10/4/01

United States Department of the Interior

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Goshute HMA

In Reply Refer To:

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OCT - 4 2001

Parasol Ranching L.L.C.
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PROPOSED MULTIPLE USE DECISION
FOR THE BIG SPRINGS ALLOTMENT

Dear Permittee:

On September 26, 2000, the Big Springs Allotment Evaluation was issued to the public for comment. That evaluation analyzed monitoring information collected between 1977 and 2000 to determine progress in meeting the multiple use objectives and standards for rangeland health for the Big Springs Allotment, and to determine what changes in existing management may be required to meet those objectives and standards.

The following documents established the multiple use objectives which guide management of the public lands within the Big Springs Allotment: the Record of Decision for the Wells Environmental Impact Statement and Resource Management Plan (RMP) issued on July 16, 1985, the Rangeland Program Summary issued on September 15, 1986, the RMP Wild Horse and Burro Amendment issued on August 2, 1992, and the Approved Elk Amendment issued on February 14, 1996.

In addition, the Secretary of the Interior approved standards and guidelines for rangeland health for the Northeastern Great Basin Area of Nevada on February 12, 1997. These standards and guidelines reflect the stated goals of improving rangeland health while providing for the viability of the livestock industry.

Following the 30 day public comment period for the evaluation, changes were made to the allotment evaluation based on public comment and further review by the Elko Field Office staff. Upon completion of these changes, the management actions to be implemented within the Big Springs Allotment were selected. The actions selected for implementation are described in the "Big Springs Allotment Management Action Selection Report (MASR)". The MASR also provides responses to public comments on the evaluation and describes the changes made to the evaluation.

Through the consultation, coordination, and cooperation process (CCC), your input, as well as input from the interested public, has been considered in the allotment evaluation process. As a result of the evaluation conclusions and after consideration of input received through the CCC process, it has been determined that: 1) some of the multiple use objectives and standards for rangeland health for the Big Springs Allotment are not being met and that livestock grazing and wild horse use are significant factors in failing to achieve or make significant progress, 2) changes in current livestock grazing management and wild horse management are required, 3) existing management of wildlife has not been a significant factor in the non-attainment of multiple use objectives and standards for rangeland health, and 4) revision of some of the allotment specific objectives is required.

Please refer to Appendix 1 for the revisions to the allotment specific objectives and a listing of the objectives to be carried forward to the next allotment evaluation. Resource Management Plan Objectives and the Standards for Rangeland Health for the Northeastern Nevada Great Basin Area remain unchanged.

In order to ensure progress towards and achieve the standards for rangeland health and multiple use objectives, ***I am issuing this proposed decision to implement the following management actions in the Big Springs Allotment.*** These management actions will become effective upon issuance of the Final Multiple Use Decision and subsequent appeal period.

I. LIVESTOCK GRAZING MANAGEMENT DECISION

1. Divide the Big Springs Allotment into two separate allotments called East and West Big Springs Allotments with the dividing line as shown on Map 1 of this decision. This line falls on the crest/watershed divide, or nearly so, of the Pequop Mountains. Please note that the boundary line immediately south of Interstate 80 encloses a portion of the west side within the East Big Springs Allotment, and a portion of the area immediately north of Pequop Summit and east of the R. 65/66 E. line is included within the West Big Springs Allotment. If fences are constructed to separate all or a portion of these two allotments, the dividing line created by the new fence(s) will be considered the actual allotment boundary.

Rationale: The division line is based on the Rangeline Agreement authorized on September 5, 1990 with modifications as noted above. Currently the east and west sides of the Big Springs Allotment are identified as separate grazing use areas, under separate management regimes, by two permittees. This will establish this rangeline as the official allotment boundary.

The small area on the west side just south of Interstate 80 is included in the use area for the east side because this area is most easily grazed by cattle using the east side/Payne Basin area and will preclude the need for a fence to split cattle use by the two permittees in this area. The area immediately north of Pequop Summit and east of the R. 65/66 E. line associated with the Beacon Reservoir area is included within the West Big Springs Allotment because this area is part of the watershed on the west side and most conducive to livestock management when included within the west side.

