, the Evaluation nevertheless on its face (p. 250-251) concludes that 31 of 35 Key Areas are meeting or exceeding the canopy and ground cover for their respective range sites AT PRISTINE CONDITION. The 4 sites are not being met are not met due to the effects of fire (p.251). Therefore the Standard was "met, except for wildfire areas" or at the very least "significant progress" IS being made.

Response 29: Refer to CLARHA pages 42-256 and Appendix 10.

Comment 30: Standard 2. Relative to the West Side comment previously supplied by FRC and/or IRC including appropriate filings and affidavits supplied before OHA. The Standard is met and/or significant progress is being made.

Response 30: Refer to CLARHA pages 220-228, Appendix 6, 7 and 10.

Comment 31: The Evaluation conclusion and rationale are not supported by the available data as it pertains to CURRENT livestock management practices. "Historic" livestock management practices (and other factors) resulted in the ecological conditions

found to exist at the time of publication of the RMP/ROD/RPS, which included findings that much of the rangeland within the Resource Area was in "poor" or "fair" ecological condition. BLM set measurable quantified, allotment-specific objectives relating to ecological condition of the rangelands within the Carico Lake Allotment, including objectives for ecological condition and objectives for short-term utilization levels. The available data show that CURRENT livestock management is not responsible for failing to meet Standard 3. Utilization data shows that the LUP prescribed utilization levels have not been exceeded. This includes the most recent BLM data relating to utilization in 2004, which show that the utilization levels are within those levels prescribed by the LUP. We again refer to the fact that Key Area CL-10 has according to the Evaluation, achieved PNC, yet such achievement is deemed within the Evaluation to "not met" Standard 3. We submit that the LUP objectives are achieved, then it must be deemed that the standard is achieved, because the LUP is purportedly in conformance with the Fundamentals of Rangeland Health.

Response 31: The ranching property comprising the estate of Henry Filippini, Sr. was distributed between John Filippini and Henry Filippini Jr., on January 24, 1977. BLM has no documentation to prove that livestock grazing management has changed from at least that time. Negligence in turning in actual use reports that reflect use by use area/pasture are absent from monitoring files.

The frequency study revealed that since 1996 17 key management areas were in downward trend, 5 were slightly upward trend, 5 trend not apparent and undetermined on 8 key areas due to only having baseline data available. Although five key areas were in arguably upward trend, the condition of the vegetative community at these sites are well below the capability and do not represent a desirable plant community. Refer to response 29.

RAC Standard 3: Habitat states – 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. As indicated by: Vegetation composition (relative abundance of species), Vegetation structure (life forms, cover, heights or age classes), Vegetation distribution (patchiness, corridors) and Vegetation productivity and Vegetation nutritional value. Refer to Appendix 5. This appendix illustrates the production at each key management area. The majority of production studies found that key perennial grasses were missing, the sites were dominated by shrubs and/or annual species and production was well below what is expected for the range site. In addition refer to Appendix 2. The key perennial grass remaining at the majority of the key management areas was Sandberg bluegrass. Sandberg bluegrass is highly drought resistant. It is one of the earliest grasses to green up in the spring and matures early. Sandberg bluegrass is palatable to livestock, wild horses and wildlife. It has high energy content; however, it is a poor source of protein. The production and population of Sandberg bluegrass tend to fluctuate with precipitation. It produces little forage in drought years, which makes it a less dependable food source than other perennial bunchgrasses. Sandberg bluegrass increases under grazing pressure. Sandberg bluegrass and cheatgrass often occur on the same site. Refer to Appendix 10.

Comment 32: (pg. 257-343) We believe the proposals within this section of the Evaluation constitute an illegal attempt to rewrite the Land Use Plan objectives for the Carico Lake Allotment via a grazing decision, rather than a proper land use plan decision document, publication in the Federal Register and an accompanying EIS. Our belief is supported at page 341 of the Evaluation, which stats, "The new management objectives for the Carico Lake Allotment have been reviewed and are consistent with the Shoshone-Eureka Land Use Plan. These objectives for the Carico Lake Allotment would supersede the objective identified in the Shoshone-Eureka Rangeland Program Summary.

Response 32: Refer to CLARHA pages 42-256 Appendix 4, 5, 6, 7, and 10 for an assessment of the condition within the allotment. Refer to response 3, 4, 5, 18 and 31. Furthermore, the Rangeland Program Summary is not the LUP. There is no mention of the RPS in the LUP and the RPS was not published in the federal register.

