

ENVIRONMENTAL ASSESSMENT

Cow Canyon, Clan Alpine, and Dixie Valley Allotments Landscape Project

(Grazing permit renewals; range improvements; wild horse management; community gravel pit establishment; invasive, nonnative and noxious weed treatments, interim visual resource management class establishment and adaptive management practices)



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It is the mission of the Bureau of Land Management to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

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LIST OF ACRONYMS

AML	Appropriate Management Level
AMP	Allotment Management Plan
APHIS	Animal and Plant Inspection Service
ATV	All-terrain Vehicle
AUM	Animal Unit Month
BCS	Body Condition Score
BLM	Bureau of Land Management
BMDO	Battle Mountain District Office
CCD	Carson City District
CCGA	Cow Canyon Grazing Agreement
CEQ	Council of Environmental Quality
CESA	Cumulative Effect Study Area
CFR	Code of Federal Regulations
COR	Contracting Officers Representative
CRMP	Consolidated Resource Management Plan
DO	Dissolved Oxygen
DR	Decision Record
E	Easting
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
FAR	Functional at Risk
FLPMA	Federal Land Policy and Management Act
FMUD	Final Multiple Use Decision
FONSI	Finding of No Significant Impact
FPST	Fallon Paiute-Shoshone Tribe
FUP	Free Use Permit
GHG	Greenhouse Gas Emission
GHMA	General Habitat Management Area
GRSG	Greater sage-grouse
HAF	Habitat Assessment Framework
HMA	Herd Management Area
HSUS	Humane Society of the United States
IBLA	Interior Board of Land Appeals
ID	Interdisciplinary Team
IM	Instructional Memorandum
LWC	Lands with Wilderness Characteristics
MBTA	Migratory Bird Treaty Act
MFP	Management Framework Plan
MLWA	Military Lands Withdrawal Act
MUD	Multiple Use Decision
MOU	Memorandum of Understanding
N	Northing
NAC	Nevada Administrative Code

NASF	Naval Air Station Fallon, NV
NDOW	Nevada Department of Wildlife
NEPA	National Environmental Policy Act
NPO	National Program Office
NRHP	National Register of Historic Places
NV	Nevada
OHMA	Other Habitat Management Area
OHV	Off-Highway Vehicle
PI	Project Inspector
PFC	Proper Functioning Condition
PMU	Population Management Unit
PHMA	Priority Habitat Management Area
PMUD	Proposed Multiple Use Decision
PRIA	Public Rangelands Improvement Act
Project	Cow Canyon, Clan Alpine, and Dixie Valley Allotments Landscape Project
PUP	Pesticide Use Proposal
PZP-22	Porcine Zone Pellucida
RAC	Resource Advisory Councils
RFFA	Reasonably Foreseeable Future Action
RMP	Resource Management Plan
RPS	Rangeland Program Summary
S&G	Standards for Rangeland Health and Guidelines
SDD	Standards Determination Document
SFO	Stillwater Field Office
SHPO	State Historic Preservation Office, Nevada
SOP	Standard Operating Procedures
TGA	Taylor Grazing Act
TNR	Temporary Non-Renewable
USC	United States Code
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Service
UTM	Universal Transverse Mercator
UTV	Utility Terrain Vehicle
VHF/FM	Very High Frequency/Frequency Modulation
VRI	Visual Resource Inventory
VRM	Visual Resource Management
WA	Wilderness Area
WFRHBA	Wild Free-Roaming Horse and Burro Act
WSA	Wilderness Study Area

1.0 INTRODUCTION/PURPOSE AND NEED

1.1 Introduction

The Bureau of Land Management (BLM) Carson City District Office (CCD), Stillwater Field Office (SFO) is proposing the Cow Canyon, Clan Alpine, and Dixie Valley Allotments Landscape Project (Project) located in Churchill County and a small portion of Mineral County, Nevada.

The proposed Project would consist of:

- Issuing new 10-year term livestock grazing permits to the current permit holders;
- Range improvement maintenance and construction;
- Managing wild horses in the Clan Alpine Herd Management Area (HMA) within the Appropriate Management Level (AML);
- Designating a mineral material community pit in Edwards Creek Valley;
- Treating invasive, nonnative and noxious weeds;
- Integrating Adaptive Management measures for various disciplines within the Cow Canyon, Clan Alpine, and Dixie Valley Allotments (see Appendix A); and
- Establishing interim Visual Resource Management (VRM) Class Objectives.

The Project is located in the Cow Canyon, Clan Alpine, and Dixie Valley Allotments within Churchill and Mineral Counties, Nevada. These allotments cover approximately 790,187 acres of land, of which 754,850 acres are public lands.

Table 1: Livestock Grazing Allotments within the Project Area

Project Area					
Allotment	Number of Livestock	Season of Use	AUMs	BLM Total Acreage	Allotment Total Acreage
Cow Canyon	365 cattle	05/01 – 01/15	2,388	146,228	149,174
Clan Alpine	927 cattle	05/01 – 03/31	10,210	358,377	365,228
Clan Alpine	1737sheep	12/01 – 03/15	1,200	358,377	365,228
Dixie Valley	528 cattle	03/01 – 02/28	6,341	250,245	275,785

This Environmental Assessment (EA) has been prepared to analyze the impacts of the proposed Project. The EA considers the potential environmental impacts of the Proposed Action or alternatives to the Proposed Action. It has been prepared in accordance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulating implementing NEPA, and the Federal Lands Policy and Management Act (FLPMA). The EA assists the BLM in project planning and ensuring compliance with NEPA and in making a determination as to whether any “significant” impacts could result from the analyzed actions. “Significance is defined by NEPA and is found in Chapter 40 of the Code of Federal Regulations (CFR) §1508.27. An EA provides analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a statement of “Finding of No Significant Impact” (FONSI). Should a determination be made that implementation of the Proposed Actions would not result in “significant environmental impacts”, a FONSI will be prepared to document that determination, and a Decision Record (DR) issued providing the rationale for approving the chosen alternative.

1.2 Background

Cow Canyon

Livestock Grazing

The Cow Canyon Allotment was established on February 20, 1964 and allocated 2,200 Animal Unit Months (AUM's) for domestic livestock grazing. In June 1992, a rangeline agreement was signed that transferred the northwest portion of the Clan Alpine allotment over to the Cow Canyon Allotment. This reassignment of approximately 20,695 public acres added 190 AUMs onto the active preference. The Cow Canyon has historically been grazed by cattle during the summer and fall months.

The Cow Canyon Allotment is managed under the Cow Canyon Grazing Agreement (CCGA) that was approved in January of 1989. The agreement documents changes made to existing livestock grazing practices to achieve the management objectives for the public lands identified in the Lahontan EIS and Rangeland Program Summary (RPS), which are specifically related to authorized livestock grazing use on the Cow Canyon Allotment. The RPS was later superseded in 2001 by the Consolidated Resource Management Plan (CRMP). The CCGA divided the area into two pastures, the Lower and the Upper. Livestock graze the first six weeks of the season in the Lower Pasture and then are required to use the Upper Pasture through the end of the grazing season. The pastures are not completely fenced. The livestock operator relies on water control, natural barriers and herding to accomplish management control. Short sections of drift fence are placed strategically in critical areas to aid in control.

Wild Horses & Burros

The 1992 Multiple Use Decision (MUD) for the Cow Canyon Allotment set the AML for wild horse use in the Cow Canyon portion of the Clan Alpine HMA at 112 to a maximum of 179 head. The December 2010 census estimated the number of wild horses in the Cow Canyon Allotment portion at 154.

The Cow Canyon, Clan Alpine, and Dixie Valley Allotments all contain acreage within the Clan Alpine HMA. The HMA is managed as one unit. Horse numbers can vary from allotment and location, but the objective is to manage horses for the entire HMA with an AML range of 612-979. The December 10, 2010 census estimated the number of horses within the Clan Alpine HMA to be at 503. The most current census conducted in October 2014 estimated the number of wild horses to be 571 for the Clan Alpine HMA.

During the period covered by the 2009 - 2010 Standards and Guidelines Rangeland Health Assessment, wild horse population was within AML. The only area that showed sign of overgrazing by cattle and/or wild horses was observed at the mouth of Dyer Canyon. In contrast, during years when wild horse numbers were above AML, use pattern mapping documented heavy use in several areas throughout the allotment.

Clan Alpine

Livestock Grazing

The Clan Alpine Allotment historically has been grazed by cattle and sheep. In 1964, the New Pass Allotment, which bordered the Clan Alpine Allotment on the northeast, was assimilated into the Clan Alpine Allotment.

In January 1979, a District Manager's Decision changed the boundary line between the Clan Alpine and Dixie Valley Allotments per "an attached map" which, unfortunately, has been lost and is no longer attached. The Decision also stated that "certain sheep trail privileges no longer exist in the Clan Alpine and Dixie Valley Allotments, since they have been converted to cattle AUMs". This reference does not include the New Pass mountains area of the Clan Alpine allotment which still has permitted domestic sheep grazing.

In June 1992, a rangeline agreement was signed that transferred the northwest portion of the Clan Alpine allotment over to the Cow Canyon Allotment. The reassignment of approximately 20,695 public acres deducted 190 AUM's from the active preference.

Also in June 1992, a rangeline agreement was signed that incorporated the Bell Flat Allotment into the Clan Alpine Allotment as a winter pasture. This pasture added approximately 91,855 public acres to the allotment along with 3600 AUMs.

The allotment is operated under the Clan Alpine Allotment Management Plan (AMP) that was approved in July of 1992. The AMP documents changes to the livestock grazing practices in order to achieve the management objectives for the public lands identified in the Lahontan EIS and RPS, which are specifically related to the authorized livestock grazing use. The RPS was later superseded in 2001 by the CRMP. Cattle's grazing is managed under a pasture rotation system. Livestock are in the allotment from May to March annually. The pastures are not completely fenced. The livestock operator(s) rely on water control, natural barriers and herding to accomplish management control. Short sections of drift fence are placed strategically in critical areas to aid in control.

Domestic sheep trail through the eastern most portion of the Clan Alpine Allotment in the winter months. They are approved to graze across the New Pass Mountains while moving from the Gilbert Allotment to the Cottonwood Allotment, both of which are located within the Battle Mountain District Office (BMDO) boundaries. Bedding grounds are expected to be moved daily and to be placed a minimum of ¼ mile from any riparian area, water facility or aspen stand. Shepherd camps are moved at least every five days. The permittee, Ellison Ranching Co., is required to remove sheep from an area when utilization reaches 50% on key upland perennial species.

Two permittees are currently licensed to graze livestock within the allotment. Cattle are authorized to graze from 5/1 to 3/31 for a total of 10,210 AUMs. Ellison Ranching is permitted to graze 1737 sheep from 12/1 to 3/15 for a total of 1200 AUMs in the New Pass Mountains area of the allotment and is administered by the BMDO.

Wild Horses & Burros

The 1992 MUD for the Clan Alpine Allotment set the AML for wild horse use in the Clan Alpine portion of the Clan Alpine HMA at 253 to a maximum of 405 head. The December 2010 census estimated the number of wild horses in the Clan Alpine portion at 151.

The Cow Canyon, Clan Alpine, and Dixie Valley Allotments all contain acreage within the Clan Alpine HMA. The HMA is managed as one unit. Horse numbers can vary from allotment and

location, but the objective is to manage horses for the entire HMA with an AML range of 612-979. The December 10, 2010 census estimated the number of horses within the Clan Alpine HMA to be at 503. The most current census conducted in October 2014 estimated the number of wild horses to be 571 for the Clan Alpine HMA.

The 2009 - 2010 utilization data showed moderate use for the last growing season. In the past when the wild horse population was above AML, utilization data indicated heavy use resulting in a determination that wild horses were a contributing factor for the over utilization of forage grasses.

Additionally, a portion of the New Pass-Ravenswood HMA, administered by the BMDO, is located in the New Pass Mountains area of the Clan Alpine Allotment. The wild horse AML for the New Pass Mountain area of the HMA was established at 90 head with an AML range of 545 to a maximum of 566 head for the entire HMA.

Dixie Valley

Livestock Grazing

The Dixie Valley Allotment is composed of three former individual allotments – Dixie Valley, Hare Canyon and Mississippi Canyon.

The Dixie Valley Allotment historically has been grazed by livestock yearlong. It is operated under a 1989 AMP. The AMP documents changes made to the livestock grazing practices in order to achieve the management objectives for the public lands identified in the Lahontan EIS and RPS, which are specifically related to authorized livestock grazing use on the Dixie Valley Allotment. The RPS was later superseded in 2001 by the CRMP. Grazing is done under a pasture rotation system. Livestock are in the allotment yearlong. The area is divided into four pastures, North Dixie, South Dixie, Mid-Slope, and High Country, and is not completely fenced. The livestock operator relies on water control, natural barriers and herding to accomplish management control. Short sections of drift fence are placed in critical areas to aid in control.

Wild Horses & Burros

The 1992 MUD for the Dixie Valley Allotment set the AML for wild horse use in the Dixie Valley portion of the Clan Alpine HMA at 247 to a maximum of 395 head. The December 2010 census estimated the number of wild horses in the Dixie Valley portion at 198.

Use pattern mapping data indicates moderate use when the wild horse numbers are within the AML range and heavy use when the wild horse numbers are above the upper end of AML. The 2009 - 2010 Dixie Valley Allotment utilization category is currently moderate.

The Cow Canyon, Clan Alpine, and Dixie Valley Allotments all contain acreage within the Clan Alpine HMA. The HMA is managed as one unit. Horse numbers can vary from allotment and location, but the objective is to manage horses for the entire HMA with an AML range of 612-979. The December 10, 2010 census estimated the number of horses within the Clan Alpine HMA to be at 503. The most current census conducted in October 2014 estimated the number of wild horses to be 571 for the Clan Alpine HMA.

Background Common to all Allotments

Evaluations of all three allotments, based on field inspections from 2009 through 2015, as well as other available information, were completed in October 2015 to determine whether rangeland health and/or Table 2-2 Habitat Standards were being met. These evaluations are available at the SFO.

It is BLM policy (BLM 2003b) that grazing permits shall be fully processed using the information from the land health standards evaluations, with fully processed identified as completing adequate environmental impact analysis and appropriate consultation in accordance with the Endangered Species Act. According to IM-2003-071, by the end of fiscal year 2009, all permits should be fully processed in the year they expire. The condition of natural resources on the Cow Canyon, Clan Alpine, and Dixie Valley Allotments were evaluated and grazing management needs to be updated at this time through a fully processed grazing permit.

The lands managed by BLM within these allotments were identified as available for livestock grazing in the Carson City District (CCD) CRMP and continued livestock grazing is consistent with the goals, objectives, standards and guidelines identified in the CRMP.

Where consistent with other multiple use goals and objectives, there is a congressional intent to allow grazing on BLM managed lands. This is evidenced by the Taylor Grazing Act (TGA) of 1934 (as amended), the FLPMA of 1976, the Public Rangelands Improvement Act (PRIA) of 1978, and the approved Standards and Guidelines (S&Gs) of 2003, as well as various other federal laws and regulations.

