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**Moorman Ranch Term Permit Renewal Standards and
Determination Document**

Egan field Office

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



STANDARDS DETERMINATION DOCUMENT

FUNDAMENTALS OF RANGELAND HEALTH Standards and Guidelines Assessment Moorman Ranch Allotment

Standards and Guidelines for Grazing Administration were developed by the Northeastern Great Basin Resource Advisory Council and approved by the Secretary of the Interior on February 12, 1997. Standards and guidelines are likened to objectives for healthy watersheds, healthy native plant communities, and healthy rangelands. Standards are expressions of physical and biological conditions required for sustaining rangelands for multiple uses. Guidelines point to management actions related to livestock grazing for achieving the standards.

This Standards Determination Document evaluates and assesses livestock grazing management achievement of the Standards and conformance with the Guidelines for the Moorman Ranch Allotment in the Ely BLM District. This document does not evaluate or assess achievement of the wild horse and burro or Off Highway Vehicle Standards or conformance to the respective Guidelines.

The standards were assessed for the Moorman Ranch Allotment by a BLM interdisciplinary team consisting of rangeland management specialists, wildlife biologist, weeds specialist, and watershed specialist. Documents and publications used in the assessment process include the 1) Soil Survey of Western White Pine County, Nevada 2) Ecological Site Descriptions Major Land Resource Area 28B, Central Nevada Basin and Range Nevada, 3) Interpreting Indicators of Rangeland Health (USDI-BLM et al. 2000), 4) Sampling Vegetation Attributes (USDI-BLM et al. 1996) and 5) the National Range and Pasture Handbook (USDA-NRCS 1997). A complete list of references is included at the end of this document. All are available for public review in the Schell BLM Field Office. The interdisciplinary team used rangeland monitoring data, professional observations, and photographs to assess achievement of the Standards and conformance with the Guidelines.

The Moorman Ranch LLC. signed a Coordinated Conservation Ranch & Allotment Management Plan in 1968. Since then an Allotment Evaluation was conducted using monitoring data collected between 1988 and 1992 and signed into effect on February 11, 1994. A Final Multiple Use Decision (FMUD) on the Moorman Ranch Allotment was completed October 21, 1997. The FMUD indicated that the Animal Unit Month (AUM) would be reduced from 10,099 AUMs to 4,749 AUMs. The remaining 5,350 AUMs were placed in voluntary non-use for five years starting on March 1, 1998 and ending on March 1, 2003. The Livestock Use Agreement (LUA) for the Moorman Ranch was signed into effect October 17, 1997 and for a period from March 1 2003 to February 28 2008. The LUA reinforces the change in AUMs and season of use, as well as a four year rotation grazing system. If monitoring data shows that adjustments need to be made in grazing use, either an increase or a decrease, it will be proportioned between livestock

and wild horses through a multiple use decision at the time. If monitoring data shows that the level of livestock use in this Final Multiple Use Decision are appropriate to meet the multiple use objectives for the allotment, this level of use will become the permitted use.

The Moorman Ranch is located in White Pine County Nevada; this allotment consists of 123,491 public land acres and 2,320 private land acres. Moorman Ranch allotment is located geographically approximately 30 miles west of Ely, Nevada, in White Pine County (see Map1, General Location Map).

The allotment is characterized by valleys, bench lands and foothills. Elevation ranges from approximately 6,000 feet above sea level in Jake's Valley to approximately 8,500 feet above sea level along the foothills of the White Pine Range. Generally the precipitation level ranges between 8-10 inches on the lower benches 10-12 inches in the foothills. Precipitation occurs primarily as winter snow or spring/fall thunderstorms and rains.

PART 1. STANDARD CONFORMANCE REVIEW

STANDARD 1. UPLAND SITES: *“Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate and land form.”*

As indicated by:

- Indicators are canopy and ground cover, including litter, live vegetation and rock, appropriate to the potential of the site.

Determination:

X Meeting the Standard

- Not Meeting the Standard, but making significant progress towards
- Not Meeting the Standard, not making significant progress toward standard

Causal Factors:

- Livestock are a contributing factor to not meeting the standard.
- Livestock are not a contributing factor to not meeting the standard
- Failure to meet the standard is related to other issues or conditions

Guidelines Conformance:

X In conformance with the Guidelines

- Not in conformance with the Guidelines

Findings and Conclusion: *Standard Achieved.*

Utilization has been light to moderate which promotes litter and soils surface stability. (See Table 7)

STANDARD 2. RIPARIAN AND WETLAND SITES: *“Riparian and wetland areas exhibit a properly functioning condition and achieve state water quality criteria.”*

As indicated by:

- Stream side riparian areas are functioning properly when adequate vegetation, large woody debris, or rock is present to dissipate stream energy associated with high water flows. Elements indicating proper functioning condition such as avoiding accelerating erosion, capturing sediment, and providing for groundwater recharge and release are determined by the following measurements as appropriate to the site characteristics:
- Width/Depth ratio; Channel roughness; Sinuosity of stream channel; Bank stability; Vegetative cover (amount, spacing, life form); and other cover (large woody debris, rock).
- Natural springs, seeps, and marsh areas are functioning properly when adequate vegetation is present to facilitate water retention, filtering, and release as indicated by plant species and cover appropriate to the site characteristics.
- Chemical, physical and biological water constituents are not exceeding the state water quality standards.

Determination:

- Meeting the Standard
- Not Meeting the Standard, but making significant progress towards
- Not Meeting the Standard, not making significant progress toward standard
- Not Applicable**

Findings and Conclusion: *Standard Not Applicable.*

On the Moorman Ranch Allotment twelve springs were selected for conducting Proper Functioning Conditions (PFC) studies. Every spring was developed except one, which no longer contained water or hydric soils. Since, each of these springs were developed they no longer fit the criteria for Riparian areas. They are now water developments and are not expected to maintain riparian-wetland areas.

STANDARD 3. HABITAT: *“Habitats exhibit a healthy, productive, and diverse population of native and/or desirable plant species, appropriate to the site characteristics, to provide suitable feed, water, cover and living space for animal species and maintain ecological processes. Habitat conditions meet the life cycle requirements of threatened and endangered species.”*

As indicated by:

- Vegetation composition (relative abundance of species);
- Vegetation structure (life forms, cover, height, or age class);
- Vegetation distribution (patchiness, corridors);

- Vegetation productivity; and
- Vegetation nutritional value.

Determination:

X Meeting the Standard

- Not Meeting the Standard, but making significant progress towards
- Not Meeting the Standard, not making significant progress toward standard

Causal Factors:

- Livestock are a contributing factor to not meeting the standard.
- Livestock are not a contributing factor to not meeting the standard
- Failure to meet the standard is related to other issues or conditions

Guidelines Conformance:

X In conformance with the Guidelines

- Not in conformance with the Guidelines

Findings and Conclusion: *Standard Achieved.*

The determination of the dominant vegetation within the Moorman Ranch Allotment is based on the Soil Survey of Western White Pine County, Nevada, and baseline range studies (ecological condition, line intercept cover). All indicators identify a diverse habitat that is distributed in a mosaic across the landscape for the size and location of the allotment. A variety of plant communities are present, indicating that vegetation types are distributed appropriately for the location and size of the allotment.

Vegetation composition at key areas using the line intercept cover method indicated shrub composition at a higher percent than should be present according to the potential composition indicated in the ecological site description, and potential grass composition lower than it should be. However, compared to data collected in 1994 data collected in 2007 indicated that in the same soil types, there has been an overall improvement in vegetative composition. Five of the nine sites has improved while three sites declined in health and one site stayed the same.

The monitoring data collected in 2007 was completed in the month of August. At this time of year forbs have desiccated and may not be adequately represented in monitoring data. This may have skewed the data analysis at sites where forbs may form a significant fraction of the understory composition and /or cover.

Professional observation indicates vegetation distribution (patchiness, corridors) to be appropriate in this area. The vegetation composition changes along the elevation gradient and plant communities are separated by topography. There is a combination of pinion juniper woodlands along with Wyoming sagebrush/grasslands and winterfat sites. Elk and antelope use this area year round, and mule deer have a migratory route through the allotment. Sage grouse inhabit the allotment along with ferruginous hawks, golden eagles and other birds of prey. Pygmy rabbit habitat is found within the allotment, as well as two

species of kangaroo mouse. Coyotes and jackrabbits are frequently seen on the allotment, and part of the allotment is within the Buck and Bald Wild Horse Herd Management Area.

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

Standard #1: UPLAND SITES

Existing grazing management and levels of grazing use on native range within the Moorman Ranch Allotment are not significant causal factors in failing to achieve the upland standard. Utilization studies presented in this analysis show slight to moderate use in these range sites since 2001. Livestock use is distributed throughout the allotment. Causal factors in these areas are considered to be drought and fire suppression. The current livestock grazing management system conforms to the guidelines.

Standard #2: RIPARIAN AND WETLAND SITES

Not applicable

Standard #3: HABITAT

Existing grazing management and levels of grazing use on native range within the Moorman Ranch Allotment are not significant causal factors in failing to achieve the habitat standard. Utilization data shows the native range problem areas were generally grazed slightly to moderately during 2001-2003, and in 2007 (Tables 1-4). In these areas, the current grazing management system conforms to the guidelines. The failure to achieve the habitat standard on native range is more attributable to fire suppression or the lack of wildfire, and drought.

PART 3. GUIDELINE CONFORMANCE REVIEW

Grazing is in conformance with the guidelines as provided in the Northeastern Great Basin Standards and Guidelines.

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

The allotment is achieving standards; no new management practices are needed. The current management practices are supplied in appendix V.