Refer to 43 CFR 4180 – Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration. This says that the authorized officer shall take appropriate action under subparts 4110, 4120, 4130 and 4160 of this part as practicable, but not later than the start of the next grazing year upon determining that existing grazing management needs to be modified to ensure that the following conditions exist:

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

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

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

(d) Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.

Comment 33: Assuming reliance upon only the Use Pattern Maps for 1988, 1989, 1990, 1991 and 1996, the failure to include areas mapped as "light" and assigning all of the actual use to those areas grazed to "moderate" and "heavy" utilization.

Response 33: Actual use was not turned in by the permittees by use area. In addition, refer to Appendix 11. BLM did use the light category to determine carrying capacity for the potential carrying capacity calculation. Furthermore, based on permittee commitment to management the BLM determined that potential carrying capacity not desired carrying capacity would be used for the stocking levels.

Comment 34: Use of 40% as the allowable utilization factor in the numerator of the Actual Use/Utilization formula. The LUP provides that 50% is the allowable utilization at the time of seed dissemination and 60% is the allowable utilization at the end of the grazing year. The evaluation erroneously and arbitrarily uses a reduced utilization level throughout Appendix 11 as though it were the LUP prescribed level, which the Evaluation at page 341 admits is not the case.

Response 34: Refer to response 3, 4, 5, 34 and 36. The 40% utilization level was based on the most current literature, which recommends that 35% to 45% use of grazable forage will maintain forage production on semiarid grassland ranges where brush encroachment is not a problem. In the more arid regions, less than 12 inches precipitation per year, of the Southwest and intermountain areas, utilization levels between 25% and 45% are recommended. Much of the Carico Lake Allotment receives less than 12 inches of precipitation per year. The level of use identified in the LUP has resulted in downward trend at the majority of the key management areas since 1996.

Comment 35: The errors in determining the available forage within the allotment are applied to the division of the forage among the permittees are arbitrarily and erroneously low and are not determined in accordance with manulize procedures and in conformance with the LUP prescribed allowable utilization levels.

Response 35: Refer to response 3, 4, 5, 6 and 37. Carrying capacity was looked at in a number of ways and are as follows: Ecological Site Inventory was examined to determine if a suitability analysis could be used. This was not achievable due to ESI not being collected over the whole allotment. Carrying Capacity was also looked at by use area. However, the permittees have neglected to turn in actual use reports by use area and there was no sound way to complete this method. The decision to base carrying capacity equitable to all permittees was the only way to take into account that actual use reports were not turned in by use area and actual use sometimes had to be taken from the grazing bill.

Comment 36: Refer to response 3, 4, 5, 6 and 37. We note that the rationale for proposing the wide-sweeping changes relative to each permittee are identical. For the reasons discussed in the comment letter the rationales are not supported by the available data applied against the Land Use Plan objectives for the allotment. Additionally, because the different permittees use or are proposed to use different Use Areas, the one-size-fits-all conclusions are not reasonably applied to all of the permittees. An example of the unreasonableness of such application is that FRC's proposed new area of use does not include riparian, streams or aspen groves, yet the (purported failure to meet LUP objectives is claimed at 258-286 as rationale to limit FRC's permitted use to 777 AUMs.

This is unreasonable. Likewise relative to Ellison sheep operation, the (purported) nonattainment of objectives and standards by cattle cannot reasonably apply to sheep which are managed differently.

Response 36: The 777 AUMs were applied for by FRC through transfer and agreed upon in meetings. Through the analysis of monitoring data BLM determined that these AUMs were available within the FRC's new use area. Again FRC failed to turn in actual use reports by use area. Ellison Ranching Company is in agreement with the proposed management actions identified in the evaluation.

Comment 37: The limitation of livestock grazing to 777 AUMs as proposed by Proposed Management Action 1 is not supported by the available data and the livestock grazing capacity of the proposed new FRC Area of Use exceeds 777 AUMs. Appendix 11 purports to have determined a livestock grazing capacity based upon production by the 2001/2002 ESI information. However, the allowable utilization level applied by Appendix 11 is 40% not the LUP prescribed 60%. This arbitrarily and unreasonably lowers the livestock grazing capacity of the area and is not in conformance with the LUP.

