

ENVIRONMENTAL ASSESSMENT

NV-040-03-020

**DUCKCREEK ALLOTMENT (0423)  
SHEEP TO CATTLE CONVERSION**

United States Department of the Interior  
Bureau of Land Management  
Ely Field Office

I. BACKGROUND INFORMATION

This environmental assessment (EA) incorporates by reference and is tiered to the Egan Draft Resource Management Plan and Environmental Impact Statement (RMP/EIS), dated December 24, 1983, and the Egan Resource Area Record of Decision (ROD) which was finalized on February 3, 1987. This EA fulfills the National Environmental Policy Act (NEPA) requirement for a site-specific analysis. Standards and Guidelines for Grazing Administration were developed by the Nevada Northeastern Great Basin Resource Advisory Council and were approved by the Secretary of the Interior on February 12, 1997.

The Duckcreek Allotment Management Action Selection Report (MASR) was issued September 10, 1992. The MASR recommended that the permitted use remain at 498 AUMs of sheep use. The season of use remained unchanged at June 1 to October 31.

A review of the history of livestock use on the Duckcreek Allotment reveals it is intertwined with the BLM grazing allotment adjoining its southern boundary called the Gilford Meadows Allotment. The Duckcreek Allotment is a sheep allotment permitted to Gracian Uhalde. The Gilford Meadows Allotment is a cattle allotment permitted to A.R. Pescio and Sons.

Between 1960 and 1962, both permittees signed an annual agreement allowing both allotments to be grazed in common by cattle and sheep. The agreements were authorized by the Ely District. Since 1963 no formal exchange of use agreement was issued by the Ely District. However, both allotments continued to be grazed in common by sheep and cows. Over the years, grazing records indicated the Ely District was aware of the situation but no action was taken to separate the users and restrict use to their permitted allotments.

An informal gentlemen's agreement was developed between Gracian Uhalde and A.R. Pescio and Sons whereby they agreed to graze their livestock on each other's allotments. The reason for the agreement was based primarily on the topographic features, limited water resources, vegetative plant communities and available forage suitability that existed on both allotments.

The Pescio's preferred to graze their cattle on Uhalde's Duckcreek Allotment and his private bottomland along the Duckcreek drainage. The forage plants, as well as the gentle sloping valley bottom topography, provided better pasture for cattle than sheep. Likewise, the hills on the west side of the Gilford Meadows Allotment are better suited and utilized by sheep due to the kind of forage available, the topography and locations of limited water sources in the area.

In the mid 1990's, the permittees entered into a Coordinated Resource Management Process (CRMP) with the BLM, Forest Service (USFS), Nevada Division of Wildlife

(NDOW) and other interested parties to develop a plan addressing all resource issues on both allotments, and the Pescio Brothers adjoining USFS Berry Creek Allotment. The Duckcreek Technical Review Team (TRT) was formed to develop a Coordinated Resource Management Plan for this area.

However, after approximately two years of effort to develop a CRM plan, the parties were unable to come to a consensus with respect to a livestock grazing management system and grazing schedule on the allotments as a unit. The Ely BLM Field Office informed both permittees they would no longer be authorized to graze the two allotments (Duckcreek and Gilford Meadows) in common. Each permittee was authorized to graze their individual allotment as specified on their grazing permit.

In the fall of 2002, the Ely Field Office received a request from Gracian Uhalde to change the kind of livestock on his grazing permit for the Duckcreek Allotment from sheep use to cattle use.

#### Need for Proposal

The need for the proposal is to make the public rangelands economically and realistically available for livestock grazing while authorizing a legitimate multiple use associated with a change in kind of livestock.

#### Relationship to Planning

The proposed action is in conformance with the Egan Resource Area Record of Decision (ROD) signed February 3, 1987.

The project is also consistent with the White Pine County Land Use Plan (May 1998) which states, "The federal government should continue to make the public rangelands economically and realistically available for livestock grazing, along with the other multiple use objectives".

The proposed action is also consistent with White Pine Elk Management Plan (March 1999) which states in part..."long-term livestock, elk, and/or wild horse forage allocations or permitted numbers will not be changed without first analyzing monitoring data and then going through the process prescribed by the National Environmental Policy Act." (Preamble: page 2)

#### Issues

An issue identified during internal scoping was a concern about impacts to riparian areas by cattle grazing within the Duckcreek Allotment.

