PROPOSED ELKO RMP WILD HORSE AMENDMENT

and

ENVIRONMENTAL ASSESSMENT

BLM/EK/PL-2003/024

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The Proposed Elko Resource Management Plan Wild Horse Amendment and Environmental Assessment outlines and analyzes the impacts of the proposed designation of wild horse herd management areas for the Little Humboldt and Rock Creek herds. The areas are located in the northwest part of Elko County, Nevada.

For further information contact Bryan Fuell, Wild Horse and Burro Specialist, Bureau of Land Management, 3900 East Idaho Street, Elko, Nevada 89801, telephone (775) 753-0200.

Proposed Elko RMP Wild Horse Amendment/EA
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Chapter 1 – Introduction

1.1 Background

In 1987, the Bureau of Land Management (BLM) issued the Elko Resource Management Plan (RMP). The Elko RMP planning area covers the western portion of the Elko district in northeastern Nevada. This planning area is comprised of approximately 6 million acres, of which over 3 million acres is public land that is administered by the Elko Field Office (FO).

A Draft Environmental Impact Statement (DEIS) and Final Environmental Impact Statement (FEIS) for the Elko RMP were issued in 1985 and 1986, respectively, with a Record of Decision (ROD) issued on March 11, 1987. Pertinent information from these documents is incorporated by reference in this RMP Amendment and Environmental Assessment (EA). Pages 33-35 of the ROD provide direction for the management of four wild horse herd areas (HAs). *HAs are limited to areas of public lands identified as being habitat used by wild horses at time of the passage of the Wild Free-Roaming Horse and Burro Act of 1971*, as amended (1971 Act; 16 U.S.C. 1331-1340; P.L. 92-195). The four HAs in the Elko RMP planning area are the Little Humboldt, Rock Creek, Owyhee and Diamond Hills (North). As shown on Map 1, the HAs are all located in Elko County. They total approximately 710,000 acres, of which about 92 percent are public lands.

Map 1 shows that the Diamond Hills HA is located in the far southwest corner of the Elko district. It is currently referred to as Diamond Hills North HA, to distinguish it from the neighboring Diamonds Hills South Herd Management Area (HMA) administered by BLM's Ely FO, and the Diamond HMA of the Battle Mountain FO. The Little Humboldt, Rock Creek, and Owyhee HAs are located in the far northwest corner of the Elko District. West of these three HAs are the Little Owyhee and Snowstorm Mountains (referred to as the Bullhead HA in the1987 RMP) HMAs. These adjacent HMAs are partly within the Elko district, but are managed by the Winnemucca FO.

While the 1987 RMP recognized the four HAs, it did not clearly designate them as HMAs. *HMAs are designated only on areas of public lands within HAs where long-term management of wild horses can be sustained*. In implementing the RMP, each HA has been managed as an HMA. A review of the 1987 Elko RMP with respect to wild horse management within the planning area identified that conflicts may exist for the management of wild horses in balance with uses by livestock, wildlife and fisheries in certain areas. As a result, it has been determined that an amendment to the 1987 RMP is needed, to address and resolve these conflicts and to determine specifically where wild horses can be managed in balance with fisheries, wildlife and livestock over the long term.

This Proposed Elko RMP Wild Horse Amendment (Amendment) has been completed in accordance with the Federal Land Policy and Management Act of 1976 (FLPMA, 43 U.S.C. 1711) and the 1971 Act. This EA has been prepared for compliance with the National Environmental Policy Act of 1969, (NEPA; 42 U.S.C. 4332 *et seq.*), to analyze the impacts of the alternatives for the Amendment.

1.2 Purpose and Need

The 1987 RMP serves as the Elko Field Office's guidance for wild horse management actions. An amendment to designate HMAs within portions of Little Humboldt and Rock Creek HAs is needed to resolve issues for the protection of Lahontan cutthroat trout (LCT) and improve riparian habitat. This fish is listed as threatened under the Endangered Species Act of 1973 (16 U.S.C. 1531-1544) (ESA). LCT are present in the Little Humboldt and Rock Creek HAs. Portions of Trout Creek within the Rock Creek HA have been identified as a potential reintroduction site in the LCT Recovery Plan, but reintroduction into this stream cannot occur without substantial improvement in stream and riparian habitat conditions. Management of free-roaming wild horses in areas important to the protection and recovery of LCT reduces opportunities to control grazing through changes in livestock management. As identified in the Background section above, the Elko RMP did not clearly identify HMAs within the 4 HAs designated in the Elko RMP. This amendment also serves to clearly identify and designate the HMAs managed through the Elko RMP.

As stated on page 1-1 of the FEIS (BLM, 1986), the purpose of an RMP is "*…to provide a framework to ensure that public lands are managed in accordance with principles of multiple use and sustained yield.*" BLM wild horse regulations at 43 CFR 4700.6 specifically require that, "*wild horses be managed as self-sustaining populations of healthy animals in balance with other uses and the productive capacity of the habitat. Wild horses shall be considered comparably with other resource values in the formulation of land use plans. Management activities affecting wild horses shall be undertaken with the goal of maintaining free-roaming behavior.*"

BLM's management of wild horses is governed by the 1971 Act. As the RMP FEIS notes on page 1-6, "*The purpose of this Act is to ensure the preservation of a unique feature of our Western heritage, as well as to prevent undue competition among wild horses, livestock and big game.*" BLM's responsibility to protect wildlife species in conjunction with managing for wild horses is also clearly stated in the 1971 Act: "*All management activities shall be at the minimal feasible level and shall be carried out … to protect the natural ecological balance of all wildlife species which inhabit such lands, particularly endangered wildlife species.*" Other resource values considered in amending the Elko RMP for the management of wild horses include the protection of crucial habitat for other fish and wildlife species of special concern, and the preservation of wilderness suitability.

The focus of this amendment is to achieve rangeland health standards as stated in the Northeastern Great Basin Area Standards and Guidelines approved by the Secretary of Interior February 1997 and revised December 2000. These standards cover uplands, riparian and wetlands, habitat, cultural resources, and wild horses.

1.3 Current Management Situation

Table 1-1 lists the size and land status of each of the four HAs. The four areas comprise approximately 710,000 acres of public and private land. Livestock grazing and dispersed recreation are the predominate uses in each area.

Table 1-1
Wild Horse Herd Areas/Land Status

Herd Area	Public Land (Acres)	Private Land (Acres)	Total (Acres)	Percent Private	Grazing Allotment
Little Humboldt	53,377	10,560	**63,937**	19.8%	Little Humboldt
Rock Creek	145,140	38,356	**183,496**	26.4%	Spanish Ranch Squaw Valley
Owyhee	336,262	2,842	**339,104**	0.8%	Owyhee
Diamond Hills North	69,056	1,423	**70,479**	2.1%	Red Rock Browne
TOTALS	657,016	53,181	**710,197**		

The 1987 Elko RMP designates certain streams within the Little Humboldt and Rock Creek HAs as high priority habitat for LCT, and streams in the Rock Creek and Owyhee HAs as high priority habitat for a BLM sensitive fish species, the Interior redband trout (*Oncorhynchus mykiss gairdneri)*. All of the HAs also include areas of crucial habitat for the management of other wildlife game species. This includes sage grouse (*Centrocercus urophasianus*), pronghorn antelope (*Antilocapra americana*), and mule deer (*Odocoileus hemionus*) in all four HAs, and bighorn sheep (*Ovis canadensis*) in portions of the Little Humboldt HA. The Little Humboldt HA includes portions of the South Fork Little Humboldt River Wilderness Study Area (WSA). Portions of the Owyhee Canyon and South Fork Owyhee River WSAs are located in the Owyhee HA (Map 1).

Management Determinations of the 1987 RMP

Page 33 of the ROD also established the objective to "*Manage wild horse populations and habitat in the established herd areas consistent with other resource uses*." Short-and long-term management actions prescribed by the 1987 RMP are to:

1. Manage the four wild horse herd areas with an appropriate management level of 330 horses.
1. Monitor wild horse populations and habitat conditions.
2. Construct two water development projects (catchment type).
3. Conduct wild horse gatherings as needed to maintain numbers.

Issuance of the Elko RMP Rangeland Program Summary, on July 23, 1987, further identified allotment-specific management objectives for livestock, wildlife and wild horses, in terms of forage allocations, priorities for the development of activity plans, and management actions. *Activity plans are multiple-use in nature and prescribe area-specific actions to monitor and improve rangeland conditions.* In Nevada, allotment-specific determinations are made by allotment management plans and/or agreements with permittees. "*Multiple use decisions*" (MUDs) are based on area-specific evaluations, and include establishment of the *appropriate management level* (AML) for wild horses in combination with consideration of grazing and wildlife use in an area.

Water developments have been constructed to benefit wild horses. Wild horse gathers have occurred in each HA. Gathers are planned to follow Standard Operating Procedures (SOPs), and include collection of data for use in developing population management plans (PMP).

Standard Operating Procedures

Page 39 of the ROD also provides general standard operating procedures common to all resource management issues, which include:

- The RMP will be implemented through activity plans.
- Management of public lands will be under the principles of multiple-use and sustained yield.
- Any valid use, occupancy, or development of public lands will be considered subject to environmental review procedures

Herd Size and Appropriate Management Levels for Wild Horses

As mentioned above, the objective from the 1987 RMP was to "Manage wild horse populations in their current herd areas consistent with other resource use," and it prescribed a long term management action to manage the four wild horse herd areas with a target population (or appropriate management level) of 330 horses. After the RMP was issued, the Interior Board of Land Appeals (IBLA) issued a consolidated decision (IBLA 88-591, 88-638, 88-648, and 88-679) that invalidated the RMP numbers for wild horses because they were set for administrative convenience rather than being based on monitoring data. It clarified that a wild horse herd size is to be established based on the concept of maintaining a thriving ecological balance. Therefore, the objective in this Amendment has been reworded as follows: "*Manage for a wild horse herd size which will maintain a thriving ecological balance consistent with other multiple uses while remaining within the wild horse herd area.*" The allotment evaluation and MUD processes are used to determined how many wild horses can properly be supported and managed by area-specific activity or implementation plans.

As the Elko RMP has been implemented to provide for the management of wild horses within grazing allotments, the AML has been determined or proposed for each wild horse herd based on monitoring data. For each HA, Table 1-2 shows the initial stocking level for wild horses specified in the 1987 RMP (330 wild horses) and the currently estimated herd size, as of 2003. It also identifies the current desired herd size (598 wild horses), as it has been determined or is proposed.

Table 1-2
Wild Horse Herd Size
(Number of Adult Wild Horses)

WILD HORSE HERD AREA	1987 RMP INITIAL STOCKING LEVEL	2003 POPULATION ESTIMATE	CURRENT DESIRED HERD SIZE (*see notes)	*NOTES FOR CURRENT DESIRED HERD SIZE
Little Humboldt	107	175	80	*AML, based on monitoring data from the May 2002 Draft Little Humboldt Allotment Evaluation and stipulated agreement dated 6/24/02 See Section 3.3.3.
Rock Creek	119	773	250	*Proposed AML, based on monitoring data from the Rock Creek Allotment Evaluation, more recent monitoring data as of March 2000
Owyhee	58	239	231	*AML established by the Owyhee Allotment Final MUD dated 4/19/02.
Diamond Hills North	46	71	37	*AML established in 1997 through agreements with grazing permittees for the Red Rock (31 horses) and Browne (6 horses) Allotments.
Total number Of Wild Horses	**330**	**1,258**	**598**	

The current estimated herd size is based on data from the most recent census and/or gathers of wild horses that have occurred combined with expected reproduction. Monitoring of wild horse herds includes conducting aerial census counts to estimate herd size and assess health, reproduction, condition, distribution, and composition. Census activities are dependent on funding. To maintain herd size at the desired level, a census may be conducted as often as every 2-3 years. A gather is normally scheduled based on the BLM's 2001 Gather Strategy, where on a Bureau-wide basis, all HMAs will be gathered on a four-year cycle to manage horses. Some gathers have also been conducted in response to emergency situations, such as drought conditions or an emergency rehabilitation of a burned area following a wildland fire.

1.4 Related Resource Programs and Policies

Wilderness Study Areas

The Little Humboldt and Owyhee HAs include WSAs. According to the Interim Management Policy (IMP) for Lands Under Wilderness Review (H-8550-1), Chapter III, Policies for Specific Activities; Section E, Wild Horse and Burro Management, "The Bureau must endeavor to make every effort not to allow populations within WSAs to degrade wilderness values, or vegetative cover as it existed on the date of the passage of FLPMA. Wild horse and burro populations must be managed at AML as determined by monitoring activities to ensure a thriving natural ecological balance." The IMP also states under Chapter 1, Section B, Specific Policy Guidance, "…the wilderness resource will be dominant in all management decisions where a choice must be made between preservation of wilderness suitability and other competing uses."

Sage Grouse

To promote the conservation of sage grouse and its habitat which may occur on public lands in each of the wild horse HAs, BLM follows the October 2000 "*Management Guidelines for Sage Grouse and Sagebrush Ecosystems in Nevada*." Page 8 of this document recognizes grazing has altered sage grouse habitat over the last century, and that the management goal for wild horses is to manage them as components of the public land and to manage them in a manner that preserves and maintains a thriving natural ecological balance in a multiple-use relationship.

1.5 Other Pertinent Statutes and Regulations

Endangered Species Act

The Endangered Species Act (ESA) provides a means to conserve threatened and endangered species and the ecosystem upon which they depend. The ESA directs all Federal agencies to use their authorities to further the purposes of the ESA by carrying out programs to conserve T& E species. This includes meeting responsibilities for the BLM to consult with the U.S. Fish and Wildlife Service under section 7(a)(2) of the ESA. Section 3.3.6 of this EA also provides an evaluation of the effects of this proposed RMP amendment on listed species that may occur under the wild horse HMA alternatives.

The. LCT Recovery Plan (1995) identifies the Rock Creek and Little Humboldt Subbasins within the Humboldt River Basin as important sites for recovery of the subspecies within the Humboldt Distinct Population Segment.

Nevada BLM Special Status Species

While BLM has a legal obligation to manage habitat for the protection of species listed species under the ESA, it is also BLM policy to ensure its management actions conserve and enhance candidate and sensitive species and their habitats (BLM Manual 6840). Nevada BLM policy is to provide State of Nevada listed species and Nevada BLM sensitive species of plants and animals with the same level of protection provided for species that are candidates for listing as threatened or endangered under the ESA. Section 3.3.6 of this EA also provides an evaluation of the effects of this proposed RMP Amendment on such species that may occur in designated wild horse HMAs.

Livestock Grazing

Regulations for the Protection, Management and Control of Wild Free-Roaming Horses and Burros at 43 CFR 4710.5 allow for the temporary or permanent closure of public lands to livestock grazing if necessary to protect wild horses when conflicts exist. After appropriate consultation if a closure becomes necessary, a Notice of Closure would be issued to affected and interested parties.

Native American Consultation

As required by section 202 (c) (9) of FLPMA, Federally recognized Tribes are being provided an opportunity participate in the development of this RMP Amendment to address consistency with Tribal plans, and to comply with specific planning authorities. Such authorities include section 101(d)(6) of the National Historic Preservation Act, the American Indian Religious Freedom Act, Executive Order 13007 (Indian Sacred Sites), and Executive Order 12898 (Environmental Justice).