Prepared by:

/s/Chelsy Simerson
Chelsy Simerson, Rangeland Management Specialist

9/18/08
Date

Reviewed by:

/s/Chris Mayer
Chris Mayer, Lead Rangeland Management Specialist

9/24/08
Date

Bonnie Million:	<u>/s/ Bonnie Million</u>	<u>9/18/08</u>
Nick Pay:	<u>/s/ Shawn Gibson</u>	<u>9/16/08</u>
Ben Noyes:	<u>/s/ Ben Noyes</u>	<u>9/17/08</u>
Cameron Collins:	<u>/s/Cameron Collin</u>	<u>9/17/08</u>
Dave Jacobsen:	<u>/s/ Dave Jacobsen</u>	<u>9/16/08</u>
Melanie Peterson:	<u>/s/ Melanie Peterson</u>	<u>9/17/08</u>
Elvis Wall:	<u>/s/ Elvis Wall</u>	<u>9/16/08</u>
Gina Jones:	<u>/s/ Gina Jones</u>	<u>9/17/08</u>

I concur:

/s/ Jeff Weeks
Authorized Officer

9/29/08
Date

REFERENCES

USDA - USFS, NRCS, USDI - BLM, Cooperative Extension Service. 1996. Sampling Vegetative Attributes.

USDA-NRCS 1997 National Range and Pasture Handbook.

USDA – NRCS. 1998. Nevada Plant List.

USDI – BLM. 2000. Interpreting Indicators of Rangeland Health. Version 3. Technical Reference 1734-6. BLM/WO/ST-00/001+1734. National Science and Technology Center Information and Communications Group, Denver, Colorado.

USDA – NRCS. 2003. Major Land Resource Area 28B, Central Nevada Basin and Range Nevada Ecological Site Descriptions.

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APPENDIX I
Monitoring Data for the Moorman Ranch Allotment

Licensed Livestock Use

Current active permitted use on the Moorman Ranch Allotment is 4,749 AUMs. From 1998 through 2008, licensed livestock use averaged 3,792 AUMs. Licensed use ranged from a high of 4,422 AUMs in 2003 to a low of 2,983 AUMs in 2001. In 1998 the Final Multiple Use Decision (FMUD) went into effect. The FMUD stated that for the first five years of this permit the permittee would take voluntary non-use of 5,350 AUMs. This left the permittee with 4,749 AUMs of permitted use. The permittee has voluntarily continued this range management practice for the remainder of the permit. The permittee plans to continue with this management practice for the proposed term permit described within this document.

Utilization

Table 1. Summary of utilization data on the Moorman Ranch Allotment, August 2007.

Plot # Date	Pasture Type	Utilization of Key Species	Average Utilization for Key Area
MR-2 8/23/2007	<i>Agropyron cristatum</i> Seeding	AGCR 6%	6%
MR-3 8/23/2007	<i>Agropyron cristatum</i> Seeding	AGCR 52%	52%
MR-4 8/20/2007	Rye Seeding	Rye 28%	28%
MR-5 8/20/2007	Native Vegetation	PASM 0% POSE 18%	9 %
MR-6 8/21/2007	<i>Artemisia tridentata</i>	POSE 23%	23%
MR-7 8/21/2007	Native Vegetation	POSE 25%	25%
MR-8 8/20/2007	Native Vegetation	ACHY 36% PASM 14%	25%
MR-9 8/22/2007	<i>Artemisia tridentata</i>	POSE 16% PASM 1 % ACHY 22%	13%
MR-10 8/22/2007	<i>Krascheninnikovia lanata</i>	KRLA 68%	68%
MR-12 8/30/2007	<i>Krascheninnikovia lanata</i>	KRLA 32% ACHY 30% POSE 23%	28%
MR-13 8/30/2007	<i>Krascheninnikovia lanata</i>	KRLA 10%	10%

MR-14 8/22/2007	<i>Agropyron cristatum</i> Seeding	AGCR 55%	55%
MR-15 8/23/2007	<i>Agropyron cristatum</i> Seeding	AGCR 35%	35%
MR-16 8/21/2007	Creek flood plain	AGCR 42 % JUBA 13%	30%
Average use of all key species throughout the allotment			29%

Table 2. Moorman Ranch Allotment Utilization, 2003

Plot # Date	Pasture Type	Utilization of Key Species	Average Utilization for Key Area
MR-1 5/29/2003	<i>Krascheninnikovia lanata</i>	KRLA 50% ELEL5 56% ACHY (T)	53%
MR-5 1/9/2003	Native Vegetation	PASM 48%	48%
MR-6 1/9/2003	<i>Artemisia tridentata</i>	POSE 26% ACHY 32% STCO 38%	32%
MR-8 1/9/2003	Native Vegetation	PASM 36% ACHY 54%	45%
MR-12 5/29/2003	<i>Krascheninnikovia lanata</i>	KRLA 50% ATCO 53% POSE 56%	53%
MR-13 5/29/2003	<i>Krascheninnikovia lanata</i>	KRLA 52% ACHY (T) ELEL5 61%	57%
MR-14 1/9/2003	<i>Agropyron cristatum</i> Seeding	AGCR 56%	56%
MR-15 1/9/2003	<i>Agropyron cristatum</i> Seeding	AGCR 57%	57%
Average use of all key species throughout the allotment			50%

Table 3. Moorman Ranch Allotment Utilization, 2002

Plot # Date	Pasture Type	Utilization of Key Species	Average Utilization for Key Area
MR-1 5/22/2002	<i>Krascheninnikovia lanata</i>	KRLA 30% ELEL5 22% ACHY (T)	26%
MR-2 8/15/2002	<i>Agropyron cristatum</i> Seeding	AGCR 54%	54%
MR-3 8/15/2002	<i>Agropyron cristatum</i> Seeding	AGCR 40%	40%
MR-3 5-22-2002	<i>Agropyron cristatum</i> Seeding	AGCR42%	42% %

MR-10 5/22/2002	<i>Krascheninnikovia lanata</i>	KRLA 48% POSE 55% ACHY 52% ELEL5 54%	52%
MR-13 5/22/2002	<i>Krascheninnikovia lanata</i>	KRLA 14% ACHY 13% ELEL5 5%	32%
MR-14 5/22/2002	<i>Agropyron cristatum</i> Seeding	AGCR 44%	44%
MR-15 8/15/2002	<i>Agropyron cristatum</i> Seeding	AGCR 58%	58%
Average use of all key species throughout the allotment			44%

Table 4. Moorman Ranch Allotment Utilization, 2001

Plot # Date	Pasture Type	Utilization of Key Species	Average Utilization for Key Area
MR-3 6/18/2001	<i>Agropyron cristatum</i> Seeding	AGCR 56%	56%
MR-3 10/18/2001	<i>Agropyron cristatum</i> Seeding	AGCR 17%	17%
MR-4 6/12/2001	Rye Seeding	AGCR 26% POSE 24%	25%
MR-5 6/15/2001	Native Vegetation	PASM 14% POSE 58%	36%
MR-5 10/16/2001	Native Vegetation	PASM 32%	32%
MR-6 6/18/2001	<i>Artemisia tridentata</i>	POSE 16% ACHY 14% ACTH7 14%	15%
MR-6 10/18/2001	<i>Artemisia tridentata</i>	POSE 28% ACHY 22% STCO 30%	27%
MR-8 10/16/2001	Native Vegetation	POSE 34% ELEL5 38% PSSPS 36%	36%
MR-9 10/16/2001	<i>Artemisia tridentata</i>	POSE 32% ACHY 38% STCO 34%	35%
MR-10 6/15/2001	<i>Krascheninnikovia lanata</i>	KRLA 50% ACHY 54% POSE 56% ELEL5 52%	53%
MR-14 10/25/2001	<i>Agropyron cristatum</i> Seeding	AGCR 28%	28%
MR-15 6/18/2001	<i>Agropyron cristatum</i> Seeding	AGCR 22%	22%

MR-16 10/10/2001	Creek flood plain	AGCR 50%	50%
Average use of all key species throughout the allotment			33%

Line Intercept Cover

Ground cover and canopy/basal/ level studies were conducted on the Moorman Ranch allotment during the month of August, 2007. Ground cover studies were completed at 10 key area sites. Line Intercept Canopy/Basal Cover studies were also conducted. Photographs were taken and professional observations noted at all 14 key area sites.

Table 5. Summary of Ground cover studies Moorman Ranch Allotment, August, 2007.

Key Area	Ground Cover	Percent	Key Area	Ground Cover	Percent
MR-4	Vegetation	13%	MR-9	Vegetation	29%
	Bare Ground	75%		Bare Ground	46%
	Litter	12%		Litter	25%
	Rock	<1%		Rock	0%
MR-5	Vegetation	26%	MR-10	Vegetation	15%
	Bare Ground	43%		Bare Ground	0%
	Litter	31%		Litter	4%
	Rock	0%		Rock	<1%
MR-6	Vegetation	28%	MR-12	Vegetation	12%
	Bare Ground	55%		Bare Ground	67%
	Litter	27%		Litter	21%
	Rock	0%		Rock	0%
MR-7	Vegetation	56%	MR-13	Vegetation	12%
	Bare Ground	15%		Bare Ground	0%
	Litter	28%		Litter	84%
	Rock	1%		Rock	0%
MR-8	Vegetation	23%	MR-14	Vegetation	17%
	Bare Ground	44%		Bare Ground	69%
	Litter	33%		Litter	14%
	Rock	0%		Rock	0%

Cover was not collected at key area sites MR-2, MR-3, MR-15, and MR-16, because these sites were located within seedings. MR-4 and MR-14 were also within a seedings, but a cover data was collected to monitor the amount of sagebrush returning to the areas.