## II. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

### Proposed Action

The proposed action is to authorize a change in kind of livestock from sheep to cattle on the Duckcreek Allotment. Currently, permitted use on the Duckcreek Allotment is 498 AUMs of sheep use from June 1 to October 31.

The conversion of sheep AUMs to cattle AUMs was determined after an analysis of soil map units, corresponding range sites, forage production, and ecological condition data collected on the allotment. Based on this data analysis, 321 AUMs of cattle use would be authorized on the Duckcreek Allotment (Appendix I: stocking rate calculations). Season of use would be from June 1 to October 31.

Monitoring and data collection would continue in its current form of establishing key areas, determining utilization levels, frequency trend, ecological condition, cover, observed apparent trend, actual use reports, and compliance checks. The rangeland management specialist would collect this data.

### No Action Alternative

The No Action Alternative would be to continue authorizing sheep use only on the Duckcreek Allotment.

### Alternative A

Alternative A would change the current season of use into two separate grazing periods rotating use every other year. The two grazing periods would be June 1 to July 31 and August 1 to October 31. The stocking rate of 321 AUMs for cattle would remain the same as in the proposed action.

### Alternative Considered But Eliminated From Detailed Analysis

Another alternative proposed action would be to combine the Duckcreek Allotment and the Gilford Meadows Allotment into one common use allotment. This alternative was considered but rejected by Ely Field Office management since one of the permittees was not in favor of it.

## III. DESCRIPTION OF THE AFFECTED ENVIRONMENT

The Duckcreek Allotment is located approximately seven air miles northeast of Ely on the east side of the Duckcreek Range in Duckcreek Basin. Elevation ranges from

approximately 6,400 feet along Duck Creek to over 9,200 feet in the Duckcreek Range. A significant portion of the land within the allotment is privately owned. The allotment is comprised of 12,611 total acres (9,531 acres public and 3,080 acres private). The majority of the springs and most of the land adjacent to Duck Creek are in private ownership. Most of the private ground is unfenced with the exception of the Berry Creek Pasture. Livestock grazing on the unfenced private lands have access to federal range. Much of the grazing by livestock within this allotment occurs on the private parcels. (It is anticipated that livestock would continue to make a significant amount of use on private ground under both the proposed action and alternative action.) Berry Creek and Duck Creek are the two major streams within the allotment. Portions of Berry Creek are intermittent.

Vegetation is characterized by Great Basin sagebrush-grass and pinyon-juniper woodland plant communities. Vegetation at the lower elevations consist of Wyoming big sagebrush and black sagebrush, Indian ricegrass, Thurbers needlegrass, bottlebrush squirreltail, Sandberg bluegrass with scattered juniper trees. Vegetation at the mid-level elevations consists of mountain big sagebrush, antelope bitterbrush, bluebunch wheatgrass, Great Basin wildrye, pinyon pine and Utah juniper. At higher elevations, mountain mahogany, quaking aspen and pinyon pine increase in density.

Both mule deer and elk utilize the allotment on a yearlong basis. The area is considered crucial mule deer winter range. There has also been an increase in the elk herd population utilizing this allotment over the last 15 to 20 years. Over the last four years elk population numbers have been stable in Nevada Department of Wildlife Hunt Unit 111, in which the Duckcreek allotment is located. The White Pine County Elk Management Plan has established a target level of 1,200 elk for Hunt Unit 111.

Three sage grouse leks occur within one mile of the allotment.

The Axehandle prescribed fire was conducted in the fall of 1998 on the allotment. The area treated had a dense canopy of pinyon pine and Utah juniper. Initially, 800 acres burned in 1998 and an additional 1,200 acres were treated in the fall of 2001. The entire 2,000 acres are currently open to livestock grazing.

The Duckcreek Allotment and surrounding area (Duckcreek Basin) receives a wide variety of recreational activities including hiking, camping, off-road vehicle use, horseback riding, hunting and fishing.

The allotment is not located within a wild horse management area (HMA) and no wild horses graze the allotment. The allotment is not located within a wilderness study area (WSA).

#### IV. ENVIRONMENTAL CONSEQUENCES

##### Proposed Action

The proposed action is within the array of options identified for the alternatives and

proposed action as analyzed in the Egan RMP/EIS. The proposed action is not substantially different than the action analyzed. No new resource information relevant to the proposed action or impacts thereof has been identified which would change the analysis or decisions. The following site specific analysis is in addition to that in the EIS.