Governor's Consistency Review

FLPMA and associated planning regulations also require that all BLM land use plans or plan amendments undergo a 60-day Governor's consistency review prior to final approval.

1.6 Planning Process, Issues and Criteria

The land use planning process, as mandated by FLPMA, involves nine basic planning steps. Steps 1 and 2 are identification of issues and development of planning criteria. Steps 3 through 8 are for the development of alternatives, analysis of impacts and the selection of a proposed plan. Step 9 is for monitoring and evaluation of the selected plan. Section 1.3 of this chapter includes information from the analysis of the management situation (step 3 of the planning process). Chapters 2 and 3 address steps 4 through 8 of the planning process, and discuss monitoring and evaluation of this Amendment (step 9) in accordance with guidance of the Elko RMP

On February 10, 2003, a Notice of Intent to prepare the Amendment and EA was published in the Federal Register (68 FR 6769-6770). During the 30-day scoping period from February 10 to March 12, 2003, the public was asked to review preliminary planning issues and criteria and informational materials and to provide comments pertinent to determining the scope of the proposed Amendment and EA.

The planning issues for wild horses addressed by the Elko RMP involved "…The determination of what areas will be designated as herd management units and how many wild horses will be maintained within designated herd units (1986 Proposed RMP/Final EIS, page 1-6)". The following issues are addressed in this EA for this RMP Amendment by the formulation of alternatives and an analysis of the effects of each alternative.

1) Where will wild horse herds be managed and maintained by the Elko FO?
2) What wild horse management requirements and practices are needed?
3) What constraints, if any, should be placed on the management of other resources?
4) Are there opportunities to conserve wildlife consistent with management of wild horses?
5) At what population levels will wild horse herds be managed, and how will adjustments be made in management levels?

No comments were received on the planning criteria during the scoping period. These planning criteria are:

1. The Wild Horse Management RMP Amendment will be completed in compliance with the FLPMA and the Wild Free Roaming Horse and Burro Act of December 15, 1971, as amended. Land use planning requirements established by sections 201 and 202 of FLPMA and the regulations in 43 CFR 1600 will be followed. Decisions for the management of wild horses made by the land use plan amendment will be the basis for every on-the-ground action the BLM undertakes.

2. The analysis for the proposed Elko RMP amendment will identify the current management situation for each of the wild horse herds, identify and explore alternatives for achieving desired future conditions, and determine objectives and provide guidance for implementation actions necessary to achieve desired goals.

3. Public participation will be encouraged throughout the process. Elko Field Office managers and interdisciplinary team members will work cooperatively with the State of Nevada, tribal governments, county and municipal governments, other federal agencies, local resource advisory councils, wild horse advocacy groups, affected permittees, and any other interested groups, agencies, and individuals.

4. The associated EA will be prepared to follow requirements of NEPA and Council of Environmental Quality (CEQ) regulations at 40 CFR 1500-1508. The EA will analyze the potential impacts of alternatives for management, including the no action alternative (continue current management). Alternatives and issues to be addressed are expected to involve concerns and values for wild horse management in conjunction with wildlife habitat and livestock grazing. If at any time analysis indicates significant environmental impacts may result from implementation of the proposed amendment, the Elko Field Manager would seek approval for preparation of an Environment Impact Statement, and adjustments would be made to the planning schedule.

5. The Amendment will incorporate the Nevada Rangeland Health Standards and Guidelines and be consistent with the current strategies and agreements reached for the conservation of sage grouse. Land health assessments, such as allotment evaluations, watershed assessments and riparian surveys, will be used when appropriate to support land use decisions for the amendment, and identify where implementation decisions (such as Multiple Use Decisions) are needed for actions to improve rangeland conditions to meet objectives for wild horses, livestock, fisheries, and wildlife.

6. To the extent consistent with federal law, decisions in the Amendment will strive to be consistent with the existing plans and policies of adjacent local, state, tribal and federal agencies. A Governor's Consistency Review will be completed on the Proposed Amendment, concurrent with a 30-day public protest period. If significant changes result from these reviews, the documents would be released for another 30-day public comment period after revision.

7. Any protests received during the 30-day public review period for the Proposed Amendment will be addressed using BLM procedures.

1.7 Proposed Plan

The BLM's nine-step planning process, which is described briefly in Section 1.6, includes the steps of developing alternatives, analyzing impacts, and selecting a proposed plan. This document includes the results of alternative development and the analysis of impacts that may result from those alternatives. This document also contains the description of the proposed plan amendment, which is subject to protest, according to the process described in 43 CFR 1610.5-2.

Since this streamlined document contains information included both in a draft amendment/EA and in a proposed plan/EA (essentially the draft and proposed plan amendments have been combined), a brief explanation is warranted to help guide readers through the document.

Chapter 2 is the detailed description of all the alternatives considered, including the proposed action, which is described below as the BLM's proposed plan. Chapter 3 contains the analysis of impacts of the alternatives, including those of the proposed action (which also are the impacts of the proposed plan).

The BLM's proposed plan for managing wild horses in the Little Humboldt and Rock Creek HMAs. The proposed plan is intended to update the 1987 Elko RMP, through the amendment process.

Detailed discussions about wild horse management, Population Management Plans, monitoring and evaluations, range improvements, and standard operating procedures, are included in sections 2.1, 2.2, 2.3, and 2.4, in Chapter 2.

Chapter 2 – ALTERNATIVES

2.1 Valid Existing Management

Management determinations for wild horses that are common to all alternatives are outlined in Table 2-1. They include the desired herd size for each of the four herds, herd size adjustment factors, and other resource constraints.

Table 2-1
Valid Existing Management

Wild Horse Management Objective	Herd Size [1]			Wild Horse Management Practices	Utilization Criteria
	Current Desired Herd Size for HMAs		Herd Size Adjustment Factors		
To manage wild horses within designated HMAs to maintain a thriving natural ecological balance consistent with other resource needs.	Little Humboldt	80	Adjustments will be based on monitoring by allotment-specific evaluations and/or herd-specific population management plans to establish AMLs for each HMA.	1-Conduct gathers as necessary to reach and maintain AML. 2 -Establish monitoring sites as necessary to measure wild horse use and habitat conditions.	Maximum combined use of livestock and wild horses will not exceed 50% of current year's growth on key herbaceous species. Additional utilization criteria may be established or adjusted based on allotment-specific or herd-specific evaluations.
	Rock Creek	250			
	Owyhee	231			
	Diamond Hills North	37			
	TOTAL	**598**			

[1]Number of adult wild horses

The current desired herd size for a given herd is the estimated number of horses that could be sustained while preserving and maintaining a thriving natural ecological balance and multiple-use relationship. It is intended as a starting point for determining appropriate wild horse numbers. Monitoring data will continue to be collected to determine if this objective is being met in a given area, and used to establish the AML for each herd. An adjustment to herd size is made when monitoring indicates change, either up or down, is needed to meet area-specific resource protection and use objectives. Such adjustments would typically be made through issuance of an allotment-specific MUD, which would also establish AML and provide specific objectives and monitoring requirements to address concerns pertinent to the management of livestock, wildlife, fisheries and wild horses in a given area.

2.2 Herd Management Area Designation Alternatives

The Owyhee HA and Diamond Hills North HA in their entirety, can be designated as HMAs by means of a maintenance action on the 1987 Elko RMP, without undergoing alternative development and impact analysis. The planning regulations at 43 CFR 1610.5-4 outline the types of actions which comprise maintenance and do not require plan amendment. The regulations states "Such maintenance is limited to further refining or documenting a previously approved decision incorporated in the plan." As described above under Background, the Elko RMP did not clearly designate the four HAs as HMAs and through implementation of the RMP, each HA has been managed as an HMA. Designating the Owyhee and Diamond Hills North HMAs as coextensive with the HA boundary serves only to clarify and establish the management direction in implementing the RMP for these two HAs and does not expand the scope of resource uses or restrictions, or change the terms, conditions, and decisions of the approved plan.

Therefore, as the result of plan maintenance, the Owyhee HA and the Diamond Hills North HA are HMAs. Analysis of these designations is not required in this EA.

In this section, alternatives for the designation of the **Little Humboldt** and **Rock Creek** HMAs are discussed.

Alternative A is the no action alternative. It is basically described as "Continue Current Management." The Little Humboldt and Rock Creek HAs would be designated as HMAs in their entirety as the Owyhee and Diamond Hills North HAs. **Alternative B** is BLM's Proposed Action for the designation of the Little Humboldt (1B) and Rock Creek (2B) HMAs. These alternatives would designate each HMA to consist of specific delineated areas *within* the HA, and may provide for the removal of wild horses from portions of these two HAs that are outside of the designated HMAs. Such areas, according to census data are generally minimally used by wild horses at the present time. Alternatives for the designation of HMAs that were eliminated from further analysis of in this EA are also described in this chapter.

2.2.1 Little Humboldt HMA Alternatives

Alternative 1A - Little Humboldt HA/HMA (Continue Current Management)
Designate the entire 63,937-acre Little Humboldt HA as shown on Map 2-1, as an HMA. Long-term management of wild horses would not change from its current level. The HMA would include about 10,560 acres of private land (16.5 percent). Numbers of wild horses would be maintained at AML as established by the 2002 Stipulated Agreement. Uses would be managed consistent with use of habitat in the HMA by free-roaming wild horses. A short-term management action could be to manage the Rim Fence to allow movement of wild horses from the Castle Ridge Pasture to other areas in the HMA. This management could include the opening of gates during periods when livestock are not present or removal of the structure. Gathers of wild horses would be planned to achieve AML within the Little Humboldt HMA.

Alternative 1B -- Little Humboldt (Castle Ridge) HMA **(Proposed Action)**
The Proposed Action is to designate only the Castle Ridge Pasture of the Little Humboldt HA as the HMA. Management for wild horses within the proposed HMA would be restricted to the Castle Ridge Pasture, as shown on Map 2-1. This area consists of approximately 17,151 acres, of which about 1,417 acres (8.3 percent) is private land. Census data over the last 20 years has shown the majority (95 percent) of the wild horses are found in the lower elevations of the Castle Ridge Pasture. Gathers of wild horses would be planned to achieve and maintain AML within the new Little Humboldt HMA. With the attainment of AML, vegetative conditions would be expected to make significant progress in meeting the standards as depicted in the Northeastern Great Basin Area Standard and Guidelines (BLM 2000). Portions of the HA not designated as the HMA would be managed as horse free areas.

2.2.2. Rock Creek HMA Alternatives

Alternative 2A - Rock Creek HA/HMA (Continue Current Management)
This alternative is to designate the entire 183,496-acre Rock Creek HA as an HMA. The HA and HMA includes about 38,356 acres of private land (20.9 percent). Map 2-2 shows the land

ownership pattern. An AML would be established through a MUD, and numbers of wild horses would be maintained at AML. Gathers of wild horses would be planned to achieve AML within the Rock Creek HMA

Alternative 2B -- Rock Creek Pastures HMA **(Proposed Action)**
The Proposed Action is to designate the Rock Creek HMA to consist of 126,753 acres within the 183,496-acre HA, to include the Burner Hills, Winters Creek, and Red Cow pastures of the northern portion of the HA (i.e., the portions in the Spanish Ranch Allotment), and extend south into Soldier Field, in the Squaw Valley Allotment portion of the HA (see Map 2-2). The new HMA would still include a substantial amount (about 24,115 acres, or 19 percent) of private land. The area identified for the HMA provides summer and winter range with adequate water and forage sources for wild horses. The removal of Frazer and Trout creek Fields from the proposed HMA is done to meet objectives for crucial habitat identified in the LCT Recovery Plan (1995) for this threatened species. With the establishment and attainment of AML through a Multiple Use Decision vegetation conditions would be expected to make significant progress in meeting the standards in the Northeastern Great Basin Area Standard and Guidelines (BLM 2000). Gathers of wild horses would be planned to achieve AML within the new Rock Creek HMA. Wild horses would be removed from portions of the HA not designated as the HMA. Since this designation would exclude the Frazer Creek Riparian Field and Trout Creek Field these areas would be managed as horse free areas. This is proposed to allow achievement of objectives for LCT, as discussed in the LCT Recovery Plan, in conjunction with improved grazing management.

Any fences within the boundaries of the HMA, would be constructed and maintained to promote recovery of LCT habitat or to protect riparian habitat for redband trout or sage grouse, and not to impede movement of wild horses between summer and winter range. A short-term action would be to move the northwest portion of the Buffalo Fire Rehabilitation fence, to coincide with the boundary between the Spanish Ranch-Squaw Valley allotments.

2.3 Standard Operating Procedures Common to All Alternatives

The following policies and SOPs are applicable to actions proposed for the management of wild horses.

1. Activity and RMP Implementation Plans -- The Elko RMP generally provides for its implementation through site-specific management actions that are outlined in activity plans under the principles of multiple-use and subject to environmental review (1987 Elko RMP ROD, page 39, item 1). The SOP specific to wild horses is for their management to be "…guided by plans that focus on proper population management, habitat improvement, and population and habitat monitoring studies and are coordinated with livestock and wildlife plans and other resource plans (1987 Elko RMP ROD, page 33)." In Nevada, allotment-specific evaluations that consider wild horses, in conjunction with livestock grazing and wildlife result in area-specific determinations of the AML for a given herd. Current emphasis is also to complete PMPs for each herd. Censuses are conducted periodically, and wild horses are maintained at AML by gathering excess animals.

2. Monitoring and Evaluation – RMPs provide for monitoring and evaluation to meet the standard and associated guidelines for rangeland health. Standards and Guidelines to address the health of wild horses and burros were approved by the Nevada State Director on December 14, 2000. This is in conjunction with monitoring to meet four rangeland health standards and associated guidelines of the Northeastern Great Basin Area Resource Advisory Council for upland sites, riparian and wetland sites, habitat, and cultural resources. Monitoring also occurs to meet area-specific objectives for wild horses, wildlife and livestock determined by activity plans (such as AEs/MUDs), PMPs, allotment management plans, and habitat management plans). Adjustments to herd size and the establishment of area-specific AML for wild horses are made based on monitoring.

3. Population Management – PMPs specifically address the biology, ecology, and management of a herd. Within a PMP, the following are described: HMA description, herd history, herd genetic viability, herd social structure, herd demographics, population monitoring and evaluation, and consequences of management actions. Collection of the following data on wild horses captured and released during gathers is useful in preparing and monitoring PMP:

- Blood Samples
- Sex ratio/Age Structure
- Reproduction and Survival
- Characteristics (Color and size)
- Condition Class
- Other data (such as parasite load, disease, percentage of pregnant mares)

A population computer model is used to predict potential effects on population growth rates through implementation of different management strategies. The numbers, age, and sex of animals proposed for removal are analyzed with The Wild Horse Population Model Version 1.35 WinEquus developed by Dr. Steven Jenkins, Associate Professor, University of Nevada Reno.

One tool used to manage a population during gathers is immunocontraception. Porcine zona pellucidae (PZP) immunocontraception is a technique whereby injection of vaccine, derived from the protein membrane surrounding pig egg cells, stimulates the immune system of female wild horses to produce antibodies. At sufficiently high numbers these antibodies inhibit fertilization and, as a result, prevent pregnancy for up to two years. The vaccine is a safe, humane and inexpensive tool to reduce the frequency of gathering excess wild horses.