Response 37: Refer to responses 3, 4, 5, 6, 35, 37 and 39.

Comment 38: The available data do not support the proposal to limit the season of use within the proposed new FRC Area of Use. FRC's yearlong use during the evaluation period has resulted in utilization levels within those prescribed by the LUP and no rational reason exists to change the period of use for the newly proposed Area of Use. Specifically, utilization levels at seed dispersal have been and continue to be less than 50% and have been and continue to be less than 60% at the end of the grazing year. Filippini Ranching Company is willing to rotate livestock within the proposed new use area on a seasonal basis and to work with BLM to develop any additional waters which may be deemed necessary to accomplish such rotation management.

Response 38: Meetings have been held with FRC and this limited season of use is what they wanted to have for their new use area.

Comment 39: Proposed utilization restrictions of 40% for grasses and 25% for shrubs at the end of the grazing season are not in conformance with the Land Use Plan and are not otherwise reasonable because they do not provide a reasonable nexus to achievement of the Land Use plan objectives.

Response 39: Refer to responses 3, 4, 5, 6, 36 and 37.

Comment 40: Frequency is not an objective of the Land Use Plan, nor does it provide a reasonable conclusion of achievement of the Land Use Plan objectives for ecological condition. In addition, where the frequency data shows that a statistically significant improvement in key forage species has already occurred, the Evaluation nevertheless finds that such improvement is "not good enough". An example of such improvement is the evaluation of Key Area CL-11, which between 1996 and 20003 achieved statistically

significant upward trends in the frequency of key species present on the site (bottlebrush squirreltail, Sandberg bluegrass and bud sagebrush), yet the Evaluation conclusion regarding the Key Area is "Although the ecological status for the key area was determined to be late seral, the lack of perennial grass composition and production, dominance by shrubs and the excessive cheatgrass component indicate that he site is in a degraded state." In other words as stated elsewhere herein, no matter that the site has achieved a late seral ("good") ecological condition and no matter that the site exhibited statistically significant increasing frequency of the key species present on the site, the Evaluation determines that the current vegetative community is not representative of a desired plant community." The bottom line is that increased frequency has already occurred, but BLM applies an amorphous standard to determine that "desired plant community" has not been achieved.

Response 40: Refer to responses 3, 4, 5 and 6. The evaluation takes into account all monitoring information and does not just rely on one method. Refer to Appendix 5 for a detailed account of the production studies. At Key Management Area CL-11, bottlebrush squirreltail dominated the key area in 1996 accounting for 27% or 540 lbs/acre of the total production. In 2004, bottlebrush squirreltail production declined substantially and only comprised 2% or 8 lbs/acre of the total production. BLM has determined that the current condition of the key area does not imply good condition. Furthermore, the site was dominated by shrubs, which is an indicator of abusive management practices.

Comment 41: The described "Desired Potential Community descriptions are a practical impossibility to achieve and set permittees up for findings of failure in future evaluations. An example of such practical impossibility is the expectation that annual species will occur at "zero" levels within 10 years. Another example is the expectation that perennial species will increase form "zero" to some other number. This is a practical impossibility, because if the species do not exist within the range site (as represented by the Key Areas) at present, then the species have no seed source by which to increase in frequency or production. Therefore, an expectation to increase to some level above "zero" is not reasonable, unless BLM intends to seed the subject species (which the Evaluation does not propose). Likewise, if the key species were not present in initial monitoring (ESI inventory prior to the creation of the land use plan and/or initiation of Key Area monitoring) it is unreasonable for BLM to find that, because they have not appeared on the site, that the CURRENT livestock management practices are resulting in a failure to meet objectives or standards. The desired potential community descriptions are not consistent with the LUP objectives regarding ecological condition. The LUP objectives do not prescribe "sub-dividing" the ecological condition objectives into "components" of ecological condition. Most or all of the "rationale" portions of this section refer to improvement "with proper livestock management", inferring that livestock management has been improper. However, current livestock management has been consistent with that provided for in the land use plan and the permits. The available utilization data do not support a conclusion of "improper" livestock management, because the current livestock management continues to meet the short term utilization levels prescribed by the LUP. The LUP prescribed utilization levels were prescribed to achieve the long term ecological condition objectives, which appear to have been met and/or making significant progress.