There would be no impacts to the following resources classified as “mandatory items”: floodplains, wilderness values, ACEC’s, wild and scenic rivers, visual resource management, prime or unique farmlands, environmental justice, cultural, paleontological, and historical resource values; water quality (drinking/ground), air quality, wild horses and burros, Native American religious concerns, wastes (hazardous and solid), and migratory birds.

The following site specific impacts have been added:

### Rangeland Resources

#### Proposed Action:

Based on an analysis of the soil map units, corresponding range sites, forage production, and ecological condition data, it has been determined that 321 AUMs of cattle use are available on the Duckcreek Allotment. Certain areas on the allotment were eliminated from consideration in calculating the new stocking rate due steepness of topography, distance from water and/or overlap with elk summer range. Also, only grass production figures were used to calculate the new stocking rate. Production data from forbs and shrubs were not included in the stocking rate calculations.

Utilization levels on the grass component of the plant community by cattle should be greater than with sheep due to the natural preference for grass by cattle as compared with sheep. However, allowable grazing use levels on key forage species (i.e. Bluebunch wheatgrass, Indian ricegrass, Thurbers needlegrass, antelope bitterbrush) will be set at 50% of current annual growth for all users combined. Allowable use levels are set to provide for ample residual biomass to allow for adequate maintenance of plant vigor, production of seed, and ground cover. This will enhance the long-term health and vigor of the key plant species. With proper livestock management and distribution it would be possible to meet this objective and not exceed this level of use. Also, it is anticipated that much of the grazing by livestock within this allotment will occur on the private ground adjoining the federal lands.

#### Alternative A:

By splitting the season of use into two separate grazing periods (June 1 to July 31 and August 1 to October 31) and rotating the use period every other year, a greater number of cattle would graze the allotment for a shorter period of time in any one year. This rotation system is a variation of a short duration, high intensity grazing system. This should have positive benefits for the key forage species. Key forage species would be green and actively growing during the June to July time period due to the higher elevations and cooler temperatures. This would lead to better cattle distribution. Once cows are removed at the end of July, there remains approximately two months for regrowth to occur on key species.

The following year, livestock grazing would not occur on the allotment until August 1. This would allow the key species to complete much of their grow cycle before cattle are turned out. During the August to October period, forage should be plentiful, enhancing

distribution. With summer temperatures at their peak, livestock would have a greater tendency to concentrate around water sources than they would during the June to July period. Cattle may utilize more browse species than they would during the June to July period. Allowable grazing use levels on key forage species (i.e. Bluebunch wheatgrass, Indian ricegrass, Thurbers needlegrass, antelope bitterbrush) will be set at 50% of current annual growth for all users combined. Allowable use levels are set to provide for ample residual biomass to allow for adequate maintenance of plant vigor, production of seed, and ground cover. This will enhance the long-term health and vigor of the key plant species. When livestock are removed at the end of October, the allotment would not be grazed by cattle during this time period the following grazing season. It is anticipated that much of the grazing by livestock within this allotment will occur on the private ground adjoining the federal lands.

### Wildlife

#### Proposed Action:

Mule deer and elk make use of the Duckcreek Allotment. Elk herd population numbers have increased within the Duckcreek Basin area over the last 15 to 20 years but have recently stabilized over the last four years. Competition will occur for key forage species, especially grass. In general, competition should be greater between cattle and elk than between cattle and deer. Cattle may utilize more browse species during the late summer and early fall which may lead to competition for available forage with mule deer. With the proposed stocking level for cattle (321 AUMs) and establishing allowable use levels at 50% of current annual growth for all users, the long-term health and vigor of the key plant species should be maintained and enhanced.

#### Alternative A:

By splitting the season of use into two separate grazing periods and rotating the use period every other year, duration of livestock use in any one year will be reduced, resulting in increased health and vigor of the key forage species. Cattle may utilize more browse species during the August to October period which may lead to greater competition for available forage with mule deer. This should only occur every other grazing season. With the proposed stocking level for cattle (321 AUMs) and establishing allowable use levels at 50% of current annual growth for all users, the long-term health and vigor of the key plant species should be maintained and enhanced.

### Special Status Species

#### Proposed Action:

Sage grouse use has been recorded on the Duckcreek Allotment. The sage grouse is listed as a sensitive species for the BLM and State of Nevada. It is also a special status species and species of concern for the U.S. Fish and Wildlife Service. The proposal to convert from sheep to cattle use on the allotment would not inhibit the bird's normal movements and activities nor be a detriment to them with proper livestock management and grazing practices.