4. Wild Horse Gathers – Gathers of wild horses are scheduled when data indicates the population of an HMA is not consistent with its AML, and are necessary to achieve and maintain an ecological balance and multiple-use relationship in a given area. Gathers may also be conducted when emergency situations arise from such events as wildland fire or drought.

- Gather plans are subject to environmental review for NEPA compliance prior to their being implemented. Assessments are made available to interested and affected groups and individuals.
- All capture and handling activities are conducted in accordance with SOPs for gathering wild horses. Copies of these SOPs are included with every capture plan.
- Page 11 of the October 2000 "*Management Guidelines for Sage Grouse and Sagebrush Ecosystems in Nevada*" provides the following guidelines: a) Where wild horse and

burro populations are adversely affecting the sage grouse population or habitat, evaluate herd populations and adjust numbers as necessary; b) Locate wild horse and burro capture facilities at appropriate distances from known sage grouse habitat to avoid adverse impacts to the habitat.

- Gathers use contractors with a helicopter and traps to humanely capture animals.
- The BLM uses the Great Basin Wild Horse and Burro Gather Contract to administrate gathers. Helicopter round-ups cannot occur during the foaling season.

5. Wild Horse Selective Removal Criteria - The 1992 Strategic Plan for wild horses defined criteria for limiting the age classes of animals removed so that only the most adoptable animals are removed from the range. The selective removal criteria from fiscal years 1992-1996 allowed the removal of animals five years old and younger. In 1996, the criteria changed to animals nine years old and younger. A decline in the BLM's ability to place sufficient numbers of animals in private care caused the BLM to revert back to the five and under removal policy in 1999. These selective removal criteria made achievement of AML on HMAs unobtainable. A new strategy was needed to reduce all HMAs down to the AML and maintain them at these levels. The fiscal year 2001 appropriation for the Wild Horse Program provided additional funding to implement a strategy designed to achieve AML on all herd management areas by fiscal year 2005. The *Gather Policy and Selective Removal Criteria for Wild Horses, Washington Office IM 2002-095*, was implemented with the following priorities:

a. Age Class Five Years and Younger: Wild horses five years of age and younger may be removed and placed into the national adoption program.

b. Age Class Ten Years and Older: Wild horses ten years of age and older may be removed and placed into long-term holding. Long-term holding are facilities contracted by the BLM used to house wild horses that have been determined unadoptable. These facilities provide forage, water, veterinarian, and all other needs for these animals on a permanent basis.

c. Age Class Six to Nine Years: Wild horses aged six to nine years old should be removed last and only if the HMA cannot achieve AML without their removal.

6. Wilderness- All activities and projects for the management of wild horses, such as gathers and water developments, must conform to the "non-impairment" criteria as stated in the Interim Management Policy for Lands Under Wilderness Review. Under Chapter 1; Section B, Specific Policy Guidance; Part 2, Nonimpairment, "BLM will review all proposals for uses and/or facilities within WSAs to determine whether the proposal meets the criteria below. Uses and/or facilities found to be nonimpairing may be permitted on lands under wilderness review. Uses and/or facilities found to be impairing shall be denied." Non-impairment criteria are:

a. The use, facility, or activity must be temporary. This means a temporary use that does not create surface disturbance or involve permanent placement of facilities may be allowed if such use can easily and immediately be terminated upon wilderness designation. "Temporary" means the use or facility may continue until the date of wilderness designation, at which time the use must cease and/or the facility must be removed. "Surface disturbance" is any new disruption of the soil or vegetation, including vegetation trampling, which would necessitate reclamation.

b. When the use, activity, or facility is terminated, the wilderness values must not have been degraded so far as to significantly constrain Congress's prerogative regarding the area's

suitability for preservation as wilderness**.** The wilderness values to be considered are those described in Section 2 (c) of the Wilderness Act of 1964.

7. Range Improvements – Range improvement projects in wild horse management areas shall be designed to incorporate features for the management of free-roaming wild horses. This includes the construction of fences in wild horse areas that are visible to the animals, and ensuring water and forage is available to meet their habitat requirements.

2.4 Alternatives Eliminated from Detailed Consideration

Eliminate Wild Horses
Eliminating wild horses from the Elko RMP planning area would only be viable if the management of wild horses were not possible in all of the four wild horse HAs. This is not the case, and so this alternative would directly contravene the intent of the 1971 Act, which states "*…They (wild horses) are considered in the area where presently found as an integral part of the natural system of the public lands*" *and are to be* "*protected and managed as components of the public lands*." This alternative is not considered further in this EA.

Eliminate Livestock Grazing from Wild Horse HMAs
Livestock grazing is an established, approved use in the Elko RMP. The Elko ROD 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 (p.20). As outlined above under Purpose and Need, resolution of the HMA boundaries is key to offsetting current limitations on opportunities to make changes to grazing systems to better control livestock grazing and protect LCT habitat. Elimination of livestock grazing in lieu of making changes to grazing systems and adjusting livestock numbers through monitoring is an action not in conformance with the ROD and outside the scope of analysis for clarifying and establishing HMA boundaries, which is the focus of this Amendment. Therefore, elimination of livestock grazing is not carried forward for analysis in this EA. Livestock grazing does need to be conducted in a fashion to make significant progress towards the Rangeland Health Standards established by the Resource Advisory Council in 1997.

Enlarge the Wild Horse HMAs
This suggested alternative was eliminated because HMAs are established only on areas *within* existing HAs. HAs are limited to areas of public lands identified as being habitat used by wild horses at time of the passage of the 1971 Act. It is beyond the scope of this RMP Amendment to consider enlargement of the wild horse HAs established under the 1971 Act, or to establish any new wild horse ranges.

Proposed Rock Creek HMA without Red Cow Pasture
Under this alternative, the Rock Creek HMA would be the same as Alternative 2B (the Proposed Action), except the Red Cow Pasture of the Spanish Ranch Allotment would be managed as a wild-horse-free area. The Red Cow Pasture provides summer habitat for wild horses. This pasture has abundant water sources and higher elevation, which provides a cooler environment from summers higher temperatures. Historical census data has shown a large concentration of horses within the Red Cow Field. The 2002 gather data showed a concentration of

predominately dark brown colored horses within the field. This alternative to exclude the Red Cow Pasture from the HMA was eliminated because this pasture provides crucial habitat for wild horses in the HA.

Proposed Rock Creek HMA without Winters Pasture

Under this suggested alternative, the Rock Creek HMA would be the same as the Alternative 2B (the Proposed Action), except the Winters Creek Pasture of the Spanish Ranch Allotment would be managed as a wild-horse-free area. The Winters Creek Pasture provides summer and winter habitat for wild horses. The pasture has abundant water sources and higher elevation, which provides a cooler environment from summers higher temperatures. Wild horses move through Winters Creek to travel to and from Burner Hills, which is winter habitat. Historical census data has shown a concentration of horses within the field. This alternative to eliminate Winter Creek Pasture from the HMA was eliminated because the pasture provides important habitat for wild horses. It also would divide the HMA into two separate areas, between which the movement of wild horses would be impeded.

Rock Creek HMA in Burner Hills Field Only

Under this alternative, only the Burner Hills Field would be designated as the Rock Creek HMA. The rest of the current HA would be managed as a wild-horse-free area. This alternative was discussed in the 1997 Rock Creek Draft Evaluation to help meet objectives for riparian habitat. It was eliminated because it would not provide adequate summer habitat and water sources for year-round horse use. It would require the elimination of wild horses from their historical habitat. Also, the natural movement into Winters Creek Pasture and Soldier Field, traditional summer habitat, would be unmanageable.

CHAPTER 3 - AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS

3.1 General Setting

The Little Humboldt and Rock Creek HAs were recognized as two areas of wild horse habitat in 1971, when the Wild Free Roaming Horse and Burro Act was passed. The HAs are located approximately 80-90 miles northwest of Elko, Nevada. Geology is typical of that found throughout northern Nevada, with north-south trending mountain ranges separated by wide valley bottoms. Average precipitation is approximately 7 inches at the valley bottoms, and 16-18 inches on the mountain peaks. Most of the precipitation comes in the form of snow when vegetation is dormant. This creates the cold temperate desert of which the HAs are a part. Temperatures can be extreme, ranging from a high of near 100 degrees Fahrenheit in the summer, to a low of 15 degrees below zero in the winter. Movement of wild horses is typically from lower elevations in the winter to higher elevations in the summer.

Vegetation is typical of the Great Basin region and consists primarily of sagebrush steppe types of shrubs and many species of native grasses. Mountain brush and riparian habitat types also occur in the HAs. Higher elevations support aspen groves, but no conifers. Big game species include mule deer, bighorn sheep, and pronghorn antelope. The HAs support some of the most important fisheries habitat in the Elko District.

<u>Little Humboldt Herd Area</u>
The southern end of the Little Humboldt HA, below the Owyhee Bluffs, is characterized by flat to gently rolling terrain (4,570 to 5,700 foot elevations). However, the majority of the HA is characterized by more mountainous terrain ranging from 5,500 to 8,000 feet in elevation.

Wild horses in the Little Humboldt HA have always exhibited an unusual distribution pattern. During every census in the last 20 years, the majority (95 percent) of the wild horses have been found in the Castle Ridge Pasture at 5,900 feet. This distribution at lower elevations would seem normal in the winter months, but not in summer months. This distribution, in combination with private lands in the HA and the occurrence of LCT in streams that are in poor condition, led to the proposal for this amendment to designate only the Castle Ridge Pasture as the HMA.

The headwaters of the South Fork of the Little Humboldt River and its tributaries (Sheep, Pole, Oregon Canyon and Secret creeks) support populations of LCT. The headwaters of the North and South Fork of Jakes Creek and Kelly Creek have populations of brook trout and/or rainbow trout.

The Little Humboldt Allotment Evaluation was issued in March 2002. Preliminary data indicates that the wild horse AML and carrying capacity for the Little Humboldt HA is 80 (960 AUMs) wild horses.

<u>Rock Creek Herd Area</u>
The highest elevation in the HA is 7,742 feet, and the lowest points range around 5,600 feet. Wild horses generally winter and move from the lower elevations in Burner Hills to summer at the higher elevations in Soldier and Red Cow fields.

A number of miles of Rock and Frazer creeks are occupied by LCT. Trout Creek has been identified as a potential reintroduction site in the LCT Recovery Plan issued by the U.S. Fish and Wildlife Service in 1995. The reintroduction of LCT cannot occur without substantial improvement in stream and riparian habitat conditions. Redband trout, a Nevada BLM sensitive species, are found in portions of Four-Mile, Chino, and Red Cow creeks, and the South Fork of the Owyhee River. Although redband trout were documented in Winters Creek in 1988, surveys by the Nevada Department of Wildlife in 2002, indicate the species may have been extirpated from this stream.

Preliminary data from the March 1997 Draft Rock Creek Allotment Evaluation indicated that the wild horse AML within the Rock Creek HA should be set at 250 (3000 AUMs) animals. This recommended AML is divided between the two grazing allotments in the HA, the Spanish Ranch and Squaw Valley allotments, as 153 and 93 wild horses, respectfully.

3.2 Critical Elements Present or Not Affected

The following critical elements of the human environment are not affected by the alternatives for this wild horse RMP amendment:

Air Quality
Areas of Critical Environmental Concern
Environmental Justice
Prime/Unique Farmlands
Hazardous/Solid Wastes

Critical elements present, but not affected include the following:

Cultural Resources – On-the-ground surveys that have been completed for projects in the Elko RMP planning area have identified over 7,000 historic and prehistoric sites. It is currently estimated that over 50,000 sites are present, but information is lacking concerning the likelihood of sites being located within the wild horse HAs. The HMA designation alternatives have no potential to affect cultural resources that may be present. Surveys are completed on areas to be disturbed by any project proposed in the planning area, and all projects are designed to mitigate any adverse effects to cultural resources.

Noxious Weeds -- Noxious weeds are known to exist within the HAs. Noxious weeds are aggressive, typically nonnative, ecologically damaging, undesirable plants, which invade sites and severely threaten biodiversity, habitat quality and ecosystems. The alternatives considered for this amendment have no potential to affect noxious weeds. Projects in wild horse HA are designed to avoid the spread of noxious weeds.

Native American Religious Concerns --Various Tribes and bands of the Western Shoshone have stated that federal projects and land actions could have widespread effects on their culture and religion because they consider the landscape as sacred and as a provider. However, the alternatives have a low potential to negatively impact any specific Native American religious aspect or traditional cultural property.

Wilderness-- The Little Humboldt HA includes 5,873 acres of the Little Humboldt River WSA (Map 1). Consistent with the *Interim Management Policy for Lands Under Wilderness Review* (H-8550-1), under Chapter 1; Section B, Specific Policy Guidance, "the wilderness resource will be dominant in all management decisions where a choice must be made between preservation of wilderness suitability and other competing uses." Both alternatives for designation of the Little Humboldt HMA provide for the inclusion of the Little Humboldt WSA. All projects and activities, including gathers of wild horses to maintain the AML within an HMA and WSA, must conform to the "nonimpairment" criteria as stated in the Interim Management Policy for lands under wilderness review, as described in section 2.3. Thus, neither of the Little Humboldt HMA alternatives considered for this wild horse RMP Amendment have the potential to affect WSAs.

3.3 Affected Resources/Effects of Alternatives

The following sections analyze the effects of the Little Humboldt and Rock Creek HMA alternatives for each resource of concern.

3.3.1 Land Status and Use

Map 2-1 shows the distribution of public and private land for the Little Humboldt HMA alternatives, and Map 2-2 shows it for Rock Creek. Table 3-1 lists the acreage of public and private land and the total size of each the alternative HMAs.

Table 3-1
Wild Horse HMA Land Status

HA/HMA	Public Land (Acres)	Private Land (Acres)	Total (Acres)	Percent Private
1A-Current Mgt	53,377	10,560	**63,937**	19.8%
1B-Proposed Action	15,734	1,417	**17,151**	8.3%
2A-Current Mgt.	145,140	38,356	**183,496**	26.4%
2B-Proposed Action	102,638	24,115	**126,753**	19%

Effects of Little Humboldt and Rock Creek HMA Alternatives
If the Little Humboldt HA is designated as the HMA (Alternative 1A), almost 20 percent of the HMA would be private land. As discussed in the livestock grazing section (3.2.3), most of the private land is currently unavailable for use by wild horses due to fencing by landowners. Limiting the area of the Little Humboldt HMA to the 17,151 acres of the Castle Ridge pasture (Alternative 1B) would result in a reduction in the amount of private land within the HMA to only 8.3 percent, and would create a situation for the long-term management of wild horses on public lands. Management of wild horses would have reduced impacts to lands that are privately owned (Map 2-1).

Most of the private land in the Rock Creek HA is unfenced. Wild horse use of private land in conjunction with public lands is not expected to create long-term management problems under either HMA alternative. If the entire Rock Creek HA is designated as the HMA (Alternative 1B), over 26 percent of the HMA would continue to consist of private land. This percentage would be reduced to 19 percent under the Proposed Action (Alternative 2B). Wild horses occurrence lands that are privately owned would be reduced (Map 2-2).