2. Establish the total number of AUMs of permitted livestock use within the Big Springs Allotment as follows (the appropriate management level for wild horses is also shown in table 1 below and stated again under the wild horse portion of this decision):

Table 1. Livestock Permitted Use and Wild Horse AML				
Pasture	**Pre-Evaluation Stocking Rates**		**Post-Evaluation Stocking Rates/AML**	
	Livestock Permitted Use (AUMs) [1]	**Wild Horse Initial Stocking Level (AUMs)[1]**	**Livestock Permitted Use (AUMs)**	**Wild Horse AML (AUMs)**
Independence Valley	3,651	N/A	3,050 (2,750) [2]	N/A
Holborn	450	N/A	550	N/A
North Pequop Mountain	1,866	N/A	1,168 (West Side)	N/A
			1,244 (East Side)	N/A
Upper Squaw Creek Riparian	Part of the North Pequop Mttn. Pasture	N/A	To Be Determined	N/A
Squaw Creek Ranch	55 [4]	N/A	55	N/A
Lower Squaw Creek Ranch	6 [4]	N/A	100	N/A
East Squaw Creek	320	N/A	180	N/A
Windmill Seeding	68 [3]	N/A	390	N/A
Railroad Field	63	N/A	230	N/A
Collar and Elbow	2,243	N/A	1,181	N/A
Shafter	6,633	768	3,193	672
East Pequop Bench	2,424	N/A	2,424 [5]	N/A
North of Home	90	N/A	90	N/A
Payne Basin & Six-Mile Canyon	422	N/A	350	N/A
Fenced Federal Range (FFR)	20 (West Side) 17 (East Side)	N/A	20 (West Side) 17 (East Side)	N/A

1 Livestock AUMs based on adjudications from the 1937 - 40 range surveys.
The initial herd size for the Goshute Herd Management Area (HMA) was160 wild horses or 1,920 AUMs for 12 months. Approximately 40% of the horses in the HMA use the Shafter Pasture of the Big Springs Allotment for a total of 768 AUMs for 12 months.
2 3,050 AUMs authorized if stockwater is hauled to the northwest portion of the valley or a new water source is developed in this area.
3 AUMs based on range survey data prior to seeding.
4 This pasture was all private land prior to the BSR Land Exchange of 1999. AUMs based on range survey data.
5 Subject to temporary reductions due to closure during the Big Springs Fire Rehabilitation.

Based on the table above, livestock permitted use for the West and East Big Springs Allotments will be as shown in table 2 below:

Table 2. Summary of Changes to Livestock Permitted Use

Livestock Permittee	Pre-Evaluation Permitted Use (AUMs)	Post-Evaluation Permitted Use (AUMs)
Egbert Livestock LLC (West Side)	5,385 [1]	4,788 [1,3]
Parasol Ranching LLC (East Side)	12,887 (16,598) [1,2]	9,454 (12,175) [1,2,3]

1 Includes FFR AUMs.
2 All of the stocking rates were evaluated with actual use data reported prior to the change in AUMs prompted by the BSR Land Exchange and therefore do not reflect the increase in permitted use following the BSR Land Exchange. The numbers in parenthesis (-) show permitted use adjustments as a result of the BSR Land Exchange.
3 The AUMs credited to owned and leased private lands intermingled with public lands will be reduced by the same percentage as public land permitted use.

Rationale: Independence Valley Pasture - The stocking rate for this pasture was based primarily on the actual use and utilization data from 1997, 1998 and 1999. Data was available to calculate carrying capacities for these years. In addition, these years are most representative of stocking levels following the development of two new water sources (Miners Well and the Honor Camp Troughs) and the increase in AUMs following reseeding of the Wood Hills Burn. The calculations of stocking rates from 1997 and 1999 represent spring use while the data from 1998 best represents fall/winter use. Spring and fall/winter use were combined to represent the capacity of this pasture. The 1997 calculated capacity was 1,724 AUMs and the capacity calculated for 1999 was 840 AUMs. The average between these two years is 1,282 AUMs for spring use. The 1998 calculations show a capacity of 1,760 AUMs for fall/winter use. The combination of 1,282 AUMs for spring use plus 1,760 AUMs from fall/winter use equals 3,042 total AUMs; however, some adjustments were made to account for the kinds of precipitation years from which the data was derived and the availability of additional forage due to water hauling. The data from 1997 and 1998 represent above average production years, therefore the capacity in an average precipitation year would be somewhat less. Conversely, additional forage is available in the northwest portion of this pasture that is not represented in the calculated capacities. Taking into account these two factors, permitted use will be authorized up to 3,050 AUMs if the permittee hauls water to the northwest use area, or a new permanent water is developed; however, if water is not provided to the northwest use area, permitted use will be authorized up to 2,750 AUMs.