#### Alternative A:

Impacts to sage grouse would be the same as the proposed action.

### Wetland and Riparian Areas

Proposed Action:

The majority of the wetland/riparian areas within the allotment are located on private ground. It is anticipated, based on past history, that livestock would make a significant amount of use on private land under the proposed action or alternative action. Only a few springs and a small, limited area along the Duck Creek drainage are located on BLM administered lands within the allotment. It is likely that cattle will concentrate around these areas during the authorized grazing season from June 1 to October 31, especially during the heat of the summer. Allowable grazing use levels on key forage species in the riparian areas are set at 50% of current annual growth. In order to protect the wetland/riparian areas within the Duckcreek Allotment it may be necessary to construct exclosure fences around the few spring sites or spring complexes located on federal lands (Shack Spring, Wellington Springs and Five Springs).

Alternative A:

By splitting the season of use into two separate grazing periods and rotating the use period every other year, duration of livestock use in any one year will be reduced. This should have positive benefits for the riparian areas especially during the June to July period. Much of the key forage species would still be green and actively growing during this time period due to the higher elevations and cooler temperatures. Cattle are less likely to concentrate around springs and other riparian areas and would to be more evenly distributed across the allotment. Once cows are removed at the end of July there remains approximately two months for regrowth to occur on key species to mitigate any grazing impacts during the June to July period.

During the August to October period, forage should be plentiful, enhancing distribution. With summer temperatures at their peak, livestock would have a greater tendency to concentrate around water sources than they would during the June to July period. Impacts to riparian areas are expected to be greater during this time period as compared to the earlier season. However, this would only occur every other year. This rotation schedule would reduce, and possibly eliminate the need to construct exclosure fences around the riparian areas.

Invasive Non-Native Species (including noxious weeds)

Proposed Action:

The conversion from sheep use to cattle use should not have any consequential impacts on either the distribution or abundance of noxious weeds in the area. The Risk Factor for spread of noxious weeds is low at the present time. This means that isolated areas of disturbance as a result of livestock grazing could produce localized increases in noxious weed infestations. The allotment would be monitored on a regular basis for noxious or invasive weeds or nonnative species.

Alternative A:

Impacts to invasive non-native species, including noxious weeds, would be the same as the proposed action.

Cumulative Impacts

Cumulative analysis is limited to those issues and resource values identified during scoping. Proper management of riparian areas in relationship to livestock grazing was a

concern during internal scoping. The cumulative impact analysis applies to the proposed action and the action alternative.

## Livestock Management / Riparian

### Past Actions

Since the early 1960's, A. R. Pescio and Sons' livestock (cattle) grazed the Duckcreek Allotment. Cows tended to concentrate around the riparian areas during the heat of the summer months. Much of this use was centered on Uhalde's private ground along Duck Creek. However, cattle also used BLM administered lands around Five Springs and North Wellington Springs.

In 1998, the Axehandle prescribed fire project was initiated on the Duckcreek Allotment. A total of 800 acres were burned. The original proposal called for a total of 2,000 acres to be treated. The remaining 1,200 acres were treated in the fall of 2001.

During the summer of 2001, a new allotment boundary fence was constructed between the Duckcreek Allotment and the Gilford Meadows Allotment.

### Present Actions

Gracian Uhalde deferred livestock grazing use in the Duckcreek Allotment during the 2002, 2003 and 2004 grazing years. In the fall of 2002, Mr. Uhalde requested to change the kind of livestock on his grazing permit for this allotment from sheep use to cattle use. Until the change is approved, Mr. Uhalde is likely to take voluntary non-use on the Duckcreek Allotment or continue to graze sheep on the allotment.

### Reasonably Foreseeable Future Actions

If the proposal to change the permit on the Duckcreek Allotment from sheep to cattle is approved, it can be reasonably anticipated that cattle will be licensed on the allotment each year during the authorized season of use. Fencing specific riparian springs may be required to protect these areas from livestock under the proposed action. Under the alternative proposed action, riparian fencing is less likely to be necessary.

A stock-water pipeline project has been proposed on the Duckcreek Allotment starting from Axehandle Spring (Uhalde's private ground) and extending approximately one mile onto BLM managed land on the lower bench.