Table 6. Line Intercept Vegetation Cover Data August 2007

Key Area/ Date	Vegetative Ground Cover	Biological Soil Crust	Soil Compaction/ Infiltration	Site Potential Cover Percent
MR-4 8/20/2007	12.75 %	Present	No excess Soil Compaction	basal and crown 10-20%
MR-5 8/20/2007	26.46 %	Present	No excess Soil Compaction	basal and crown 20-30%

MR-6 8/21/2007	28.26 %	Present	No excess Soil Compaction	basal and crown 10-20%
MR-7 8/21/2007	55.63 %	Present	No excess Soil Compaction	basal and crown 35-50%
MR-8 8/20/2007	23.26 %	Present	No excess Soil Compaction	basal and crown 30-40%
MR-9 8/22/2007	28.78 %	Present	No excess Soil Compaction	basal and crown 5-15%
MR-10 8/22/2007	19.02 %	Present	No excess Soil Compaction	basal and crown 10-20%
MR-12 8/30/2007	12.38 %	Not Present	No excess Soil Compaction	basal and crown 20-35%
MR-13 8/30/2007	12.49 %	Not Present	No excess Soil Compaction	basal and crown 5-10%
MR-14 8/22/2007	16.91 %	Present	No excess Soil Compaction	basal and crown 10-20%

Table 7. Comparison of Ecological Condition Composition studies on soil types within the Moorman Ranch Allotment

Ecological Site Description Numbers *	1994			Current (2007) Collected in August			Potential			Observed Apparent Trend
	Grass	Forb	Shrubs / Trees	Grass	Forb	Shrubs / Trees	Grass	Forb	Shrubs / Trees	
R028BY010NV	4%	0%	96%	65%	0%	35%	50%	5%	45%	Upward
R028BY007NV	16%	2%	82%	38%	0%	62%	65%	10%	25%	Upward
R028BY091NV	24%	8%	68%	11%	3%	86%	30%	10%	60%	Down- ward
R028BY091NV	24%	8%	68%	10%	11%	79%	30%	10%	60%	Down- ward
R028BY087NV	38%	2%	70%	10%	4%	86%	55%	15%	30%	Down- ward
R028BY090NV	18%	2%	80%	18%	0%	82%	30%	5%	10%	Not Apparent
R028BY084NV	7%	20%	73%	47%	0%	53%	55%	10%	35%	Upward
R028BY062NV	0%	0%	100%	41%	6%	53%	60%	10%	30%	Upward
R028BY056NV	0%	0%	100%	7%	0%	93%	20%	5%	75%	Upward

Table 7 indicates that for most ecological sites the current grass component is less than potential while shrubs are greater.

Table 8. Cover Data from Ecological Site Inventory on the Moorman Ranch Allotment, 1994

Ecological Site Description Numbers	Plant Spp
R028BY010NV	POSE 2% ELEL5 2%
	ARTRW 91% CHVI8 5%
R028BY007NV	ACHY 1% POSE 2%
	ELLA3 2% ACTH7 10%
	POCA 1%
	ASTER 1% PENST 1%
R028BY091NV	ARTRW 81% JUOS 1%
	PSSPS 12% POSE 10%
	ACHY 1% ELEL5 1%
	POFE 2% BASA 3%
	PPFF 2% LUPIN 1%
R028BY091NV	AMUT 20% ARVA2 38%
	PIMO 5% JUOS 5%
	PSSPS 12% POSE 10%
	ACHY 1% ELEL5 1%
	POFE 2% BASA 3%
R028BY087NV	PPFF 2% LUPIN 1%
	AMUT 20% ARVA2 38%
	PIMO 5% JUOS 5%
	PSSPS 15% POSE 2%
	ACTH7 10% ELEL5 1%
R028BY090NV	ERIOG 2%
	ARVA 49% PUTR2 1%
	PIMO 10% JUOS 10%
	PSSPS 15% POSE 2%
	ELEL5 1% ACHY 0%
R028BY084NV	ASTER 0% ERIOG 2%
	ARNO4 63% PIMO 5%
	JUOS 10% CHRYS 2%
	ELEL5 6% POSE 1%
R028BY062NV	HAGL 20%
	KRLA 41% ATCO 30%
	CHVI8 1% PIDE4 1%
R028BY056NV	SSSS 50%
	SSSS 50%
R028BY056NV	ARTRW 100%

* Ecological site descriptions can be found in the Natural Resources Conservation Service book, Major Land Resource Area 28B for Central Nevada Basin and Range. This

information can be found at the Ely BLM District Office in Ely NV. More specific soil description can be found at the following web site using the Soil Mapping Unit number. <http://soildatamart.nrcs.usda.gov/Report.aspx?Survey=NV780&UseState=NV>

Cover Data 2007

Key area MR-4

Soil Mapping Unit (SMU) 900

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

<u>Species</u>	<u>Percent composition</u>
Ryegrass seeding	65%
<i>Artemisia tridentata</i> ssp. <i>vaseyana</i>	31%
<i>Sarcobatus</i>	4%

The following range notes were made on the line intercept cover form: Cryptogams are present in the center of grass crowns and under some sagebrush. Plants that are present but not found within the line transect include *Chrysothamnus viscidiflorus* and *Halogeton glomeratus* (only in highly trampled areas). No other invasive species, such as cheatgrass, are present. Some pedicelling of the grasses around the crown, but soils are fairly stable with no signs of rills or evidence of soil movement. Cattle are present in the pasture, and are dispersed evenly throughout the area.

Key area MR-5

SMU 880

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

<u>Species</u>	<u>Percent composition</u>
<i>Artemisia tridentata</i> ssp. <i>vaseyana</i>	63%
<i>Agropyron smithii</i>	4%
<i>Poa secunda</i>	33%

The following range notes were made on the line intercept cover form: Cryptogams are present under some of the large shrubs. Utilization is evenly distributed throughout the area. Signs of soil movement are apparent with litter build up on one side of the plants as well as for rills on the ground surface. Cattle are present in the area. Some sign of horses, however there is no elk or deer sign. There is a diverse age class of rangeland plants. This area has received no excess trampling or compaction.

Plants that are present but not found within the line transect include *Sphaeralcea coccinea*, junipers, *Achnatherum hymenoides*, *Elymus elymoides*, and *Chrysothamnus viscidiflorus*. On the east side of road, several forbs are present including *Cryptantha* spp., *Stanleya* spp., *Eriogonum umbellatum*, and *Phlox hoodii*. No noxious or invasive weed species are present at this site.

Key area MR-6

SMU 920

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

<u>Species</u>	<u>Percent composition</u>
<i>Pascopyrum smithii</i>	2%
<i>Elymus elymoides</i>	4%
<i>Achnatherum hymenoides</i>	<1%
<i>Poa secunda</i>	5%
<i>Brassica spp.</i>	3%
<i>Artemisia tridentata ssp. vaseyana</i>	78%
<i>Chrysothamnus viscidiflorus</i>	8%

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

Plants that are present but not found within the line transect include, *Opuntia* spp., *Aster ascendens*, *Cryptantha* spp., and *Agropyron cristatum*. No noxious weeds were found in the area but *Bromus tectorum* was present in small quantities. Cryptogams are present under the shrubs. The soil is a rocky-silty soil, with some pedicelling around the bunchgrasses. Soil is stable with no sign of washes or rills. *Achnatherum hymenoides* did not develop seed in 2007 due to drought. Other grasses did seed such as *Elymus elymoides* and *Poa secunda*. The utilization collected was by livestock (cattle). The site has a healthy diversity of age classes among the plants.

Key area MR-7

SMU 870

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

<u>Species</u>	<u>Percent composition</u>
<i>Elymus elymoides</i>	2%
<i>Poa secunda</i>	7%
<i>Pascopyrum smithii</i>	<1%
<i>Elymus lanceolatus</i>	<1%
Unidentified grass	<1%
<i>Penstemon</i> spp.	3%
<i>Brassica</i> spp.	2%
<i>Iva axillaris</i>	4%
Unidentified forb	2%
<i>Eriogonum umbellatum</i>	14%
<i>Chrysothamnus viscidiflorus</i>	3%
Unidentified shrub	25%
<i>Symphoricarpos albus</i>	37%

Plants that were unidentified were too dry and lacked characteristics to be properly identified. The following range notes were made on the line intercept cover form:

Plants that are present but not found within the line transect include, *Artemisia tridentata ssp. vaseyana*, Pinyon-Juniper woodland, *Cercocarpus montanus*, *Leymus cinereus*, thistle, *Aster ascendens*, *Grindelia squarrosa*, *Cryptantha* spp., *Eriogonum umbellatum*,

and *Achnatherum hymenoides*. This area is used by deer, elk and cows. Some *Bromus tectorum* is present in the area and may be a problem if burned. This area has light 10-20% utilization. There is no sign of soil movement.

Key area MR-8

SMU 762

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

<u>Species</u>	<u>Percent composition</u>
<i>Artemisia tridentata</i> ssp. <i>vaseyana</i>	79%
<i>Chrysothamnus viscidiflorus</i>	7%
<i>Achnatherum hymenoides</i>	1%
<i>Elymus elymoides</i>	5%
<i>Agropyron smithii</i>	1%
<i>Poa secunda</i>	3%
<i>Astragalus</i> spp.	1%
<i>Phlox hoodii</i>	2%
<i>Lomatium grayi</i>	<1%
<i>Opuntia</i> spp.	<1%

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

Plants that are present but not found within the line transect include, *Elymus lanceolatus*, *Cryptantha* spp., *Aster ascendens*, and *Krascheninnikovia lanata*. The soils are stable with no plant pedicelling and no rills. Fresh wild horse tracks are present in the area. No noxious or invasive weed species are present. Cryptogams are present in the understory of the shrubs.

Key area MR-9

SMU 124

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

<u>Species</u>	<u>Percent composition</u>
<i>Pascopyrum smithii</i>	1%
<i>Poa secunda</i>	13%
<i>Achnatherum hymenoides</i>	3%
<i>Artemisia tridentata</i> ssp. <i>wyomingensis</i>	79%
<i>Chrysothamnus viscidiflorus</i>	3%

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

Plants that are present but not found within the line transect include, *Krascheninnikovia lanata*, *Cryptantha* spp., *Mentzelia* spp., *Phlox hoodii*, *Aster ascendens*, *Penstemon* spp. , *Eriogonum* spp., *Lomatium triternatum*, *Erigeron* spp., *Opuntia* spp. and on higher slopes *Seriphidium pygmaeum*. Cryptogams present on shrubs as well as ground cover. Heavy use by wild horse, (lots of old and new droppings, numerous hoof prints in trails and throughout area, some plants have been bitten off close to the ground). Young

Achnatherum hymenoides plants are coming up. Soils are stable with no rills or displaced litter. Trampling and compaction of the soil is light to moderate. No invasive or noxious weed species are in the area.

Key area MR-10

SMU 351

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

<u>Species</u>	<u>Percent composition</u>
<i>Poa secunda</i>	47%
<i>Achnatherum hymenoides</i>	<1%
<i>Krascheninnikovia lanata</i>	53%

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

Utilization was dispersed evenly throughout the area. Some use by rabbits. The grasses produced very few seed heads in 2007 due to the drought conditions. However, there is an abundance of *Poa secunda* plants that produced numerous seed heads. No invasive or noxious weed species are in the area. The area is experiencing sagebrush encroachment. No cattle were present in the pasture. Soils are stable with adequate vegetation and ground cover. Cryptogams are abundant. This area receives year round wild horse utilization.