Table 2: Cow Canyon – Clan Alpine – Dixie Valley Allotments Decision Documents

PLANNING DOCUMENTS			
Name	Decision	AUMs (livestock)	AML (wild horses)
Lahontan Environmental Impact Statement	9/3/85		
Rangeland Program Summary Update	1989		
Consolidated Resource Management Plan	2001	N/A	Clan Alpine HMA: 619-979
Cow Canyon Grazing Agreement	FD 1/10/89	2197 cattle	N/A
Multiple Use Decision Cow Canyon Allotment	Proposed MUD (PMUD) 6/11/92	2200 cattle	112-179
Clan Alpine Allotment Management Plan	AMP 7/20/92	10,210 cattle 1200 sheep	Clan Alpine HMA: 405 Desatoya HMA: 43 in the Clan Alpine portion
Multiple Use Decision Clan Alpine Allotment	PMUD 6/15/92	10,210 cattle 1200 sheep	Clan Alpine HMA: 253-405

PLANNING DOCUMENTS

Name	Decision	AUMs (livestock)	AML (wild horses)
			Desatoya HMA: 32 - 43
Dixie Valley Allotment Management Plan	AMP 11/8/89	6492 cattle	Clan Alpine HMA: 274 in the Dixie Valley portion
Multiple Use Decision Dixie Valley Allotment	PMUD 6/2/92	6495 cattle	Clan Alpine HMA: 247-395 in the Dixie Valley portion
MUDs			
Grazing Allotment	Decision	AML	
Cow Canyon	PMUD 6/11/92	112 - 179	
Clan Alpine	PMUD 6/15/92	253 - 405	
Dixie Valley	PMUD 6/02/92	247 - 395	
Clan Alpine HMA Total AML: 612 - 979			
Clan Alpine (5% of Desatoya HMA)	PMUD 6/15/92	32 - 43	
GATHER PLAN DECISIONS			
Clan Alpine, Pilot Mountain and Pine Nut Herd Management Areas Gather Plan	NV-C010-2010-0019-EA Decision Record 2010		
Desatoya Herd Management Area Gather Portion of the Desatoya Mountains Habitat Resiliency, Health, and Restoration Project	NV-C010-2011-0513-EA Decision Record 2012		

Minerals

The public and other interested parties have a need for mineral material sites for various purposes. The BLM allows for the public to purchase mineral materials from the location at fair market value under 43 CFR 3600 regulations utilizing a standard mineral materials contract. BLM, other government entities and non-profit organizations may request Free Use Permits (FUP) for mineral materials under these regulations.

In order to facilitate the public's need of materials from this location, the BLM is proposing to designate one mineral material site as a new community pit. This site would comprise approximately 70 acres and encompass two existing mineral material pits. The pit is located in T21N R39E Sec 2 (SWSWSE) and Sec 11 (NENWNE) (E2NENE) (SENENE), Mount Diablo Meridian which is located outside of any Greater sage-grouse (GRSG) habitat management areas. By establishing this community pit it would facilitate processing for future mineral material sales in the area.

Invasive, Nonnative, and Noxious Weeds

There are documented observations of numerous noxious weed infestations across the project area. Some have been treated with herbicides, but there are no current records within the SFO to verify that these treatments have been successful at eradicating the weeds. There are other noxious weed infestations that have recently been recorded, and these have not been

treated. It is probable that there are numerous areas of noxious weeds and other invasive plant species that are unknown and scattered across the landscape. This Project would target the two noxious weed species that are known to occur within the project area; however, if other noxious weed species are observed, they would also be treated.

Saltcedar (*Tamarix ramosissima*), a federally and state listed noxious weed, is infesting the project area and is found growing up numerous canyons. These exotic and invasive plants draw excessive amounts of water from the soil, displace native plants, and are practically unusable for wildlife habitat.

Hoary cress (*Cardaria draba*), a federally and state listed noxious weed, has been observed in a few areas within the project area. These aggressive invaders reproduce by both seeds and their roots, making eradication difficult. An infestation of hoary cress can form a dense stand that replaces native plants, replaces forage for livestock and wildlife, and reduces available soil moisture and nutrients early in the growing season.

Cheatgrass (*Bromus tectorum*) is not a federally nor state listed noxious weed, but is nonnative and considered invasive. Cheatgrass has become a serious weed in rangeland systems throughout North America. It is now estimated to infest more than 101 million acres in western states (Mack 1981). It is an aggressive invader of sagebrush, pinyon-juniper, mountain brush and other shrub communities often out-competing native grasses and forbs.

Livestock: Although cheatgrass provides good quality forage early in the season, the plants mature quickly; initially turning reddish before completely curing. The best forage quality is in late winter to mid spring and it must be grazed early in its growing season. Moreover, under drought situations the presence of cheatgrass causes rapid depletion of early season soil moisture, thus serving to out-compete, retard or prevent the establishment of perennial grasses (Welsh 1987).

Military Withdrawn Lands

Under the Military Lands Withdrawal Act of 1999 (MLWA), P.L. 106-65, Enacted 5 October 1999, Section 3011, Withdrawals (a) Naval Air Station Fallon (NASF), Nevada, Ranges, approximately 18,982 acres of public lands were withdrawn from the Dixie Valley and Cow Canyon Allotments (See Appendix A, Maps). The 2007 Memorandum of Understanding (MOU) between NASF and BLM details the agreed upon management responsibilities of the BLM for minerals, livestock grazing, wild horses & burros, recreation, VRM, wildlife, and cultural resources on the Navy withdrawn lands.

Visual Resource Management

The assignment of VRM objectives for the CCD in previous land use plans was not complete and did not extend to the more remote eastern and southern areas of the District. Because of this, the VRM objectives for the planning area have not been assigned and are currently considered to be unclassified.

1.3 Purpose and Need

The purpose of the proposed Project is to address multiple disciplines across a landscape level within the boundaries of the Project area. This would provide for a cooperative approach to resolving resource conflicts and issues and address projects that would fulfill the needs of several resources at once.

Livestock Grazing

The purpose of the Proposed Action as it relates to livestock grazing management is to maintain and/or improve the quality of the rangelands while meeting the regulatory requirements for livestock grazing. The need for the Proposed Action is to provide for appropriate livestock grazing on public lands in accordance with all applicable laws (such as but not limited to the TGA, FLPMA, and PRIA), regulations, including but not limited to 43 CFR 4130.1(a) (2005) which states, "Grazing permits or leases authorize use on the public lands and other BLM-administered lands that are designated in land use plans as available for livestock grazing," while achieving or making progress towards achieving applicable land health and/or Table 2-2 Habitat Standards and conforming with the applicable guidelines for livestock management (S&G's)¹.

Monitoring data was reviewed and assessments of the rangeland health of the allotments were completed between 2009 and 2015 during the term permit renewal process through the Standards Determination Documents (SDD) (refer to Appendix F). The following table presents a summary of the SDD by allotment.

Table 3: Summary of the SDD

Allotment	<u>Standard 1</u> Soils	<u>Standard 2</u> Riparian/ Wetlands	<u>Standard 3</u> Water Quality	<u>Standard 4</u> Plant & Animal Habitat	<u>Standard 5</u> Special Status Species Habitat
Cow Canyon	Meeting standard	Not meeting in some areas, livestock grazing not a causal factor	Meeting standard	Not meeting in some areas, livestock grazing a factor	Not meeting in some areas, livestock grazing a factor
Clan Alpine	Meeting standard	Not meeting in some areas, livestock grazing a factor	Meeting standard	Not meeting in some areas, livestock grazing a factor	Not meeting in some areas, livestock grazing a factor

¹ The applicable land health S&Gs for livestock grazing on these allotments are those that apply to the Sierra Front-Northwestern Great Basin Area of Nevada BLM-managed lands, which were developed pursuant to 43 CFR 4180.2(b) (2005), and approved by the Secretary of the Interior on February 12, 1997. AIM data was collected during land health evaluations and used to evaluate Habitat Assessment Framework (HAF) requirements. A copy of these S&G's may be obtained from the CCD.

Allotment	<u>Standard 1</u> Soils	<u>Standard 2</u> Riparian/ Wetlands	<u>Standard 3</u> Water Quality	<u>Standard 4</u> Plant & Animal Habitat	<u>Standard 5</u> Special Status Species Habitat
Dixie Valley	Meeting standard	Not meeting in some areas, livestock grazing a factor	Meeting standard	Not meeting in some areas, livestock grazing a factor	Not meeting in some areas, livestock grazing a factor

Wild Horses & Burros

The purpose of the Proposed Action as it relates to Wild Horses and Burros is to ensure healthy rangelands by maintaining AML within the Herd Management Area (HMA) so as to maintain and/or bring the wild horse and burro populations to the levels determined to be necessary for a thriving natural ecological balance². The need for the Proposed Action is to provide for appropriate management of wild horses and burros on public lands in accordance with the Wild Free-Roaming Horse and Burro Act (WFRHBA), the CRMP, and all applicable laws.

Minerals

The purpose of the Proposed Action as it relates to mineral resources is to designate a mineral material community pit in Edwards Creek Valley to meet current and future mineral material needs in the Valley. The community pit designation would allow the BLM to sell federally owned mineral materials to operators for their current and future projects. The need for the Proposed Action is established by the regulations found at 43 CFR 3600 and the Minerals Act of 1947.

Invasive, Nonnative, and Noxious Weeds

The purpose of the Proposed Action as it relates to invasive, nonnative and noxious weeds is to facilitate control and possible eradication of invasive, nonnative, and noxious weeds on a landscape scale within the Cow Canyon, Clan Alpine, and Dixie Valley Allotments. The need for the Proposed Action is to restore and improve ecosystem health by controlling weeds and invasive species, improve rangeland and riparian areas, and improve water quality on the landscape.

Visual Resource Management

The purpose of the Proposed Action in relation to Visual Resource Management is to establish interim visual management objectives for the project area until such time that permanent objectives are designated in the revised CRMP. The need for this action is established by the CCD CRMP (2001), Section VRM-1,1.C and Visual Resource Management Manual 8400 Section .06.3 for establishing interim visual management objectives.

² The Interior Board of Land Appeals (IBLA) has defined “thriving natural ecological balance” as follows: “The goal of wild horse and burro management should be to maintain a thriving ecological balance between wild horse and burro populations, wildlife, livestock and vegetation, and to protect the range from the deterioration associated with overpopulation of wild horses and burros.” (109 IBLA 115; also reference Dahl vs. Clark, supra at 592).

Wilderness Study Area Range Improvements

The purpose of the Proposed Action in relation to two range improvements within the Clan Alpine Wilderness Study Area (WSA) is to analyze the potential impacts or impairment to wilderness characteristics from the Proposed Action. The need for this action is established under Section 2 (c) of the Wilderness Act of 1964 and Section 1.6.C.2.f. of BLM Manual 6330, Management of BLM Wilderness Study Areas.

In this case, the range improvements would have minimal short term impacts to wilderness character, but would result in long term benefits by providing for restoration of springs, native vegetation, and enhancement of water sources for wild horses. The Proposed Action meets the exception to non-impairment criteria Section 1.6.C.2.f, protection or enhancement of wilderness characteristics or values and Section 1.6.D.10.c.i and ii, water development and fences for wild horse and burro management.

1.4 Land Use Plan Conformance Statement

The Proposed Action and alternatives are in conformance with the CCD CRMP (2001). The AML for the Clan Alpine HMA was established through the allotment evaluation and Final MUD (FMUD) process (see Table 2).

CRMP 2001

The Proposed Action and alternatives are in conformance with the following decisions and objectives from the CRMP:

Grazing and Invasive, Nonnative, and Noxious Weeds

The Proposed Action and Current Management Alternatives described below are in conformance with the CRMP, pages LSG-1 & LSG-2:

- “Maintain or improve the condition of the public rangelands to enhance productivity for all rangeland and watershed values.”
- “Provide adequate, high quality forage for livestock by improving rangeland condition.”
- “Improve overall range administration.”
- “Maintain a sufficient quality and diversity of habitat and forage for livestock, wildlife, and wild horses through natural regeneration and or vegetation manipulation methods.”
- “Improve the vegetation resource and range condition by providing for the physiological needs of key plant species.”
- “Reduce soil erosion and enhance watershed values by increasing ground cover and litter.”
- “Improve riparian-wetland ecosystems to achieve a healthy proper functioning condition that assures biological diversity, productivity and sustainability.”

As the No Grazing Alternative would be inconsistent with the current CRMP, (the CRMP identified the lands within the allotments as available for livestock grazing), selection of the No Grazing Alternative would require concurrent amendment of the CRMP which is not within the

scope of this EA, however it is analyzed in this EA as a baseline comparison to the alternatives. Under 43 CFR 1610.5-3, all actions approved or authorized by the BLM must conform to the existing land use plan.

Wild Horses & Burros

This action is in conformance with the CCD CRMP (2001) pages WHB-1-5 and WLD 1-9:

- “Maintain sound thriving populations of wild horses within HMAs.”
- “Maintain or improve the condition of the public rangelands so as to enhance productivity for all rangeland values (including wildlife).”
- “Maintain and improve wildlife habitat, and reduce habitat conflicts while providing for other appropriate resource uses.”

Minerals

This action is in conformance with the CCD CRMP (2001) page MIN-1:

- “Encourage development of energy and mineral resources in a timely manner to meet national, regional and local needs consistent with the objectives for other public land uses.”

Visual Resource Management

The Proposed Action and Alternatives described below are in conformance with the CCD CRMP (2001) pages VRM-1 through 4:

- 1.C. “Interim Visual Management Objectives are established where a project is proposed and there are not RMP (or MFP³) approved VRM objectives. These objectives are developed using the guidelines in Manual Section 8410 and must conform with the land use allocations set forth in the RMP which covers the project area. The establishments of interim VRM objectives will not require a plan amendment unless the project itself requires one.”

Wilderness Study Areas

The Proposed Action and Current Management Alternatives described below are in conformance with the CCD CRMP, page WSA-4:

- 5.1 Wilderness study Areas will be managed in accordance with Section 603(c) of FLPMA and the Interim Management Policy for Lands under Wilderness Review (superseded by M-6330 Management of Wilderness Study Areas, 2012) so as not to impair their suitability for preservation of wilderness.

APPROVED GREATER SAGE-GROUSE PLAN AMENDMENT 2015

The CRMP has been amended by the Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment (USDI, BLM 2015b). The Record of Decision (ROD) (USDI, BLM 2015a) and Approved Resource Management Plan Amendments

3 MFP – Management Framework Plan, a land use planning document like the Resource Management Plan.

for the Great Basin Region, including the Greater Sage-Grouse Sub-Region of Nevada and Northeastern California, were signed on September 21, 2015 by the Director of the BLM and the Assistant Secretary of Land and Minerals Management (henceforth referred to as the Decision). This Decision in conjunction with the approved resource management plans and approved resource management plan amendments constitutes BLM land use planning decisions to conserve the GRSG and its habitats throughout its remaining range that is located on public lands administered by the BLM. The efforts of the BLM, in coordination with the Forest Service on National Forest System lands within the remaining range of the species, constitute a coordinated strategy for conserving the GRSG and the sagebrush-steppe ecosystem on most Federal lands on which the species depends. Appendix C of this Decision states that Required Design Features (RDFs) are required for certain activities in all GRSG habitats. RDFs establish the minimum specifications for certain activities to help mitigate adverse impacts.

The Project Area has been mapped as containing all three types of Habitat Management Areas as defined in the ROD, Priority Habitat Management Area (PHMA), General Habitat Management Area (GHMA) and Other Habitat Management Area (OHMA). The Project components are in conformance with the amended RMP, and are compliant with the applicable RDFs, lek buffer distances, and specifically the goals, objectives and management decisions identified in Section 2.2 for Special Status Species, Vegetation, Livestock Grazing, Wild Horses and Burros, and Cultural Resources.

Special Status Species

The Proposed Action and Current Management Alternatives are in conformance with the Approved Greater Sage-Grouse Plan Amendment of 2015 pages 2-3 through 2-13, Management Decisions MD SSS 1 through MD SSS 24.