## Conclusion-Cumulative Effects

### Proposed Action

The proposed action would authorize a change in kind of livestock from sheep to cattle on the Duckcreek Allotment. Establishing an appropriate stocking level for cattle (321 AUMs) while maintaining allowable use levels on key forage species at 50% of current annual growth should maintain and enhance the long-term health and vigor of the key plant species. The new proposed stocking level is lower than the historic cattle use (since

1960). In order to further protect the wetland/riparian areas within the Duckcreek Allotment it may be necessary to construct exclosure fences around the few spring sites or spring complexes located on federal lands.

#### Alternative Proposed Action

The alternative action would authorize a change in kind of livestock from sheep to cattle on the Duckcreek Allotment and split the season of use into two separate grazing periods. Establishing an appropriate stocking level for cattle (321 AUMs) while maintaining allowable use levels on key forage species at 50% of current annual growth should maintain and enhance the long-term health and vigor of the key plant species. The new proposed stocking level is lower than the historic cattle use (since 1960). This rotation schedule would reduce, and possibly eliminate the need to construct exclosure fences around the riparian areas.

#### Suggested Monitoring

Appropriate monitoring has been included as part of the Proposed Action. If monitoring of riparian areas indicates objectives are not being met, the need to construct exclosure fences will be analyzed. No additional monitoring is proposed as a result of the impact analysis.

## V. CONSULTATION AND COORDINATION

### Intensity of Public Interest

There is a general public interest in the proper management of public lands. Gracian Uhalde (permittee) has a high degree of interest in this particular proposal. The proposed conversion would allow for a legitimate multiple use of the public lands while making these same public rangelands economically and realistically available for livestock grazing.

On December 16, 2003 the Duckcreek Allotment Sheep to Cattle Conversion was presented at the Native American Coordination meeting in Ely, Nevada. No concerns were identified. Representatives included the Ely Shoshone Tribe and the Paiute Indian Tribe of Utah.

### Record of Persons, Group and Agencies Contacted

Gracian Uhalde (Grazing permittee)  
Steve Foree, Nevada Division of Wildlife  
John McLain, Resource Concepts, Inc.  
Betsy Macfarlan, Eastern Nevada Landscape Coalition  
Susan Forbes, USFS Ely Ranger District  
Gary McCuin, Dept. of Agriculture  
Lincoln County Commission  
Katie Fite, Committee for the High Desert  
Jon Marvel, Western Watershed Project  
Steve Carter, Carter Cattle Company  
Loretta Cartner, Interested party  
Dan Heinz, Interested party  
Melvin Gardner, Interested party  
George Andrus, Interested party  
Robert Williams, U.S. Fish and Wildlife Service  
Richard Sewing, National Mustang Association

#### a. Internal District Review

John Longinetti	Range
Mike Perkins	Wildlife & Threatened or Endangered Animals
Carolyn Sherve-Bybee	Cultural Resources
Jack Tribble	Wilderness, Visual Resources, Recreation
Shane DeForest	Invasive, Non-Native Species; Riparian/Wetlands
Elvis Wall	Native American Concerns, Tribal Coordination
Susan Baughman	Environmental Coordination
Gary Medlyn	Soils

DUCKCREEK ALLOTMENT  
STOCKING RATES CALCULATIONS  
(BLM ADMINISTERED LANDS ONLY)

The conversion of sheep AUMs to cattle AUMs was determined after an analysis of soil map units from the Soil Survey of Western White Pine County, Nevada, corresponding range sites, forage production, and ecological condition data collected on the allotment.

The Duckcreek Allotment contains 12,611 total acres of which 9,531 acres are public (BLM) and 3,080 acres are privately owned. Only the 9,531 acres of public land were used to calculate the new stocking rate for cattle.

The area within the Duckcreek Allotment is comprised of 13 separate soil map units (SMU) as identified within the Soil Survey of Western White Pine County, Nevada. The acreage of public land within each soil map unit on the allotment is as follows:

SMU 226: 1,383 ac.; SMU 109: 1,509 acres; SMU 297: 2,875 acres; SMU 690: 174 acres;  
SMU 1520: 51 acres; SMU 780: 37 acres; SMU 1283: 923 acres; SMU 1230: 274  
acres; SMU 413: 586 acres; SMU 1282: 602 acres; SMU 1480: 568 acres; SMU 481:  
232 acres; SMU 434: 317 acres.