Response 41: Refer to responses 3, 4, 5 and 6. Refer to CLARHA pages 42-256, Appendix 6, 7, 10 and 11. In addition, BLM determined that the key management areas were capable of achieving the DPC's. Furthermore, it was not BLM's intent to attain zero levels of annual species in ten years.

Comment 42: (Pg. 334-335) The objectives proposed are not in conformance with the allotment specific LUP objectives for the Carico Lake Allotment and are unreasonable. The proposed stubble heights are not based upon research or monitoring of the Carico Lake Allotment, are based on research conducted on riparian areas with potentials far different than that of the Carico Lake Allotment, and do not provide a reasonable nexus to achieve the Land Use Plan Objectives.

(Pg. 335-338) The objectives are not in conformance with the allotment specific LUP objectives for the Carico Lake Allotment.

Response 42: Refer to responses 3, 4, 5 and 6.

II. Carico Lake Allotment Conformance Determination

Based upon the assessment and evaluation of data collected within the Carico Lake Allotment and after carefully considering the comments received, I make the following determinations:

Standard 1: Upland Sites – PARTIALLY MET

Significant Progress Being Made – NO

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

As indicated by:

• Indicators are canopy and ground cover, including litter, live vegetation and rock, appropriate to the potential of the site.

Rationale:

Monitoring and baseline data was collected at thirty-five key management areas within the Carico Lake Allotment. These key areas serve as a basis for the upland health assessment, which has been used to determine the effects of livestock, wild horse and wildlife use within the allotment. An evaluation of this standard was completed on all key areas. Following the analysis, interpretation and evaluation of available monitoring information, it was determined that this standard is being met at thirty-one out of thirtyfive key management areas. The standard is not being met at key management areas CL-5, CL-7, CL-30 and CL-38. Production data, cover data, frequency/trend data, precipitation, ecological status, photo documentation and field observations were used as a basis for this determination.

CARICO LAKE ALLOTMENT USE	TOTAL KEY MANAGEMENT AREAS	KEY MANAGEMENT	KEY MANAGEMENT AREAS
ANEA	WITHIN USE AREA	STANDARD 3	MEETING STANDARD 3
Antelope Pasture Area	1	CL-30	NA
Carico Lake Valley Use Area	5	NA	CL-14, CL-17, CL-18, CL-37 &
			CL-39
Cedars South Pasture	1	CL-5	NA
Cedars Pasture	1	CL-7	NA
Cortez Use Area	3	NA	CL-35, CL-40 & CL-41
Fish Creek Mountain Use Area	2	NA	CL-11 & CL-33
Filippini Ranching Company Use	3	NA	CL-9, CL-10 & CL-12
Area			
Harry Canyon Use Area	3	NA	CL-6, CL-8 & CL-13
Moss Use Area	1	CL-38	NA
Shoshone Mountain Use Area	4	NA	CL-24 & CL-25, CL-26 & CL-29
Toiyabe Flat Use Area	3	NA	CL-20, CL-21 & CL-23
Toiyabe Mountain Use Area	11	NA	CL-16, CL-22, CL-27, CL-28,
			CL-31, CL-32, CL-34 & CL-36
Total	35	4	31

In all cases where the standard was met adequate cover, species composition of perennial vegetation and production was found to be appropriate for each key management area to 1.) stabilize soils, 2.) allow for proper infiltration and permeability rates and 3.) minimize soil erosion.

Causal Factor:

It has been determined that the wildfire that occurred at the key areas is the causal factor for non-attainment of the standard.

Therefore, Standard 1: Upland Sites is being **PARTIALLY MET and** *Significant Progress is not being made* for the Carico Lake Allotment.

DETERMINATION (RAC Standard 1 Upland Sites):

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

- I have determined that livestock grazing is allowing for Standard 1 to be met.
- I have determined that the wild horse population is allowing for Standard 1 to be met.
- I have determined that livestock and wild horse herd management is in conformance with the guidelines.
 - Refer to the Carico Lake Allotment Rangeland Health Assessment and Appendix 10 for a detailed discussion

Standard 2: Riparian and Wetland Sites – NOT MET

Significant Progress Being Made – NO

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

As indicated by:

- Stream side riparian areas are functioning properly when adequate vegetation, large woody debris, or rock is present to dissipate stream energy associated with high water flows. Elements indicating proper functioning condition such as avoiding accelerating erosion, capturing sediment, and providing for groundwater recharge and release are determined by the following measurements as appropriate to the site characteristics.
- Width/Depth ratio; Channel roughness; Sinuosity of stream channel; Bank stability; Vegetative cover (amount, spacing, life form); and Other cover (large woody debris, rock).