Key area MR-12

SMU 480

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

<u>Species</u>	<u>Percent composition</u>
<i>Achnatherum hymenoides</i>	3%
<i>Poa secunda</i>	36%
<i>Elymus elymoides</i>	2%
<i>Halogeton glomeratus</i>	6%
<i>Atriplex confertifolia</i>	33%
<i>Krascheninnikovia lanata</i>	20%

The following range notes were made on the line intercept cover form: Plants that are present but not found within the line transect include, *Artemisia tridentata*, *Brassica* spp., *Picrothamnus desertorum*. *Halogeton glomeratus* is encroaching in this area, along with *Atriplex confertifolia*. *Poa secunda* and *Achnatherum hymenoides* are growing in healthy, full bunches but *Achnatherum hymenoides* is less abundant. Soil appears to be stable with adequate soil cover and no visible signs of movement. There is some trailing (all animals) through the area along with burrowing animal holes all around. *Krascheninnikovia lanata* is much healthier on the south side of the road, opposite from the witness post and cage. (Approx. 200ft) The current location of the witness post and cage was completely encroached by *Halogeton glomeratus*.

Key area MR-13

SMU 643

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

<u>Species</u>	<u>Percent composition</u>
<i>Elymus elymoides</i>	7%
<i>Krascheninnikovia lanata</i>	93%

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

Plants that are present but not found within the line transect include, *Achnatherum hymenoides*, *Atriplex confertifolia*, *Artemisia tridentata*, *Brassica* spp. Very little *Halogeton glomeratus* is in the area. Cryptogams are present in the understory and in some interspaces. Soil appears to be stable with a hard crust forming on the surface and no visible signs of soil movement. There is no excessive trampling or compaction of the soil by livestock or wildlife.

Key area MR-14

SMU 920

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

<u>Species</u>	<u>Percent composition</u>
<i>Agropyron cristatum</i>	9%
<i>Pascopyrum smithii</i>	1%
<i>Phlox hoodii</i>	1%
<i>Artemisia tridentata</i> ssp.wyomingensis	89%

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

Agropyron cristatum is growing within the *Artemisia tridentata* ssp.wyomingensis. Other grasses have some new growth but not much due to the drought year. Soils are stable with no rills or pedicelling. Numerous trails go through the crested wheat seeding. The crested wheat is producing lots of seed heads. No noxious or invasive weed species are present in the area. Within the cage the seed stocks were 14-18 inches high, and the plants were thickly vegetated.

Riparian Assessment

“Lentic Standard Checklists” were completed for 11 springs on the Moorman Ranch Allotment. The data collected is summarized in Table 4.

Table 9. Summary of Proper Functioning Condition studies on the Moorman Ranch Allotment, August, 2007.

Spring Name	Legal location	Date Studied	Functionality Rating	Size	Notes
Divide Spring	T.18N R.58E Sec. 23 NWSE	8/27/07	Developed	0.1 Acres	See note 1.
Deer Spring	T.19N R.59E Sec. 25 NESE	8/27/07	PFC	0.1 Acres	Developed :water flow (trough is functioning)
Barrel Spring	T.20N R.56E Sec. 26 NWNW	8/29/07	No Water	0.2 Acres	Developed; CCC*; Dry and has been for a long time no riparian vegetation. The condition of this area is outside of management's control.
Tunnel Spring	T.17N R.58E Sec. 9	8/27/07	Developed	0.5 Acres	See note 2.
Wild Horse Spring	T.17N R.58E Sec. 21	8/28/07	Developed	0.2 Acres	Developed; CCC*; Pipe was broken and water was flowing down stream but is being impeded by hoof action. Trough is not functioning.
Campbell #1 Spring	T.19N R.59E Sec. 33	9/14/07	Developed	0.1 Acres	Developed; CCC*; Trough is full of water; Overflow is creating a riparian area. Water is piped to its location and flows down hill.
Campbell #2 Spring	T.19N R.59E Sec. 32	9/14/07	PFC	0.5 Acres	Developed; CCC*; Spring is flowing at a steady rate along the ground and into to nonfunctioning collection tanks.
Unnamed Spring	T.17N R.58E Sec. 21 NWSW	8/28/07	No Water	0.5 Acres	No recent water. This area has been dry for several years, the only wild rose. This area has been diminished beyond repair. The degradation is outside of management's control.
Sand Spring	T.17N R.58E Sec. 21	8/28/07	PFC	1.0 Acres	Developed spring with an enclosure; This area is functional as a wetland.

Indian Spring	T.18N R.59E Sec. 10	8/28/07	Developed	0.2 Acres	Developed; Collection tank is located several yards from the original spring head. Water is piped into a trough and the overflow is creating a little riparian area with two stock watering ponds.
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* CCC Civilian Conservation Corps.

1. This spring is developed and in very poor condition. The facilities are nonfunctioning and creating a very dirty watering hole. This water source needs to be repaired. The damage has been done by all species of animals within the Moorman Ranch Allotment.

2. This spring is developed. The intent for this area was to better disperse livestock and wildlife by providing water at this site.

Figure 1. shows the locations of the springs that were monitored and others that are located on private land within the allotment.

Location of Moorman Ranch Allotment

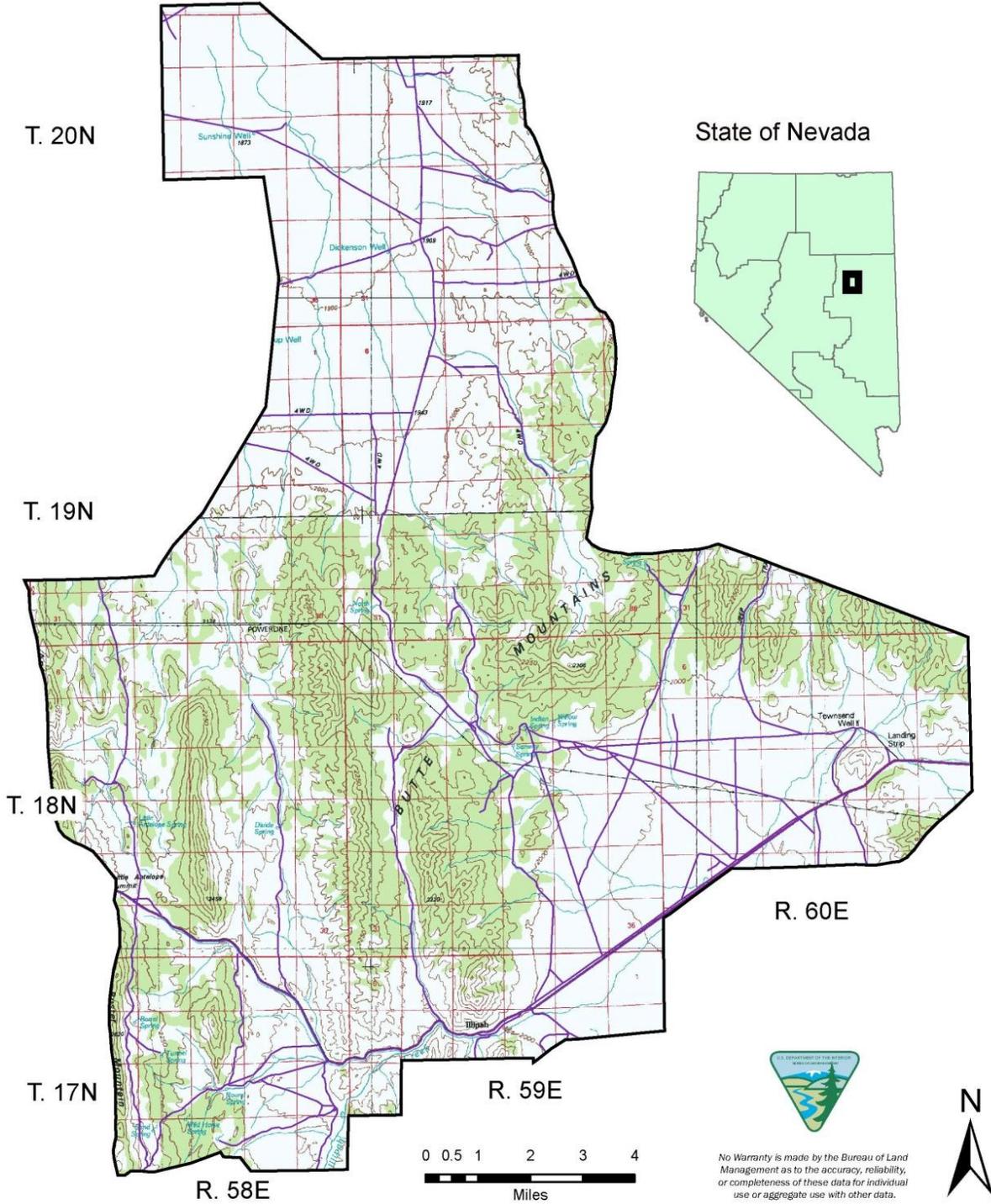


Figure 1. Location of Moorman Ranch Allotment within White Pine County, Nevada

Precipitation Data

Table 9. Crop Yield, Precipitation Index and Yield Index for Yelland Field Reporting Station, Ely, Nevada

Year	Crop Year Precipitation
1997	7.83
1998	10.00
1999	7.18
2000	6.70
2001	5.26
2002	4.42
2003	6.88
2004	5.45
2005	12.20
2006	8.32
2007	5.62

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

APPENDIX II

RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS

Term Grazing Permit Renewal for Moorman Ranch LLC

Moorman Ranch Allotment

White Pine County, Nevada

On April 1st, 2008 a Noxious & Invasive Weed Risk Assessment was completed for the term grazing permit renewal for Moorman Ranch LLC on the Moorman Ranch allotment in White Pine County, NV. This allotment is located in two watersheds the Long Valley watershed in the northern half and the Jakes Valley watershed in the southern. The current grazing term permit was issued for the period 03/01/1998 to 02/28/08. Total grazing use for the Moorman Ranch allotment is 10,092 AUMs of which all are active. The term permit currently authorizes 841 cattle from March 1st to February 28th. This allotment consists of 123,491 public land acres and divided into 12 pastures. These pastures allow the permittee to use a rest - rotation grazing system.