3.3.2 Vegetation

Little Humboldt Vegetation

Vegetation is predominantly Wyoming big sagebrush (*Artemesia tridenta*ta *wyomingensis*), Sandberg bluegrass (*Poa secunda*) and bottlebrush squirreltail (*Elymus elymoides*, formerly *Sitanion hystrix*) in the lower elevations. The higher elevations are primarily dominated by dense mountain big sagebrush vegetation type, which includes low sage (*Artemesia arbuscula spp*.), antelope bitterbrush (*Purshia tridentata*), mountain snowberry (*Symphoricarpos oreophilus*), serviceberry (A*melanchier utahensis*) and grasses such as Idaho fescue (*Festuca idahoensis*) and bluebunch wheatgrass (*Pseudoroegneria spicata*). About 7 percent of the Little Humboldt Allotment is comprised of ecological sites where quaking aspen (*Populus* spp.) is the potential dominate overstory vegetation. This would equate to about 4,915 acres of aspen woodland-dominated habitat. (BLM, 2002)

Castle Ridge is a long, high ridge running north/south through the Castle Ridge Pasture of the allotment. The highest elevation along the ridge is approximately 7, 825 feet and the ridge gradually slopes off becoming flat and part of the Owyhee Desert. The majority of the pasture is approximately 5,000 feet in elevation and consists of vegetation typical of the Owyhee Desert: Wyoming big sagebrush with an understory of Sandberg's bluegrass, bottlebrush squirreltail, Great Basin wildrye (*Leymus cinereus*) and smaller amounts of bluebunch wheatgrass and Idaho fescue. Wild horse utilization data was collected during the fall of 2002 and utilization of bluebunch wheatgrass was found to be 60% in some locations. Other areas of historic over-use by wild horses include the areas around springs and seeps on Castle Ridge. Wild horses tend to congregate around the water sources (seeps and springs) and cause trampling and overuse of vegetation, which can lead to death of plants resulting in bare ground. Trampling leads to soil compaction, and compacted areas do not recover easily. (BLM, 2002)

Effects of the Little Humboldt HMA Alternatives

If current management is continued and the entire HA is designated as the HMA (Alternative 1A), wild horse use would continue to be primarily in the Castle Ridge Pasture, and use in the remainder of the HMA would continue to be none to slight. North and South pastures of the South Fork Little Humboldt River Basin (Basin) would continue to have incidental to slight use. Upland vegetation around springs and seeps could continue to be impacted by concentrations of wild horses.

Under Alternative 1B (Proposed Action), wild horses would be managed within the Castle Ridge Pasture only. With the attainment of AML, vegetative conditions would be expected to make significant progress in meeting the standards as depicted in the Northeastern Great Basin Area Standard and Guidelines (BLM 2000).

Rock Creek Vegetation

The area is characterized by terrain ranging from flat and gently rolling to mountainous. Elevations range from 4,500 feet to peaks of 8,500 feet. Vegetation for both of the allotments is diverse ranging from crested wheatgrass seeding to sage communities. The major plant associations are characterized as big sagebrush-grass and low sagebrush-grass. The big sagebrush-grass and low sagebrush-grass types are dominated by big sagebrush, low sagebrush, shadscale, and rabbit brush (*Chrysothamnus* spp.), respectively. Major grass species include bluebunch wheatgrass, Idaho fescue, Sandberg bluegrass, needlegrass (*Stipa* spp.), and bottlebrush squirreltail. Key forb components include arrowleaf balsamroot (*Balsamorhiza sagittata*), lupine (*Lupinus* spp.), phlox (*Phlox* spp.), and aster (*Aster* spp.). The higher elevations found in the Tuscarora Mountains also include mountain browse types interspersed with the low sagebrush, mountain big sagebrush-bitterbrush, mountain big sagebrush-mountain shrub, and quaking aspen vegetation types. Montane riparian shrub habitat is dominated by several species of willows as part of the willow vegetation type with some areas also dominated by shrubs such as Wood's rose and chokecherry as part of the mixed deciduous shrub vegetation type. Aspen stands are commonly interspersed within these vegetation types.

Currently, season-long grazing by livestock is permitted, primarily due to lack of fenced pastures to facilitate control of livestock movement. Over the last ten years wildfires have burned large areas within the Squaw Valley and Spanish Ranch Allotments converting sagebrush ecosystems into annual grass communities. The loss of sagebrush, native grasses, and forbs in some of these areas may have a negative impact on wildlife, such as mule deer, sage grouse, and other sagebrush obligates, as well as on livestock and wild horses. To help maintain and restore important vegetative communities, treatments such as seedings, prescribed fire, mechanical thinning, and fuel breaks will continue.

Effects of the Rock Creek HMA Alternatives

Designation of the Rock Creek HA as the HMA and continuing current management (Alternative 2A) may result in a continued downward trend in the condition of vegetative communities, primarily because it may constrain efforts to improve grazing management. If grazing continues without a substantive change in management, no improvement in the condition of riparian and upland vegetation would be expected. The attainment of rangeland management standards would not occur. Loss of understory vegetation such as grasses and forbs may occur. This could increase invasion by non-native annuals such as cheatgrass and provide for exceedingly high shrub density. Aspen stands would also be impacted if they continued to be grazed season long. Continued hot season use by livestock could impact the regenerating suckers and potentially eliminate small isolated stands of aspen.

Under Alternative 2B (Proposed Action), wild horse management would be restricted to the Burner Hills, Winters Creek, Red Cow, and Soldier Field Pastures. Vegetation would continue to be used by wild horses. This alternative would allow for development of a management system that would make significant progress towards attainment of rangeland health standards. Proper management would reduce shrub density and increase grass and forb production and reduce impacts to aspen stands. Managing for healthy plant communities will reduce the risk of invasion by exotic annuals and noxious weeds.

3.3.3 Livestock Grazing

Little Humboldt Grazing

The 64,000-acre Little Humboldt HA comprises 76 percent of the Little Humboldt Allotment. A significant amount (almost 20 percent) of the HA is private land. There is a single permittee in the allotment and the season of use is from 3/16 to 11/30 annually. Current authorized use is 8,279 AUMs. The allotment has a long history of litigation. Private landowners have constructed fences that exclude wild horses from most of their lands. The Little Humboldt Allotment Evaluation was issued for comment in March 2002. A decision to close the North and South Basin pastures followed in May and was appealed by the livestock permittee (Oro Vaca). To address and resolve the matter, the BLM and permittee agreed to a Stipulation to Modify Decision and to Dismiss Appeals (Stipulated Agreement) on June 24, 2002. The permittee and BLM agreed to reduce wild horses to 80 head as recommended by the Little Humboldt Allotment Evaluation, and to close the North and South Basin pastures to livestock grazing until at least February 28, 2004. BLM also agreed to reconstruct the Castle Ridge Pipeline (which was done in the fall of 2002), and Oro Vaca agreed to take non-use in the Castle Ridge Pasture until horse numbers were reduced (grazing season 2002-2003). Livestock are expected to use the Castle Ridge Pasture during the grazing season 2003-2004 and 2004-2005. At the end of the use period, utilization monitoring will be conducted and a carrying capacity will be determined for the pasture. Forage will then be allocated among wild horses, wildlife and livestock. A MUD is expected to be issued within two years of the Basin being re-opening to livestock use. The MUD would reestablish the AML based on current monitoring data, and further outline actions necessary to meet objectives for livestock, wildlife, and wild horse management within the Little Humboldt Allotment.

Effects of the Little Humboldt HMA Alternatives

If the HA is designated as the HMA (Alternative 1A) and the Rim Fence is managed to allow movement of wild horses from the Castle Ridge Pasture, a few wild horses could continue to utilize the Little Humboldt Basin. Gates could be required left open when cattle leave the Basin to facilitate wild horse movement. This could result in large numbers of cattle re-entering the Basin. If this occurs, it could cause utilization and riparian objectives for LCT not to be met. Wild horses could also get trapped in the Basin, which could result in mortality during the winter due to average heavy snow accumulations. In implementing the terms of the stipulated agreement, the permittee and BLM agreed to reduce wild horses to 80 head. At this level of wild horses, the vegetative resources should improve within the Castle Ridge Pasture. With maintenance of the Castle Springs Pipeline livestock and wild horses distribution would be improved by dispersing animals away from upland seeps and springs.

Under the Alternative 1B (Proposed Action), wild horses would be managed in the Castle Ridge Pasture of the Little Humboldt Allotment. Impacts of grazing would be at the same level as described in Alternative 1A except exclusive to the Castle Ridge Pasture. With the attainment of AML, vegetative conditions would be expected to make significant progress in meeting the standards as depicted in the Northeastern Great Basin Area Standard and Guidelines (BLM 2000). Utilization in the Basin would be closely monitored for the next several years to determine if riparian habitat objectives are being met.

Rock Creek Grazing

In 1988, a Rangeline Agreement was signed dividing the Rock Creek Allotment into the Spanish Ranch and Squaw Valley Allotments. The Spanish Ranch Allotment is 182,588 acres, and consists of four use areas known as Burner Hills, Winters Creek, Hot Creek and Red Cow. The Squaw Valley Allotment is 259,419 acres, and is made up of a large number of acres of unfenced native range, three separate seeded pastures, and two fenced pastures known as the Horseshoe Field and the Indian Springs Field. In 2001, the Buffalo Fire burned over 21,000 acres within the Rock Creek HA, including most of the Fraser Creek watershed, which is inhabited by LCT. In order to allow recovery of the watershed and riparian areas, a fence was constructed around the burned area, and the area was closed to grazing.

Construction in 2003 of a fence dividing the Squaw Valley and Spanish Ranch Allotments for the purpose of improving livestock management for LCT is identified as a minimizing/enhancement measure in the informal consultation with the U. S. Fish and Wildlife Service for the Barrick Goldstrike Mines Inc. Betze Project (BLM, 2003). The Betze Project is located in Boulder Valley south of the Rock Creek basin and includes ground water pumping operations associated with Barrick's Betze-Post Pit and Meikle mines. Once a letter dated July 15, 2002, the Fish and Wildlife Service's concurrence with BLM's determination that the Betze Project was not likely to adversely affect LCT, which was based in part on construction of the Squaw Valley/Spanish Ranch Division fence.

Authorized use within the Squaw Valley and Spanish Ranch Allotments is 26,796 and 21,201 AUMs, respectively. Season of use on the Spanish Ranch is 3/25 to 10/31, while on the Squaw Valley Allotment permitted use is allowed from 4/01 to 11/30. Ellison Ranching Co. controls the base property for the Spanish Ranch Allotment and presently leases the livestock permit for the Squaw Valley Allotment from Barrick Goldstrike Company. The lease on Squaw Valley will expire at the end of the 2003 grazing season. At that time the permit will revert back to Barrick Goldstrike Company unless a new lease agreement is prepared. The permit on the Squaw Valley Allotment authorizes grazing for cattle, sheep, and domestic horses, while cattle and sheep are authorized to graze in Spanish Ranch Allotment. Domestic horses are not authorized to graze within or adjacent to the Rock Creek HA boundary.

In 1997, the Rock Creek Evaluation was completed outlining the condition of both the Squaw Valley and Spanish Ranch Allotments. The Rock Creek Allotment Evaluation was distributed to interested parties for comment in April of 1997. The evaluation recommends that the wild horse AML within the Rock Creek HA be set at 250 animals (3000 AUMs), divided between the Spanish Ranch and Squaw Valley Allotments as 153 and 93 wild horses, respectively. Currently, the Elko Field Office is preparing to issue a MUD for both of the allotments. The Final Multiple Use Decision (FMUD) will implement changes to livestock grazing and set AML for wild horses within the Rock Creek HMA.

Effects of the Rock Creek HMA Alternatives

Changing the Rock Creek HA to an HMA (Alternative 2A) would result in continuing current management for wild horses in the area. This could constrain options for implementing improved grazing management(fencing). Current grazing management consists of large areas of unfenced land that include highly sensitive streams that are home to LCT and redband trout.

These streams would continue to receive heavy use by livestock, further degrading and impacting important fisheries and riparian habitat. This alternative would result in some areas (particularly streams) receiving heavy utilization, and other areas going unutilized.

Under Alternative 2B (Proposed Action), wild horse management would be restricted to the Burner Hills, Winters Creek, Red Cow, and Soldier Field Pastures. The alternative would result in improved forage availability, livestock distribution, vegetation density, vigor, plant reproduction, desired plant community, and productivity. This alternative would allow for significant progress toward attainment of standards for rangeland health.

3.3.4 Wildlife/Habitat

There are approximately 350 species of vertebrate wildlife that potentially occur in northeastern Nevada. As listed in part, on Attachment 1, the HAs provide habitat for many of these species on a seasonal or yearlong basis in association with aspen, sagebrush, intermittent ponds, cliffs and talus, mountain brush, and riparian habitat types.

Although riparian areas comprise a relatively small portion of the available habitat within the HA, they provide a disproportionately higher habitat value for wildlife. Present riparian conditions within the HA are poor, as discussed further in the next section 3.3.5. Upland sites where utilization by livestock and wild horses is light show a good mix of native shrub, forb, and grass species, and are in good condition. Upland areas of more heavily use by livestock and wild horses are in poor condition. Sagebrush communities have heavy shrub cover with a lack of native grass and forb understory. The understory of many upland areas has been invaded by cheatgrass, an annual exotic grass.

Migratory Birds -- On January 11, 2001, President Clinton signed the Migratory Bird Executive Order 13186. It directs executive departments and agencies to take certain actions to further implement the Migratory Bird Treaty Act and to conserve migratory birds. Attachment 2 lists of migratory bird species that may occur in the habitat types of the Little Humboldt and Rock Creek HAs. This listing is from the 1999 Nevada Partners in Flight Bird Conservation Plan.

Little Humboldt Wildlife/Habitat

The Little Humboldt HA provides crucial habitat for mule deer in the winter and summer, crucial habitat for California bighorn sheep year-round, and summer range for pronghorn. Data collected in 1997 indicated that range and wildlife habitat conditions were generally better (diversity and production of vegetation) at a lower elevation site on Castle Ridge compared to upper elevations. Since 95 percent of the wild horse use is in the Castle Ridge Pasture, horses have not affected wildlife habitat conditions in other portions of the HA.

Effects of the Little Humboldt HMA Alternatives

If the HA is designated as the HMA (Alternative 1A), grazing by wild horses during the critical spring-period growth-stage of perennial herbaceous vegetation could result in poor cover and forage diversity for wildlife. Future gathering of wild horses to reach AML is expected to result in improved wildlife habitat conditions. There is a potential for increased use of wildlife habitat outside of the Castle Ridge Pasture if wild horses are allowed to exceed AML and populate the

entire HMA. In addition, opportunities to increase management of grazing to improve riparian wildlife habitat, are reduced or eliminated under this alternative.

Under Alternative 1B (Proposed Action), managing for wild horses in the Castle Ridge Pasture, including maintaining numbers at AML, would result in reduced competition with wildlife species. It would increase the quantity and quality of available forage and cover on upland and riparian/meadow habitat types to benefit wildlife and migratory birds. In the case of raptors, the proposed action would result in improved habitat of prey species. There would be less of a disturbance associated with wild horses along stream bank riparian, meadow and upland habitats. Wildlife habitat conditions would be expected to make significant progress in meeting the standards as depicted in the Northeastern Great Basin Area Standard and Guidelines (BLM 2000).