Vegetation

The Proposed Action and Current Management Alternatives are in conformance with the Approved Greater Sage-Grouse Plan Amendment of 2015 pages 2-13 through 2-18, Management Decisions MD VEG 1 through MD VEG 27.

Livestock Grazing

The Proposed Action and Current Management Alternatives are in conformance with the Approved Greater Sage-Grouse Plan Amendment of 2015 pages 2-23 through 2-27, Management Decisions MD LG 1 through MD LG 23.

Wild Horses and Burros

The Proposed Action and Current Management Alternatives are in conformance with the Approved Greater Sage-Grouse Plan Amendment of 2015 pages 2-27 through 2-28, Management Decisions MD WHB 1 through MD WHB 10.

Cultural Resources

The Proposed Action and Current Management Alternatives are in conformance with the Approved Greater Sage-Grouse Plan Amendment of 2015 page 2-37, Management Decisions MD CUL 1 through MD CUL 3.

1.5 Relationships to Statutes, Regulations, Policies, Plans or Other Environmental Analysis

The Proposed Action and Alternatives are consistent with the following:

- Taylor Grazing Act of 1934 as amended;
- Federal Land Policy and Management Act of 1976;
- Public Rangelands Improvement Act of 1978;
- Title 43 of the Code of Federal Regulations Subpart 4100 – Grazing Administration;
- Noxious Weed Act of 1974;
- Endangered Species Act of 1973;
- National Environmental Policy Act of 1969;
- Standards and Guidelines for Nevada's Sierra Front-Northwestern Great Basin Area (2003);
- Migratory Bird Treaty Act of 1918;
- Migratory Bird Treaty Act – Interim Guidance – BLM Instruction Memorandum (IM) 2008-050;
- Memorandum of Understanding between the BLM and the U.S. Fish and Wildlife Service (USFWS) to Promote the Conservation of Migratory Birds – BLM 2010-110.
- Facilitation of Hunting Heritage and Wildlife Conservation – Executive Order (EO) 13443 – inclusion of game animals/key habitats;
- National Historic Preservation Act (16 United States Code (USC) 470f);
- Archeological Resources Protection Act;
- Native American Graves Protection and Repatriation Act;
- Indian Sacred Sites – EO 13007; and
- Consultation and Coordination with Indian Tribal Governments – EO 13175;
- Wild Free-Roaming Horse and Burro Act of 1971, As Amended (Public Law 92-195, 43 CFR § 4700);
 - 43 CFR 4700.0-6: (a) “Wild horses shall be managed as self-sustaining populations of healthy animals in balance with other uses and productive capacity of their habitat.”
 - 43 CFR 4710.3-1: Herd management areas. “Herd management areas shall be established for the maintenance of wild horse and burro herds. In delineating each herd management area, the authorized officer shall consider the appropriate management level for the herd, the habitat requirements of the animals, the relationships with other uses of the public and adjacent private lands, and the constraints contained in 4710.4. The authorized officer shall prepare a herd management area plan, which may cover one or more herd management areas.”
 - 43 CFR 4710.4: Constraints on management. “Management of wild horses and burros shall be undertaken with limiting the animals’ distribution to herd areas. Management shall be at the minimum feasible level necessary to attain the

objectives identified in approved land use plans and herd management area plans.”

- 43 CFR 4740.1: Use of motor vehicles or aircraft. (a) “Motor vehicles and aircraft may be used by the authorized officer in all phases of the administration of the Act, except that no motor vehicle or aircraft, other than helicopters, shall be used for the purpose of herding or chasing wild horses or burros for capture or destruction. All such use shall be conducted in a humane manner. (b) Before using helicopters or motor vehicles in the management of wild horses or burros, the authorized officer shall conduct a public hearing in the area where such use is to be made.”
- 43 USC Sec. 1901: (4) “continue the policy of protecting wild free-roaming horses and burros from capture, branding, harassment, or death, while at the same time facilitating the removal and disposal of excess wild free-roaming horses and burros which pose a threat to themselves and their habitat and to other rangeland values.”
- The Materials Act of July 31, 1947; and
- Title 43 CFR 3600 - Mineral Materials Disposal.

Other Environmental Analysis

- Clan Alpine, Pilot Mountain and Pine Nut Herd Management Areas Gather Plan (DOI-BLM-NV-C010-2010-0019-EA)
- Desatoya Mountains Habitat Resiliency, Health, and Restoration Project Environmental Assessment (DOI-BLM-NV-C010-2011-0513-EA).
- Final Programmatic Environmental Impact Statement, Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States FES 07-21.
 - Carson City District Drought Management Environmental Assessment (DOI-BLM-NV-C000-2013-0001-EA).

1.6 Decisions to be Made

The Authorized Officer would make separate decisions, as described below, to implement the different components of the Landscape Project.

Livestock Grazing

The Authorized Officer would decide whether or not to issue a new term livestock grazing permit for the Cow Canyon, Clan Alpine, and Dixie Valley Allotments, and if so, the terms and conditions for each permit.

The Authorized Officer would also decide whether or not to authorize the maintenance and creation of range improvements throughout the Project area.

Wild Horses & Burros

The Authorized Officer would determine whether or not to implement any proposed bait and/or water trapping and vaccination of released mares with a contraceptive and removal of wild

horses. The authorizing officer's decision would not set or adjust the AML as this was set through a previous decision and is not within the scope of this EA.

Wild horse helicopter removal numbers are subject to adjustments which would be based on a pre-gather census conducted approximately 6 to 12 months prior to the implementation of the gather.

Minerals

The Authorized Officer would determine whether or not to designate the mineral material site in Edwards Creek Valley as a community pit.

Invasive, Nonnative, and Noxious Weeds

The Authorized Officer would determine whether or not to implement the proposed six year treatment plan for Invasive, Nonnative and Noxious Weeds.

Visual Resource Management

The Authorized Officer would decide the interim visual management class objectives that would be applied to this area for lands within the project area, located outside of designated WSAs.

Wilderness Study Areas

The Authorized Officer would decide whether or not to authorize two spring developments with exclusionary fencing in the Clan Alpine Allotment along the boundary of the Clan Alpine WSA.

1.7 Scoping and Issues

During the preliminary internal scoping in November 2011 and during the project initiation process in February 2013, BLM resource specialists identified the following resources as being present and potentially impacted by the Proposed Action:

- Livestock Grazing
- Wild Horses and Burros
- Vegetation
- Invasive, Nonnative and Noxious Species
- Cultural Resources
- Native American Religious Concerns
- Wetlands/Riparian Zones
- General Wildlife
- BLM Sensitive Species (animals)
- Migratory Birds
- Visual Resources
- Wilderness/WSA
- Lands with Wilderness Characteristics
- Water Quality
- Minerals

2.0 PROPOSED ACTION AND ALTERNATIVES

This chapter describes seven alternatives, the Proposed Action, the Dixie Valley Reduction in Livestock and Change in Season of Use Alternative, the Cherry Valley Closure to Hot Season Grazing Alternative, the Cow Canyon Change in Season of Use and Clan Alpine Reduction of AUMs Alternative, the No Domestic Sheep Grazing Alternative, the No Grazing Alternative and the No Action Alternative. The Proposed Action was developed in response to resource conditions on the allotments and with input from the grazing permittees. The No Action alternative is considered and analyzed to provide a baseline for comparison of the impacts of the Proposed Action. This chapter also provides a brief description of other alternatives that were considered but were eliminated from further analysis in this EA.

2.1 Alternative 1: Proposed Action

The Proposed Action would occur within the Cow Canyon, Clan Alpine and Dixie Valley Allotments in Churchill and Mineral Counties, NV. The legal description of these allotments is found in the following tables.

Table 4: Legal Description* of Cow Canyon Livestock Grazing Allotment

Township	Range	Sections
20N	37E	3; 4; 5; 6; 7; 8; 9; NW corner 16; NE corner 17
20N	36E	1-12; NW corner 13; 14; 15; 16; NE corner 17
20N	35E	1; 2; 3; 4; 5; NE corner 12
21N	37E	All except 13; 24; 25; 36
21N	36E	All
21N	35E	All except 5; 6; 7; 8; 17; 18; 19; 20; 30; 31
22N	38E	19; 20; 29; 30; 31; 32
22N	37E	All except 1; 2; 3; 12; NE corner 13
22N	36E	All except NW corner Section 5; north half Section 6
22N	35E	12; 13; 14; 15; 16; 21; 22; 23; 24; 25; 26; 27; 28; 33; 34; 35; 36
23N	37E	19; 29; 30; 31; 32
23N	36E	25; 26; 33; 34; 35; 36

*Mount Diablo Meridian, Churchill County, Nevada

Table 5: Legal Description* of Clan Alpine Livestock Grazing Allotment

Township	Range	Sections
18N	37E	3; 4; 5; 6; 7; 8; 9; 16; 17 20; 21; 29; 31
19N	38E	NW corner 1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 17; 18; NE corner 19
19N	37E	All except SE corner 24; 25; SE corner 26; 35; 36
19N	36E	1; 2; 10; 11; 12; 13; 14; 15; 22; 23; 24; 25; NE corner 36
20N	40E	3; 4; 5; 6; 7; 8; 9; 17; 18; 19
20N	39E	1-24; 27; 28; 29; 30; 31
20N	38E	All except SE corner of Section 36
20N	37E	All except Sections 4; 5; 6
21N	40E	4; 5; 6; 7; 8; 9; 15; 16; 17; 18; 19; 20; 21; 22; 28; 29; 30; 31; 32; 33
21N	39E	All
21N	38E	All

Township	Range	Sections
21N	37E	12; 13; 14; 23; 24; 25; 26; 35; 36
22N	40E	4; 5; 6; 7; 8; 9; 17; 18; 19; 20; 28; 29; 30; 31; 32; 33
22N	39E	All
22N	38E	All except Sections 19; 29; 30 31
22N	37E	1; 2; 3; 4; 10; 11; 12; 13
23N	40E	17; 18; 19; 20; 28; 29; 30; 31; 32; 33
23N	39E	13-36
23N	38E	13-36
23N	37E	1; 2; 9; 10; 11; 13-29; 32; 33; 34; 35; 36
Bell Flat Pasture of Clan Alpine Allotment		
13N	35E	NW corner Section 5; north half Section 6
13N	34E	1; 2; 3; 4; 5; 8; 9; 10; 11
14N	35E	4; 5; 6; 7; 8; 9; 16-21; 27; 28; 29; 30; 31; 32; 33; NW corner 34
14N	34E	All except Section 31
15N	35E	All except 1; 2; 11; 12; 13; 14; 25; 26; 35; 36
15N	34E	All except 6; 7; 18
16N	35E	All except 1; 2; 11; 12; 13; 14; 23; 24; 25; 26; 35; 36
16N	34E	1; 2; 3; 7-16; 21- 28; 33; 34; 35; 36

*Mount Diablo Meridian, Churchill and Mineral Counties, Nevada

Table 6: Legal Description* of Dixie Valley Livestock Grazing Allotment

Township	Range	Sections
17N	36E	All except SE corner 1; 13; 14; 15; 23; 24; 25; 26; 27; 33; 34; 35; 36
17N	35E	All
17N	34E	1; 2; 3; 10; 11; 12; 13; 14; 15; 22; 23; 24; 25; 26; 27; 33; 34; 35; 36
18N	37E	NW corner 6; 7; 18; 19; 30; 31
18N	36E	All
18N	35E	All
18N	34E	1; 2; 3; 10; 11; 12; 13; 14; 15; 22; 23; 24; 25; 26; 27; 34; 35; 36
19N	36E	All except 1; 2; SE corner 10-14; east ½ 15; north ¼ 23; 24; east ¼ 24
19N	35E	All
19N	34E	All except 19; 29; 30; 31; 32; 33
19N	33½E	East ¼ of 1; east ½ of 12; NE corner 13
20N	36E	South ½ of 7; 8; 9; 17; 18; 19; 20; 29; 30; 31; 32; 33
20N	35E	All except ¾ of 1; north ½ of 2
20N	34E	All except 6; 18; 19; west ½ 30
21N	35E	5; 6; 7; 8; 17; 18; 19; 20; 29; 30; 31; 32
21N	34E	All
21N	33E	1; 2; 11; 12; 13; 14; 23; 24; 25; 26; 35; 36
22N	35E	NW corner 5; 6; 7; west ½ 18; 19; 20; 29; 30; 31; 32
22N	34E	All except west ½ 6; NW corner 7
22N	33E	13; 24; 25; 26; 35; 36
23N	35E	5; 6; 7; 8; 17; 18; 19; 20; 21; 27; 28; 29; 30; 31; 32; 33; 34
23N	34E	1; 2; 11; 12; 13; 14; 15; SE corner 16; 21-29; 31-36

Township	Range	Sections
24N	35E	31; west quarter 32
24N	34E	SE corner 36

*Mount Diablo Meridian, Churchill County, Nevada

2.1.1 Livestock Grazing

Under the Proposed Action, the BLM would issue the applicants 10-year term livestock grazing permits with the following changes to grazing schedules:

Cow Canyon

In order to help facilitate the removal of livestock from the allotment in a judicious manner the BLM proposes to extend the gathering period in the Upper pasture from 15 days to 30 days. Cattle would begin being herded down to the Lower pasture on Nov 1 and be off the allotment by Dec 1. This would extend the current grazing season previously ending on November 15 to November 30. The number of permitted livestock would be decreased from 365 to 340 in order to keep the AUMs at relatively the same level as currently authorized.

Table 7: Cow Canyon Livestock Grazing Schedule

CURRENT GRAZING SCHEDULE				
Cow Canyon	Lower	05/01 – 06/15	365 cattle	552 AUMs
	Upper	06/16 – 11/15	365 cattle	1836 AUMs
	Total			2388 AUMs
PROPOSED GRAZING SCHEDULE				
Cow Canyon	Lower	05/01 – 06/15	340 cattle	514 AUMs
	Upper	06/16 – 11/30	340 cattle	1878 AUMs
	Total			2392 AUMs

Clan Alpine

The permittee would be approved to begin moving cattle from one pasture to another two weeks prior to the end/beginning time of the authorized pasture use. All cattle would need to be removed from the pasture by the time off date. The Cold Springs pasture would be used in November to hold cattle as they are gathered and then trailed to the Bell Flat pasture for the winter grazing season and again in April when heading back to the Clan Alpine Allotment in the spring. The proposed renewal includes use in the month of April which is not permitted currently, however the number of permitted livestock would be decreased from 927 to 848 keeping the AUMs the same.

Table 8: Clan Alpine Livestock Grazing Schedule

CURRENT GRAZING SCHEDULE				
Clan Alpine *Use is rotated annually	Shoshone*	05/01 – 06/30	927 cattle	1859 AUMs
	Alpine*	05/01 – 06/30	927 cattle	1859 AUMs
	Desatoya/Cherry Valley	07/01 – 08/31	927 cattle	1890 AUMs
	Edwards	09/01 – 10/31	927 cattle	1859 AUMs
	Cold Springs	11/01 – 11/30	927 cattle	914 AUMs
	Bell Flat	12/01 – 03/31	927 cattle	3688 AUMs
	Total			10210 AUMs

Table 9: Clan Alpine Livestock Proposed Grazing Schedule

PROPOSED GRAZING SCHEDULE				
Clan Alpine *Use is rotated annually	Shoshone*	04/15 – 05/31	848 cattle	1310 AUMs
	Alpine*	06/01 – 07/15	848 cattle	1255 AUMs
	Desatoya/Cherry Valley	07/16 – 08/31	848 cattle	1310 AUMs
	Edwards	09/01 – 10/31	848 cattle	1701 AUMs
	Cold Springs	11/01 – 11/30	414 cattle	408 AUMs
	Bell Flat	12/01 – 04/15	848 cattle	3819 AUMs
	Cold Springs	04/01 – 04/30	413 cattle	407 AUMs
				Total

Reinstated AUMs

The Clan Alpine permittee has requested a reinstatement of 1600 AUMs lost to previous punitive actions. These 1600 AUMs would be allocated towards winter grazing in the Shoshone Pasture of the Clan Alpine Allotment where snow would help distribute livestock to areas previously unused due to lack of available water.