Each soil map unit incorporates several range sites as identified in the soil survey. Each of the major soil components within the soil map units corresponds to a specific range site. Also, the Soil Survey of Western White Pine County identifies the percent composition of each of the major soil components within the soil map unit (to a maximum of 85% of the SMU). The percent composition of the major soil components was multiplied by the total acreage of the soil map unit to determine the acreage for each of the major soil components and its corresponding range site. Forage production on the remaining area (15%) of the SMU not identified by the major soil components was not incorporated into the stocking rate calculations.

Ecological site inventory (ESI) was conducted on the allotment in the mid 1990's. Production data from these studies was used in calculating the stocking rate for cattle. Since cows are primarily grass eaters, only grass production figures were used to calculate the new stocking rate. Production data from forbs and shrubs were not included in the stocking rate calculations.

Of the 13 soil map units within the Duckcreek Allotment, grass production associated with four soil map units were eliminated from consideration in calculating the stocking rate due to one or more of the following reasons: steepness of topography, distance from water and/or overlap with elk summer range. These four soil map units were: SMU 109, SMU 226, SMU 434, and SMU 481.

Of the remaining nine soil map units, grass production associated with the largest five soil map units were considered when calculating new stocking rate for cattle use. These five soil map units were: SMU 297, SMU 1283, SMU 413, SMU 1480 and SMU 1282.

Grass production from the remaining four soil map units were not included in the stocking rate calculations due to the limited acreage of each of these units occurring on federal lands within the Duckcreek Allotment and to be conservative in the estimation of the new stocking rate established on the allotment for cattle. These four soil map units are: SMU 690, SMU 1520,

SMU 780 and SMU 1230.

Soil Map Unit 297: 2875 Acres

Range Site Descriptions:

(028BY006NV) Shallow Calcareous Loam (40% of map unit)

Grass production only (from ecological condition write-up): 89 lbs per acre  
1150 acres (40%)

(028BY088NV) Calcareous Loam (30% of map unit)

Grass production only (from ecological condition write-up): 240 lbs per acre  
863 acres (30%)

(028BY016NV) Shallow Calcareous Slope (15% of map unit)

Average grass production from ecological condition forms (air dry weight): 21%  
Normal Year Production: 225 lbs per acre  
 $21\% \times 225 \text{ lbs per acre} = 47 \text{ lbs per acre}$   
431 acres (15%)

Stocking Rate Calculations:

$1150 \text{ acres} \times 89 \text{ lbs/ac} = 102,350 \text{ lbs total forage}$   
 $102,350 \text{ lbs.} \times 50\% = 51,175 \text{ lbs. allowable useable forage}$   
 $51,175 \text{ lbs.} / 1000 \text{ lbs/AUM} = 51 \text{ AUMs (estimated stocking level)}$

$863 \text{ acres} \times 240 \text{ lbs/ac} = 207,120 \text{ lbs total forage}$   
 $207,120 \text{ lbs.} \times 50\% = 103,560 \text{ lbs. allowable useable forage}$   
 $103,560 \text{ lbs.} / 1000 \text{ lbs/AUM} = 104 \text{ AUMs}$

$431 \text{ acres} \times 47 \text{ lbs/ac} = 20,257 \text{ lbs total forage}$   
 $20,257 \text{ lbs.} \times 50\% = 10,128 \text{ lbs. allowable useable forage}$   
 $10,128 \text{ lbs.} / 1000 \text{ lbs/AUM} = 10 \text{ AUMs}$

$51 \text{ AUMs} + 104 \text{ AUMs} + 10 \text{ AUMs} = \mathbf{165 \text{ AUMs (estimated stocking level for this soil map unit)}}$

Soil Map Unit 1283: 923 Acres

Range Site Descriptions:

(028BY006NV) Shallow Calcareous Loam (45% of map unit)  
Grass production only (from ecological condition write-up): 89 lbs per acre  
415 acres (45%)

(028BY007NV) Loamy 10 –12 P.Z. (40% of map unit)  
Average grass production from ecological condition forms (air dry weight): 21%  
Normal Year Production: 800 lbs per acre  
21% X 800 lbs per acre = 168 lbs per acre  
369 acres (40%)

Stocking Rate Calculations:

415 acres X 89 lbs/ac = 36,935 lbs total forage  
36,935 lbs. X 50% = 18,468 lbs. allowable useable forage  
18,468 lbs. / 1000 lbs/AUM = 18 AUMs (estimated stocking level)