Improvement of wildlife habitat in the Castle Ridge Pasture is expected if wild horse numbers are maintained at AML, coupled with a grazing system that allows for maintenance or improvement of native perennial grass and forb species and overall dynamics of affected ecological sites, and, in turn, improvement of rangeland health/wildlife habitat.

Rock Creek Wildlife/Habitat

The Rock Creek HA provides habitat for mule deer and pronghorn on a seasonal or yearlong basis. Rehabilitation of areas burned on the Squaw Valley Allotment from the Buffalo Fire in 2001, and needed improvement of Frazer Creek and riparian/meadow habitat, have caused the temporary closure of the area to wild horse and livestock use. An emergency gather of wild horses was completed in 2002. Repetitive use during the critical period of native perennial grass and forb growth on the burned area is of concern as is the potential for large areas being dominated by exotic annual species, including cheatgrass.

Effects of the Rock Creek HMA Alternatives

Continued use of the entire HA as the HMA by wild horses (Alternative 2A)- including repetitive grazing during the critical spring period growth stage of perennial herbaceous vegetation, could have negative impacts that exacerbates poor cover and forage diversity for wildlife. Implementation of the proposed grazing system and gathering horses to AML is expected to result in improved riparian habitat conditions that would improve habitat for sensitive species. There is a potential for increased impacts to wildlife habitat if wild horses are allowed to exceed AML.

Under Alternative 2B (Proposed Action), the Rock Creek HMA would include the Burner Hills, Winters Creek, Red Cow and Soldier fields, and less area would be subject to use by wild horses. With the establishment and attainment of AML, wildlife habitat conditions would be expected to make significant progress in meeting the standards as depicted in the Northeastern Great Basin Area Standard and Guidelines (BLM 2000). Having no wild horses in the Frazer Creek and Trout Creek Pastures would help to achieve habitat objectives for wildlife species in these areas.

3.3.5 Riparian/Wetlands/Aquatic Habitat

Areas influenced by riparian vegetation which collectively provide riparian habitat, include

rivers, streams, springs as running water habitats and lakes, ponds, seeps, bogs, and meadows as standing water habitats. It is estimated that up to 80 percent of the wildlife species in the Great Basin, are directly dependent on riparian habitat. These areas are in poor condition and have been reduced in their potential size, primarily as a result of livestock and wild horses use. Heavy invasion of non-riparian woody vegetation (sagebrush and rabbitbrush) and exotic annual and perennial vegetation has occurred in areas where the soil moisture regimes have been affected in riparian areas and meadows

Little Humboldt-Riparian/Wetland/Aquatic Habitat

The allotment is well watered with many seeps, springs, and streams, a large percentage of which occur on private land. Streams include: North and South Forks of Jakes Creek, Kelly, Kenny, SFLHR, Sheep, Secret, Pole, Oregon Canyon, and Brush creeks. One-hundred thirteen seeps and springs were identified on public lands in the Allotment during a 1982-83 BLM water inventory (Little Humboldt, Jakes Creek, and Draft Tall Corral Allotment Evaluation 2002).

Non-stream riparian habitat condition data for seeps, springs, meadows, and aspen stands were collected through a BLM water inventory between 1982 and 1983, and through various field surveys completed by BLM and the Nevada Division of Wildlife between 1992 and 1995. Many springs within the Little Humboldt HA are located in rocky canyon areas in association with the headwaters of major streams, or on steep slopes forming the face of the Owyhee Bluffs. Field observations and photographs indicate habitat conditions are extremely poor at nearly all seeps, springs, and meadow areas accessible to livestock and wild horses.

Some spring sites are located in remote rocky areas and are naturally protected from grazing. However, the majority are impacted by trampling, heavy to severe use of riparian vegetation, accelerated erosion, channel downcutting, and associated drainage of moist soil profiles. In many sites, formation of gullies has resulted in significant loss of riparian vegetation. Although heavy use by livestock has historically occurred on most of these sites, heavy use of non-stream riparian habitat is also occurring by wild horses, particularly in the northeast part of the allotment in the vicinity of Castle Springs. This area supports 95 percent of the wild horse herd within the HA. Castle Springs was rated as non-functional due to shrinking riparian area, lack of riparian vegetation, and excessive erosion from horse trailing.

Approximately 91 percent of the stream bottoms within the basin are private lands. The Basin Pastures were partially fenced by BLM on the west and southeast sides to provide opportunities to manage and reduce livestock impacts on critical LCT stream and riparian habitats of the South Fork of the Little Humboldt River, Sheep, Secret, Pole, and Oregon Canyon creeks and for rehabilitation of impacts of 2000 and 2001 wild fires to the west of the basin. Private-land fencing connected to BLM fencing has restricted wild horse access to the Basin.

Effects of the Little Humboldt HMA Alternatives

If current management is continued and the entire HA is designated as the HMA (Alternative 1A), wild horse use would continue to be primarily in the Castle Ridge Pasture. Use in the remainder of the HMA would continue to be none to slight. The vegetation around springs and seeps could continue to be impacted by concentrations of wild horses. The North and South

pastures of the South Fork Little Humboldt River Basin would continue to have slight to no use by wild horses.

Under Alternative 1B (Proposed Action), the Castle Ridge portion of the HA would be designated as the Little Humboldt HMA. Wild horses and livestock have impacted springs, seeps, and small streams within the Castle Ridge Pasture portion of the Allotment in the past. With the attainment of AML, riparian, wetland, and aquatic habitat would be expected to make significant progress in meeting the standards in the Northeastern Great Basin Area Standard and Guidelines (BLM 2000). Proper wild horse numbers, changes in livestock use and improvement in water distribution, should result in the improvement of wetland/riparian areas associated with seeps, springs, and streams.

Rock Creek Riparian/Wetland/Aquatic Habitat

Many small wetlands and riparian areas are associated with springs and streams within the Rock Creek HA. A total of 38,356 acres of private lands are generally located along stream bottoms and spring and seeps. Woody plant species (willow and aspen) and herbaceous vegetation, associated with stream riparian areas have historically been heavily impacted by livestock. Wild horses tend to use the small springs and seeps more than the stream riparian areas.

Information collected since 1983 shows that most seeps and springs are heavily impacted by livestock and wild horses in the form of trampling and overgrazing of riparian and wetland vegetation (BLM, 1997). Regeneration of woody riparian plants (willow and aspen) is being suppressed over a wide area.

Riparian conditions on perennial and intermittent streams are generally poor and have deteriorated over time on the stream within the HA. Major limiting factors include a lack of pool habitat, heavy sedimentation of stream bottoms, cut and eroding streambanks, and most importantly, the absence of a healthy riparian zone. Streams that do not currently support trout species, but have riparian habitat issues include, Trout, Amazon, Soldier, Milligan, Buffalo, Willow, Little Rock, Pole and Coyote creeks. Generally, the streams are wide and shallow with high summer water temperatures. Recent observations show an increase in willow growth along portions upper Rock Creek. In the past, exclosures on Winters and Frazer creeks have allowed for improved habitat condition within these protected areas; exclosures on both streams have been destroyed by wildfire and have not been repaired. The Frazer Creek exclosures are now part of a new Frazer Creek Riparian Pasture, which is currently closed to livestock grazing.

Effects of the Rock Creek HMA Alternatives

If current management is continued and the entire HA is designated as the HMA (Alternative 2A), wild horses would continue to impact seeps and springs. Achieving AML would limit this impact. Fencing has been constructed as part of the 2001 Buffalo Fire rehabilitation within the Frazer Creek watershed. This fire rehabilitation fencing would remain in place to protect riparian habitat for LCT.

The Draft Rock Creek Allotment Evaluation proposed to change livestock management in the Spanish Ranch and Squaw Valley Allotments to improve riparian habitat associated with important fisheries and riparian habitat. Grazing system proposals will likely include fencing of

pastures to help limit livestock access to streams and riparian areas. Such proposals if implemented could hinder the free roaming nature of wild horse.

Under Alternative 2B (Proposed Action), designating the Rock Creek HMA would eliminate the riparian habitat issues for Trout and Frazer creeks, improving LCT habitat. With the establishment and attainment of AML, riparian, wetland, and aquatic habitat would be expected to make significant progress in meeting the standards in the Northeastern Great Basin Area Standard and Guidelines (BLM 2000). Management plans for the Spanish Ranch and Squaw Valley allotments would be developed to make significant progress towards the attainment of rangeland health standards for wetlands and riparian areas associated with streams, springs, and seeps.

3.3.6 Special Status Species

Special status species are those listed or proposed for listing as threatened or endangered under the ESA, species that are candidates for listing under the ESA, species that are listed by the State of Nevada, and species that are on BLM's list of Sensitive Species. Species known to occur in the HAs are shown in Attachment 3.

Lahontan Cutthroat Trout
Lahontan cutthroat trout a listed species under the ESA, is an inland subspecies of cutthroat trout endemic to the Lahontan Basin of northern Nevada, eastern California, and southern Oregon. The subspecies was once widespread throughout the Lahontan Basin and was associated with Pleistocene Lake Lahontan. The subspecies was listed as endangered in 1970 and reclassified as threatened in 1975. The first Lahontan Cutthroat Trout Recovery Plan was completed in 1995.

Redband trout
The Interior Columbia River redband trout, is a BLM sensitive species, occur in, streams within the Spanish Ranch Allotment that are tributary to the South Fork Owyhee River. These streams have several have native redband trout populations.

Sage Grouse and Other Terrestrial Species
The HAs provides habitat for sage grouse and raptors in Attachment 3. Sage grouse are a BLM sensitive species, petitioned for listing under ESA. Sage grouse use the HAs primarily for brood-rearing and summer habitat. Breeding and nesting occurs at lower elevations over large areas of the HAs. Areas of riparian habitat, described in section 3.3.5, are important for brood-rearing especially in upper elevation during the summer and early fall. Forbs are an essential part of the diet of young sage grouse. Hen sage grouse move their broods considerable distances seeking riparian areas that provide succulent forbs. It is likely that brood movements occur from the Owyhee Desert to the Little Humboldt and Rock Creek HAs. These HAs are the closest areas that provide a relative abundance of late brood-rearing habitat. Sage grouse use of riparian habitat has been affected by the poor condition of areas in the HAs, as discussed in section 3.3.5. Eagles, owls and hawks may occur in the area seeking prey species, which includes sage grouse. Sage grouse could be affected by changes in habitat, and modifications to existing fences that offer perch sites for birds of prey.

Little Humboldt Special Status Species

Lahontan Cutthroat Trout
Streams associated with the South Fork Little Humboldt River basin have native populations of LCT. LCT currently are found in the South Fork Little Humboldt River (SFLHR) and its tributaries: Sheep, Secret, Pole, and Oregon Canyon creeks (Table 3.3.6-1).

Table 3.3.6-1
Streams Occupied by Lahontan Cutthroat Trout

LITTLE HUMBOLDT HERD AREA	OCCUPIED STREAM MILES		CONDITION & TREND
Little Humboldt Allotment	**Public**	**Total**	
So. Fk. Little Humboldt River	0.5	7.6	Poor/Up
Sheep Creek	1.0	5.5	Poor/Up
Secret Creek	0.0	4.0	Poor/Up
Pole Creek	0.2	1.2	Poor/Up
Total Miles	**1.7**	**18.3**	

Stream habitat survey data collected for these streams show the trend has been static to downward for streams in the basin since baseline surveys were established in 1977. Most significant were the declines in bank cover and bank stability, and the increase in stream width to depth ratio (BLM, 2002). The headwaters of Pole Creek and its confluence with the SFLHR are within the Little Humboldt Allotment. The middle reaches are within the Bullhead Allotment. LCT was documented in Pole Creek during NDOW stream surveys in 1997 and 2002.

The overall lack of a healthy riparian zone and associated channel features in the basin affect the ability of the SFLHR and its tributary streams within the Basin to maintain a viable LCT population over time. The Basin was closed to livestock grazing in 2002 until specific riparian criteria are met, as recommended by the Little Humboldt, Jakes Creek, and Tall Corral Allotment Evaluations (BLM 2002). A few wild horses historically used the Basin, until private lands were fenced in 2001. This fencing tied into BLM's Rim Fence (BLM 2002). This action was allowed due to wild horses' historical use of the Castle Ridge area.

Sage Grouse
Upland areas on Castle Ridge provide cover and forage for sage grouse. There are several documented sage grouse leks (breeding display areas) and nesting areas within the pasture.

Effects of the Little Humboldt HMA Alternatives
Lahontan Cutthroat Trout

If current management is continued and the entire HA is designated as the HMA (Alternative 1A), wild horses would have access into the North Basin and Jakes Creek pastures. A short-term management action would be to manage the current fencing (i.e. open gates) to allow movement of wild horses from the Castle Ridge Pasture to other areas in the HMA. This could provide livestock free access to all areas, and remove benefits to LCT.

Under Alternative 1B (Proposed Action), this alternative leaves fencing in place that restricts livestock use for the benefit of wetland and riparian improvement for recovery of LCT within the basin. Historically approximately 95 percent of the wild horses have used the Castle Ridge portion of the Little Humboldt Allotment without fencing present. The benefits to managing for wild horses only in Castle Ridge are greater for wetland and riparian areas and LCT than Alternative 1A. With the attainment of AML, special status species habitat condition would be expected to make significant progress in meeting the standards in the Northeastern Great Basin Area Standard and Guidelines (BLM 2000)

Sage Grouse
If the Little Humboldt HA is the HMA (Alternative 1A), wild horse use, including repetitive grazing during the critical spring period growth stage of perennial herbaceous vegetation, could have negative impacts that exacerbates poor cover and forage diversity for special status species. Future gathering of wild horses to reach AML, along with implementation of an improved grazing system is expected to result in improved riparian habitat conditions. There is a potential for increased over use of wildlife habitat outside of the Castle Ridge Pasture if wild horses are allowed to exceed AML and populate the entire HMA.

Under Alternative 1B (Proposed Action), managing for wild horses in the Castle Ridge Pasture, Achieving AML, should improve vegetative conditions and make significant progress in meeting the standards as depicted in the Northeastern Great Basin Area Standard and Guidelines (BLM 2000). This alternative would result in reduced competition with sage grouse. It would increase the quantity and quality of available forage and cover on upland and riparian/meadow habitat types to benefit wildlife, BLM Special Status Species and migratory birds. There would be less disturbance associated with wild horses along stream bank riparian, meadow and upland habitat.

<u>Rock Creek HA Special Status Species</u>
Lahontan Cutthroat Trout -- The Squaw Valley side of the Rock Creek HA has an estimated 25 miles of occupied LCT habitat that is important for the recovery of LCT within the Rock Creek subbasin. In addition, Trout Creek has been identified as a potential LCT recovery stream, when substantial improvement in stream riparian habitat occurs (Table 3.3.6-2).