BLM would consider the reinstatement of the lost AUMs only after five consecutive years of compliance by the permittee with all grazing permit conditions. If compliance is met, the BLM would issue a temporary non-renewable permit (TNR) for 1600 AUMs of winter grazing in the Shoshone Pasture for the duration of the permit. This additional grazing would be monitored annually and prior to approval of the reinstatement of the 1600 AUMs to ensure the additional use would not impact the ability of the area to maintain, achieve or make significant progress toward achieving the Standards for Rangeland Health and/or Table 2-2 Habitat Standards.

The additional livestock grazing utilization shall be within or below the moderate (41-60%) level of the current year’s growth on key perennial species in the uplands and at a 4” to 6” stubble height on or near any riparian areas to provide effective stream bank protection, prevent sedimentation, and maintain or improve the plant communities. Additionally within areas of GRSG habitat, Table 2-2 Habitat Objectives for GRSG shall be met (BLM 2015). If during an annual evaluation(s) it is ascertained that the area is not meeting one or both conditions, or maintaining, achieving or making significant progress toward achieving the Standards for Rangeland Health and/or Table 2-2 Habitat Standards, the TNR would be revoked and/or not renewed. The 1600 AUMs shall not be reinstated and shall be considered permanently dropped.

Table 10: Clan Alpine Livestock Grazing Schedule with Reinstated AUMs

PROPOSED GRAZING SCHEDULE WITH REINSTATED AUMs				
Clan Alpine *Use is rotated annually	Shoshone*	04/15 – 05/31	848 cattle	1310 AUMs
	Alpine*	06/01 – 07/15	848 cattle	1255 AUMs
	Desatoya/Cherry Valley	07/16 – 08/31	848 cattle	1310 AUMs
	Edwards	09/01 – 10/31	848 cattle	1701 AUMs
	Cold Springs	11/01 – 11/30	414 cattle	408 AUMs
	Bell Flat	12/01 – 04/15	848 cattle	3819 AUMs
	Shoshone	12/01 – 04/15	355 cattle	1600 AUMs
	Cold Springs	04/01 – 04/30	413 cattle	407 AUMs
				Total

Dixie Valley

Fifteen days flexibility would be allowed for cattle movement between pastures. All cattle would need to be removed from the pasture by the time off date. Grazing use between the High Country pasture and Mid-Slope pasture would be rotated annually. There would be no change in the grazing rotation between the Dixie Valley North and South pastures.

Table 11: Dixie Valley Livestock Grazing Schedule

CURRENT GRAZING SCHEDULE ODD YEARS				
Dixie Valley	High Country Pasture	06/01 – 08/20	528 cattle	1406 AUMs
	Mid-Slope Pasture	08/21 – 10/31	528 cattle	1251 AUMs
	Dixie Valley North Pasture	11/01 – 02/28	528 cattle	2084 AUMs
	Dixie Valley South Pasture	03/01 – 05/31	528 cattle	1600 AUMs
Total				6341 AUMs
CURRENT SCHEDULE EVEN YEARS				
Dixie Valley	High Country Pasture	06/01 – 08/20	528 cattle	1406 AUMs
	Mid-Slope Pasture	08/21 – 10/31	528 cattle	1251 AUMs
	Dixie Valley North Pasture	03/01 – 05/31	528 cattle	2084 AUMs
	Dixie Valley South Pasture	11/01 – 02/28	528 cattle	1600 AUMs
Total				6341 AUMs

Table 12: Dixie Valley Proposed Livestock Grazing Schedule

PROPOSED GRAZING SCHEDULE ODD YEARS				
Dixie Valley	High Country Pasture	06/01 – 08/20	528 cattle	1406 AUMs
	Mid-Slope Pasture	08/21 – 10/31	528 cattle	1251 AUMs
	Dixie Valley North Pasture	11/01 – 02/28	528 cattle	2084 AUMs
	Dixie Valley South Pasture	03/01 – 05/31	528 cattle	1600 AUMs
Total				6341 AUMs
PROPOSED GRAZING SCHEDULE EVEN YEARS				
Dixie Valley	High Country Pasture	08/21 – 10/31	528 cattle	1406 AUMs
	Mid-Slope Pasture	06/01 – 08/20	528 cattle	1251 AUMs
	Dixie Valley North Pasture	03/01 – 05/31	528 cattle	2084 AUMs
	Dixie Valley South Pasture	11/01 – 02/28	528 cattle	1600 AUMs
Total				6341 AUMs

Terms and Conditions

Common to all Allotments:

Grazing management shall be authorized in a manner that would make progress towards meeting the standards as set forth by the Sierra Front-Northwestern Great Basin RAC, 1997.

Within Greater sage-grouse habitat management areas the permittee shall abide by the terms and conditions as stated in the September 2015 Record of Decision for the Approved Resource Management Plan Amendments for the Great Basin Region, including the Greater Sage-Grouse Sub-Region of Nevada and Northeastern California.

The permittee is responsible for informing all persons who are associated with the allotment that they would be subject to prosecution for knowingly disturbing archaeological sites or for

collecting artifacts. If archaeological materials are discovered as a result of operations under this authorization, the permittee must immediately contact the authorized officer.

Pursuant to 43 CFR §10.4(G), the permittee must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Pursuant to 43 CFR §10.4(C) and (D), the permittee must stop activities in the immediate vicinity of the discovery and protect it from the permittees activities for 30 days or until notified to proceed by the authorized officer.

The permittee is responsible for informing all persons who are associated with the allotment that they would be subject to prosecution for disturbing or collecting vertebrate fossils, collecting large amounts of petrified wood (over 25lbs./day, up to 250lbs./year), or collecting fossils for commercial purposes on public lands. If any paleontological resources are discovered as a result of operations under this authorization, the permittee must immediately contact the authorized officer.

An accurate actual use report must be submitted within 15 days of the end of the grazing season.

Maintenance of range improvements is required and shall be in accordance with all approved cooperative agreements and range improvement permits. Maintenance shall be completed prior to turnout. Maintenance activities shall be restricted to the footprint (previously disturbed area) of the project as it existed when initially constructed. The BLM shall be given 48 hours advance notice of any maintenance work that would involve heavy equipment.

Within WSAs, new range improvements can only be authorized if they meet the non-impairment standards as defined in Manual 6330. Range improvements existing or under construction on October 21, 1976 may continue to be used and maintained in the same manner and to the same degree as such use was being conducted on that date. Enclosure fencing or vegetation manipulation is not permitted under the "non-impairment" criteria except to allow for wildlife related projects that would clearly protect or enhance wilderness values.

Salt and/or supplements must be placed at least 1 mile from live waters (springs, streams), and outside of associated riparian areas, permanent livestock watering facilities, wet or dry meadows and aspen stands. Salt would not be placed in known historic properties.

Within WSAs, the use of mechanical or motorized transport is restricted to those primitive routes that were identified and documented as ways at the time of the 1979-80 intensive lands with wilderness characteristics inventory.

Camping on public lands in any location longer than 14 days by permittee or hired hands must be approved through a Letter of Agreement from the Authorizing Officer. A notice must be posted in camp or in the case of trailers or camping units, in a window by entry door indicating name and contact information of owner and permittee along with a copy of the Letter of Agreement. Camps must be located a minimum of 200' from water sources. Occupant must avoid any unnecessary or undue degradation of public lands.

Once utilization on key forage plant species has reached the moderate level (41-60%) of current year's growth, livestock would be actively removed from a pasture or certain areas within a pasture. A moderate utilization level would be an indicator to turn off or close (if possible) the riparian area and remove livestock to other water sources. A stubble height of 4-6 inches may be applied where appropriate in riparian areas. Generally, stubble heights of 4 to 6 inches provide effective stream bank protection, prevent sedimentation, and maintain or improve plant communities (USDI 1999).

Cow Canyon Allotment:

Grazing use in the Cow Canyon Allotment would be in accordance with the 1989 CCGA and Final Decision as well as the decision for EA# DOI-BLM-NV-C010-2015-0004-EA.

Clan Alpine Allotment:

Grazing use in the Clan Alpine Allotment would be in accordance with the 1992 Clan Alpine AMP and Final Decision as well as the decision for EA# DOI-BLM-NV-C010-2015-0004-EA.

Trailing is included in this authorization with the following requirements: 1. Cattle would be trailed a minimum of ten miles per day. 2. Cattle would be trailed from one pasture to the next with overnight stops allowed only in the Clan Alpine Allotment.

All enclosures are closed to livestock grazing unless authorized by the BLM.

To avoid impacts to Greater sage-grouse, livestock utilizing the Cold Springs Pasture during April would not be allowed to congregate in the southern portion of the pasture where there is sensitive habitat.

As in the Ellison Ranching Co. sheep permit with Battle Mountain this condition would apply to Ellison Ranch Co. on the Clan Alpine Allotment:

Use in the Clan Alpine shall be in accordance with the terms and conditions of the Clan Alpine AMP approved 7/20/92.

As in the additional Ellison Ranching Co. sheep permits with Battle Mountain these conditions would be added to the permit and shall apply to Ellison Ranching Co. on the Clan Alpine Allotment:

Actual Use information would be submitted within 15 days of completing grazing use as specified on the grazing permit and grazing licenses. Actual Use reports assist with interpretation of data, and it is critical to obtain an accurate and detailed record of Actual Use for each grazing year. Therefore, permittees shall not be licensed for the upcoming grazing season until Actual Use Reports for the previous grazing season are accepted by this office. These reports are to be detailed (describe how livestock are managed, i.e. rotation schedule or pasture used, when and where), readable, accurate and completed on the appropriate Actual Use Form.

Utilization of winterfat would not exceed 30% during the growing season and 50% by the end of winter dormancy. Utilization of other key species would not exceed 40% by seed dissemination, and 50% by the end of the grazing season.

Ellison Ranching Co. would be required to remove livestock from the area if utilization of key perennial upland species reaches 50%.

Prior to any future decisions (which could include the need for additional environmental analysis), monitoring data would be evaluated to determine if adjustments are necessary and/or if any additional modifications in existing management would be necessary.

Ellison Ranching Co. would be required to move their sheep on a regular basis so that over-utilization of the vegetation and other resource damage does not occur.

Ellison Ranching Co. would be required to notify the Stillwater Field Office along with the Mount Lewis Field Office at least 14 days prior to turnout in order to determine if any temporary changes in permitted use are required either at the request of the permittee or at the discretion of the BLM based upon current monitoring data and/or monitoring data collected during the previous grazing year.

No bed grounds shall be within $\frac{1}{4}$ mile of riparian areas, watering facilities, aspen stands or known weed infestations and shall be moved every day.

Sheep herder camps are to move at least every 5 days.

Dixie Valley Allotment.

Grazing use in the Dixie Valley Allotment would be in accordance with the 1989 Dixie Valley AMP and Final Decision as well as described in the decision for EA# DOI-BLM-NV-C010-2015-0004-EA.

The Horse Creek and Bench Creek watersheds are closed to grazing. The gap fences at the mouth of the canyons would be in workable condition and would remain closed.

Bureau personnel have the right of ingress and egress over any lands privately owned or controlled in order to access areas of the allotment.

2.1.2 Proposed Range Improvements

These range improvements are proposed to help address management concerns in areas that are not currently achieving standards and guidelines within the project area. Fencing the spring areas would help in protecting the water sources from further degradation and allow natural rehabilitation. Water would either be available downstream or piped to a trough outside of the fenced area. The well and troughs would help with the distribution of cattle allowing livestock into areas previously used very little due to lack of water and reduce grazing pressure on the surrounding areas. Range Improvement construction is a short term, temporary surface disturbing process that requires a small number of motorized vehicles and equipment.

Spring/Wet Meadow Exclosure Fencing and Range Improvements

Monitoring for baseline conditions would be assessed prior to treatment to gauge trend, evaluate outcome of treatments, and to form an adaptive management strategy for all range improvements. A standard BLM 4-wire fence built to meet specifications regarding cattle, horses and/or wildlife would be constructed (BLM Handbook 1741-1) as described below. A standard 4-wire fence consists of a smooth bottom wire and two strands of barbed wire and a smooth top wire or a combination. The wire spacing is 16", 22", 30" and 42" with 16 1/2' spacing between T-posts. Fence construction would involve the use of pick-up trucks, post-hole diggers attached to tractors or backhoes and other equipment as necessary. New road construction would not be included for the proposed fencelines, but a two-track road could be created and remain visible until vegetation is naturally restored along any fence. Existing roads would be utilized to the extent possible. Management decisions for livestock grazing and special status species, Appendix B, and the Required Design Features in Appendix C of the Approved Resource Management Plan Amendments for the Great Basin Region, including the Greater Sage-Grouse Sub-Region of Nevada and Northeastern California would be adhered to in areas of GRSG habitat.

Four range improvements are proposed (see Appendix A, Maps) and consist of the following:

Dirt Spring – Universal Transverse Mercator (UTM) 438126.383 Easting (E) 4409807.208 Northing (N) (see Appendix A, Maps) This spring improvement and exclosure fence would be located in the Clan Alpine Allotment approximately 1,000 feet south and inside of the Clan Alpine WSA boundary. Access to the site is along the designated primitive route W33 so no new roads or cross country travel would be required to complete the project. The wilderness characteristic of this site have been severely impacted due to drought and intensive use by cattle and wild horses and includes the denuding of vegetation and compaction of soil to the extent that water flow through the spring has been greatly reduced. There are wood scraps and a partially broken down fence that exists around the spring from an old range improvement that would be removed and hauled off site. Fence replacement dimensions would be approximately 100 ft X 100 ft (0.3 acres), and constructed using the pipe and cable method to maximize durability and minimize visibility.

Construction would consist of 2 inch by 9 foot Schedule 40 galvanized pipe driven 3'-3" into the ground at 10 foot intervals. Two equally spaced rows of 3/8" steel cable would run horizontally through eye bolts that have been installed on the pipe posts. Cable would be attached at the cables begin/end with a heavy duty spring expansion/contraction device. Optional 1-7/8" steel pipe rail may be installed at the top of the fence if it is determined that wild horses may damage the fence without the additional support. To install the spring box, a pit would be excavated to accommodate a 3ft deep corrugated metal spring box which would be buried and covered with gravel using a small tracked backhoe. A 2" black polypro irrigation pipe up to 285 ft in length would be buried in a trench excavated by the backhoe. A trough 3ft X 6ft X 2ft deep and painted with an acceptable color from the Standard Environmental Color Chart to blend in to the surroundings would be installed on the ground.

Although the construction phase for the installation of the trough, pipeline and spring box would create unavoidable temporary surface disturbance, all activities would be constrained to

the maximum area required to dig the pit for placement of the spring box and run the trench from the spring box to the trough. This disturbance would be minimized through the judicious use of the small tracked backhoe and manual labor. Since the construction area for the fence, spring box and pipeline is currently denuded of vegetation and the soil has been compacted from cattle and wild horses walking and loafing around the spring, new surface disturbance from use of the backhoe would be minimal. The fence would be installed primarily though manual labor, thereby limiting the amount of disturbance for this activity. Upon completion of the project, any surface disturbance would be re-contoured and reseeded with native vegetation. No date for the installation of this range improvement has been determined yet. Actual implementation of the project would depend on identifying and successfully obtaining the required funds for operations and labor.