- Natural springs, seeps, and marsh areas are functioning properly when adequate vegetation is present to facilitate water retention, filtering, and release as indicated by plant species and cover appropriate to the site characteristics.
- Chemical, physical and biological water constituents are not exceeding the state water quality standards.

Rationale:

61.06 acres of Lentic/Spring resources were assessed for Proper Functioning Condition (PFC) in the Carico Lake Allotment. The following is the condition rating for the lentic areas assessed within the Carico Lake Allotment.

	PFC	FAR-UP	FAR-NA	FAR-DOWN	NF
Total Acres	1.76		3.22	38.18	17.9
Percent of Total Acres	2.9	0	5.3	62.5	29.3

13.08 miles of Lotic/Stream resources were assessed for Proper Functioning Condition (PFC) in the Carico Lake Allotment. The following is the condition rating for the lotic areas assessed within the Carico Lake Allotment.

	PFC	FAR-UP	FAR-NA	FAR-DOWN	NF
Total Miles	0.84	1.44	3.60	3.13	4.07
Percent of Total Miles	6.4%	11%	27.5%	24%	31.1%

Standard 2 states "Riparian and wetland areas exhibit a properly functioning condition and achieve state water quality criteria"

Proper functioning condition (PFC) is the minimum requirement for all waters of the allotment. Ninety-two percent of the Lentic or springs/seeps assessed failed to meet minimum standards. Five percent were rated at risk with no apparent trend, and only three percent of the acreage assessed was rated, as being in PFC. Fifty-five percent of the Lotic or flowing waters did not meet the minimum standard. Twenty-eight percent were rated function-at-risk with no apparent trend. Eleven percent rated as functional-at-risk with an upward trend or showing significant progress toward achieving PFC. Only six % of the lotic was rated as PFC.

The rational for the low ratings was the lack of adequate vegetation (type, diversity, and amount) to dissipate stream energy associated with high flows and to facilitate water retention, filtering, and release of water on both lotic and lentic systems; and the presence of active erosion/headcutting. The majority of both lentic and lotic sites were in poor conditions throughout the allotment. This was the result of heavy livestock and wild horse concentration, which has lead to the degraded riparian conditions.

The majority of the riparian-wetlands accessed <u>do not meet</u> those characteristics necessary to provide suitable habitat for the animal species present and to maintain

ecological processes. Habitat conditions are also not meeting the life cycle requirements of Special Status Species known to utilize riparian-wetland habitats.

Water Quality; Standard 2 also requires that waters are to achieve state water-quality criteria as indicated when chemical, physical, and biological water constituents are not exceeding the <u>state water quality standards</u>. To date, the State has not set <u>standards</u> for waters located within the Carico Lake Allotment. Beneficial Use Criteria, however, have been set by the State of Nevada for all waters of the state (NAC445A.119).

The base line water quality data collected by the BLM suggests that water quality criteria for the beneficial uses for Livestock Watering and Wildlife Propagation were not met for fecal coliform on 39% of 121 samples taken in the Carico Lake Allotment from 1999 to 2004. The turbidity criterion was not met on 27% of the Aquatic Warm Water samples and on 44% of the Aquatic life-Cold Water samples. Samples tested by the BLM were for base line data purposes only and were not collected as prescribed in NAC445A.119, Beneficial Use Criteria. Therefore, the data shown does not constitute violation of State of Nevada Water quality criteria for beneficial use.

It is assumed that changes in stocking rate, type of livestock, season of use, and duration of use necessary to improve riparian functioning condition, would also correct most if not all of the water quality issues in the Allotment.

Causal Factor:

Current and historical heavy livestock and wild horse impacts to riparian-wetlands especially during the hot season in the allotment are the causal factors for non-attainment of the standard.

Therefore, Standard 2: Riparian and Wetland Sites is **NOT MET and** *Significant Progress is not being made* for the Carico Lake Allotment. Refer to Appendix 10 for complete evaluation of this standard.