No field weed surveys were completed for this project. Instead the Ely District weed inventory data was consulted. The following species are found within the boundaries of the Moorman Ranch allotment:

<i>Acrotilon repens</i>	Russian knapweed
<i>Carduus nutans</i>	Musk thistle
<i>Centaurea stoebe</i>	Spotted knapweed
<i>Cirsium arvense</i>	Canada thistle
<i>Cirsium vulgare</i>	Bull thistle
<i>Lepidium draba</i>	Hoary cress
<i>Onopordum acanthium</i>	Scotch thistle

The following species are found along roads and drainages leading to the allotment:

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

These allotments were last inventoried for noxious weeds in 2002. While not officially inventoried the following non-native invasive weeds probably occur in or around the allotment: cheatgrass (*Bromus tectorum*), halogeton (*Halogeton glomeratus*), horehound (*Marrubium vulgare*), and Russian thistle (*Salsola kali*).

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

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

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

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

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

This project rates as High (8) at the present time. If new weed infestations establish within these allotments it could have an adverse impact those native plant communities. Also, any increase of cheatgrass could alter the fire regime in the area.

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

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

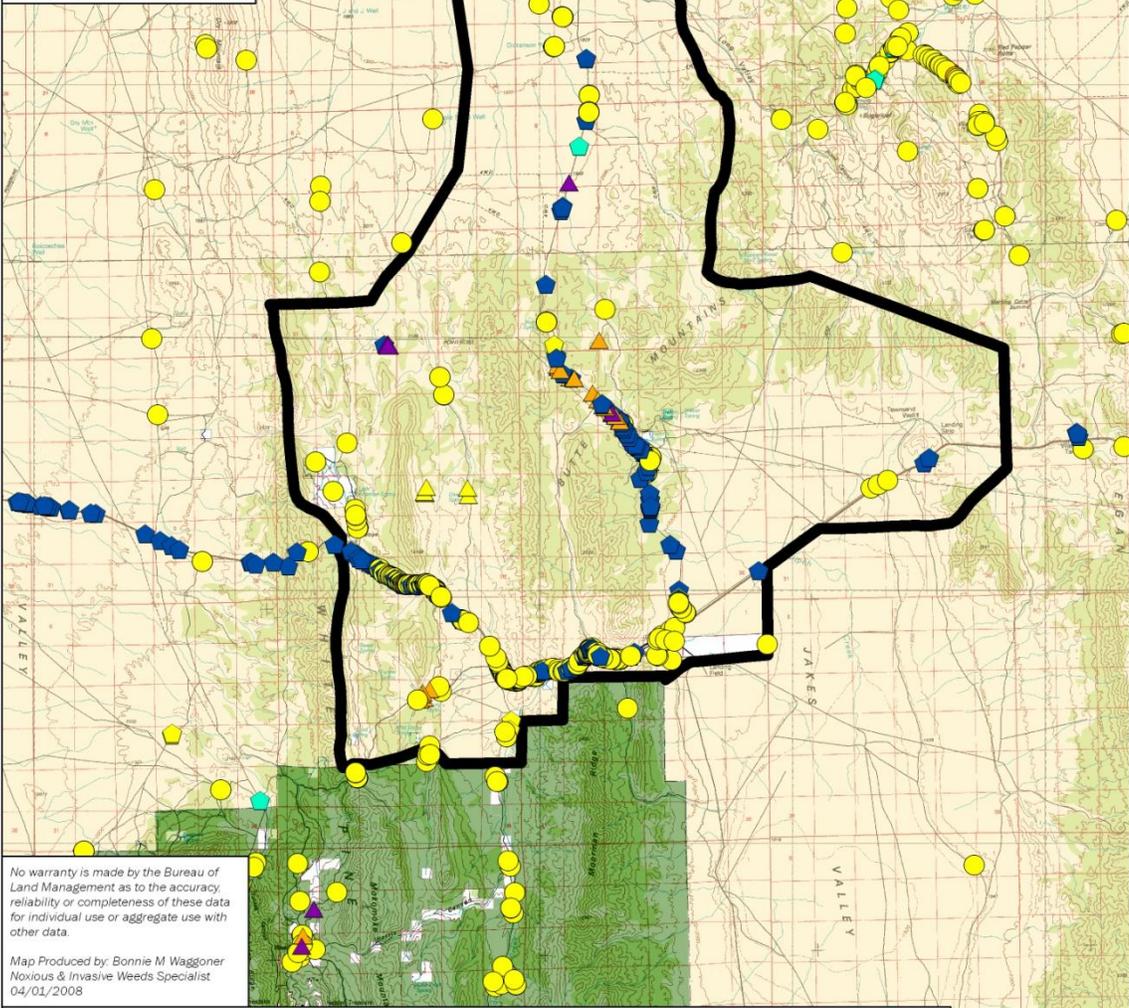
For this project, the Risk Rating is Moderate (32). This indicates that the project can proceed as planned as long as the following measures are followed:

Moorman Ranch Allotment Term Permit Renewal

Documented Noxious & Invasive Weed Infestations

BLM

Location within the Ely Field Office boundary



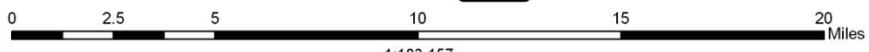
No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual use or aggregate use with other data.

Map Produced by: Bonnie M Waggoner
Noxious & Invasive Weeds Specialist
04/01/2008

Ely District Office

Legend

- | | | |
|----------------|------------------|-------------------------|
| BLM | CANADA THISTLE | SPOTTED KNAPWEED |
| FOREST SERVICE | MUSK THISTLE | TALL WHITETOP |
| PRIVATE | RUSSIAN KNAPWEED | WATER HEMLOCK |
| BLACK HENBANE | SALT CEDAR | WHITETOP/HOARY CRESS |
| BULL THISTLE | SCOTCH THISTLE | Moorman Ranch allotment |



1:183,157



APPENDIX III

Current Terms and Conditions of Permit

Per the final multiple use decision issued for the Moorman Ranch allotment dated 10/21/97, the permittee agreed to take voluntary non-use of 5,350 AUMs of the total number of animal unit months of specified livestock grazing. Therefore only 4,749 AUMs of livestock grazing were authorized for the grazing period beginning March 1, 1998 and ending March 1, 2003. The permit was extended under the Appropriations Act of 2004 until the permit could be processed.

AUMs will be authorized by use area and season of use as follows:

<u>Use Area</u>	<u>Period Of Use</u>	<u>AUMS</u>
Long Valley	10/15 - 04/15	1366
West Jake	09/01 - 04/15	644
Antelope/Divide	05/16 - 10/15	600
Trench	05/16 - 10/15	183
Burned Basin	09/01 - 04/15	148
Townsend Seeding*		477
M. Ranch Seeding*		343
East Jake	05/16 - 10/15	300
East Jake Seeding*		169
Buster Mountain**		394
Illipah Seeding**		125

* Period of use will be limited to (5/1 - 6/15) and (9/1 - 10/31) or (3/1 - 6/15). See FMUD Appendix III map I.

** A four year rotation system will be established in conjunction with the permittees forest service allotments as outlined below:

Buster Mountain

<u>Year</u>	<u>Season Of Use</u>
1	06/16 - 07/24
2	07/01 - 08/08
3	07/26 - 09/02
4	09/06 - 10/14

If monitoring shows that objectives are not being met by the fifth year, the permittee will reduce the number of AUMs based on available monitoring data as the authorized officer directs, to reduce the impacts of late use.

Illipah Seeding

<u>Year</u>	<u>Season Of Use</u>
1	09/30 - 10/14

2	06/16 - 06/30
3	07/11 - 07/25
4	08/22 - 09/05

No salt or supplements will be allowed within 1/2 mile of water sources or in winterfat vegetation

Livestock use will either start in the west portion of the east jakes use area and proceed east, shutting off waters as livestock are moved, or start in the east and proceed west shutting off waters as livestock are moved.

The stocking rate for the antelope/divide use area will be set at 600 AUMs for cattle based on water hauling, or 492 AUMs if water hauling is not utilized. Full use of the 600 AUMs will be based on the following stipulations:

Water will either be available in the stock pond located at T18N, R 58E, SEC.11 NWNW or will be hauled to a suitable location to be decided by the rangeland mgt specialist and permittee in the northern portion of the divide use area.

Water will either be hauled to T 19N, R 58E, SEC. 33 NESW or pumped from the existing well (at the same location) by the mine as in the past.

Livestock will be distributed between waters in the northern and southern portions of the divide use area and then herded into the northern portion of antelope use area and then south. Gates will be closed to exclude livestock from the divide use area once they have been moved into the antelope area.

Pursuant to 43 CFR 10.4 (G) the holder of this authorization must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined at 43 CFR 10.2). Further, pursuant to 43 CFR 10.4 (C) and (d), you must stop activities in the immediate vicinity of the discovery and protect it from you activities for 30 days or until notified to proceed by the authorized officer.

- * The total number of animal unit months of specified livestock grazing should be used in lieu of "permitted use".

In accordance with SEC. 325, TITLE III, H.R. 2691, department of the interior and related agencies appropriations ACR, 2004 (P.L. 108-108), which was enacted on November 10, 2003, this grazing permit or lease is renewed under section 402 of the federal land act of 1976, as amended (42 U.S.C. 1752), title iii of the Bankhead-Jones Farm Tenant Act (7 U.S.C. 410AAA-50). Terms and conditions contained in the immediately preceding permit or lease have been incorporated into this permit or lease in total, or, if the lease is issued as a result of a preference transfer, in-so-far as they reflect the transfer action. These terms and conditions shall continue in effect until such time as the secretary of the interior completes processing of this permit or lease in compliance

with all applicable laws and regulations, at which time this permit or lease may be canceled, suspended or modified, in whole or in part, to meet the requirements of such applicable laws and regulations.

Grazing use will be in accordance with the northeastern great basin area standards and guidelines, and with the final multiple use decision dated October 21, 1997.

The aforementioned great basin area standards and guidelines for grazing administration were developed by the respective resource advisory council and were approved by the secretary of the interior on February 12, 1997.