Unnamed Spring in Cherry Valley– UTM 418854.243 E 4381687406 N (see Appendix A, Maps). This spring improvement and enclosure fence would be located in the Dixie Valley Allotment approximately 125 ft. southwest and inside the Clan Alpine WSA boundary and 300 ft from an existing road located outside of the WSA. No new roads and minimal cross country travel would be required to complete the project. The wilderness characteristic of this site has been severely impacted due to drought and intensive use by cattle and wild horses and includes the denuding of vegetation and compaction of soil to the extent that water flow through the spring has been greatly reduced. There is a dilapidated range improvement that would be removed as part of the project. Fence dimensions would be approximately 300ft X 100ft (0.5 acres). The fence would be constructed similar to the description for the fencing proposed around Dirt Springs described above. A 3ft deep corrugated metal spring box would be buried and covered with gravel. The pipeline (up to 150 ft.) would be dug and buried using a small tracked backhoe. A trough 3ft X 6ft X 2ft deep and painted with an acceptable color from the Standard Environmental Color Chart in order to blend in with the surroundings as much as possible would be connected to the pipeline. This trough and half the pipeline would be located outside of the WSA.



Figure 1: Photo of pipeline, fence and trough in disrepair at Unnamed Spring in Cherry Valley.

Although the construction phase for the installation of the trough, pipeline and spring box would create unavoidable temporary surface disturbance, all activities would be constrained to the maximum area required to dig the pit for placement of the spring box and run the trench from the spring box to the trough. This disturbance would be minimized through the judicious use of the small tracked backhoe and manual labor. Since the construction area for the fence, spring box and pipeline is currently located in an area mostly denuded of vegetation and the soil has been compacted from cattle and wild horses walking and loafing around the spring, new surface disturbance from use of the backhoe would be minimal. The fence would be installed primarily through manual labor, thereby limiting the amount of disturbance for this activity. Upon completion of the project, any surface disturbance would be re-contoured and reseeded with native vegetation. No date for the installation of this range improvement has been determined yet. Actual implementation of the project would depend on identifying and successfully obtaining the required funds for operations and labor.

Rock Creek Spring – UTM 0429940 E 4357940 N (see Appendix A, Maps). This fence would serve as a spring enclosure fence and is located in the Clan Alpine Allotment adjacent to but outside the western Desatoya Mountains WSA boundary. Fence dimensions would be approximately 450ft X 130ft (1.2 acres). Individual trees that have encroached into the wet meadow would be lopped and scattered. The fence line would remain on the north side of the dirt road and not bisect the road which provides access to the WSA.



Well in Camp Creek area – UTM 0424385 E 4360784 N (see Appendix A, Maps). If water is judged to be in the area, a new well would be constructed in a wash that bisects a dirt road at this location within the Dixie Valley Allotment. It would be drilled to an approximate depth of 350 feet with a maximum casing of 8 inches. A submersible pump would be lowered into the casing and powered by a portable generator. Above ground facilities would include, at a minimum, a 10,000 gallon storage tank and up to three troughs 3ft X 6ft X 2ft deep, painted with an acceptable color from the Standard Environmental Color Chart to blend in with the

surroundings as much as possible. A section of pipeline, no more than 100 feet, would be installed from the well head to the storage tank. Total ground disturbance would be approximately ½ acre including the cattle loafing area. Water rights would be applied for by the permittee.

Table 13: Proposed Locations of Range Improvements Identified Under the Proposed Action

Location of Proposed Range Improvements Under the Proposed Action				
Range Improvement	Township	Range	Section	Principal Meridian
Dirt Spring Development & Enclosure	23N	38E	29	Mount Diablo Meridian
Unnamed Spring in Cherry Valley	20N	36E	28	Mount Diablo Meridian
Rock Creek Spring Enclosure	17N	37E	4	Mount Diablo Meridian
Camp Creek Well	18N	36E	26	Mount Diablo Meridian

2.1.3 Existing Range Improvements

The following table contains a list of existing range improvements on the three allotments. The success of the rest rotation grazing schedules to maintain/attain Rangeland Health and/or Table 2-2 Habitat Standards depends, in part, on fully operational range improvements which are necessary to control livestock movements in accordance with the grazing schedules. Maintenance of all range improvements under a Range Improvement Permit or Cooperative Agreement are the responsibility of the grazing permittees. Grazing privileges may be suspended by the Authorized Officer if Range Improvement(s) are found to be not in good working order and/or in an aesthetic state prior to turnout.

Table 14: Existing Range Improvements

Project Name	Township, Range, Section / Pasture	Condition	Mitigation Description	Completion Date
<i>Cow Canyon Allotment</i>				
Cow Canyon Drift Fence	T21N, R36E Sec 23 Upper Pasture	Good	Minor maintenance on north & south of fence	Within 1 year of signed DR
Dixie Sand Hill Well	T21N R35E Sec 31 Lower Pasture	Good	Well needs a cap	Within 2 years of signed DR
Dixie Meadows Fence	T22N R35E Sec 29 Lower Pasture	Good	None needed	N/A
Artesian Well Holding Corral	T21N R35E Sec 16 Lower Pasture	Poor	Complete reconstruction; scrap cleanup	Within 1 year of signed DR
Kaiser Peak Fence	T20N R36E Sec 21 Upper Pasture	Fair	Tighten corners; straighten or replace T-posts	Within 1 year of signed DR
Sand Hills Fence	T20N R35E Sec 2 Lower Pasture	Poor	Normal maint; restring north end; rebuild near corner & east side	Within 2 years of signed DR
Bernice Canyon Drift Fence	T22N R37E Sec 14 Upper Pasture	Fair	Rock jacks incomplete; deadmans needed at creek; washout in creek	Within 1 year of signed DR

Project Name	Township, Range, Section / Pasture	Condition	Mitigation Description	Completion Date
Clan Alpine Drift Fence & Cattleguard	T20N R36E Sec 23 Upper Pasture	Poor	Complete reconstruction of fence; close gates	Within 2 years of signed DR
Deer Lodge Drift Fence	T22N R37E Sec 33 Upper Pasture	Poor	Needs reposting & restringing	Within 1 year of signed DR
Kissing Rock Pipeline	T21N R35E Sec 35 Upper Pasture	Poor	Needs reconstruction	Within 2 years of signed DR
Grover Point Well	T21N R35E Sec 24 Lower Pasture	Fair	Permittee says in working order	N/A
Dyer Flat Well	T22N R36E Sec 14 Lower Pasture	Fair	Permittee says in working order	N/A
Clan Alpine Allotment				
Byers Drift Fence	T21N R37E Sec 15, 21,22 Clan Alpine Pasture	Poor	Needs full reconstruction	Within 1 year of signed DR
Lower Cherry Canyon Fence	T19N R37E Sec 5 Clan Alpine Pasture	Fair	Needs repair in creekbed	Within 1 year of signed DR
New Pass Well	T20N R39E Sec 2 Edwards Pasture	Fair	Repair fence around well	TBD
Horse Shoe Well	T22N R39E Sec 36 Edwards Pasture	Good	Cleanup of area	TBD
Edwards Valley Well #1	T21N R39E Sec 3 Edwards Pasture	Good	Cleanup of area	Within 1 year of signed DR
Ormanchea Well	T21N R39E Sec 19 Edwards Pasture	Good	None needed	N/A
Cold Spring Summit Fence	T18N R37E Sec 31 Cold Springs Pasture	Fair	Needs repair in various areas along fenceline	Within 2 years of signed DR
Shoshone Well	T22N R39E Sec 32 Edwards Pasture	Fair	Repair fence around trough	Within 2 years of signed DR
Byer Canyon Fence	T21N R37E Sec 25 Clan Alpine Pasture	Poor	Complete reconstruction	Within 1 year of signed DR
Rock Creek Fence	T17N R36E Sec 1 Desatoya Pasture	Good	Maintenance at gates and wood H-braces	Within 2 years of signed DR
Clan Alpine Drift Fence & Cattleguard	T20N R36E Sec 23 Clan Alpine Pasture	Poor	Complete reconstruction	Within 1 year of signed DR
Cherry Meadow Fence	T20N R36E Sec 27 Clan Alpine Pasture	-----	TBD	-----
Byer Canyon Spring #1	T21N R37E Sec 22 Clan Alpine Pasture	Poor	Reconstruct spring enclosure	Within 1 year of signed DR
North War Canyon Spring	T20N R37E Sec 18 Clan Alpine Pasture	Fair	Rebuild enclosure; fix pipeline, clean veg from spring	Within 1 year of signed DR
Edwards Well One (Hidden Well)	T20N R39E Sec 18 Edwards Pasture	Good	Remove windmill; cleanup of area	Within 2 years of signed DR

Project Name	Township, Range, Section / Pasture	Condition	Mitigation Description	Completion Date
Cold Springs Drift Fence	T18N R37E Sec 27 Alpine Pasture	Good	None needed	N/A
Bell Flat Water Haul	T16N R35E Sec 17 Bell Flat Pasture	Good	None needed	N/A
Topia Fence	T18N R37E Sec 25 Desatoya Pasture	Fair	Reinforce ends; tighten wire; brush removal	Within 1 year of signed DR
Kaiser Peak Fence	T20N R36E Sec 16 High Pasture	Fair	Tighten corners; straighten or replace T-posts	Within 1 year of signed DR (east half)
Bell Flat Well	T15N R34E Sec 33 Bell Flat Pasture	-----	TBD	-----
Highway 23 Fence	T16N R35E Sec 3 Bell Flat Pasture	Fair	Normal maintenance; rebuild H-braces & gates replace with metal	Within 2 years of signed DR
Divide Corral	T15N R35E Sec 9 Bell Flat Pasture	-----	TBD	-----
Gabbs Valley Fence	T14N R35E Sec 34 Bell Flat Pasture	Fair	Maintenance on all gates & H-braces	Within 1 year of signed DR
Broken Hills Cattleguard	T14N R35E Sec 34 Bell Flat Pasture	-----	TBD	-----
Slate Mtn Drift Fence	T14N R34E Sec 18 Bell Flat Pasture	Excellent	None needed	N/A
South Bell Flat Fence	T14N R35E Sec 32 Bell Flat Pasture	-----	TBD	-----
Bell Canyon Drift Fence	T15N R34E Sec 19 Bell Flat Pasture	-----	TBD	-----
Broken Hills Well Storage	T14N R35E Sec 21 Bell Flat Pasture	-----	TBD	-----
SW Bell Flat Fence	T13N R34E Sec 9 Bell Flat Pasture	Good	Repairs needed in wash; improve gate	Within 2 years of signed DR
SE Bell Flat Storage	T14N R34E Sec 25 Bell Flat Pasture	-----	TBD	-----
<i>Dixie Valley Allotment</i>				
Deep Creek-Freeman Drift Fence	T20N R34E Sec 8 North Pasture	Poor	Needs reconstruction or removal	Abandon
Ridge Fence	T20N R34E Sec 5 North Pasture	-----	Can't find – no remnants – Abandon	N/A
Bench Creek Well	T17N R35E Sec 12 South Pasture	Good	Cleanup of area	Within 2 years of signed DR
Bench Creek Fence	T17N R35E Sec 24 South Pasture	Poor	Reconstruct east & west end of fence; maintenance on washout areas	Within 1 year of signed DR
Cold Springs Summit Fence	T18N R37E Sec 31 Mid-Slope Pasture	Fair	Needs repair in various areas along fenceline	Within 1 year of signed DR

Project Name	Township, Range, Section / Pasture	Condition	Mitigation Description	Completion Date
East Lee Canyon Fence	T19N R33E Sec 13 North Pasture	Good	Minor tightening; remount 2 gate posts	Within 1 year of signed DR
Dixie Meadows Fence	T22N R35E Sec 20 North Pasture	Good	Replace bent t-posts; minor tightening	Within 1 year of signed DR
Camp Creek Storage Tank & Trough	T17N R36E Sec 1 Mid-Slope Pasture	Good	None needed	N/A
Kaiser Peak Fence	T20N R36E Sec 16 High Pasture	Fair	Tighten corners; straighten or replace T-posts	Within 1 year of signed DR (west half)
Sand Hills Fence	T20N R35E Sec 2 North Pasture	Fair	Rebuild north corner & east edge; fence cut at north end	Within 2 years of signed DR
Chalk Mountain Pipeline	T17N R34E Sec 36 South Pasture	Good	None needed per permittee	N/A
Westgate Well	T17N R35E Sec 33 South Pasture	Good	None needed	N/A
Middlegate Corral	T17N R35E Sec 36 South Pasture	Good	Tighten wires; straighten posts on west side	Within 1 year of signed DR
Bench Creek Corral	T17N R35E Sec 12 Mid-Slope Pasture	Good	Cleanup area	Within 2 years of signed DR
Dixie Wash Well	T20N R26E Sec 26 on Navy withdrawn lands	Poor	Not in working condition – abandon	Abandon
Coyote Canyon Fence	T19N R33E Sec 1 North Pasture	Good	Normal maint; brush removal	Within 1 year of signed DR
East Lee Cattleguard & fence	T19N R33E Sec 13 North Pasture	Good	Brush removal	Within 1 year of signed DR
Dixie Corral	T19N R34E Sec 9 North Pasture	Poor	Complete rebuild	Abandon
Cherry Valley West Spring Development	T20N R36E Sec 28 High Pasture	Poor	Complete rebuild	Proposed in this EA
Hot Water Well	T19N R34E Sec 21 North Pasture	Good	Cleanup area	Within 2 years of signed DR
Cherry Valley Corrals	T20N R36E Sec 28 High Pasture	Poor	Complete rebuild	Abandon
Dixie Hot Springs Fence	T22N R35E Sec 8 On Navy withdrawn lands	Fair	Rewire between posts; repair H-braces; straighten posts	Within 1 year of signed DR
Chalk Mountain Well	T17N R34E Sec 36 South Pasture	Good	None needed	N/A
Chalk Mountain Pipeline	T17N R34E Sec 9 South Pasture	Fair	Works to the north storage tank	N/A
Camp Creek Water	T18N R36E Sec 15	Good	Needs new tank cover	Within 1 year

Project Name	Township, Range, Section / Pasture	Condition	Mitigation Description	Completion Date
Development	Mid-Slope Pasture			of signed DR
Horse Creek Gap Fence	T19N R35E Sec 12 High Pasture	Poor	Reconnect south side to rock; rebuild gate	Within 1 year of signed DR
Bench Creek Gap fence	T19N R36E Sec 30 Mid-Slope Pasture	Good	None needed	N/A
Dixie Valley South Water Hauls	T17N R35E Sec 1 Mid-Slope Pasture	Good	None needed	N/A

2.1.4 Wild Horses & Burros

The Proposed Action is to manage wild horses within the AML range (Low - 612; High – 979) ensuring the maintenance of a thriving natural ecological balance and multiple use relationship in the Clan Alpine HMA. To facilitate the management of wild horses within the AML and, when needed, reduce the number of future wild horses through a combination of skewing sex ratios to favor males, gelding some males and treating females with a contraceptive. The Clan Alpine HMA is managed as one unit. Horse numbers can vary from allotment and location, but the objective is to manage horses for the entire herd area.

The Proposed Action would allow BLM to achieve significant progress toward attainment of rangeland health and/or Table 2-2 Habitat Standards requirements and resource objectives. Managing wild horse populations within the HMA at AML reduces the movement of horses outside of the HMA in their search for forage and water. The Proposed Action would reduce the number of wild horses that need to be removed from the HMA over time, and thereby result in fewer wild horses being placed in short or long-term holding facilities or in the adoption and sale program.