DETERMINATION (RAC Standard 2 Riparian and Wetland Sites):

- I have determined that livestock grazing is a significant causal factor leading to Standard 2 not being met.
- I have determined that the wild horse population is a significant causal factor to Standard 2 not being met.
- I have determined that livestock management and wild horse herd management are not in conformance with the guidelines.
 - Refer to the Carico Lake Allotment Rangeland Health Assessment and Appendix 10 for a detailed discussion.

Standard 3: Upland Habitat - PARTIALLY MET

Significant Progress Being Made – NO

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.

As indicated by:

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

Rationale:

Monitoring and baseline data was collected at thirty-five key management areas within the Carico Lake Allotment. These key areas serve as a basis for determining the effects of livestock, wild horse and wildlife use within the allotment. An evaluation of this standard was completed on all key management areas. Following the analysis, interpretation and evaluation of available monitoring information, it was determined that the standard was met at four of the thirty-five key management areas. The standard was being met at CL-5, CL-26, CL-29 and CL-35. The causal factors for non-attainment of the standard varied from wildfire, soil characteristics, livestock and a combination of livestock and wild horses. It was determined that wildfire was the causal factor for nonattainment of the standard at CL-7, CL-30 and CL-38. The causal factor is unknown at this time for non-attainment of the standard at CL-33. Current and historic livestock grazing were the causal factor for non-attainment of the standard at CL-6, CL-8, CL-9, CL-10, CL-11, CL -12, CL-13, CL-14, CL-16, CL-17, CL-18, CL-28, CL-29, CL-39, CL-40 and CL-41. Historic and current livestock and wild horse use were the causal factor for non-attainment of the standard at CL-20, CL-21, CL-22, CL-24, CL-25, CL-27, CL-31, CL-32, CL-34, CL-36 and CL-37. The Carico Lake Allotment consists of 14 pastures or use areas the following table outlines the total number of key management areas within each use area and how many of these were meeting or not meeting the standard.

CARICO LAKE ALLOTMENT USE AREA	TOTAL KEY MANAGEMENT AREAS	KEY MANAGEMENT AREAS NOT MEETING	KEY MANAGEMENT AREAS MEETING STANDARD 3
	WITHIN USE AREA	STANDARD 3	
Antelope Pasture Area	1	CL-30	NA
Carico Lake Valley Use Area	5	CL-14, CL-17, CL-18,	NA
		CL-37 & CL-39	
Cedars South Pasture	1	NA	CL-5
Cedars Pasture	1	CL-7	NA
Cortez Use Area	3	CL-40 & CL-41	CL-35
Fish Creek Mountain Use Area	2	CL-11 & CL-33	0
Filippini Ranching Company Use Area	3	CL-9, CL-10 & CL-12	NA

Carico Lake Allotment Use Area	Total Key Management Areas within Use Area	Key Management Areas not Meeting Standard 3	Key Management Areas Meeting Standard 3	
Harry Canyon Use Area	3	CL-6, CL-8 & CL-13	NA	
Moss Use Area	1 CL-38		NA	
Shoshone Mountain Use Area	4	CL-24 & CL-25	CL-26 & CL-29	
Toiyabe Flat Use Area	3	CL-20, CL-21 & CL-23	NA	
Toiyabe Mountain Use Area	11	CL-16, CL-22, CL-27,	NA	
		CL-28, CL-31, CL-32,		
		CL-34 & CL-36		
Total	35	31	4	

Production data, cover data, frequency/trend data, precipitation, ecological status, ecological site inventory, photo documentation and field observations were used as a basis for this determination. In the aforementioned cases where the standard was not met it was determined that adequate species composition, cover, and production did not exist to provide for suitable 1.) feed, 2.) water, 3.) cover, 4). living space, and 5). maintain ecological processes, to meet the habitat requirements for animal species.

Causal Factor:

Current and historical livestock and wild horse use were the causal factor for nonattainment of the standard.

Standard 3: Riparian Habitat Standard – NOT MET

Significant Progress Being Made – NO

Riparian areas lacked adequate vegetation (type, diversity, and amount) and the presence of active erosion/headcutting, which has resulted in dewatering of meadows and stream bank/floodplains. The majority of both lentic and lotic sites were found to be in less than proper functioning condition throughout the allotment.