Table 3.3.6-2
Streams Occupied by Lahontan Cutthroat Trout

ROCK CREEK HERD AREA	OCCUPIED STREAM MILES		CONDITION & TREND
Squaw Valley Allotment	**Public**	**Total**	
Frazer Creek	1.4	13.8	Fair/Good/Up
Lewis Creek	0.0	6.5	Poor/Down
Nelson Creek	0.0	5.1	Poor/Down
Upper Rock Creek	1.0	10.1	Poor/Down
Upper Willow Creek	1.0	5.5	Poor/Static
Lower Willow Creek	0.1	3.1	Poor/Static
Toe Jam Creek	0.8	16.0	Poor/Static
Total Miles	**4.3**	**50.1**	

The Rock Creek drainage area provides habitat for two small metapopulations, one associated with Rock Creek and its tributaries, Toe Jam and Trout creeks, and the second associated with Willow Creek and its tributaries, Lewis and Nelson creeks. Toe Jam Creek is outside the historic wild horse HA, but a portion of Rock Creek is within the HA. Frazer Creek, an isolated tributary in the Rock Creek subbasin, is also an important LCT stream with an abundance of LCT. Habitat conditions for LCT streams are fair to good in rugged canyon areas inaccessible to livestock, but are poor in the more open areas characterizing majority of the drainage. There appear to have been little appreciable change in stream lengths occupied by LCT during the past twenty years.

Frazer Creek originates from a heavily impacted meadow and spring complex, and flows through a rugged canyon. This pasture is currently closed to grazing because of the 2001 Buffalo fire. In 1978, three exclosures were built along Frazer Creek and a fourth was built around the stream's spring source. The exclosures were damaged in the 2001 fire, and the pasture was fenced to rehabilitate the area and benefit LCT, resulting in a separate riparian pasture.

As indicated in the discussion for grazing in the Rock Creek HA, a division fence between the Squaw Valley and Spanish Ranch Allotments was identified as a minimizing/enhancement measure for LCT in the informal consultation with the U. S. Fish and Wildlife Service completed for approval of Barrick Goldstrike Mine, Inc. Betze Project. The fence, when constructed, would effectively separate the two allotments and allow for implementation of grazing systems designed to improve stream and riparian habitats for the benefit of LCT.

Redband trout – This BLM-sensitive species which occurr in Winters (Chimney), Four Mile (Chino), Red Cow and Amazon creeks within the HA (Table 3.3.6-3).

Table 3.3.6-3
Streams Occupied by Redband Trout

ROCK CREEK HERD AREA	OCCUPIED STREAM MILES		CONDITION & TREND
Spanish Ranch Allotment	**Public**	**Total**	
Winters Creek	0.5	6.1	Poor/Static
Red Cow Creek	3.6	9.5	Poor/Down
Fourmile Creek	0.5	11.0	Poor/Static
Big Cottonwood Creek	2.0	10.0	Poor/Down
Total Miles	**6.6**	**36.6**	

Winters Creek originates as a series of springs on the north end of the Tuscarora Mountains. The stream is perennial for most of its length, although flows are diverted onto private lands for irrigation in the lower reaches. Although it seems likely Winters Creek historically supported a population of redband trout, none were present at the time 56 were transplanted from Fourmile Creek in 1973 by the NDOW. In 1974, BLM fenced the public lands portion of the stream (approximately ½ mile) in an effort to improve habitat conditions. The exclosure and the entire watershed burned in 1994. In 1995, the Winters Creek watershed was fenced in an effort to allow for recovery from fire and to implement controlled livestock grazing. A lack of livestock control within the pasture partially as a result of fence damage by wild horses, resulted in significant post-fire impacts to the stream and associated riparian zone. Although redband trout were documented in Winters Creek in 1988, no fish were found during surveys conducted by NDOW in 2002

Fourmile Creek is less extensive than other tributaries to the South Fork Owyhee River system and has little streamflow during the summer season. It maintains a small population of redband trout that have generated concern among biologists for more than 30 years. Behnke describes a "drastic" deterioration in habitat between 1964 and 1972 and observed that the population was confined to 8 to 10 small pools in ½ mile of stream by 1972 (Behnke 1972). Similarly, observations since 1972 have documented trout in scattered, poor quality pools. Between 1977 and 1992 some improvement in bank cover have been observed, but with a decline in bank stability. Overgrazing by livestock has been identified as the primary agent contributing to deteriorated habitat conditions.

Red Cow Creek supports a moderate population of redband trout, although surveys indicate the fish are confined to isolated, shallow pools with high summer water temperatures. The situation for redband trout in Red Cow Creek is critical. Habitat conditions have deteriorated to the extent that the stream is now probably marginally suitable for trout. Surveys conducted by BLM in 2000 show season-long livestock grazing has prevented establishment of riparian plant species, while cutting and wasting of banks has resulted in the almost complete elimination of mature riparian vegetation.

Sage Grouse
There are 23 documented sage grouse leks (breeding display areas) in the Rock Creek HA and numerous nesting areas on the flanks of the Tuscarora Range. Monitoring data since 1994 indicates a downward trend in the condition of some upland sites. The removal of about 1,200 wild horses from an emergency gather in August of 2002 may help to reverse this trend.

Effects of the Rock Creek HMA Alternatives
Lahontan Cutthroat Trout
Continued use of the entire HA as the HMA by wild horses (Alternative 2A) wild horses would continue to impact stream riparian habitat and headwater springs and seeps. With the Attainment of AML, LCT habitat condition would be expected to improve. Although, with no control of grazing rangeland health standards would not be met. Under Alternative 2B (Proposed Action), wetland and riparian habitat associated with recovery of LCT within the Squaw Valley Allotment would be improved by providing opportunities for improved livestock management practices, and removal of wild horses, that focus on seeps and springs. Exclusion of the Frazer Creek and Trout Creek watersheds from the proposed HMA would assist in recovery efforts for the LCT. The Proposed Action would thus improve management opportunities for the benefit of LCT. Since Soldier Field in the Squaw Valley Allotment does not include LCT habitat, inclusion of it in the designated HMA would not affect LCT under the proposed alternative.

Redband trout
Potential issues with fencing and livestock control in areas used by wild horses would remain for redband trout streams in the Spanish Ranch Allotment. A slight improvement in stream, wetland and riparian habitat conditions may result from future establishment and maintenance of AML from the reduction of wild horses that focus on seeps and springs in the Burner Hills, Winters Creek, and Red Cow pastures. Since both the Alternative 1B and 2B include these pastures of the Spanish Ranch Allotment, there is no difference in effects to redband trout.

Sage Grouse
Continued use of the entire HA as the HMA by wild horses (Alternative 2A) including repetitive grazing during the critical spring period growth stage of perennial herbaceous vegetation, could have negative impacts that exacerbate poor cover and forage diversity for wildlife. Implementation of the proposed grazing system and removing excess horses to achieve AML is expected to result in improved riparian habitat conditions that would improve habitat for sensitive species. There is a potential for increased heavy use to wildlife habitat if wild horses are allowed to exceed AML and populate the entire HMA

Under Alternative 2B (Proposed Action), there is a potential for increased impacts to wildlife habitat if wild horses are allowed to exceed AML. Not having wild horses in the Frazer Creek and Trout Creek pastures would help to achieve habitat objectives for wildlife species in these areas, and assist efforts to improve livestock management. Management of wild horses on a more defined area is needed in concert with efforts to manage for other wildlife habitat and range resources on the allotments. With the establishment and attainment of AML, vegetative conditions would be expected to make significant progress in meeting the standards in the Northeastern Great Basin Area Standard and Guidelines (BLM 2000).

3.3.7 Wild Horses

Wild horse herds in both areas have shown to be capable of 15-22 percent increases annually. The use of immunocontraception vaccine during gathers helps to limit this increase to about 5 percent for one or two years. The vaccine is a safe, humane and inexpensive tool, when used with management prescriptions, to reduce the frequency of gathering excess wild horses.

Little Humboldt Wild Horses

Wild horses in the Little Humboldt HA have always exhibited an unusual distribution pattern. Census data over the last 20 years has shown the majority (95 percent) of the wild horses are found in the lower elevations of the Castle Ridge Pasture. The HA is bordered by the Rock Creek HA and Snowstorm Mountains HMA. Some of the annual fluctuation in herd size may be attributable to immigration from neighboring herds.

Wild horses within this HA are quite large and have good conformation. The primary colors of wild horses are: sorrel, bay, chestnut, and roan, with a few blacks, palominos, and paints. The Little Humboldt HA has shown to be a productive area for wild horses. Since 1971, there have been four BLM-authorized removals with an estimated total of 480 wild horses removed from the HA. An emergency gather was conducted in August of 2002, due to lack of water and forage (drought). Following completion of this gather, the estimated population was 150 animals. The current (2003) estimated population is 175 wild horses. The terms of the Little Humboldt Stipulated Agreement established an interim AML of 80 wild horses. This interim AML sets wild horse number within the HMA regardless of alternative selected

Effects of the Little Humboldt HMA Alternatives

Under Alternative 1A, management of wild horses would not be changed. The entire HA would continue to be managed as the HMA for wild horses. Maintaining numbers of wild horses at AML would reduce impacts to wildlife habitat and conflicts with management of sensitive fish habitat and livestock grazing in the HMA. Changes to management of livestock and modifications to existing range improvements may be required to allow movement of wild horses throughout the HMA. This might be accomplished by leaving gates open during periods when wild horses are present in an area, but livestock are not. Since wild horses primarily reside in Castle Ridge Pasture, this would not require much change. Under this alternative, restoration of streams and management for LCT in the Basin would need to address wild horses concerns. This could limit options for proper management of livestock when wild horses are not necessarily present.

Under the Proposed Action (Alternative 1B), wild horses would be managed in the Castle Ridge Pasture only. The area wild horses traditionally use would continue to be provided for under this alternative. Maintaining numbers of sustained wild horses at AML would reduce impacts to wildlife and riparian habitat and conflicts with livestock grazing in the HMA. There would be no concerns for wild horses related to implementation of management to benefit LCT. Under this alternative significant progress toward meeting the standards for rangeland health is expected. The HA not designated as part of the HMA would be managed as wild-horse free. Wild horses outside the HMA would be removed and made available for adoption.

Rock Creek Wild Horses

Census data shows that wild horses are found in most of the Rock Creek HA. They move from Burner Hills and Winter Creek in the winter, to Soldier Field and Red Cow in the summer. Numbers traditionally have been well above the desired herd size. The concentration of use around seeps and springs has contributed to poor habitat conditions.

Wild horses within this HA are quite large, well conformed and colorful. Many red, strawberry, and blue roans, and brown wild horses are found within the HA. The Rock Creek HA is a productive area for wild horses. Since 1971, there has been five BLM-authorized removals with an estimated total of 1,747 wild horses removed from the HA. An emergency gather was conducted in August of 2002 due to lack of water and forage (drought). Following completion of this gather, the estimated population was 650 animals. The current (2003) estimated population is 773 wild horses. The Draft Rock Creek Allotment Evaluation recommended an AML of 250 wild horses. When the AML is established wild horse numbers would be managed at this level regardless of alternative selected.

Effects of the Rock Creek HMA Alternatives

Under the Proposed Action (Alternative 2A), management of the Rock Creek herd would not change. The entire HA would be managed for wild horses. Maintaining numbers of wild horses at AML, once established, would reduce impacts to wildlife habitat and conflicts with livestock grazing in the HMA. Current and future management of livestock would need to be changed to allow movement of wild horses throughout the HMA. Any new range improvements would be planned to not impede movement of wild horses, and this could limit options for implementing improved livestock grazing systems. Currently, livestock are able to graze large areas of unfenced land that include highly sensitive streams which are home to LCT and redband trout. This alternative would continue to result in poor livestock distribution with some areas receiving heavy utilization.

Under the Proposed Action (Alternative 2B), wild horse management would be restricted to the Burner Hills, Winters Creek, Red Cow, and Soldier Field pastures. Maintaining numbers of wild horses at AML, once established, would reduce impacts to fish and wildlife habitat and conflicts with livestock grazing in the HMA. Under this alternative significant progress toward meeting the standards for rangeland health is expected. This alternative would result in improved forage availability, livestock distribution, and vegetation productivity (density, vigor and reproduction). The HA not designated as part of the HMA would be managed as wild-horse free. Wild horses outside the HMA would be removed and made available for adoption.

3.4 Cumulative Effects

NEPA regulations define cumulative effects as the impact on the environment that result from the incremental impact of the action when added to other past, present, proposed and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions (40 CFR 1508.7). ESA regulations define the "environmental baseline" to include the past and present effects of all actions in the area, and the anticipated of impacts of all proposed federal projects in the action area that have undergone section 7 consultation, plus the impact of contemporaneous non-federal actions.

Rehabilitation of wildland fire within the HA between 1994-2001 has establish two fenced pastures that have potentially excluded wild horses. The fences have also had the effect of increasing options to improve aquatic and riparian conditions to benefit fish and wildlife species. Past actions taken by BLM to meet stream and aquatic habitat objectives include closures of fenced areas to livestock grazing. Recent gathers and future establishment and maintenance of AML are also actions that could be considered to have cumulative effects on resource values under NEPA, but the effects from establishing future AML on ESA listed species would not be considered until the proposed action undergoes section 7 consultation.

Little Humboldt

If the established Little Humboldt HA is designated as the HMA (Alternative 1A), future modifications to existing fences on public lands by BLM would restore access for wild horses from the Castle Ridge Pasture to the South Basin and possibly the Jakes Creek pastures, but the North Basin would still be unavailable. A cumulative effect of the proposed designation of the Little Humboldt HMA (Alternative 2B) to consist only of the Castle Ridge Pasture is the loss of use of the excluded areas by a small number (about 5 percent) of wild horses. At the same time, the currently proposed designation is likely to result in improved aquatic and riparian conditions. Closure of the Basin to livestock grazing under the Stipulated Agreement is expected to benefit LCT. The effects of re-opening the Basin, in conjunction with implementing changes to the grazing system and establishing AML for wild horses on listed or proposed species would be determined in consultation with the Fish and Wildlife Service under the ESA. With the attainment of AML, vegetative conditions would be expected to make significant progress in meeting the standards in the Northeastern Great Basin Area Standard and Guidelines (BLM 2000).

Rock Creek

Recent fencing of the area burned by the Buffalo fire in the Frazer Creek watershed, removal of wild horses and closure to livestock grazing until aquatic and riparian restoration objectives are actions taken by BLM to improve habitat and benefit recovery of LCT. More improvement in habitat conditions is likely to occur if the Rock Creek HMA is designated to exclude this area under the Proposed Action (Alternative 2B). Past construction of the Winters Creek Pasture fence in the Rock Creek HA limited use of this area for a couple years before the fence was damaged, and restoration of sensitive habitat occupied by redband trout were not realized. Future proposed reconstruction and management of the Winters Creek Pasture fence, along with future modifications to livestock grazing, would make access to this area more difficult until wild horses become accustomed. Leaving gates open following grazing would also make it more difficult for permittees to control their livestock. The recent gather of wild horses from the Red Cow and Winters Creek areas of the Rock Creek herd and future establishment AML, followed by proposed gathers of wild horses to maintain numbers within the HMA is expected to improve habitat conditions in Winters Creek and other streams in the HMA for redband trout. The reduced numbers of horses is also expected to result in improved habitat conditions around springs and seeps, which would provide long-term benefits to both wildlife and wild horses. With the establishment and attainment of AML, vegetative conditions would be expected to make significant progress in meeting the standards in the Northeastern Great Basin Area Standard and Guidelines (BLM 2000).

3.5 Monitoring and Evaluation

This Proposed Amendment for wild horses does not offer any changes to the monitoring and evaluation requirements as described on pages 41-43 of the ROD for the Elko RMP (BLM, 1987) and in section 2.3 in this EA. Tracking of progress toward meeting resource objectives and completion of actions in support of meeting resource objectives will continue to be tracked and documented on an allotment and overall basis. Monitoring activities, in the form of plan maintenance, updates to the 1987 Rangeland Program Summary and evaluations of the RMP, will continue, until such time as it is determined that the RMP requires complete revision to keep the plan current with changing circumstances, resource conditions, or policies.