Under this alternative the BLM intends to use bait/water trapping over the next ten years to remove small numbers of wild horses (20-30) each year until the overall population management objectives are met or to maintain AML range. All breeding age mares would be inoculated with a fertility control (PZP-22 or most current formulation) prior to being released in order to maintain AML, extend the time before another gather is required, and reduce the number of wild horses that would need to be removed in the future. The procedures to be followed for implementation of fertility control are detailed in Appendix C. All future removals of wild horses would be based upon population inventories conducted through aerial or ground surveys. The objective of this annual bait/water trapping sessions is to trap sufficient numbers of wild horses to administer fertility control vaccine and/or remove wild horses in order to achieve and/or maintain the AML range. If the proposed bait/water trapping and fertility control treatments prove to be unsuccessful in maintaining population objectives, then it is anticipated that a follow up helicopter-driven gather would be implemented in the Clan Alpine HMA every two to three years over the next 10 years to re-vaccinate the mares, remove any excess animals, and skew the sex ratio to 60% stallions and 40% mares (see the Clan Alpine, Pilot Mountain and Pine Nut Herd Management Areas Gather Plan No. NV-C010-2010-0019

(October 2010)). Funding limitations and competing priorities may require delaying future follow-up gathers and population control activities.

The proposed gather plan would be initiated when census data and/or range health conditions deem it necessary (in accordance with statewide priorities) and would be ongoing, treating mares as necessary with the goal of balancing recruitment with natural mortality to maintain the population within the AML range. Over the course of this plan (10 years), if fertility control efficiency is low and too many foals are being recruited into the population then additional excess wild horses would be removed. Conversely, if not enough foals are recruited into the population to maintain the AML range fewer mares would be vaccinated and allowed to return to fertility.

The Proposed Action would allow BLM to maintain and/or achieve significant progress toward attainment of rangeland health and/or Table 2-2 Habitat Standards requirements and resource objectives. These management actions are also supported by a recent report received from the Humane Society of the United States (HSUS), which recommends that the BLM increase the level of use of fertility control and other population control methods such as sex ratio adjustments, gelding, etc. <http://www.blm.gov/wo/st/en/info/newsroom/2011/july/hsusstatement.html>

The Proposed Action is consistent with current BLM policy and direction to reduce gather frequencies and the number of animals that need to be removed from the range over time through application of fertility control and adjustment of sex ratios to favor stallions, which reduces the proportion of the population that would give birth to foals.

Managing wild horse populations within the HMA at AML reduces the movement of horses outside of the HMA in their search for forage and water. The Proposed Action would reduce the number of excess wild horses that need to be removed from the HMA over time, and thereby result in fewer wild horses being placed in short or long-term holding facilities or in the adoption and sale program.

The bait/water trapping, would begin when census data and/or range conditions dictate the need for wild horse treatment and/or removal, and could be conducted year round with an emphasis in the summer months when this method is expected to be most effective. Several factors such as animal physical condition, herd health, weather conditions, or other considerations could result in schedule adjustments. Gather operations would be conducted in accordance with the Standard Operating Procedures (SOPs) described in the National Wild Horse and Burro Gather Contract (Appendix D). Trap sites would be located at previously used or disturbed sites or other heavily surface disturbed areas whenever possible. New undisturbed areas selected as potential trap sites or holding facilities would be inventoried for cultural resources by qualified BLM personnel. If historic properties are encountered, the locations would be avoided, unless they could be mitigated to eliminate any impacts.

For bait/water trapping the permittee, BLM personnel, or a private gather contractor would construct either permanent or temporary corrals around water sources (private or BLM lands). Personnel would close the gate on the corral/trap either remotely or a mechanical release

method, such as a trip wire, may be used. If a mechanical release method, which is activated by the horses, is employed, the trap would be inspected daily whenever there is a possibility of the gate being closed. The permittee, BLM personnel or a private gather contractor would follow all of the procedures outlined in Appendix D, Standard Operating Procedures for Wild Horse (or Burro) Gathers.

Gathered horses that are identified for removal would be taken to the Indian Lakes holding facility in Fallon, NV, the Palomino Valley Corrals near Sparks, NV or another holding facility designated by the Authorized Officer. The animals would be transported by either BLM personnel or a private contractor and subject to all the stipulations in Appendix D. Horses that are to be released back into the HMA would have a freeze mark applied by either BLM personnel or a private contractor. Trap sites and holding facilities would not be located inside of WSAs. Motorized vehicle use would only be permitted on authorized designated existing (cherry stemmed) roads and trails extending into the WSAs.

An Animal and Plant Inspection Service (APHIS) or other veterinarian would be on site during the gather activities, as needed, to examine animals and make recommendations for care and treatment. Any wild horses residing outside the HMA boundaries, any weaned foals, yearlings or orphaned foals would be removed and made available for adoption to qualified individuals. Old, sick or lame horses unable to maintain an acceptable body condition greater than or equal to a Henneke Body Condition Score (BCS) of 3 or with serious physical defects such as club feet, severe limb deformities, or sway back would be humanely euthanized as an act of mercy, comprising on average about 0.5% of gathered horses. Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy (Washington Office IM 2009-041). http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2009/IM_2009-041.html

Wild horse data including sex and age distribution, condition class information, color, size and other information may also be recorded. Hair samples could be collected in order to assess the genetic diversity of the herds.

2.1.5 Minerals

The BLM is proposing to designate a mineral material community pit in Edwards Creek Valley, Nevada located in the Edwards Pasture of the Clan Alpine Allotment. The mineral material pit would strategically be placed in the valley to reduce transportation lengths while still meeting current and future material needs in the valley. The proposed location can be seen in Appendix D. The current public needs for material are for geothermal exploration, local rancher use, and road maintenance by the Churchill County Road Department. BLM plans on designating a 70 acre community pit in the northeast part of Edwards Creek Valley, Nevada (see Appendix A; Maps). The location of the pit is in T21N, R39E, Section 2 (SESWSE) (SWSESE) and section 11 (NENWNE) (E2NENE) (SENESE), Mount Diablo Meridian. The proposed pit would join an authorized mineral material pit in the north end to a pre-existing pit in the southern end of the project area near the county road.

Currently, there is one company that has an authorized contract for removal of material, from the north end of the proposed community pit, for use on the existing roads for a geothermal exploration project. The operator has a contract to supply needed granular material for capping the fine grain soils on the current roads northeast of the valley. As the project develops and required permitting is finalized the material would be used for capping geothermal drilling pads and access roads. If a geothermal energy source is found, there would be a larger need for mineral material.

Excavation of material from the community pits would be completed by standard construction equipment. Possible equipment used on the site could include a screen, or a crushing plant, loaders, conveyors, a water truck and haul trucks. Equipment would occasionally occupy the pit during the duration of the material contracts. All processing of the mineral material would remain within the boundaries of the community pit area. There would be no permanent equipment stored onsite after the expiration of the authorized material contracts.

Excavated material could be stockpiled onsite before being transported to its authorized use area. Materials would be hauled from the site by existing roads or short access roads from the existing main roads. Roads would have to be maintained to keep a flat surface and prevent dust. Maintenance would include maintaining a durable surface and use of water to suppress dust.

After the need for the community pits have expired, reclamation would commence. Reclamation would include recontouring of the disturbed surface for visual and safety purposes, ripping of any compacted areas, elimination of any stockpiled materials, use of any fine material or available topsoil as a growth medium, seeding with a native seed mixture, and replanting any salvaged plants.

2.1.6 Invasive, Nonnative, and Noxious Weeds

The Proposed Action for the Invasive, Nonnative and Noxious Species program would be to implement a 6-year plan after the signing of the DR, consisting of the following:

- Inventory to identify weed species, locations, and infestation size;
- Treatment of the plants identified in the inventory; and
- Monitoring to identify those areas successfully treated and those that would require follow-up treatment.

Note: This plan is subject to available funds. In this 6-year plan, the Cow Canyon, Clan Alpine, and Dixie Valley Allotments would be divided into 5 areas for inventory, treatment, and monitoring. An outline of the proposed schedule and maps of each area (refer to Appendix A; Maps 6-10) are provided in this document.

Saltcedar:

Saltcedar infestations would be treated either by using the cut-stump method or low volume foliar application method.

Low Volume Foliar Application

- Trees would be sprayed from the crown to the bottom, covering two sides of the plant, with thorough coverage to the crown. The formulation of imazapyr has been approved for use on BLM lands; also, a Pesticide Use Proposal (PUP) for this herbicide has been completed and approved by the Deputy State Director, Natural Resources, Nevada, for use on lands managed by the SFO for the years 2014, 2015, and 2016. PUPs would be reissued for additional years of treatments as necessary. Imazapyr controls undesirable wetland, riparian and terrestrial vegetation growing in or around surface water.
- Backpack sprayers may be used for transportation of herbicides.
- Non-toxic marking dye would be added to the solution to insure proper coverage.
- Chemical applications would not occur within 24 hours of forecasted rain.
- There are no restrictions on livestock consumption of water from the treatment area.
- Application can be made at any time of the year except during periods of heavy sap flow in the spring.
- All instructions on the herbicide's label would be reviewed and followed.
- All SOPs, mitigation measures, and conservation measures listed in the Record of Decision for the Vegetation Treatments Using Herbicides on BLM lands in 17 Western States Programmatic EIS, which was signed in September of 2007, would be followed.
- Plants may also be treated by the herbicides shown in Table 15 as these have been approved for use on BLM lands; also, a PUP for each of these herbicides has been completed and approved by the Deputy State Director, Natural Resources, Nevada, for use on lands managed by the SFO.

Cut-stump Method

- Trees would be initially downed using either hand, crosscut, or chainsaws.
- Wood slash would be scattered.
- The recently cut surface of the tree stumps (cambium area) would be painted with an herbicide mixture of imazapyr and methylated seed oil. The oil moves the herbicide through the developing callus layer to the vascular tissues for translocation throughout the plants. The formulation of imazapyr, called Habitat®, has been approved for use on BLM lands; also, a PUP for this herbicide has been completed and approved by the Deputy State Director, Natural Resources, Nevada, for use on lands managed by the SFO. Habitat® controls undesirable wetland, riparian and terrestrial vegetation growing in or around surface water.
- Backpack sprayers may be used for transportation of herbicides.
- Non-toxic marking dye would be added to the solution to insure proper coverage.
- Resprouts and new growth would be treated with a ground foliar application of the formulation of imazapyr.
- Chemical applications would not occur within 24 hours of forecasted rain.

- Application can be made at any time of the year except during periods of heavy sap flow in the spring.
- All instructions on the herbicide’s label would be reviewed and followed.
- All SOPs, mitigation measures, and conservation measures listed in the Record of Decision for the Vegetation Treatments Using Herbicides on BLM lands in 17 Western States Programmatic EIS, which was signed in September of 2007, would be followed.
- Plants may also be treated by the herbicides shown in Table 15 as these have been approved for use on BLM lands; also, a PUP for each of these herbicides has been completed and approved by the Deputy State Director, Natural Resources, Nevada, for use on lands managed by the SFO.

Table 15: Other Herbicides Used For Saltcedar Control

Trade Name	Common Name
Aquamaster	glyphosate
Garlon 4	triclopyr
Gly Star Pro	glyphosate

Hoary Cress:

Hoary cress infestations would be treated by spraying herbicides on postemergent foliage. Treatment details are as follows:

- Herbicide application would be done by a backpack, handheld, or Utility Terrain Vehicle (UTV) mounted sprayer.
- The time of spraying would be when the plants are young and actively growing for best results. The formulation of metsulfuron methyl, Escort XP®, has been approved for use on BLM lands; also, a PUP for this herbicide has been completed and approved by the Deputy State Director, Natural Resources, Nevada, for use on the SFO for the years 2014, 2015, and 2016. Escort XP® controls annual and perennial weeds and unwanted woody plants. It is absorbed primarily through the foliage and by the roots to a lesser degree.
- The herbicide would not be applied directly to water or to areas where surface water is present.
- Nontarget plants would be avoided.
- There are no grazing restrictions for Escort XP®.
- All instructions on the herbicide’s label would be reviewed and followed.
- All SOPs, mitigation measures, and conservation measures listed in the Record of Decision for the Vegetation Treatments Using Herbicides on BLM lands in 17 Western States Programmatic EIS, which was signed in September of 2007, would be followed.
- Plants may also be treated by the herbicides shown in Table 16 as these have been approved for use on BLM lands; also, a PUP for each of these herbicides has been

completed and approved by the Deputy State Director, Natural Resources, Nevada, for use on lands managed by the SFO.

Table 16: Other Herbicides Used For Hoary Cress Control

Trade Name	Common Name
Telar DF	chlorsulfuron
Plateau	imazapic
Weedar 64	2,4-D

Russian knapweed:

Russian knapweed infestations would be treated by spraying herbicides on post emergent foliage. Treatment details are as follows:

- Herbicide application would be done by a backpack, handheld, or UTV-mounted sprayer.
- The time of spraying would be when the plants are young and actively growing for best results. The formulation of metsulfuron methyl, Escort XP®, has been approved for use on BLM lands. Escort XP® controls annual and perennial weeds and unwanted woody plants. It is absorbed primarily through the foliage and by the roots to a lesser degree.
- The formulation of chlorsulfuron, Telar® XP, could also be used early in the spring when the plants are young and actively growing. This herbicide is absorbed by both the roots and foliage of plants, rapidly inhibiting growth.
- A PUP for each of these herbicides has been completed and approved by the Deputy State Director, Natural Resources, Nevada, for use on lands managed by the SFO.
- The herbicides would not be applied directly to water or to areas where surface water is present.
- Nontarget plants would be avoided.
- There are no grazing restrictions for Escort XP® with use rates of 1 2/3 ounces per acre.
- There are no grazing restrictions for Telar® XP with use rates of 1 1/3 ounces per acre.
- All instructions on the herbicide’s label would be reviewed and followed.
- All SOPs, mitigation measures, and conservation measures listed in the *Record of Decision for the Vegetation Treatments Using Herbicides on BLM lands in 17 Western States Programmatic EIS*, which was signed in September of 2007, would be followed.
- Plants may also be treated by the herbicides shown in Table 17 as these have been approved for use on BLM lands; also, a PUP for each of these herbicides has been completed and approved by the Deputy State Director, Natural Resources, Nevada, for use on lands managed by the SFO.

Table 17: Other Herbicides Used For Russian Knapweed Control

Trade Name	Common Name
Banvel	dicamba
Plateau	imazapic
Weedar 64	2,4-D
Curtail	clopyralid + 2, 4-D
Tordon 22K	picloram

Other noxious and invasive weed species may be discovered in the process of conducting the inventory. These infestations would be incorporated into the following year's treatment schedule. Table 18 provides the trade names, common names, and potential weed species that could be treated. The herbicides shown are those that have a PUP completed and approved by the Deputy State Director, Natural Resources, Nevada, for use on the SFO for the years 2014, 2015, and 2016. All have been approved for use on BLM lands. In the event that an infestation is discovered that would be better controlled using an herbicide not in the table below, the SFO Weed Coordinator would write an additional PUP and have it approved by the Deputy State Director. Any additional proposed herbicides would also be approved for use on BLM lands.