The majority of the riparian-wetlands accessed do not meet those characteristics necessary to provide suitable habitat for the animal species present and to maintain ecological processes. Habitat conditions are also not meeting the life cycle requirements of Special Status Species known to utilize riparian-wetland habitats.

Causal Factor:

Current and historical heavy to severe livestock and wild horse concentrations and utilization of riparian-wetlands habitats are the primary causal factor for non-attainment of the standard.

Therefore, Standard 3: Habitat is **NOT MET and** *Significant Progress is not being made* for the Carico Lake Allotment. Refer to Appendix 10 for complete key management area and riparian habitat evaluations of this standard.

DETERMINATION (RAC Standard 3 Upland and Riparian Habitat):

- I have determined that livestock grazing is a significant causal factor leading to Standard 3 not being met.
- I have determined that the wild horse population is a significant causal factor to Standard 3 not being met.
- I have determined that livestock management and wild horse herd management are not in conformance with the guidelines.
 - Refer to the Carico Lake Allotment Rangeland Health Assessment and Appendix 10 for a detailed discussion.

Standard 4: Cultural Resources - MET

Land use plans will recognize cultural resources within the context of multiple use.

Rationale:

Based on the evaluation of existing information pertaining to range improvements and grazing, cultural resources are being recognized within the context of multiple-use management within the Carico Lake Allotment.

DETERMINATION (RAC Standard 4 Cultural Resources):

Therefore, Standard 4: Cultural Resources is being **MET** for the Carico Lake Allotment.

- I have determined that livestock grazing is allowing for Standard 4 to be met.
- I have determined that the wild horse population is allowing for Standard 4 to be met.
- I have determined that livestock and wild horse herd management is in conformance with the guidelines.
 - Refer to the Carico Lake Allotment Rangeland Health Assessment and Appendices.

Standard 5: Healthy Wild Horse and Burro Populations - NOT MET

Significant Progress Being Made - NO

Wild horses and burros exhibit characteristics of a healthy, productive, and diverse population. Age structure and sex ratios are appropriate to maintain the long term viability of the population as a distinct group. Herd management areas are able to provide suitable feed, water, cover and living space for wild horses and burros and maintain historic patterns of habitat use. As indicated by:

- Healthy rangelands that provide sufficient quantities and quality of forage and water to sustain the appropriate management level on a year long basis within a herd management area.
- Wild horses and/or burros managed on a year-long basis for a condition class greater than or equal to five to allow them normal chances for survival in the winter (see glossary for equine body conditioning definitions).
- *Highly adoptable wild horses and burros that are readily available from herd management areas.*
- Wild horse and burro herds that exhibit appropriate age structure and sex ratio for short- and long-term genetic and reproductive health.

Rationale - South Shoshone and Bald Mountain Herd Management Areas (HMAs)

The majority of the key management areas within the HMAs are not meeting Habitat Standard 3. The majority of the riparian areas that occur within the HMAs are Functioning-at-Risk or Non-Functional; therefore, Riparian Standard 2 is not being met within the HMA. Livestock and wild horses were identified as causal factors for the riparian and vegetation standards not being achieved within the HMA.

Wild horse populations are concentrated and proper distribution of wild horses is not occurring within both the HMAs.

The condition of wild horses within each HMA is good and they appear to be healthy and average in size. Due to characteristics of wild horses in the HMAs and overall condition it is expected that these wild horses would be highly adoptable.

Despite the above factors, the HMAs are not meeting the Standard for several reasons. Appropriate Management Level (AML) has not been established or achieved, which would ensure that the number of wild horses is in balance with the forage, water and living space within this allotment. The habitat in much of the HMAs is in poor condition due to limitations in production of perennial grasses, which include low production or the absence of key perennial grasses from the plant community. Due to the inability to control the wild horse populations by gathering excess numbers the population has exceeded the capacity of the land.

As a result of the above factors, Standard 5: Healthy Wild Horse and Burro Populations is **NOT MET and** *Significant Progress is not being made*. Refer to Appendix 10 for the complete evaluation of the standard.
DETERMINATION (RAC Standard 5 Healthy Wild Horse and Burro Populations)

- I have determined that the wild horse population is a significant causal factor to Standard 5 not being met.
- I have determined that wild horse herd management is not in conformance with the guidelines.
 - Refer to the Carico Lake Allotment Rangeland Health Assessment and Appendices.

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Date