Holborn Pasture - The information available from 1999 was used as the basis for the stocking rate. Use patterns during 1999 reflected pasture wide use during an average forage production year. The calculated capacity for 1999 ranged from 552 AUMs at key area 4306-04 to 876 AUMs at key area 4306-03. The limiting factor was 552 AUMs and therefore 550 AUMs was selected as the stocking rate.

North Pequop Mountain Pasture - The information available for 1997 and 1999 was used as the basis for the stocking rate(s).

On the west side of the pasture, data from key areas 4306-8 and 4306-9 in 1997 were most representative of pasture capacities when the south end is used first under a deferred rotation strategy, and data from key areas 4306-5 and 4306-10 from 1999 were most representative of pasture capacity when the north end is used first under a deferred rotation strategy. The capacity of the west side of the pasture based on grazing the south end first was 1,396 AUMs and the capacity based on using the north end first 940 AUMs. The average of these two values is 1,168 AUMs which was the recommended stocking rate.

On the east side of the pasture, there was only data from 1999. The calculated capacity from 1999, an average precipitation year, was 1,244 AUMs which was selected as the stocking rate.

Upper Squaw Creek Riparian Pasture - Under the interim grazing plan, this area will be part of the North Pequop Mountain Pasture. This pasture will be created by fencing described under the final grazing plan for the East Big Springs Allotment. This pasture will be rested initially until proper functioning condition is achieved and then be opened for grazing under stubble height/utilization limits. The AUMs in this pasture will be defined through monitoring once it is authorized for grazing use.

Squaw Creek Ranch Field - This was a separate private pasture prior to completion of the BSR Land Exchange in 1999 and there is no capacity data; therefore, the capacity assigned to this acreage by the range survey is selected until the capacity can be defined through monitoring.

Lower Squaw Creek Ranch Field - This field was also a separate private pasture prior to the BSR Land Exchange. This field is irrigated and grows an abundance of grasses. This field is approximately 50 acres in size with an estimated rating of ½ acre/AUM which results in the selected capacity of 100 AUMs.

East Squaw Creek Pasture - The average capacity, based on two widely divergent years, was 179 AUMs. This was considered a reasonable stocking level based on the fact that the 640 acres of seeding on the south end supports most of the use in this pasture. Assigning a 5 acre/AUM average value to the capacity of this seeding results in a seeding

capacity of 120 AUMs. The difference between the 120 AUMs provided by the seeding and the average calculated capacity of this pasture leaves a 60 AUM capacity to the remainder of the pasture. This falls short of the range survey capacity, however livestock do not prefer to stay in the northern part of this pasture. A conservative approach to stocking this pasture during the growing season is prudent considering there is a sage grouse strutting ground in the area and it would be important to leave much of the native grass growth for nesting cover. If the proposed drift fence is constructed within this pasture, livestock use of much of the native range will expand to the north and also be easier to manage for periods of use separate from the seeding on the south end.

Windmill Seeding - The selected capacity of 390 AUMs for this seeding is based on high levels of utilization. When the cattle graze this pasture, they graze the relatively small area of Russian wildrye south of the well first, and graze it heavily before making much use of the larger seeding consisting of Russian wildrye and crested wheatgrass. Observations of the density and health of the Russian wildrye indicate it has remained healthy under heavy use when periodically deferred from use during all or a portion of the growing season. Therefore, continuing in this manner is expected to be compatible with meeting objectives.

Railroad Field - The two years of actual use and utilization data show widely differing estimates of capacity which average 291 AUMs. Recent observations of use in this pasture indicate the range survey rating of 63 AUMs is low; however, the high calculated capacity of 540 AUMs in 1997 is high considering it was an above average precipitation year. The selected stocking rate of 230 AUMs is considered a reasonable estimate of the average capacity considering the acreage in this pasture.

Collar and Elbow Pasture - The selected capacity is based on data from 1999. In 1999, all the wells were operated whereas it is unclear from previous years. Therefore, the capacity of 1,181 AUMs is selected.

Shafter Pasture - The appropriate management level for wild horses was based on data from utilization and actual use and the objective of 10% use prior to the entry of livestock. The selected stocking rate for livestock is also based on actual use and utilization. The AML for wild horses and livestock stocking level total the average capacity calculations for end of winter use.

East Pequop Bench Pasture - The selected stocking rate is based on the range survey ratings. There was insufficient information collected during the evaluation period to analyze capacity.

North of Home Pasture - The selected stocking rate is based on grazing privileges adjudicated following the range surveys. There was insufficient information collected during the evaluation period to analyze capacity.