Table 18: Herbicides with Approved PUPs

Trade Name	Common Name	Invasive, Nonnative and Noxious Species
Telar DF	chlorsulfuron	knapweeds (Russian, squarrose, spotted & diffuse); perennial pepperweed; thistles (Canada, Scotch, bull & musk); yellow starthistle; hoary cress
Aquamaster	glyphosate	medusahead; poison hemlock; knapweeds (Russian, squarrose, spotted & diffuse); perennial pepperweed; Canada thistle; yellow starthistle; saltcedar; cheatgrass; big sagebrush; grey rabbitbrush
Banvel	dicamba	knapweeds (Russian, spotted & diffuse); thistles (Canada, bull & musk); yellow starthistle; cheatgrass; grey rabbitbrush
Curtail	clopyralid + 2,4-D	knapweeds (Russian, squarrose, spotted & diffuse); thistles (Canada, bull & musk); yellow starthistle
Escort XP	metsulfuron methyl	poison hemlock; Russian knapweed; perennial pepperweed; thistles (Canada, Scotch, bull & musk); halogeton; purple loosestrife; hoary cress
Garlon 4	triclopyr	saltcedar; Canada thistle
Gly Star Pro	glyphosate	knapweeds (Russian, squarrose, spotted & diffuse); perennial pepperweed; Canada thistle; cheatgrass; big sagebrush; grey rabbitbrush; saltcedar
Krovar I DF	bromacil + diuron	spotted & diffuse knapweed; kochia; cheatgrass
Habitat	imazapyr	knapweeds (Russian, squarrose, spotted & diffuse); perennial

Trade Name	Common Name	Invasive, Nonnative and Noxious Species
		pepperweed; yellow starthistle; saltcedar; cheatgrass
Plateau	imazapic	medusahead; poison hemlock; Russian knapweed; perennial pepperweed; thistles (Canada, Scotch, bull & musk); halogeton; cheatgrass; hoary cress
Tordon 22K	picloram	knapweeds (Russian, squarrose, spotted & diffuse); thistles (Canada, Scotch, & musk); yellow starthistle
Transline	clopyralid	knapweeds (Russian, squarrose, spotted & diffuse); thistles (Canada, bull & musk); yellow starthistle
Weedar 64	2,4-D	Canada & musk thistle; big sagebrush; grey rabbitbrush; hoary cress

The Six Year Plan is as follows:

Year 1 (refer to Map 6 in Appendix A)

Identify areas infested with noxious weeds in the 1st fifth

- Bell Flat Pasture of the Clan Alpine Allotment
- South half of the Dixie Valley Allotment
- 240,517 acres

All passable roads would be driven either by a 4-wheel drive truck or an all-terrain vehicle (ATV). Major canyons would be hiked or accessed by ATV's if jeep trails are present and trails are not blocked by heavy saltcedar infestations. All sites previously recorded and/or treated would be checked for live plants.

Year 2 (refer to Map 7 in Appendix A):

Treat infestations identified in year 1

- Bell Flat Pasture of the Clan Alpine Allotment
- South half of the Dixie Valley Allotment
- 240,517 acres

Identify areas infested with noxious weeds in the 2nd fifth.

- North half of the Dixie Valley Allotment
- 170,586 acres

All passable roads would be driven either by a 4-wheel drive truck or an ATV. Major canyons would be hiked or accessed by ATV's if jeep trails are present and trails are not blocked by

heavy saltcedar infestations. All sites previously recorded and/or treated would be checked for live plants. Previously identified infestations would be treated as described previously.

Year 3 (refer to Map 8 in Appendix A):

Treat infestations identified in year 2

- North half of the Dixie Valley Allotment
- 170,586 acres

Identify areas infested with noxious weeds in the 3rd fifth

- Cow Canyon Allotment
- 132,136 acres

All passable roads would be driven either by a 4-wheel drive truck or an ATV. Major canyons would be hiked or accessed by ATV's if jeep trails are present and trails are not blocked by heavy saltcedar infestations. All sites previously recorded and/or treated would be checked for live plants. Previously identified infestations would be treated as described previously.

Year 4 (refer to Map 9 in Appendix A):

Treat infestations identified in year 3

- Cow Canyon Allotment
- 132,136 acres

Identify areas infested with noxious weeds in the 4th fifth

- North half of the Clan Alpine Allotment
- 177,433 acres

All passable roads would be driven either by a 4-wheel drive truck or an ATV. Major canyons would be hiked or accessed by ATV's if jeep trails are present and trails are not blocked by heavy saltcedar infestations. All sites previously recorded and/or treated would be checked for live plants. Previously identified infestations would be treated as described above.

Year 5 (refer to Map 10 in Appendix A):

Treat infestations identified in year 4

- North half of the Clan Alpine Allotment
- 177,433 acres

Identify areas infested with noxious weeds in the 5th fifth

- South half of the Clan Alpine Allotment
- 102,080 acres

All passable roads would be driven either by a 4-wheel drive truck or an ATV. Major canyons would be hiked or accessed by ATV's if jeep trails are present and trails are not blocked by heavy saltcedar infestations. All sites previously recorded and/or treated would be checked for live plants. Previously identified infestations would be treated as described above.

Year 6 (refer to Map 10 in Appendix A):

Treat infestations identified in year 5

- South half of the Clan Alpine Allotment
- 102,080 acres

All passable roads would be driven either by a 4-wheel drive truck or an ATV. Major canyons would be hiked or accessed by ATV's if jeep trails are present and trails are not blocked by heavy saltcedar infestations. Previously identified infestations would be treated as described above.

Check the spray areas for effect.

Year 7

Repeat years 1- 6 as necessary

2.1.7 Visual Resource Management

The Proposed Action for VRM is to establish interim VRM Class III management objectives for the planning area with the exception of the WSAs. The VRM Class I management objective is assigned to all four WSAs in accordance with BLM policy IM No. 2000-096, *Use of VRM Class I Designation in Wilderness Study Areas*.

2.1.8 Adaptive Management

Adaptive management promotes flexible decision making that can be adjusted in the face of varying resource conditions. Circumstances that may require adaptive management within the various resources in any one year may include, but are not limited to, drought, fire, and weed infestations or above average cheatgrass production. Analyzing a set of actions allows for a response and implementation in a timely manner. The following are options to help respond to changing conditions within the project area.

Temporary Non-Renewable Use (TNR) Grazing

The use of a TNR permit may be authorized on an annual basis when conditions set forth in 43 CFR 4110.3-1(a) and 43 CFR 4130.6-2 are met. 43 CFR 4110.3 subparts (1) and (a) of the grazing regulations state: (1) "Additional forage may be apportioned to qualified applicants for livestock grazing use consistent with multiple use management objectives. Additional forage temporarily available for livestock grazing use may be apportioned on a non-renewable basis. 43 CFR 4130.6-2 subpart (2) of the grazing regulations state that: "Nonrenewable grazing permits or leases may be issued on an annual basis to qualified applicants when forage is temporarily available, provided this use is consistent with multiple use objectives. . ." This additional use of AUMs above/outside of active preference is considered to be temporary nonrenewable use and would not result in a permanent change to permitted use. Depending on other appropriate uses, the authorized officer may not grant TNR even if it is determined that additional forage is available.

Wildfires along with historic over grazing have helped to contribute to the establishment of cheatgrass communities in various regions of all three allotments. The issuance of a grazing TNR could help to alleviate the expansion and possibly reduce the extent of these invasive communities. Wildfire is a natural event that defines a range of variability in potential vegetation communities of sagebrush steppe vegetation types. Invasive annual grasses have been shown to alter wildfire behavior. Knapp (1996) reviewed the history, persistence, and influences to human activities of cheatgrass dominance in the Great Basin desert and noted changes in density of cheatgrass have led to corresponding changes in fire frequency. Additionally, fires have shown a tendency to occur repeatedly within cheatgrass dominated areas. Balch et al (2012) found that cheatgrass dominated lands had a shorter fire-return interval, were disproportionately represented in larger fires, were significantly more likely to have been the ignition point for fires, and showed a strong inter-annual response to wet years in comparison to other prominent land cover classes across the Great Basin.

Livestock grazing has been identified as an underutilized tool in assisting managers to achieve fuels and vegetation management objectives. Davies et al (2010), Diamond et al (2009), and Taylor, Jr. (2006) suggest that livestock grazing could minimize wildfire impacts to high priority areas. Although cheatgrass provides good quality forage early in the season, the plants mature quickly. The best forage quality is in late winter to mid spring and it should be grazed early in its growing season. Moreover, under drought situations the presence of cheatgrass causes rapid depletion of early season soil moisture, thus assisting to out-compete, retard or prevent the establishment of perennial grasses (Welsh 1987). The flexibility of a TNR would allow for grazing during optimal timeframes not just when scheduled to be in a particular pasture. Any additional use would only be granted after an interdisciplinary review of the TNR application is conducted, field visits are completed to verify the availability of additional forage, and a determination has been made that the additional use would not impact the ability of the area to achieve or make significant progress toward achieving the Standards for Rangeland Health and/or Table 2-2 Habitat Standards and other multiple use/resource objectives. Allowable use levels under TNR would conform to a utilization target of 50% for native, key forage species in the uplands and/or a 4"– 6" stubble height in all riparian areas. When these triggers are met livestock would be removed from the area.

Drought Management

Drought conditions periodically reoccur in Nevada. The BLM must take responsive management actions to mitigate the impacts of public land uses and activities on natural resources when they are stressed by drought conditions. Drought management responses would be in accordance with the CCD Drought Management EA and the Nevada Handbook H-1730-1 *Resource Management during Drought*.

2.2 Alternative 2: Dixie Valley Reduction in Livestock and Change in Season of Use

Under this alternative the period of use on the Dixie Valley Allotment would be changed from March 1 through February 28 to June 1 through February 28. In addition, the 1600 AUMs in the Dixie Valley North Pasture would be placed into suspended non-use and the pasture would not be available to livestock for grazing. The grazing rotation schedule had not been followed in past seasons, which has caused some degradation, particularly to riparian areas in the Dixie

Valley North Pasture. Closing this pasture for a period of time should allow for vegetation regeneration and the pasture to make significant progress toward meeting S&Gs. The AUMs would be returned to Active status when the authorized officer deems conditions acceptable.

In accordance with 43 CFR 4110.3, 4130.3 and 4130.3-1, active use, season-of-use and grazing management practices would be changed as follows:

Table 19: Dixie Valley Livestock Grazing Schedule

CURRENT GRAZING SCHEDULE ODD YEARS				
Dixie Valley	High Country Pasture	06/01 – 08/20	528 cattle	1406 AUMs
	Mid-Slope Pasture	08/21 – 10/31	528 cattle	1251 AUMs
	Dixie Valley North Pasture	11/01 – 02/28	528 cattle	2084 AUMs
	Dixie Valley South Pasture	03/01 – 05/31	528 cattle	1600 AUMs
Total				6341 AUMs
CURRENT GRAZING SCHEDULE EVEN YEARS				
Dixie Valley	High Country Pasture	06/01 – 08/20	528 cattle	1406 AUMs
	Mid-Slope Pasture	08/21 – 10/31	528 cattle	1251 AUMs
	Dixie Valley North Pasture	03/01 – 05/31	528 cattle	1600 AUMs
	Dixie Valley South Pasture	11/01 – 02/28	528 cattle	2084 AUMs
Total				6341 AUMs

Table 20: Dixie Valley Livestock Proposed Grazing Schedule

PROPOSED GRAZING SCHEDULE ODD YEARS				
Dixie Valley	High Country Pasture	06/01 – 08/20	528 cattle	1406 AUMs
	Mid-Slope Pasture	08/21 – 10/31	528 cattle	1251 AUMs
	Dixie Valley South Pasture	11/01 – 02/28	528 cattle	2084 AUMs
	Total			
Total Suspended Non-Use				1600 AUMs
PROPOSED GRAZING SCHEDULE EVEN YEARS				
Dixie Valley	High Country Pasture	08/21 – 10/31	528 cattle	1251 AUMs
	Mid-Slope Pasture	06/01 – 08/20	528 cattle	1406 AUMs
	Dixie Valley South Pasture	11/01 – 02/28	528 cattle	2084 AUMs
	Total Active			
Total Suspended Non-Use				1600 AUMs

Terms and Conditions

All terms and conditions described under Alternative 1: Proposed Action applies to Alternative 2: Dixie Valley Reduction in Livestock and Change in Season of Use.

Additionally, in accordance with 43 CFR 4130.3-2, the following term and condition would be included on the Dixie Valley Allotment Permit:

Of the total Permitted Use for cattle, 1600 AUMs would be placed in suspended non-use for conservation and protection of the public lands. Range and riparian conditions would be evaluated periodically to determine if and when conditions improve. AUMs held in non-use may be released by the authorized officer when range conditions improve in the Dixie Valley North Pasture.

Under this alternative Wild Horse & Burros, Minerals, and Invasive, Nonnative, and Noxious Weeds management and Visual Resource Management would be the same as described under the Proposed Action.

2.3 Alternative 3: Cherry Valley Closure to Hot Season Grazing

Under this alternative the season of use for the Cherry Valley Pasture of the Clan Alpine Allotment would be changed from July 1 through August 31 to September 1 through October 31 due to management concerns. In 1985, 1988, 1989 and 1991 the BLM placed exclosures in various areas of the Cherry Valley for wildlife habitat management and watershed management. In 2010 maintenance was done on all these exclosures. In 2011, when checking the area, cattle and wild horses were observed in the exclosures due to cut fencing. Closing the Cherry Valley Pasture to hot season grazing would address management concerns given that over the years keeping the fencing in good working order has not proven feasible.

Table 21: Clan Alpine Livestock Grazing Schedule

CURRENT GRAZING SCHEDULE				
Clan Alpine *Use is rotated annually	Shoshone*	05/01 – 06/30	927 cattle	1859 AUMs
	Alpine*	05/01 – 06/30	927 cattle	1859 AUMs
	Desatoya/Cherry Valley	07/01 – 08/31	927 cattle	1890 AUMs
	Edwards	09/01 – 10/31	927 cattle	1859 AUMs
	Cold Springs	11/01 – 11/30	927 cattle	914 AUMs
	Bell Flat	12/01 – 03/31	927 cattle	3688 AUMs
	Total			

Table 22: Clan Alpine Livestock Proposed Grazing Schedule

PROPOSED GRAZING SCHEDULE				
Clan Alpine *Use is rotated annually	Shoshone*	05/01 – 06/30	927 cattle	1859 AUMs
	Alpine*	05/01 – 06/30	927 cattle	1859 AUMs
	Desatoya/Edwards	07/01 – 08/31	464 cattle	946 AUMs
	Edwards	07/01 – 10/31	463 cattle	1872 AUMs
	Cherry Valley	09/01 – 10/31	464 cattle	931 AUMs
	Cold Springs	11/01 – 11/30	927 cattle	914 AUMs
	Bell Flat	12/01 – 03/31	927 cattle	3688 AUMs
Total				10210 AUMs

Terms and Conditions

All terms and conditions described under Alternative 1: Proposed Action applies to Alternative 3: Cherry Valley Closure to Hot Season Grazing.

Under this alternative Wild Horse & Burros, Minerals and Invasive, Nonnative, and Noxious Weeds management and Visual Resource Management would be the same as described under the Proposed Action.

2.4 Alternative 4: Cow Canyon Change in Season of Use and Clan Alpine Reduction of AUMs

Cow Canyon

Under this alternative to ensure the allotment would continue to maintain, achieve or make significant progress toward achieving rangeland health and/or Table 2-2 Habitat Standards the season of use on the Cow Canyon Allotment would be changed from May 1 through November 15 to October 1 through April 15. Restricting livestock grazing to winter months would 1) defer most livestock grazing use to a period outside the active growing season for native perennial bunchgrass species, 2) remove mid-summer grazing use of riparian areas, and 3) limit disruption and herbaceous utilization associated with livestock within sage-grouse habitats. Flexibility of ten days would be provided to complete moves between pastures as long as the pastures are meeting vegetation and sage-grouse habitat requirements.