369 acres X 168 lbs/ac = 61,992lbs total forage  
61,992 lbs. X 50% = 30,996 lbs. allowable useable forage  
30,996 lbs. / 1000 lbs/AUM = 31 AUMs (estimated stocking level)

18 AUMs + 31 AUMs = **49 AUMs (estimated stocking level for this soil map unit).**

Soil Map Unit 1480: 568 Acres

Range Site Descriptions:

(028BY088NV) Calcareous Loam 14 –16 P.Z. (65% of map unit)  
Grass production only (from ecological condition write-up): 240 lbs per acre  
369 acres (65%)

(028BY094NV) Calcareous Loam 10 –14 P.Z. (20% of map unit)  
Average grass production from ecological condition forms (air dry weight): 21%  
Normal Year Production: 700 lbs per acre  
21% X 700 lbs per acre = 147 lbs per acre  
114 acres (20%)

Stocking Rate Calculations:

369 acres X 240 lbs/ac = 88,560 lbs total forage  
88,560 lbs. X 50% = 44,280 lbs. allowable useable forage  
44,280 lbs. / 1000 lbs/AUM = 44 AUMs (estimated stocking level)

114 acres X 147 lbs/ac = 16,758 lbs total forage  
16,758 lbs. X 50% = 8,379 lbs. allowable useable forage  
8,379 lbs. / 1000 lbs/AUM = 8 AUMs (estimated stocking level)

44 AUMs + 8 AUMs = **52 AUMs (estimated stocking level for this soil map unit).**

Soil Map Unit 413: 586 Acres

Range Site Descriptions:

(028BY046NV) Gravelly Loam 12 – 14 P.Z. (40% of map unit)  
Grass production only (from ecological condition write-up): 131 lbs per acre  
234 acres (40%)

(028BY086NV) Gravelly Clay 10 –12 P.Z. (30% of map unit)  
Average grass production from ecological condition forms (air dry weight): 21%  
Normal Year Production: 600 lbs per acre  
21% X 600 lbs per acre = 126 lbs per acre  
176 acres (30%)

(028BY087NV) Gravelly Clay 12 –14 P.Z. (15% of map unit)  
Average grass production from ecological condition forms (air dry weight): 21%  
Normal Year Production: 700 lbs per acre  
21% X 700 lbs per acre = 147 lbs per acre  
88 acres (15%)

Stocking Rate Calculations:

234 acres X 131 lbs/ac = 30,654 lbs total forage  
30,654 lbs. X 50% = 15,327 lbs. allowable useable forage  
15,327 lbs. / 1000 lbs/AUM = 15 AUMs (estimated stocking level)

176 acres X 126 lbs/ac = 22,176 lbs total forage  
22,176 lbs. X 50% = 11,088 lbs. allowable useable forage  
11,088 lbs. / 1000 lbs/AUM = 11 AUMs (estimated stocking level)

88 acres X 147 lbs/ac = 12,936 lbs total forage  
12,936 lbs. X 50% = 6,468 lbs. allowable useable forage  
6,468 lbs. / 1000 lbs/AUM = 6 AUMs (estimated stocking level)

15 AUMs + 11 AUMs + 6 AUMs = **32 AUMs (estimated stocking level for this soil map unit).**

Soil Map Unit 1282: 602 Acres

Range Site Descriptions:

(028BY006NV) Shallow Calcareous Loam 10 – 14 P.Z. (65% of map unit)  
Grass production only (from ecological condition write-up): 89 lbs per acre  
391 acres (65%)

(028BY011NV) Shallow Calcareous Loam 8 – 10 P.Z. (20% of map unit)  
Average grass production from ecological condition forms (air dry weight): 21%  
Normal Year Production: 450 lbs per acre  
21% X 450 lbs per acre = 95 lbs per acre  
120 acres (20%)

Stocking Rate Calculations:

391 acres X 89 lbs/ac = 34,799 lbs total forage  
34,799 lbs. X 50% = 17,399 lbs. allowable useable forage  
17,399 lbs. / 1000 lbs/AUM = 17 AUMs (estimated stocking level)