Payne Basin & Six Mile Pastures - The selected stocking rate is based on the average calculated capacity of the two key areas. The average for key area 4306-16 was 382 AUMs, and the average for key area 4306-17 was 315 AUMs. The average of these two numbers is 350 AUMs. When stocking this pasture, the levels of use need to be balanced between the areas represented by the two key areas. More data is needed to draw any conclusions about stocking rates for the Six-Mile Canyon area.

Fenced Federal Range - The AUM values for the FFR parcels are based on the range survey ratings.

3. Implement Livestock Grazing Management Systems within the West and East Big Springs Allotments as follows:

a. West Big Springs Allotment

Deferred rotation grazing will be applied to all pastures. The management practices to be applied will limit use so as not to exceed the utilization objectives and allow the preferred forage plants in each pasture/use area to frequently complete their growth stages and disseminate seed. The final grazing system incorporates new water sources to expand grazing distribution and seedings to increase forage and habitat around the water sources. Maps 2 and 3 show pasture locations and the approximate locations of proposed range improvements. The interim and final grazing plans are described below.

Interim Grazing Plan

Independence Valley Pasture - Implement deferred rotation grazing practices amongst use areas within this pasture. Some *use areas* will be grazed in the spring/early summer and the remaining use areas grazed in the late summer/fall/winter/early spring. Generally, areas grazed in the spring/early summer of one year will be grazed in the late summer/fall/winter/early spring of the next year, and areas grazed in the fall/winter of one year will be grazed in the spring/early summer the following year. Use areas will be associated with the water sources in this pasture (See Allotment Evaluation Maps). The permittee plans to pipe water from Wadel Spring, located west of the allotment boundary in the northwest part of the pasture, and place a trough on the West Big Springs Allotment side of the boundary fence (this will all be done on leased private lands). The permittee also plans to haul water to the northwest portion of the valley/bench and on the bench in the northeast corner. The southeast part of Independence Valley associated with Boxcar Well will normally be reserved for late fall/winter use annually. *Each year, prior to spring use, the permittee will meet with the Elko Office to plan when the different use areas will be grazed for the year.* An example of the rotation is shown in the Table 3 below.

Table 3. Example of the Independence Valley Pasture Rotation		
USE AREAS	**YEAR 1**	**YEAR 2**
Boxcar Well	Late Fall/Winter (12/01 - 03/31)	Late Fall/Winter (12/01 - 03/31)
North Boxcar Well Miners Well Rattlesnake Well NE Water Haul Site Honor Camp Troughs	Spring/Early Summer (04/01 - 06/30)	Late Summer/Fall/Winter/Early Spring (09/01 - 03/31)
Section 12 Well Warm Springs Johnson Well NW Water Haul Site	Late Summer/Fall/Winter/Early Spring (09/01 - 03/31)	Spring/Early Summer (04/01 - 06/30)
The private field at the Warm Springs Ranch is often grazed in the late summer/fall offering an additional use area. This field is currently leased by the permittee.		

Holborn Pasture - Between mid May and early July, cattle will be moved from the Independence Valley Pasture into the Holborn Pasture north of Interstate 80. The deferred rotation plan calls for two years of use beginning as early as mid May followed by two years of use beginning in July. During years one and two, the cattle will be moved into the pasture as early as mid May. In years three and four, the cattle will be moved into the pasture in early July.

The years the cattle are moved into this pasture in July are considered the years of deferment as most of the forage plants will be at seedripe or seed dissemination.

Cattle may remain in this pasture for only a short period of time (two weeks) and then moved to the North Pequop Mountain Pasture and/or cattle may remain in this pasture until late September. The length of time the cattle remain in this pasture will partly depend on the availability of water from snow runoff/rain which enhances distribution, and the amount of forage growth in any one year. If the cattle remain in the pasture for a short period of time, some water sources may not be operated resulting in no use in some areas; however, if the cattle remain in the pasture for an extended period of time, most/all water sources will be operated so as not to exceed the utilization objectives in any one use area. Table 4 below displays the planned rotation in use periods.

Table 4. Holborn Pasture Rotation of Use Periods	
YEAR 1 & 2	**YEAR 3 & 4**
05/15 - 09/30	07/01 - 09/30

North Pequop Mountain Pasture - This pasture is the primary summer range for the cattle operation as well as a major use area and travel corridor for mule deer. The elk population has also been increasing, and there is sage grouse habitat. Controlling the use levels on the forage grasses and bitterbrush (important shrub for deer browse) are primary considerations.