Table 23: Cow Canyon Livestock Grazing Schedule

CURRENT GRAZING SCHEDULE				
Cow Canyon	Lower	05/01 – 06/15	365 cattle	552 AUMs
	Upper	06/16 – 11/15	365 cattle	1836 AUMs
	Total			2388 AUMs
PROPOSED GRAZING SCHEDULE				
Cow Canyon	Lower	10/01 – 10/31	366 cattle	373 AUMs
	Upper	11/01 – 03/15	366 cattle	1636 AUMs
	Lower	03/16 – 04/15	366 cattle	373 AUMs
	Total			2382 AUMs

Clan Alpine

Under this alternative the Clan Alpine Allotment permitted AUMs would be reduced from 10,210 to 5115 AUMs and grazing would be permitted yearlong. The Bell Flat Pasture, along with its 3688 AUMs, would no longer be attached to the allotment. Prior to July 1992 Bell Flat was a stand-alone allotment with a permitted use of 3600 AUMs. Through a rangeline agreement the allotment became a winter pasture for the Clan Alpine Allotment. Under this alternative the Bell Flat area would be returned to a separate allotment retaining its current permitted 3688 AUMs and the 12/1 through 3/31 grazing season until further evaluation can be completed through a new environmental analysis. In the future anyone desiring to graze livestock in the Bell Flat Allotment would be required to make application to the Stillwater FO.

Changes to the remaining pastures would involve incorporating the smaller Alpine and Shoshone pastures into the Edwards pasture and extending the grazing season within the new pasture. This would combine the low and mid-elevation regions of the allotment. Merging these areas and extending the season of use would allow for increased flexibility with livestock during grazing use. The permittee would adjust the placement/timing of grazing based on previous year's monitoring and current year's climatic conditions. Livestock would be moved to other areas of the pasture when utilization of native perennial bunchgrass species reach a moderate level (41-60%) of current year's growth and/or a stubble height of 4-6" inches in riparian areas. During the winter months cattle, assisted by snow and snowmelt, can scatter through the lower and mid-elevation country to previously unused expanses (due to lack of water).

This flexibility in grazing management would be authorized within the permit dates and within active permitted AUMs as long as:

- The permittee continues to demonstrate stewardship and cooperation with the BLM.
- Pastures would continue to meet or make significant progress towards meeting Rangeland Health Standards.
 - Rangeland monitoring is a key component of flexibility in grazing management. Monitoring by BLM staff, in coordination with the livestock operator, for the success in meeting allotment-specific resource objectives would take place following implementation. Monitoring could include, but is not limited to, annual key forage utilization, permanent photo points, 100' quadratic frequency, and 100' line-point intercept. Upland trend data would be collected and analyzed by BLM staff on 5 to 10-year intervals. During each allotment visit, monitoring for noxious weed establishment would occur, as well as observations of overall rangeland condition.

Table 24: Clan Alpine Livestock Grazing Schedule

CURRENT GRAZING SCHEDULE				
Clan Alpine *Use is rotated annually	Shoshone*	05/01 – 06/30	927 cattle	1859 AUMs
	Alpine*	05/01 – 06/30	927 cattle	1859 AUMs
	Desatoya/Cherry Valley	07/01 – 08/31	927 cattle	1890 AUMs
	Edwards	09/01 – 10/31	927 cattle	1859 AUMs
	Cold Springs	11/01 – 11/30	927 cattle	914 AUMs
	Bell Flat	12/01 – 03/31	927 cattle	3688 AUMs
	Total			

Table 25: Clan Alpine Livestock Proposed Grazing Schedule

PROPOSED GRAZING SCHEDULE				
Clan Alpine	Edwards	09/01 – 06/30	425 cattle	2976 AUMs
	Cherry Valley	07/01 – 08/31	175 cattle	357 AUMs
	Desatoya	07/01 – 08/31	250 cattle	510 AUMs
	Cold Springs	09/01 – 11/30	425 cattle	1272 AUMs
	Total			

Within five years, if rangeland conditions are found to be regressing rather than maintaining/improving, the allotment would revert back to the current pasture setup and rotation, without Bell Flat as a winter pasture but incorporating the month of April in the grazing schedule, while retaining the reduced livestock numbers.

Table 26: Clan Alpine Livestock Grazing Schedule if Proposed is Not Meeting Standards

CURRENT GRAZING SCHEDULE				
Clan Alpine *Use is rotated annually	Shoshone*	04/1 – 06/30	425 cattle	1272 AUMs
	Alpine*	04/1 – 06/30	425 cattle	1272 AUMs
	Desatoya/Cherry Valley	07/01 – 08/31	425 cattle	866 AUMs
	Edwards	09/01 – 10/31	425 cattle	852 AUMs
	Cold Springs	11/01 – 11/30	425 cattle	419 AUMs
	Total			

Terms and Conditions

All terms and conditions described under Alternative 1: Proposed Action applies to Alternative 4: Cow Canyon Change in Season of Use and Clan Alpine Reduction of AUMs.

Under this alternative the Dixie Valley Allotment, Wild Horse & Burros, Minerals, and Invasive, Nonnative, and Noxious Weeds management and Visual Resource Management would be the same as described in the Proposed Action.

2.5 Alternative 5: No Domestic Sheep Grazing

Under this alternative the winter domestic sheep grazing portion in the New Pass area of the Clan Alpine Allotment would be eliminated. Ellison Ranching Co. would no longer be permitted to graze 1737 sheep for 1200 AUMs from 12/1 – 3/15 within this allotment.

Terms and Conditions

The terms and conditions described under Alternative 1: Proposed Action applies to Alternative 5: No Domestic Sheep Grazing except those pertaining to the Ellison Ranching Co. sheep permits.

Under this alternative, Cattle Grazing, Wild Horse & Burros, Minerals, Invasive, Nonnative, and Noxious Weeds, and Visual Resource Management Proposed Actions would remain the same.

2.6 Alternative 6: No Grazing

Under this alternative, the existing grazing permits would be cancelled or allowed to expire without renewal and BLM would require the permittees to remove livestock from the allotments. Livestock grazing on the Cow Canyon, Clan Alpine, and Dixie Valley Allotments would not be authorized by the BLM and the available forage on public lands would not be allocated for livestock use. BLM would not collect the fees associated with the grazing permits. BLM would have limited regulatory and land management authority regarding livestock grazing on these allotments if the grazing permits were not renewed. Implementation of this alternative could interfere with BLMs ability to meet its legislative mandates under the following federal laws:

- The TGA of 1934 provides the basic legislative authority for livestock grazing on public lands, with provisions for protection of the lands from degradation and for orderly use and improvement of public rangelands. The TGA established a system for the allotment

of grazing privileges to livestock operators based on grazing capacity and use priority, and for the delineation of allotment boundaries. It also established standards for rangeland improvements and implemented grazing fees.

- The FLPMA of 1976 and the PRIA of 1978 mandate the management of public land for multiple use and sustained yield. Specifically, the regulations implementing these acts call for rangeland management strategies that provide forage for economic use as well as for the maintenance or restoration of watershed function, nutrient cycling, water quality, and habitat quality.
- The CCD CRMP of 2001 has identified the lands within the allotments as available for livestock grazing; a decision to implement a No Grazing Alternative would not be consistent with the CRMP. Under 43 CFR 1610.5-3, all actions approved or authorized by the BLM must conform to the existing land use plan. Actions out of conformance with the CRMP would require a land use plan amendment which is outside the scope of this EA.

Under this alternative key forage species production, cover, and structure would most likely improve in the short term, however, over time the amount of old, decadent grasses or shrubs would increase which limits annual production and forage value for all animals in the area. Anderson (1993) found that after a period of time, ungrazed herbaceous, fibrous rooted plant species become decadent and stagnant. This resulted in reduced above ground growth and a reduction in essential features of vegetative cover which include the replacement of soil organic matter and the optimum capture of precipitation. A study done by Courtois et al. (2004) found that 65 years of protection from grazing on 16 exclosures at different locations across Nevada resulted in relatively few differences between vegetation inside the exclosures and those exposed to moderate grazing outside the exclosures. Where differences did occur, total vegetative cover was greater inside the exclosures while density was greater outside the exclosures. Protection from grazing failed to prevent the expansion of cheatgrass and it was found to be generally more dense inside the exclosures than outside (Courtois et al. 2004) (West et al. 1984).

Under this alternative Wild Horse & Burros, Minerals and Invasive, Nonnative, and Noxious Weeds management and Visual Resource Management would be the same as described under the Proposed Action.

2.7 Alternative 7: No Action

2.7.1 Livestock Grazing

Under the No Action Alternative current management of the three allotments (refer to Maps in Appendix A) would be continued under new permits. The BLM would issue new grazing permits for the Cow Canyon Allotment at 2,390 animal unit months (AUMs), the Clan Alpine Allotment at 10,210 AUMs, and the Dixie Valley Allotment at 6,341 AUMs, all with the same terms and conditions as the expiring permits. The grazing schedule under Alternative 1 is shown in Table 27. There would be no new range improvements. Maintenance would continue on the existing improvements as currently authorized/conducted.

Table 27: No Action Alternative Livestock Grazing Schedules for Cow Canyon, Clan Alpine, and Dixie Valley Allotments

No Action Alternative Grazing Schedule			
Allotment	Pasture	Grazing Use	Livestock Numbers
Cow Canyon	Lower	05/01 – 06/15	365 cattle
	Upper	06/15 – 11/15	365 cattle
Clan Alpine *Use is rotated annually	Shoshone*	05/01 – 06/31	927 cattle
	Alpine*	05/01 – 06/31	927 cattle
	Desatoya/Cherry Valley	07/01 – 08/31	927 cattle
	Edwards	09/01 – 10/31	927 cattle
	Cold Springs	11/01 – 11/30	927 cattle
	Bell Flat	12/01 – 03/31	927 cattle
Dixie Valley	High Country	06/01 – 08/20	528 cattle
	Mid-Slope	08/21 – 10/31	528 cattle
ODD YEAR	Dixie Valley North	11/01 – 02/28	528 cattle
	Dixie Valley South	03/01 – 05/31	528 cattle
Dixie Valley	High Country	06/01 – 08/20	528 cattle
	Mid-Slope	08/21 – 10/31	528 cattle
EVEN YEAR	Dixie Valley North	03/01 – 05/31	528 cattle
	Dixie Valley South	11/01 – 02/28	528 cattle

2.7.2 Wild Horses & Burros

The BLM would not conduct any capture/gathers at this time. Direct management of the wild horse populations in the Clan Alpine HMA would be deferred to a later date. The horse populations would not be maintained at the AML, which represent the wild horse population being compatible with ensuring a thriving natural ecological balance. The fertility control vaccine would not be administered to mares within the HMAs. A greater number of excess wild horses would need to be removed in future gathers to achieve AML and to reverse resource degradation derived from an overpopulation of wild horses. Compliance with the CRMP or with promoting a healthy natural ecological habitat in conformance with rangeland health standards and the provisions of Section 1333 (a) of the WFRHBA would not be met.

2.7.3 Minerals

Under the No Action Alternative no new mineral pits would be designated at this time within the proposed project area.

2.7.4 Invasive, Nonnative and Noxious Weeds

Under the no action alternative, the Dixie Valley, Clan Alpine and Cow Canyon Allotments would continue to be routinely surveyed along roadways and other disturbed areas for new weed infestations. The SFO weed coordinator would be notified of any weeds found and provided with the species, size of the infestation, cover class, distribution of plants (linear or

irregular), and location. Treatment methods could include biological, cultural/mechanical, and chemical control. When applicable, several of these methods would be combined into an integrated pest management program in order to reduce the costs and risks to humans and the environment. Areas previously treated with herbicides would continue to be monitored.

2.7.5 Visual Resource Management

VRM Class objectives would not be designated under this alternative since no project would be undertaken to trigger this action.

2.7.6 Adaptive Management

The TNR adaptive management actions described under the Proposed Action would not take place under the No Action Alternative. However, drought management actions could still occur in accordance with the CCD Drought Management EA and the Nevada Handbook H-1730-1 *Resource Management during Drought* on these allotments.

2.8 Alternative Actions Considered and Dismissed From Detailed Analysis

2.8.1 Remove or Reduce Livestock within the HMA

Permanently eliminating all livestock grazing within the Clan Alpine HMA would not be in conformance with the existing land use plan and is contrary to the BLM's multiple-use mission as outlined in the 1976 FLPMA. Also livestock grazing cannot be reduced without complying with applicable statutes and regulations, including amendment of land-use plan under 43 CFR Part 1600 and public decision-making process prior to any reductions in livestock grazing as required under 43 CFR Part 4100. The CRMP has identified the lands within the project area as available for livestock grazing. Any action to eliminate livestock grazing would be inconsistent with the CRMP, absent a land-use plan amendment. Under the 43 CFR 1610.5-3, all actions approved or authorized by the BLM must conform to the existing land use plan. A plan amendment – which would be subject to separate regulatory requirements for a public decision-making process -- is outside the scope of this EA.

The allocation of forage for wildlife, livestock and wild horses was determined previously through various public decision-making processes (refer to Section 1.2, Table 2). Reallocation of forage available for livestock to wild horses would not necessarily maintain a thriving natural ecological balance since wild horses tend to use rangelands differently than livestock. Livestock grazing can be confined to specific pastures, limited periods of use, and specific seasons of use, so as to minimize impacts to vegetation during the critical plant growing season. In contrast, wild horses are present on the range year-round, may use the range differentially, and their impacts cannot be controlled through the establishment of a grazing system but rather by controlling the wild horse population at a level that does not adversely impact range resources and conflict with other multiple uses of the land.

This would only be effective for a very short term as the horse population would continue to increase. Wild horses are a year-round presence on the public lands, in contrast to livestock

for which grazing use is regulated by an authorized grazing permit and in response to forage and water availability and resource concerns. Eventually the HMA and adjacent lands would no longer be capable of supporting the horse population.

2.8.2 Designate the Clan Alpine HMA as a “Wild Horse Range”

Designating the Clan Alpine HMA as a “Wild Horse Range” under 43 CFR 4710.3-2 would require amendment of the CRMP, which is outside the scope of this EA. Only the BLM Director or Assistant Director (as per BLM Manual 1203: Delegation of Authority), may establish a Wild Horse Range after a full assessment of the impact on other resources through the land-use planning process. As this is not an “exclusive” designation, it might potentially have little to no effect on the level of livestock grazing permitted to occur in the area. There are currently three designated Wild Horse Ranges in the western United States that are managed principally for wild horses, and one Wild Burro Range managed principally for wild burros, consistent with 43 CFR 4170.3-2. These are the Pryor Mountain Wild Horse Range in Montana; the Little Book Cliffs Wild Horse Range in Colorado; the Nevada Wild Horse Range and the Marietta Wild Burro Range in Nevada.

2.8.3 Raising the Appropriate Management Levels for Wild Horses

The AMLs were established through a public decision making process and issuance of an FMUD following completion of an in-depth analysis of habitat suitability, resource monitoring, population inventory data, and public input into the final decision-making. This alternative was not brought forward for detailed analysis because it is outside of the scope of the analysis, and is inconsistent with the CRMP. Furthermore, in order to raise the AML for wild horses, monitoring data would need to indicate that sufficient forage, water and space are available to support wild horse numbers above AML. Available monitoring data and observations, however, indicate that the current population of wild horses is negatively impacting rangeland health in some areas and that animals need to remain within AML in order to achieve or progress toward achieving a thriving natural ecological balance.

2.8.4 Zeroing out the HMA

This action would require an amendment of the CRMP, which is outside the scope of this EA.