The Elko Field Office will continue to monitor conditions in the wild horse HMAs. Data will continue to be collected and evaluated to determine if area-specific objectives for rangeland health are being met and if adjustments are needed. This includes monitoring and taking action to establish and maintain AML in each wild horse HMA. The AML will remain unchanged until data indicates the objective of maintaining a thriving natural ecological balance and multiple-use relationship in the HMA is not being met.

CHAPTER 4 – CONSULTATION AND COORDINATION

4.1 Public Scoping

The land use planning process for this Elko RMP Amendment began on February 10, 2003, with the publication of a Notice of Intent in the Federal Register publication. This notice also initiated a 30-day public scoping period. An invitation to participate in scoping, including public meetings in Elko, Eureka and Reno, Nevada, was mailed to everyone on the Elko FO mailing list. A news release was issued to announce the dates and locations of the public meetings and the availability of additional information, and to request receipt of written comments by March 12, 2003. Informational materials (fact sheets and maps for the RMP Amendment and four HAs) were available during scoping and provided at the meetings.

The three public scoping meetings were held on February 24, 25 and 26, 2003. in Elko, Eureka and Reno, Nevada. They were attended by grazing permittees, Northeastern Nevada Stewardship Group representatives, wild horse advocates, and interested individuals. A presentation was given to explain the planning review process and wild horse management. Resource specialists at the public meetings discussed additional information toward determining the scope of the Amendment and EA.

Written comments were received from the following persons, organizations and agencies, the three with an asterisk (*) by their name also attended one of the public scoping meetings.

Andrea Lococo, The Fund for Animals; Jackson WY
Craig Downer, Minden NV
Donald G. Oman, Twin Falls ID
John Carpenter, Nevada State Assemblyman, Elko NV
David G. Knight, Elko NV
Maynard Alves, Redmond OR
*Bill Hall; Ellison Ranching Co., Tuscarora NV
*Jim Andrea; Agri Beef Inc., Tuscarora NV
*Carl Slagowski, Carlin NV

The Elko FO had previously received comments on a March 2002, evaluation of livestock, wildlife and wild horse management for the Little Humboldt Allotment that were considered pertinent toward determining the scope of this Amendment and EA. The comments were from:

Commission for the Preservation of Wild Horses, Carson City, NV
Wild Horse Organized Assistance, Reno, NV
Oro Vaca, Inc., Golconda, NV

The input received (In Summary):

- Discuss establishment of the herd area boundaries, and provide detailed maps to show the HAs and acreage lost by designation of an HMA within a HA.
- Clarify "the need to address boundaries [designate an HMA] within the Rock Creek HA."
- The Amendment should make it easier to manage and gather horses.

- The wild horse program is a terrible squandering of the American taxpayer's money. These are feral horses that have run outside, and we have hungry children and many other needed causes that this money would be better spent on.
- Consider wild horse use and needs based on past studies, critical areas of winter and summer use, water availability, etc.
- Restrict the Little Humboldt HMA to the Castle Ridge area.
- For the Rock Creek HA, note that AML (appropriate management level) needs to be set and must be met before any progress can be made towards rangeland health and riparian restoration.
- BLM's initial proposal for the Rock Creek HMA appears to include building a fence on the west side of Trout Creek, as a division fence between the Trout Creek Field and Soldier Field. Another option would be to build a fence on the east side of Trout Creek to provide access to water, because Little Rock Creek, Coyote Creek and Soldier Creek can dry up at the end of the summer.
- Consider an alternative that would remove Winters Creek Pasture from the Rock Creek HMA.
- The HMA for the Diamond Hills North Allotment should exclude a crested wheat seeding on the north boundary of the Red Rock Allotment that belongs to Merkley Ranches.
- Consider an alternative for expansion of the Rock Creek HA boundary to meet wild horse use during seasonal migration or need during times of drought.
- Consider a "new age" model alternative that would involve the (re)establishment of herd areas of size and habitat composition adequate for at least one-thousand inter-breeding adults. The associated management strategy would allow natural factors to operate, such as natural predators, intrinsic factors such as winter and summer die off and old age attrition, and the natural spacing demonstrated by wild horses when left for long periods of time on their own.
- Have a hunting season to thin the herds and manage their size.
- The EA should discuss the cost, location, species and numbers of predators killed within the four HAs and how such actions may impact wild horse numbers, distribution and movement patterns.
- If any boundaries are redrawn to exclude wild horses from private land, then it becomes necessary to reduce livestock stocking rates on public lands within an HA to provide for the needs of wild horses to survive on less lands.
- Acknowledge compliance with regulations at CFR 4719.5 that allow for the temporary or permanent closure to livestock grazing to provide habitat for wild horses, when conflicts between livestock and wild horses exists.
- Provide a comprehensive examination of forage allocation within the HAs, fences that may need to be removed to enable wild horses to roam freely, and possible modifications to livestock grazing practices such as stocking rates and turn-out dates.
- For the Diamond Hills North herd, annual compensation should be given for any horses that exceed the 37 head that the permittees for the Red Rock (and Browne) Allotment agreed to.

Section 2.4 of this EA discusses suggested alternatives that were eliminated from detailed consideration. Other issues raised that will not be addressed include:

- Provide a comprehensive evaluation of forage allocation and set AML – A comprehensive evaluation of forage allocation is outside of the scope of an RMP Amendment. Setting AML is an implementation decision that is based on the best information available and issued as part of a "Multiple Use Decision."
- Predator Control – An analysis of effects of predator control activities within an HMA is beyond the scope of the EA for this wild horse management amendment. Just as BLM does not regulate hunting on public lands, we lack jurisdiction for predator control. BLM works cooperatively with state agencies as they conduct or regulate such activities on public lands.
- Have a hunting season to thin the herds and manage their size

4.2 Persons and Agencies Consulted

Endangered Species Act Consultation

BLM is responsible for consulting with the Fish and Wildlife Service under section 7(a)(2) of the ESA to ensure actions it proposes would not jeopardize the continued existence of a threatened or endangered species or adversely affect designated critical habitat. A September 24, 1994, Memorandum of Agreement among the Fish and Wildlife Service and 14 other Federal agencies, including BLM, establishes a general framework for cooperation and participation in the exercise of agency responsibilities under the ESA. In July, 2002, the BLM, Nevada State Office, also entered into a Consultation Agreement with the Nevada Fish and Wildlife Service Office for all BLM RMPs in Nevada (MOA 6840-NV930-0230). Section 3.3.6 of this EA includes an evaluation of the effects of this proposed RMP amendment for wild horses on listed and other special status species. It concludes that BLM's proposed action for the designation of the Little Humboldt and Rock Creek HMAs may affect, but is not likely to adversely affect, the threatened LCT. This Proposed Amendment/EA is being submitted to the U.S. Fish and Wildlife Service with a request for their concurrence with this determination, for purposes of meeting section 7(a)(2) consultation or conferencing requirements and associated regulations at 50 CFR part 402, and BLM agreements with the Service.

Native American Consultation

Tribes throughout northeastern Nevada were sent the letter inviting their participation in scoping, and a member of the Te-Moak Tribe of the Western Shoshone attended the scoping meeting in Elko. The Elko FO Native American Coordinator provided the scoping package and has since provided reports on development of the proposed amendment at monthly meetings with the Tribes. To date, no concerns have been expressed. The Tribes will receive the Proposed Amendment/EA to afford an additional opportunity to assure any concerns they may have are addressed prior to approval.

Governor's Consistency Review

State agencies were invited to participate in scoping for this wild horse management RMP amendment. No concerns were identified. This Proposed Amendment/EA is being distributed to State agencies and will undergo a 60-day Governor's consistency review prior to final approval, in accordance with BLM's procedures for this review found in 43 CFR 1610.3-2(e).

State Wildlife Agency Consultation

Nevada Department of Wildlife received the Draft Rock Creek and Little Humboldt Allotment Evaluations (BLM 1997 & 2002). The Department provided comments on the evaluations to the BLM concerning wildlife and fisheries. These comments will be considered in developing the MUD for these areas. They also were invited to participate in the scoping of this Amendment.

Availability of the Proposed Amendment/EA

The Proposed Amendment/EA is being sent to all parties who participated in scoping and/or requested they be on the mailing list for this document (see Distribution List). A notice of the availability of this document will be issued to local and regional media, and copies of the document will be provided upon request. Everyone who receives the document will be advised that this proposed plan is subject to protest to the Director of the BLM, and that a final decision will be issued following resolution of any protests received.

4.3 List of BLM Preparers

Bryan Fuell	Wild Horse and Burro Specialist-Project Manager
Lorrie West	Environmental Coordinator-NEPA
Tyson Gripp	Rangeland Management Specialist- Range and vegetation
Kathy McKinstry	Natural Resource Specialist-Range and vegetation
Ken Wilkinson	Wildlife Biologist-Wildlife, Migratory Birds, BLM Special Status Species
Carol Evans	Fisheries Biologist-Fisheries and Riparian/Wetlands/Aquatic Habitat
Pat Coffin	Fisheries Biologist-Fisheries and Riparian/Wetlands/Aquatic Habitat
Tamara Hawthorne	Outdoor Recreation Planner-Wilderness, Recreation, and Visual Resource Management
Gerald Dixon	Native American Coordinator-Native American Religious Concerns
Maxine Perrine	Range Management Assistant

Maps

1-Elko RMP Wild Horse Herd Areas
2-1-Little Humboldt Herd Area
2-2-Rock Creek Herd Area

Attachments

1-Wildlife List
2-Migratory Birds
3-Special Status Species List

References:

Behnke, Robert. 1972. Field Trip Report to Chino Creek. Nevada Division of Wildlife files. Elko, Nevada.

BLM. 1985. Draft Elko Draft Resource Management Plan and Environmental Impact Statement. United States Department of the Interior, Bureau of Land Management, Elko District, Elko, Nevada.

BLM. 1986. Final Elko Proposed Resource Management Plan and Final Environmental Impact Statement. United States Department of the Interior, Bureau of Land Management, Elko District, Elko, Nevada.

BLM. 1987. Elko Resource Management Plan Record of Decision. United States Department of the Interior, Bureau of Land Management, Elko District, Elko, Nevada.

Rosgen, David. 1994. A Classification of Natural Rivers. Catena

1995 Lahontan Cutthroat Trout Recovery Plan, U.S. Fish and Wildlife Service

BLM. 1997. Diamond Mountain Complex Evaluation Draft. Bureau of Land Management, Elko, Nevada.

BLM. 1997. Rock Creek (Spanish Ranch and Squaw Valley) and Andrae Allotment Evaluations. Bureau of Land Management, Elko, Nevada.

BLM 1997 Northeastern Great Basin Area Standards and Guidelines. Bureau of Land Management.

Nevada Partners in Flight. 1999. Nevada Partners in Flight Bird Conservation Plan

BLM. 2000. Owyhee Allotment Evaluation. Bureau of Land Management, Elko, Nevada.

BLM 2000 Revised Northeastern Great Basin Area Standards and Guidelines. Bureau of Land Management.

BLM. 2002. Little Humboldt, Jakes Creek, and Tall Corral Allotment Evaluations. Bureau of Land Management, Elko, Nevada.

Oro Vaca and BLM. 2002. Stipulation to Modify Decision and to Dismiss Appeals. Bureau of Land Management, Elko Field Office Files

Coffin, Patrick. 2003. Personal Communications. Fisheries Biologist, Bureau of Land Management, Elko Field Office, Elko, Nevada.

BLM. 2003. Betze Project Final Supplemental Environmental Impact Statement Appendix C, Barrick Goldstrike Mines Inc., Bureau of Land Management, Elko, Nevada.

.

Distribution List

Federal Agencies & Congressional Delegation
BIA Eastern Nevada Agency, Elko, NV
US Fish and Wildlife Service, Reno, ,NV
Honorable Jim Gibbons, Reno, NV
Honorable Harry Reid, Washington DC
Honorable John Ensign, Carson City, NV

State Agencies & Legislators
Nevada Sate Clearinghouse, Carson City, NV
NV Division of Forestry, Elko, NV
Health Division, Carson City, NV
NV State Parks, Elko, NV
NDOW, Elko, NV
John Carpenter, Elko, NV
Dean Rhoads, Tuscarora, NV
John Marvel, Battle Mountain, NV

Local Governments
Eureka County Dept of Natural Resources, Eureka, ,NV
Eureka County Commissioners, Eureka, NV
Board of County Commissioners, Elko, NV

Native American Representatives
Duckwater Tribal Council, Duckwater, NV
Wells Band of the Te-Moak Tribe, Wells, NV
Duck Valley Tribal Council, Owyhee, NV
Goshute Tribal Council, Ibapah, UT
Yomba Shoshone Tribe, Austin, NV
Environmental Coordinator Duckwater Shoshone Tribe, Duckwater, NV
Environmental Coordinator South Fork Band Te-Moak Tribe, Spring Creek, NV
Ely Shoshone Tribe
Battle Mountain Band of the Te-Moak Tribe, Battle Mountain, ,NV
Shoshone-Paiute Business Council, Owyhee, NV

Livestock Operators
Agri Beef, Tuscarora, NV
Ellison Ranch, Tuscarora, NV
Rother Farms
Hale Bailey, Carlin, NV
Wilford and Barbara Bailey, Eureka, NV
Land Manager Barrick Goldstrike Mines, Elko, NV
Ora Vaca Inc., Golconda, NV
Merkley Ranches Inc., Spring Creek, NV
Paris Livestock Company, Spring Creek, NV

Individuals
Donald Oman, Twin Falls, ID
Beitia Family, Elko, NV
Craig Downer, Minden NV
David Knight, Elko, , NV
Mike McCurrey, Reno, NV
Donald Oman, Twin Falls, ID
Ken Schoessher, Well, NV
Carl Slagowski, Carlin, NV
Bob Schweigert Winnemucca, NV

Wild Horse Interest Groups
The Humane Society of the US, Washington DC
Commission for the Preservation of Wild Horses, Carson City, NV
Doris Day Animal League Washington DC
Humane Society of the US, Washington DC
National Mustang Assoc, Cedar City, UT
American Bashkir Curley Register, Ely, NV
American Horse Protection Assoc, Washington DC
American Mustang and Burro Assoc., Lincoln, CA
Animal Protection Institute, Sacramento, CA
National Mustang Assoc Inc., Cedar City, UT
Fund for Animals, New York, NY
Colorado Wild Horse and Burro Coalition, Greeley, CO
Wild Horse Spirit, Carson City, NB
Wild Horse Organized Assistance Reno, NV
Fund for Animals, Jackson, WY
International Society for the Protection of Mustang and Burros, Interior, SD
Wild Horse Sanctuary, Shingletown, CA
Anna Charlton, Animal Rights Law, Newwark, NV
Humane Society-US-WL/Habitat Protect, Washington DC
ISPMB, Lantry, SD