Other Terms and Conditions

Grazing use will also be in accordance with 43 CFR subpart 4180 fundamentals of rangeland health and standards and guidelines for grazing administration.

Livestock numbers identified in the term grazing permit are a function of seasons of use and permitted use for each allotment. Deviations from those livestock numbers and seasons of use may be authorized on an annual basis where such deviations would not prevent attainment of the multiple-use objectives for the allotment.

Deviations from specified grazing use dates will be allowed when consistent with multiple-use objectives. Such deviations will require an application and written authorization from the authorized officer prior to grazing use.

The authorized officer is requiring that an actual use report (form 4130-5) be submitted within 15 days after completing your annual grazing use.

The payment of your grazing fees is due on or before the date specified in the grazing bill. This date is generally the opening date of your allotment. If payment is not received within 15 days of the due date, you will be charged a late fee assessment of \$25 or 10 percent of the grazing bill, whichever is greater, not to exceed \$250. Payment with visa, MasterCard, or American express is accepted. Failure to make payment within 30 days of the due date may result in trespass action.

Pursuant to 43 CFR 10.4 (g) the holder of this authorization must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined at 43 CFR 10.2). Further, pursuant to 43 CFR 10.4 (c) and (d), you must stop activities in the immediate vicinity of the discovery and protect it from your activities for 30 days or until notified to proceed by the authorized officer.

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

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

APPENDIX IV

	<i>Scientific Name</i>	Plant Symbol	Common Name
Grasses	<i>Agropyron cristatum</i>	AGCR	Crested wheatgrass
	<i>Pascopyrum smithii</i>	PASM	Western wheatgrass
	<i>Poa secunda</i>	POSE	Sandberg bluegrass
	<i>Achnatherum hymenoides</i>	ACHY	Indian ricegrass
	<i>Elymus lanceolatus</i>	ELEL5	Bottlebrush squirreltail
	<i>Stipa comata</i>	STCO	Needleandthread grass
	<i>Achnatherum thurberianum</i>	ACTH7	Thurber's needlegrass
	<i>Elymus elymoides</i>	ELLA3	Thickspike wheatgrass
	<i>Pseudoroegneria spicata ssp spicata</i>	PSSPS	Bluebunch wheatgrass
	<i>Juncus arcticus</i>	JUBA	mountain rush
	<i>Bromus tectorum</i>	BRTE	cheatgrass
Shrubs	<i>Krascheninnikovia lanata</i>	KRLA	winterfat
	<i>Artemisia tridentata ssp. wyomingensis</i>	ARTRW	Wyoming big sagebrush
	<i>Chrysothamnus viscidiflorus</i>	CHVI8	Douglas' rabbitbrush
	<i>Juniperus osteosperma</i>	JUOS	Utah Juniper
	<i>Artemisia nova</i>	ARNO	black sagebrush
	<i>Pinus monophylla</i>	PIMO	singleleaf pinyon
	<i>Artemisia tridentata Nutt. ssp. vaseyana</i>	ARTRV	
	<i>Purshia tridentata</i>	PUTR2	antelope bitterbrush
	<i>Atriplex confertifolia</i>	ATCO	Shadescale saltbrush
	<i>Picrothamnus desertorum</i>	PIDE4	bud sagebrush
		SSSS	Unknown shrub or tree
	<i>Chrysactinia</i>	CHRYS	Chrysactinia
	<i>Sarcobatus</i>	SAVE4	greasewood
Forbs		ASTER	Purple aster
		PENST	penstemon
	<i>Halogeton glomeratus</i>	HAGL	halogeton
	<i>Eriogonum</i>	ERIOG	buckwheat
	<i>Poa fendleriana</i>	POFE	muttongrass
		PPFF	Unknown frobs
	<i>Baccharis salicina</i>	BASA	willow baccharis
	<i>Lupinus</i>	LUPIN	lupine

APPENDIX V

LIVESTOCK GRAZING MANAGEMENT AGREEMENT MOORMAN RANCH ELY FIELD OFFICE

I. INTRODUCTION

The purpose of this agreement is to document livestock grazing management for the Moorman Ranch Allotment for the five year period 03/01/03 - 02/28/08. This agreement will recognize and identify livestock practices and management procedures along with future shared goals and objectives for the Moorman Ranch and the Bureau of Land Management. Management practices presented in this agreement will serve to maintain or achieve the Northeastern Great Basin Area Standards for Grazing Administration, which are specifically related to authorized grazing use.

The Moorman Ranch Allotment is an "I" category allotment, involving 123,491 federal acres and 2,320 private acres for a total 125,811 acres. The allotment is located in western White Pine County. The allotment includes portions of Long Valley, Jakes Valley, Butte Mountains, and a small portion of the White Pine Range and Antelope Mountains. The allotment consists of eleven use areas, three that are crested wheatgrass seedings, one Russian wildrye seeding, and seven areas of native range.

This agreement serves to continue with changes in grazing management and permitted use on the Moorman Ranch Allotment as identified in the 1997 agreement and final multiple use decision. Authorized permitted use will continue as 4,749 AUMs. 5,350 AUM's will be placed in nonuse. Period of use will continue as yearlong with cattle rotated between seven native and four seeded pastures.

This agreement was prepared in consultation, cooperation, and coordination with the Moorman Ranch representatives Bob Dickenson, ranch manager Jack Neal.

II. EXISTING LIVESTOCK MANAGEMENT PRACTICES

Since 1997 grazing management including use areas and stocking levels have been reflective of the five year multiple use decision which expires March 1, 2003.

Change during this period has resulted in a stable grazing operation for the Moorman Ranch Allotment. Monitoring results have shown that most use has been categorized as "moderate" at key areas using the Key Forage Plant Method along with Use Pattern Mapping.

Following the installation of the Highway 50 right of way fence along the East Jakes Use Area in 2002, AUM's previously unused due to public safety concerns will be available.

Since the 1997 decision, the Moorman Ranch has been in conformance with their current term permit 03/01/1998 to 02/28/2008 and has done an excellent job involving livestock grazing distribution. This has been demonstrated from field inspections, accurate actual use reports, consultation and overall livestock grazing management and monitoring information.

The cattle operation on this allotment has been year-round, with Long Valley, West Jakes and Burned Basin use areas used as winter/spring range, Antelope/Divide, Trench and East Jakes use areas as spring/summer/fall, and the Buster Mountain, Illipah, Moorman Ranch, Townsend and East Jakes Seedings as fall use areas.

The stocking levels and periods of use have been based upon forage availability and condition, current growing conditions which have included recent drought, planned rest periods, and achievement of the standards within the 6 native pastures and 4 crested wheat seedings.

Grazing use for the Moorman Ranch Allotment according to the Actual Use Grazing Report for 1998, 1999, 2000, and 2001 is as follows:

Permitted use as reflected on the current term permit for the Moorman Ranch Allotment is as follows:

USE AREA	PERIOD OF USE	TOTAL PERMITTED USE (AUMs)	VOLUNTARY NON-USE AUMs)	TOTAL AUTHORIZED PERMITTED USE (AUMs)
Long Valley	10/15 – 04/15	3,369	2,003	1,366
West Jakes	09/01 – 04/15	1,115	471	644
Illipah Seeding	*	125	0	125
East Jakes	05/16 – 10/15	521	374	300***
Buster Mountain	**	1,130	736	394
Antelope/ Divide	05/16 – 10/15	2,145	1,653	600***
Burned Basin	09/01 – 04/15	713	565	148
Trench	05/16 – 10/15	499	316	183
Townsend Seeding	*	477	0	477
East Jakes Seeding	*	173	4	169
Moorman Ranch Seeding	*	343	0	343

* Period of use will be limited to (5/1 – 6/15) and (9/1 – 10/31).

**A four-year rotation system has been established in conjunction with the permittees Forest Service pastures as outlined below

*** These stocking rates apply only if water hauling is utilized. See page 10 Special Conditions for complete details.

BUSTER MOUNTAIN:

<u>YEAR</u>	<u>SEASON OF USE</u>
1	06/16 – 07/24
2	07/01 – 08/08
3	07/26 – 09/02
4	09/06 – 10/14

ILLIPAH SEEDING:

<u>YEAR</u>	<u>SEASON OF USE</u>
1	09/30 – 10/14
2	06/16 – 06/30
3	07/11 – 07/25
4	08/22 – 09/05

FOREST SERVICE USE:

A four year rotation system has been established. This system resembles the rotation pattern associated with BLM seedings. The herd moves from BLM seedings around June 15 to the U.S. Forest Service pastures. The three pastures include Taylor Flat, Cottonwood, and Illipah. Grazing use will occur on the Forest until October 15 where they will move to private lands for 2 weeks before returning to BLM lands in Long Valley.

III. WILD HORSES

The majority of the Moorman Ranch Allotment lies within the Buck and Bald Wild Horse Herd Management Area (HMA) (Map #1), with a small portion located within the Monte Cristo HMA (Map #2). The appropriate management level (AML) of 400 wild horses on the entire Buck and Bald HMA was established through the multiple use decision process. AML on the Buck and Bald portion of the Moorman Ranch Allotment has been set at 44 animals year long (236 AUMs). AML on the Monte Cristo HMA is established at 236 animals yearlong. However, zero AUMs have been allocated for wild horses on the Moorman Ranch portion of the Monte Cristo HMA.

In July of 2001 approximately 700 wild horses were gathered from the Buck and Bald HMA and approximately 400 wild horses were gathered from the adjacent Butte HMA. The Buck and Bald HMA was left nearly 40 % below AML. It is estimated that 400 wild horses now populate the entire Buck and Bald HMA. In January of 2003, 586 wild horses were removed from the Monte Cristo HMA. However, the gather was approximately 300 wild horses short of its original gather quota.

IV. WILDLIFE

Mule Deer

Mule deer use of the Moorman Ranch allotment has declined in the last seven years due to climatic conditions (persistent drought). The female segment of the deer population is in a poorer physical condition which leads to less fawns being born and fewer fawns surviving to enter the winter period. The fawns that survive to enter the winter period are in poor condition and fewer fawns survive the winter. Mule deer use areas on the allotment are on Buster Mountain, the Antelope/Divide use area as well as the Trench and Deer Spring areas.