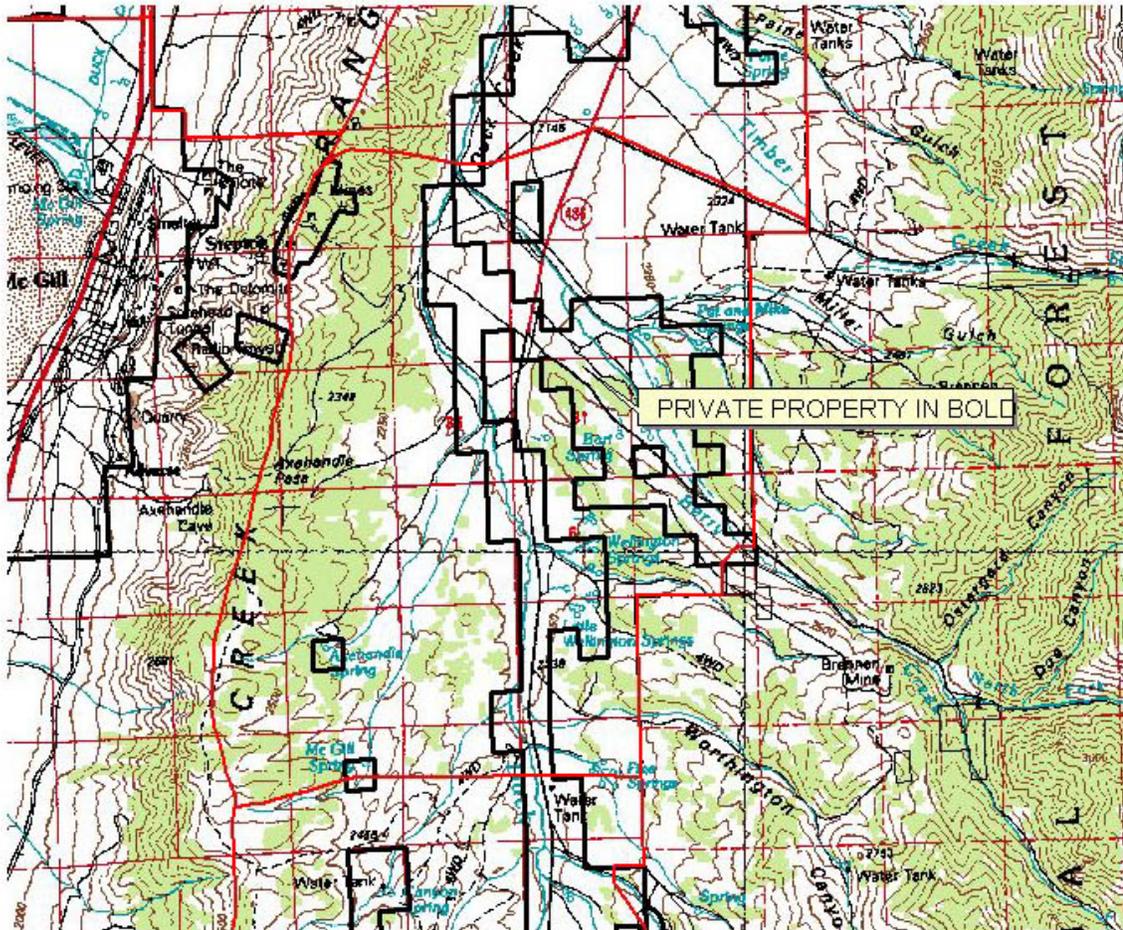
120 acres X 95 lbs/ac = 11,400 lbs total forage  
11,400 lbs. X 50% = 5,700 lbs. allowable useable forage  
5,700 lbs. / 1000 lbs/AUM = 6 AUMs (estimated stocking level)

17 AUMs + 6 AUMs = **23 AUMs (estimated stocking level for this soil map unit).**

**TOTAL STOCKING LEVEL FOR CATTLE ON THE DUCKCREEK ALLOTMENT**

**165 AUMs + 49 AUMs + 52 AUMs + 32 AUMs + 23 AUMs = 321AUMs**

# DUCKCREEK ALLOTMENT PRIVATE LANDS



- Allotments.shp**
- BATTLE MTN.
  - CALIENTE
  - CALIENTE/ELY
  - CLOSED
  - ELKO
  - ELY
  - ELY/CALIENTE
  - LAS VEGAS
  - TONOPAH
  - USFS
  - UTAH
- Landstatus**
- BLM
  - USFS
  - NPS
  - BIA
  - FWS
  - DOD
  - PK
  - NVST
  - WTR
  - PVT