Other Interest Groups
EVCA, Elko, NV
Halls Outfitting and Guide Services, Wells, NV
Public Lands Foundation, Arlington VA
Natural Resources Defense Council, San Francisco, CA
Committee for Idaho's High Desert, Boise, ID
Western Watersheds Project, Hailey, ID
LRTC, Reno NV
NE NV Trout Unlimited, Elko, NV
Palisade Ranch, Carlin, NV
Montart Finance Co., Inc Greeley, CO
Ormsby Sportsman Assoc., Carson City, NV
Petan Co of NV Inc, Tuscarora, NV

Bureau of Land Management Offices
BLM Ely District , Ely, NV
BLM Carson City, Carson City, NV
BLM Battle Mountain, Battle Mountain, NV
BLM Winnemucca, Winnemucca, NV
BLM Nevada State Office, Reno, ,NV
BLM Las Vegas, Las Vegas, NV

Elko RMP Wild Horse Amendment
Attachment 1 - Wildlife Species List
Lower Sagebrush/Grassland Steppe, Northeastern Nevada

Birds

Turkey Vulture	*Cathartes aura*
Bald Eagle	*Haliaetus leucocephalus*
Northern Harrier	*Circus cyaneus*
Swainson's Hawk	*Buteo swainsoni*
Red-tailed Hawk	*Buteo jamaicensis*
Ferruginous Hawk	*Buteo regalis*
Rough-legged Hawk	*Buteo lagopus*
Golden Eagle	*Aquila chrysaetos*
American Kestrel	*Falco sparverius*
Merlin	*Falco columbarius*
Prairie Falcon	*Falco mexicanus*
Cray Partridge	*Perdix perdix*
Chukar	*Alectoris chukar*
Sage Grouse	*Centrocercus urophasianus*
Mourning Dove	*Zenaida macroura*
Great Horned Owl	*Bubo virginianus*
Burrowing Owl	*Athene cunicularia*
Short-eared Owl	*Asio flammeus*
Common Nighthawk	*Chordeiles minor*
Broad-tailed Hummingbird	*Selasphorus platycercus*
Northern Flicker	*Colaptes auratus*
Gray Flycatcher	*Epidonax wrightii*
Ash-throated Flycatcher	*Myiarchus cinerascens*
Say's Phoebe	*Sayornis saya*
Western Kingbird	*Tyrannus verticalis*
Horned bark	*Eremophila alpestris*
Barn Swallow	*Hirundo rustica*
Black-billed Magpie	*Pica pica*
American Crow	*Corvus brachyrhynchos*
Common Raven	*Corvus corax*
Rock Wren	*Salpinctes obsoletus*
Mountain Bluebird	*Sialia currucoides*
American Robin	*Turdus migratorius*
Sage Thrasher	*Oreoscoptes montanus*
Loggerhead Shrike	*Lanius ludovicianus*
Northern Shrike	*Lanius excubitor*
European Starling	*Sturnus vulgaris*
Brewer's Sparrow	*Pooecetes gramineus*
Vesper Sparrow	*Chondestes grammacus*
Lark Sparrow	*Amphispiza belli*
White-crowned Sparrow	*Zonotrichia leucophrys*
Lapland Longspur	*Calcarius lapponicus*
Red-winged Blackbird	*Agelaius phoeniceus*
Western Meadowlark	*Sturnella neglecta*
Brewer's Blackbird	*Euphagus cyanocephalus*
Brown-headed Cowbird	*Molothrus ater*
Black Rosy Finch	*Leucosticte atrata*
Gray-crowned Rosy Finch	*Leucosticte tephrocotis*
House Sparrow	*Passer domesticus*

Mammals

Little Brown Bat	*Myotis lucifugus*
Long-eared Myotis	*Myotis evotis*
Long-legged Myotis	*Myotis volans*
Small-footed Myotis	*Myotis ciliolabrum*
Silver-haired Bat	*Lasionycteris noctivagan*
Western Pipistrelle	*Pipistrellus hesperus*
Big Brown Bat	*Eptesicus fuscus*
Townsend's Big-eared Bat	*Plecotus townsendii*
Brazilian Free-tailed Bat	*Tadarida brasiliensis*
Black-tailed Jackrabbit	*Lepus californicus*
Mountain Cottontail	*Sylvilagus nuttal1ii*
Pygmy Rabbit	*Sylvilagus idahoensis*
Townsend's Ground Squirrel	*Spermophilus townsendii*
Belding Ground Squirrel	*Spermophilus be1dingi*
Least Chipmunk	*Tamias minimus*
Botta's Pocket Gopher	*Thomomys bottae*
Northern Pocket Gopher	*Thomomys talpoides*
Little Pocket Mouse	*Perognathus longimembris*
Great Basin Pocket Mouse	*Perognathus parvus*
Dark Kangaroo Mouse	*Microdipodops megacephalus*
Ord Kangaroo Rat	*Dipodomys ordii*
Chisel-toothed Kangaroo Rat	*Dipodomys microps*
Deer Mouse	*Peromyscus maniculatus*
Northern Grasshopper Mouse	*Onychomys leucogaster*
Desert Woodrat	*Neotoma lepida*
Sagebrush Vole	*Lemmiscus curtatus*
House Mouse	*Mus musculus*
Kit Fox	*Vulpes macrotis*
Coyote	*Canis latrans*
Long-tailed Weasel	*Mustela frenata*
Badger	*Taxidea taxus*
Striped Skunk	*Mephitis mephitis*
Mountain Lion	*Felix concolor*
Bobcat	*Lynx rufus*
Mule Deer	*Odocoileus hemionus*
Pronghorn	*Antilocapra americana*

Reptiles

Western Skink	*Eumeces skiltonianus*
Western Whiptail	*Cnemidophorus tigrus*
Desert Collared Lizard	*Crotaphytus insularis*
Long-nosed Leopard Lizard	*Gambelia wislizenii*
Desert Spiny Lizard	*Sceloporus magister*
Sagebrush Lizard	*Sceloporus graciosus*
Western Fence Lizard	*Sceloporus cccidentalis*
Side-blotched Lizard	*Uta stansburiana*
Desert Horned Lizard	*Phrynosorna platyrhinos*
Short-horned Lizard	*Phrynosorna douglassii*
Long-nosed Snake	*Rhinocheilus lecontei*
Ground Snake	*Sonora semiannulata*
Night Snake	*Hypsiglena torquata*
Gopher Snake	*Pituophis melanoleucus*
Racer	*Coluber constrictor*
Striped Whipsnake	*Masticophis taeniatus*
Western Rattlesnake	*Crotalus viridis*

Elko RMP Wild Horse Amendment
Attachment 2 – Migratory Birds

On January 11, 2001, President Clinton signed the Migratory Bird Executive Order 13186. This Executive Order outlines the responsibilities of federal agencies to protect migratory birds. The United States has recognized their ecological and economic value to this country and other countries by ratifying international, bilateral conventions for the conservation of migratory birds. These migratory bird conventions impose substantive obligations on the United States for conservation of migratory birds and their habitats. The United States has implemented these migratory bird conventions through the Migratory Bird Treaty Act. President Clinton's Migratory Bird Executive Order directs executive departments and agencies to take certain actions to further implement the Migratory Bird Treaty Act. As defined in the executive order, "action" means a program, activity, project, official policy (such as a rule or regulation), or formal plan directly carried out by a federal agency. The executive order further states that each Federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations is directed to develop and implement, within 2 years, a Memorandum of Understanding (MOU) with the U.S. Fish and Wildlife Service that shall promote conservation of migratory bird populations. The term "action" will be further defined in this MOU as it pertains to each federal agency's own authorities and programs.

A list of the migratory birds affected by the President's executive order is contained in 43 CFR 10.13. References to "species of concern" pertain to those species listed in the periodic report "Migratory Nongame Birds of Management Concern in the United States;" priority migratory bird species as documented by established plans, such as Bird Conservation Regions in the North American Bird Conservation Initiative or Partners in Flight physiographic areas; and those species listed in 50 CFR 17.11. The 1999 Nevada Partners in Flight Bird Conservation Plan identifies the following bird species for prioritization for management action associated the wild horse herd areas, as listed by habitat type in the following table.

Attachment 2 (Cont.)– Migratory Birds
Migratory Birds by Habitat Type

Aspen	**Montane Riparian**	**Montane Shrub**	**Sagebrush**
Obligates*: None Other**: Northern Goshawk Calliope Hummingbird Flammulated Owl Lewis's Woodpecker Red-naped Sapsucker Mountain Bluebird Orange-crowned Warbler MacGillivray's Warbler Wilson's Warbler Other Associated Species Cooper's Hawk Northern Flicker Hermit Thrush Yellow-rumped Warbler Long-eared Owl	Obligates: Wilson's Warbler MacGillivray's Warbler Other: Cooper's Hawk Northern Goshawk Calliope Hummingbird Lewis's Woodpecker Red-Naped Sapsucker Orange-crowned Warbler Virginia's Warbler Yellow-breasted Chat Other Associated Species Warbling Vireo Broad-tailed Hummingbird Fox Sparrow Blue Grouse	Obligates: None Other: Black Rosy Finch Black-throated Gray Warbler Calliope Hummingbird Cooper's Hawk Loggerhead Shrike Blue Grosbeak Vesper Sparrow MacGillivray's Warbler Orange-crowned Warbler Swainson's Hawk Western Bluebird	Obligates: Sage Grouse Other: Black Rosy Finch Ferruginous Hawk Gray Flycatcher Loggerhead Shrike Vesper Sparrow Prairie Falcon Sage Sparrow Sage Thrasher Swainson's Hawk Burrowing Owl Calliope Hummingbird Other associated species: Brewer's Sparrow Western Meadowlark Black-throated Sparrow Lark Sparrow Green-tailed Towhee Brewer's Blackbird Horned Lark Lark Sparrow
Cliffs and Talus	**Mountain Mahogany**	**Lakes (Playas)*** **	**Pinyon/Juniper**
Obligates: Prairie Falcon Black Rosy Finch Other: Ferruginous Hawk Other Associated Species Golden Eagle White-throated Swift Say's Phoebe Common Raven Cliff Swallow Violet-green Swallow Canyon Wren Rock Wren	Obligates: None Other: Black-throated Gray Warbler Cooper's Hawk Flammulated Owl Gray Flycatcher Juniper Titmouse Northern Goshawk Red-Naped Sapsucker Orange-crowned Warbler Virginia's Warbler	Obligates (PIF-listed as Wetlands/Lakes): White-faced Ibis Snowy Plover American Avocet Black Tern Other (PIF-listed as Wetlands/Lakes): Sandhill Crane Long-billed Curlew Short-eared Owl Other Associated Species *(Wetlands/Lakes)* American bittern Great Egret Snowy Egret Cattle Egret Black-crowned Night Heron Marsh Wren Common Yellowthroat Yellow-headed Blackbird	Obligates: Pinyon Jay Gray Vieo Other: Ferruginous Hawk Gray Flycatcher Juniper Titmouse Mountain Bluebird Western Bluebird Virginia's Warbler Black-throated Gray Warbler Scott's Oriole Other Associated Species Mountain Quail Scrub Jay Black-billed Magpie Clark's Nutcracker Mountain Chickadee

* "Obligates" are species that are found only in the habitat type described in the section. [Habitat needed during life cycle even though a significant portion of their life cycle is supported by other habitat types]

** "Other" are species that can be found in the habitat type described the Nevada Partners in Flight Bird Conservation Plan.

*** Other Associated (Wetlands/Lakes) Species are predominately associated with wetlands where emergent aquatic vegetation provides cover and foraging areas. Otherwise, relative to Little Humboldt herd area, snow pond/playas/manmade reservoirs could provide some seasonal habitat for some of the species shown.

Elko RMP Wild Horse Amendment
Attachment 3 – Special Status Species

Definitions of Special Status Species

Federally Threatened or Endangered Species: Any species that the U.S. Fish and Wildlife Service has listed as an endangered or threatened species under the Endangered Species Act throughout all or a significant portion of its range.
Proposed Threatened or Endangered Species: Any species that the Fish and Wildlife Service has proposed for listing as a Federally endangered or threatened species under the Endangered Species Act.
Candidate Species: Plant and animal taxa that are under consideration for possible listing as threatened or endangered under the Endangered Species Act.
BLM Sensitive Species: Species 1) that are currently under status review by the U.S. Fish and Wildlife Service, 2) whose numbers are declining so rapidly that Federal listing may become necessary; 3) with typically small and widely dispersed populations; or 4) that inhabit ecological refugia or other specialized or unique habitats.
State of Nevada Listed Species: State-protected animals that have been determined to meet BLM's Manual 6840 policy definition.

The listing of Nevada BLM Special Status Species is based on input provided by BLM, Nevada Division of Wildlife, and U.S. Fish and Wildlife Service in BLM Instruction Memorandum No. NV-98-013 (February 27, 1998). BLM Elko Field Office provided input for BLM Instruction Memorandum No. NV-98-013, entitled "Former Candidate Category 2 Species On Or Suspected On Elko District -BLM Lands Recommended As BLM Sensitive Species As Of 5/96".

The effects of a proposed action on species that are listed or are proposed for listing as threatened or endangered are subject to consultation under section 7 of the ESA.

Nevada BLM policy is to provide State of Nevada Listed Species and Nevada BLM Sensitive Species with the same level of protection as is provided for candidate species in BLM Manual 6840.06C. Per wording for Table IIa. in BLM Instruction Memorandum No. NV-98-013, Nevada protected animals that meet BLM's 6840 policy definition are those species of animals occurring on BLM-managed lands in Nevada that are: (1) 'protected" under authority of Nevada Administrative Codes 501.100 - 503.104; (2) have been determined to meet BLM's policy definition of "listing by a State in a category implying potential endangerment or extinction," and (3) are not already included as a federally listed, proposed, or candidate species.

The following table lists the species according to their status that are potentially found in northeastern Nevada (the planning area of the Elko RMP). **Bold type** indicates species of animals and plants that have been documented as occurring in the Little Humboldt wild horse herd area (superscript "**1**") and the Rock Creek wild horse herd area (superscript "**2**").

Attachment 3 (Cont.) -Special Status Species

COMMON NAME	SCIENTIFIC NAME
Federally Endangered Species	
(None)	(None)
Federally Threatened Species	
Lahontan cutthroat trout[1, 2]	Oncorhynchus clarki henshawi
Bald Eagle	Haliaeetus leucocephalus
Federally Proposed Threatened or Endangered Species	
(none)	(none)
Federal Candidate Species	
(none)	(none)
State of Nevada Listed Species	
Golden Eagle[1, 2]	Aquila chrysaetos
Burrowing Owl[1, 2]	Athene cunicularia
Ferruginous Hawk	Buteo regalis
Swainson's Hawk[1]	Buteo swainsoni
Northern Goshawk	Accipiter gentiles
Spotted bat	Euderma maculatum
Nevada BLM Sensitive Species	
Mammals	
Small-footed myotis	Myotis ciliolabrum
Long-eared myotis	Myotis evotis
Fringed myotis	Myotis thysanodes
Long-legged myotis	Myotis volans
Yuma myotis	Myotis yumanensis
Pale Townsend's big-eared bat	Plecotis townsendii pallescens
Pacific Townsend's big-eared bat	Plecotis townsendii townsendii
Prebles shrew	Sorex pleblei
Birds	
Greater Sage Grouse[1, 2]	Centrocercus urophasianus
Mountain Quail	Oreortyx pictus
Fishes	
Interior redband trout[1, 2]	Onchorhyncus mykiss gibbsi