Rocky Mountain Elk

Rocky Mountain Elk use of the allotment has increased in the past three to four years. Elk have been observed on Antelope Summit, on Buster Mountain and at Illipah reservoir. No specific use areas have been established as of yet, but as the elk population increases in the White Pine Range, elk will pioneer on to the allotment and establish resident populations.

Pronghorn Antelope

Pronghorn use of the allotment has increased in the past two to three years due to the Nevada Department's of Wildlife's (NDOW) releases of pronghorns in Jakes Valley to augment the existing small population of resident pronghorns. Pronghorns utilize the alfalfa fields attendant to the Moorman Ranch. Four guzzlers have been constructed in Jakes Valley on adjacent allotments in an attempt to have pronghorns establish use areas in other portions of the valley.

Sage Grouse

There are 15 known sage grouse leks (strutting grounds) located within the Moorman Ranch Allotment boundaries as follows:

- 4 leks located in southern portion of the allotment along Illipah Creek bordering Forest Service lands
- 9 leks located in eastern portion of the allotment in North Jakes Valley (the leks in the northern portion of the allotment have not been determined active since the Townsend seeding fence was constructed)
- 2 leks located in Long Valley (1 on Moorman Ranch-Warm Springs Allotment boundary, and 1 identified just south of Maple Syrup Well)

Brooding sage grouse (females with young) are observed each spring/summer/early fall by the Ranch Manager, Jack Neal on the alfalfa fields attendant to the ranch.

Sage grouse habitat (i.e. leks, nesting, brooding, and summer and winter habitats) will be managed consistent with the Western States Sage Grouse Guidelines, as adapted for use in Nevada.

V. TERMS AND CONDITIONS OF AUTHORIZED USE

In accordance with 43 CFR 4130.3-1 and 4130.3-2 permitted use on the Moorman Ranch Allotment will be as follows;

1.) Permitted Use

Permitted Use for the Moorman Ranch Allotment will continue to be 4,749 AUMs. The Moorman Ranch Allotment will continue to place 5,350 AUMs in voluntary non-use for a period of five years. At the end of the fifth year the Moorman Ranch Allotment will be reviewed to see if grazing use is meeting or making significant progress towards multiple use objectives. In accordance with 43 CFR 4130.3-1 and 4130.3-2, the following terms and conditions will be implemented.

USE AREA	PERIOD OF USE	PERMITTED USE (AUMs)
Long Valley	10/15 – 04/15	1,366
West Jakes	09/01 – 04/15	644
Illipah Seeding	*	125
East Jakes	05/16 – 10/15	300***
Buster Mountain	**	394
Antelope/ Divide	05/16 – 10/15	600***
Burned Basin	09/01 – 04/15	148
Trench	05/16 – 10/15	183
Townsend Seeding	*	477
East Jakes Seeing	*	169
Moorman Ranch Seeding	*	343

* Period of use will be limited to (5/1 – 6/15) and (9/1 – 10/31).

**A four-year rotation system has been established in conjunction with the permittees Forest Service pastures as outlined on page 3.

*** These stocking rates apply only if water hauling is utilized. See page 10 Special Conditions for complete details.

2.) Period of Use

The period of use will continue as yearlong.

The deferred rotation grazing system will continue between the seven native pastures and the four seeded pastures.

Winter and spring use areas include Long Valley, West Jakes, and Burned Basin. The Antelope/Divide, Trench, and East Jakes use areas will be grazed during spring/summer/fall periods. Fall use areas include Buster Mountain, Illipah Seeding, Moorman Ranch Seeding, Townsend Seeding, and East Jakes Seeding.

Beginning about the middle of October the base herd which consists of approximately 430 cattle will move to the Long Valley Use Area where they will remain until about March 1. At this point 100 heifers will go back to private lands and the remaining 350 cattle will move to the West Jakes pasture until mid April. These cattle will then proceed to one of the four deferred crested wheat seedings for 2 weeks. The herd will then move to the remaining seedings with the rotation system schedule for that year where they will remain until about June 1-15. From the seedings, approximately 120 cattle will move into summer country in the Antelope/Divide Use Areas and the remaining 300 head will go to U.S.F.S lands where they will stay until the middle of October. The entire herd then goes back to private lands for 1-2 weeks on alfalfa stubble until finally returning to the Long Valley Use Area once again.

3.) Allowable Use Levels

Authorized grazing use will be in accordance with the following allowable use levels: Utilization will not exceed 50% of current year growth during winter use on winterfat and the key perennial species and will not exceed 45% of current year growth during summer use on bitterbrush and the key perennial species.

Allowable use levels on crested wheat seedings will remain at 60% use.

4.) Flexibility

The Moorman Ranch will continue to be authorized flexibility which will be determined seasonally. Flexibility will be based on factors such as forage availability and condition, climatic conditions and livestock movement and distribution between pastures. Deviations in livestock numbers, areas of use and periods of use may be determined on a seasonal basis where such deviations are warranted. Authorization of deviation would not prevent attainment of shared goals, the multiple-use objectives and the standards for grazing administration.

5.) Temporary Non-Renewable Use

Temporary Non-Renewable (TNR) grazing use may be issued on an annual basis when it is determined that additional forage is available. TNR will be valuable for determining sustainable use levels. TNR may be authorized when consistent with multiple-use objectives. TNR can also be authorized by pasture or use area during the grazing year.

6.) Increasing Permitted Use

Where it is determined that additional forage is available on a sustained yield basis, permitted use may be increased. In order to confirm that additional forage is available on a sustained yield basis, grazing use will be temporarily authorized at the higher permitted use level. If during the five year agreed upon period, monitoring data confirms additional forage is available on a sustained yield basis, permitted use may be increased.

Authorization of grazing use above 4,749 AUMs will require completion of an environmental assessment along with public consultation. Development of rangeland improvements, maintenance of existing projects and water hauling can be used to enhance productivity to qualify for an increase in permitted use. Forage will be apportioned based on the percentage of permitted use and the wild horse AML.

As a result of the highway 50 right of way fence installed in 2002, it may be determined that additional AUMs may be available for use in the East Jakes Use area on a seasonal basis which would not conflict with the previous public safety concerns.

7.) Annual Grazing Use

Jack Neal and the BLM will continue to coordinate on an annual basis. The grazing system for each grazing year will be documented to include stocking levels, use areas and permitted use dates. Monitoring information will also be summarized annually.

8.) Grazing Billings

Billing for grazing use will continue on an Actual Use (after the fact) basis.

9.) Salt or supplements

No salt or supplements will be allowed within ½ mile of water sources or in winterfat vegetation.

10.) Grazing System

The general grazing system for the Moorman Ranch Allotment will continue as described in the existing livestock management practices section presented above. Grazing use will continue as yearlong with winter, spring, and summer use areas (as on page 1) follows:

Long Valley Use Area

Grazing use will continue as fall/winter with the season of use from 10/15 to 04/15 in the Long Valley use area. Permitted use for Long Valley Use Area will not exceed 1,366 AUMs.

Authorized grazing use in the winter use areas will be in accordance with the following allowable use levels: Utilization will not exceed 50% of current year growth during winter use on winterfat and the key perennial species.

In order to maintain animal distribution in the Long Valley Use Area wells will be functioning and livestock use will be distributed based on pumping of the wells. Cattle will be distributed to all water sources during the winter authorized use period. These wells include Dickenson Well, Sunshine Well and North Spring Pipeline.

West Jake Use Area

Livestock use will continue as fall/winter use with a season of use from 09/01 to 04/15. Permitted use will remain at 644 AUMs. Authorized grazing use in fall/winter use areas will be in accordance with the following allowable use levels: Utilization levels on key perennial species and shrubs will not exceed 45 % of current year growth. Utilization on crested wheat seedings will not exceed 60 %.

Antelope/Divide Use Area

The livestock season of use will continue as spring/summer/fall (05/01 to 10/15). Permitted use will continue to be authorized at 600 AUMs if water is hauled and 492 AUMs if water is not hauled (see page 10 for details).

The stocking rate for the Antelope/Divide use area will continue at 600 AUMs for cattle based on water hauling, or 492 AUMs if water hauling is not utilized. Full use of the 600 AUMs will be based on the following stipulations:

- 1.) Water will either be available in the stock pond located at 18N, R 58E, SEC.11 NWNW or will be hauled to a suitable location to be decided by the Rangeland Management Specialist and Permittee in the northern portion of the divide use area.
- 2.) Water will either be hauled to T. 19N, R. 58E, SEC.33 NESW or pumped from the existing well (at the same location) by the mine as in the past.

Livestock will be distributed between waters in the northern and southern portions of the Divide Use Area and then herded into the northern portion of the Antelope Use Area and then south. Gates will be closed to exclude livestock from the Divide Use Area once they have been moved into the Antelope Use Area.

Trench Use Area

The livestock season of use will continue as spring/summer/fall (05/15 to 10/15). Permitted use will continue to be authorized at 183 AUMs.

Burned Basin Use Area

Livestock use in Burned Basin Use Area will be fall/winter/spring (09/15 to 04/15). Permitted use will not exceed 148 AUMs.

East Jake Use Area

The livestock season of use will continue as spring/summer/fall (05 to 10/15). Permitted use will not exceed 300 AUMs if water is hauled and 147 AUMs if water is not hauled (see page 10 for details). Full use of the 300 AUMs will be based on the establishment of

two water haul sites. One will be located at Townsend Well T. 18N, R. 60E, SEC. 10 and the other will be located south of Highway 50 in the vicinity of T. 18N, R. 60E, SEC. 14. The rangeland management specialist and the permittee will agree upon the specific location. Livestock will either start in the west portion of East Jakes Use Area and proceed east, shutting off waters as livestock are moved, or start east and proceed west, shutting off waters as livestock are moved.

Townsend Seeding

The livestock season of use will be limited to (5/1 to 6/15) and (9/1 to 10/31). Permitted use will not exceed 477 AUMs.

Moorman Ranch Seeding

The livestock season of use will be limited to (5/1 to 6/15) and (9/1 to 10/31). Permitted use will not exceed 343 AUMs.

East Jakes Seedings

The livestock season of use will be limited to (5/1 to 6/15) and (9/1 to 10/31). Permitted use will not exceed 169 AUMs.

Buster Mountain Use Area

A four-year rotation system has been established in conjunction with the permittees Forest Service Allotments as outlined above in the permitted use section. Permitted use will continue at 394 AUMs. (See page 3 for a detailed description)

Illipah Seeding

A four-year rotation system will be established in conjunction with the permittees Forest Service Allotments as outlined above in the permitted use section. Permitted use will continue at 125 AUMs. . (See page 3 for a detailed description)

Standard Operating Terms and Conditions:

The following terms and conditions were integrated from the current term permit issued to the Moorman Ranch Allotment dated 03/01/98 through 02/28/08.

Livestock numbers identified in the Term Grazing Permit are a function of seasons of use and permitted use.

The authorized officer is requiring that an actual use report (Form 4130-5) be submitted within 15 days after completing your annual grazing use.

The payment of your grazing fees is due on or before the date specified in the grazing

bill. If payment is not received within 15 days of the due date, you will be charged a late fee assessment of \$25 or 10 percent of the grazing bill, whichever is greater, not to exceed \$250. Payment with Visa, Mastercard or American Express is accepted. Failure to make payment within 30 days of the due date may result in trespass action.

Pursuant to 43 CFR 10.4(G) the holder of this authorization must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined at 43 CFR 10.2). Further, pursuant to 43 CFR 10.4 (C) and (D), you must stop activities in the immediate vicinity of the discovery and protect it from your activities for 30 days or until notified to proceed by the authorized officer.

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

Standards and Guidelines for Grazing Administration will be implemented through the terms and conditions of the grazing permit. The grazing management practices identified in the terms and conditions are designed to ensure significant progress towards fulfillment of the Northeastern Great Basin Standards and Guidelines for Grazing Administration as developed by the Northeastern Great Basin Resource Advisory Council and approved by the Secretary of the Interior on February 12, 1997. The management actions implement the guidelines to meet the multiple-use objectives and standards.

VI. RANGE IMPROVEMENTS

The permittee in coordination with the BLM, will identify any future range improvement projects as needed. The BLM will initiate the project planning process for each proposed project. Project construction and implementation will depend on funding and district priorities.

VII. OTHER MANAGEMENT ACTIONS

Landscape Restoration

BLM and The Moorman Ranch will work together to propose projects, develop strategies and implement actions associated with the Eastern Nevada Landscape Restoration Project (ENLRP). Projects will focus on restoration and maintenance of the biological and ecological conditions of the Western White Pine Landscape to an ecologically functioning condition

Fire Management Plan

The Ely District Managed Natural and Prescribed Fire Plan was completed November 17, 2000. The purpose of the Ely District Managed Natural and Prescribed Fire Plan is to identify management objectives, issues, constraints, management actions, and monitoring to enable the BLM to allow fire to function, as nearly as possible, as an ecological process. The plan area is divided into thirty-five (35) fire management polygons based on allowable burned acres to address resource issues/concerns. Depending on the specific issues (primarily wildlife habitat and vegetative condition) within each polygon, there are guidelines for allowable burned acres (300 acres, 500 acres, 1,000 acres, 1,500 acres, 2,500 acres, and few constraints (5,000+ acres). Following are the polygons located with the Moorman Ranch Allotment areas:

Fire Management Polygons	Size (acres)	Allowable Burned Acres	Rationale
Northern Benches	74,891	Full Suppression	Invasive Species, Forage Condition
West Side Butte Mountains	43,826	300	Deer Winter Range
South Butte Mountains	29,197	Few Constraints	
Valley	10,948	Full Suppression	Invasive Species, Forage Condition
Valley	1060	Full Suppression	Invasive Species, Forage Condition
Egan and Cherry Creek	7,246	Full Suppression	Invasive Species, Forage Condition
High Country	12,355	Full Suppression	Invasive Species, Forage Condition

Fire Management Polygons Limited to 300 Acres

Fire within this polygon is limited to no more than 300 acres per incident because of mule deer summer and winter range. Burning more acres within a given area could reduce the forage available for deer.

Fire Management Polygons with few constraints (5,000 + acres)

The remaining fire management polygons have few constraints because there are no over-riding resource concerns.

Appropriate management response will continue on the remaining acres.

Noxious Weeds

Treat invasive and noxious weeds in a manner that is most appropriate to the weed species and degree of infestation throughout the allotments.

VII. ALLOTMENT GOALS AND OBJECTIVES

Livestock management practices will make progress toward the achievements of the standards and the shared goals of Moorman Ranch and the Bureau of Land Management.

The Northeastern Great Basin Resource Advisory Council (RAC) has developed standards and guidelines to help balance sustainable development and multiple-use while making progress towards attaining healthy, properly functioning rangelands. The Northeastern Great Basin Resource Advisory Council Standards and Guidelines were approved by the Secretary of the Interior on February 12, 1997. These Standards and Guidelines reflect the stated objectives of improving rangeland health while providing for the viability of the livestock industry. The standards and guidelines are located in Appendix I of this document.

The Egan Record of Decision (ROD) establishes allotment specific objectives and management guidelines for the public lands within its planning area. This includes the public lands within the Moorman Ranch Allotment.

VIII. ANALYSIS, INTERPRETATION AND EVALUATION OF MONITORING DATA

Standards for Grazing Administration

Analysis of Monitoring Data – Moorman Ranch Allotment

An assessment of rangeland health and a review of the monitoring data was conducted associated with this agreement.

Key forage plant method (KFPM) utilization transects were conducted on the allotment in 2001 and 2002. The transects were conducted at key range and wildlife management areas in Long Valley and Jakes Valley. The utilization did not exceed the moderate level on any transects conducted during the two year monitoring period.

Standard 1. Upland Sites

Ecological condition indicates areas of late seral and mid seral. Utilization and use pattern mapping conducted within all livestock use areas show predominantly moderate use. As a result, litter remains to promote soil infiltration and permeability appropriate to the potential of the site.

Standard 2. Riparian and Wetland Sites

Illipah Creek is the only major riparian complex on the Moorman Ranch Allotment. It was rated as static in a 1993 stream inventory. Proper Functioning Condition (PFC) has been recently conducted and was determined to be Functioning At Risk (FAR) due to the lack of adequate vegetative cover present to protect banks and dissipate energy during high flows.

Standard 3. Habitat

Utilization conducted in 2001 and 2002 indicate predominately moderate use over the allotment. Therefore, at this utilization level the current vegetation composition and litter are appropriate to maintain rangeland health condition. This indicates that the vegetative composition and production of plant community species are adequate. Seral stages on the majority of the sites indicate that vegetative composition and production are appropriate for the potential of those sites. Five key areas located in native range sites have been rated in association with ecological condition. Four of these sites were classified as late-seral and one was mid-seral. Most habitats are exhibiting a healthy, productive, and diverse population of desirable plant species appropriate to site characteristics, to provide suitable feed, water, cover and living space for animal species and are maintaining the ecological processes.

IX. FUTURE MONITORING AND ADJUSTMENTS

Monitoring Program

During the five-year period of this agreement, the BLM will continue to monitor the Moorman Ranch Allotment. Jack Neal (permittee) will be encouraged to participate in monitoring. Specific rangeland monitoring studies to be collected on both allotments may include proper functioning condition, riparian studies, cover studies, ecological condition studies, key forage plant method utilization transects, use pattern mapping, frequency trend or observed apparent trend.

Evaluation

Grazing use and stocking levels will also be evaluated after the five-year period of the agreement. The evaluation will determine consistency with and achievement of the standards for grazing administration and the allotment specific objectives and shared goals of The Moorman Ranch and the BLM. The current term permit will expire in 2008 which corresponds with the length of this agreement. Following the five-year period, a new term permit will be issued. Based upon the findings of the evaluation conducted during 2008, adjustments may or may not be needed. Any needed adjustments will be made through agreement or decision. Adjustments may include changes to period-of-use, stocking levels, areas-of-use or other grazing management practices. If adjustments are needed a new term permit will be issued.

X. AUTHORITY

The authority for the livestock portion of this agreement is contained in Title 43 of the Code of Federal Regulations, which states in pertinent part:

4100.0-8: "The authorized officer shall manage livestock grazing on public lands under the principle of multiple use and sustained yield, and in accordance with applicable land use plans. Land use plans shall establish allowable resource uses, related levels of production or use to be maintained, areas of use, and resource condition goals and objectives to be obtained. The plans also set forth program constraints and general management practices needed to achieve management objectives. Livestock grazing activities and management actions approved by the authorized officer shall be in conformance with the land use plan as defined at 43 CFR 1601.0-5(b)."

4101.3: "The authorized officer shall periodically review the grazing preference specified in a grazing permit or grazing lease and may make changes in the grazing preference status.

These changes shall be supported by monitoring, as evidenced by rangeland studies conducted over time, unless the change is either specified in an applicable land use plan or necessary to manage, maintain or improve rangeland productivity."

4130.6: "Livestock grazing permits and leases shall contain terms and conditions necessary to achieve the management objectives for the public lands and other lands under Bureau of Land Management administration."

The authority for the wild horse and burro portion of this decision is contained in Sec. 3(a) and (b) of the Wild-Free-Roaming Horse and Burro Act (P.L. 92-195) as amended and in Title 43 of the Code of Federal Regulations, which states in pertinent parts:

4700-6(a): "Wild horses and burros shall be managed as self-sustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat."

4710.4: "Management of wild horses and burros shall be undertaken with the objective of limiting the animals distribution to herd areas. Management shall be at the minimum level necessary to attain the objectives identified in approved land use plans and herd management area plans."

4720.1: "Upon examination of current information and a determination by the authorized officer that an excess of wild horses or burros exists, the authorized officer shall remove the excess animals immediately..."

XI. AGREEMENT

I, the undersigned, do hereby agree to and accept this agreement. I understand that the grazing privileges so authorized herein are subject to the provisions of the Code of Federal Regulations (43 CFR 4100 through 4180) which deal with grazing use on public lands. I also agree that the terms and conditions of this agreement are binding upon the permittee(s), his respective heirs, executors administrators, successors in interest of assignors with such modification as approved or required by the authorized officer.

Moorman Ranch/Bob Dickenson/Jack Neal

Date

Chris Mayer
Acting Assistant Field Manager
Renewable Resources

Date