This pasture will receive deferment from livestock use in two ways. Cattle use will be rotated between the north and south ends of this pasture, and secondly, cattle will remain in the Holborn Pasture until some time in July in some years before moving into the North Pequop Mountain Pasture.

The deferred rotation plan calls for the cattle to begin their use at the south end for two years in a row. This area is associated with Ralph Spring, West Spring, Rocky Point Spring, Beacon Spring, and West Squaw Creek Well. The permittee will move cattle drifting into the north end back to the south end in a timely manner; however, the cattle don't tend to drift to the north end since there is only one spring at the far north end and it is somewhat lower in elevation. Some of the cattle grazing the south end will likely drift onto the east side of this pasture where the adjoining permittee grazes; therefore, the livestock operator on the west side will be responsible for monitoring his cattle drift and move his cattle back onto the west side in a timely manner. Removing cattle drifting into the East Squaw Creek and Upper Beacon Spring areas will be particularly important the first year or two prior to the installation of riparian management fences in these areas. On 8/1 or later, most of the cattle will be spread across the northern part of the west side. The permittee will make a good faith effort to move and keep the cattle in the northern use areas at this time to reduce the potential of cattle drifting onto the east side of this pasture. By the end of September, the cattle are moved out of this pasture.

During the third and fourth years, the cattle will begin their grazing on the north end for two years in a row. This area is associated with Independence Well, Pequop Spring and Pequop Well. The cattle tend to drift into the south end where there are several springs and higher elevation country; therefore, the permittee will move cattle drifting into the south end back to the north end in a timely manner. Beginning on 8/1 or later, most of the cattle will be spread across the south part of the pasture. Some of the cattle grazing the south end will likely drift onto the east side of this pasture where the adjoining permittee grazes; therefore, the livestock operator on the west side will be responsible for monitoring cattle drift and move

the cattle back onto the west side in a timely manner. Table 5 below displays the planned rotation in use periods.

Table 5. North Pequop Mountain Pasture Rotation in Use Areas		
USE AREA	**YEARS 1 & 2**	**YEARS 3 & 4**
North	08/01 - 09/30	05/15 - 09/30
South	05/15 - 09/30	08/01 - 09/30

Final Grazing Plan

The final grazing plan will continue the deferred rotation practices described under the interim systems above. The final grazing plan differs from the interim grazing plan only by the proposed addition of permanent water locations and seedings in various locations along with an allotment boundary fence on a portion of the North Pequop Mountain Pasture. The allotment boundary fence and additional water developments and seedings are described below by pasture and listed in Table 6.

Independence Valley Pasture -

(1). Develop a new water location in the northwest part of the valley, between Interstate 80 and Johnson Well. Perennial grasses are common along the upper bench and mountain.

(2). Seed up to 4,000 acres of public land associated with existing and proposed water locations. The seed mix will include grasses, shrubs/half-shrubs and forbs. The areas to be seeded will be lower bench and valley big sagebrush and rabbitbrush areas poor in grasses and other forage. The locations of areas and acres of proposed seeding will be more specifically identified through the environmental analysis process on individual projects.

(3). Monitor the use and condition of Hogan Spring/seep located on the west bench of the Pequop Mountains and determine if protective measures should be taken protect the water source if wild horses continue to occupy this area or from cattle use.

(4). Consider a fence that will prevent cattle from drifting back to the Warm Springs Ranch area from other use areas.

Holborn Pasture -

(5). Seed up to 1,000 acres of public land associated with the NDOT well adjacent to the Interstate 80 exit. The seed mix will include grasses, shrubs/half-shrubs and forbs. The areas to be seeded will be the big sagebrush area poor in grasses.

North Pequop Mountain Pasture -

(6). Construct a boundary fence between the East and West Big Springs Allotments within the North Pequop Mountain Pasture. The fence will be approximately three miles long and run along the boundary line from Interstate 80 at Pequop Summit to Rocky Point, with a short gap fence in the canyon immediately north of Rocky Point. This fence will be designed as a let-down fence to be let-down by 9/30 and put back up prior to the entry of livestock the following year. This fence will also be part of an interior pasture fence proposed for the east side of this pasture as described under the grazing management practices for the East Big Springs Allotment below. The livestock permittees will be responsible for letting the fence down and putting it back up in a timely manner.

(7). Develop a new water location on the north Pequop Mountain bench a couple of miles west of Pequop Spring. Perennial grasses are common in this area.

(8). Develop a new water location on the north Pequop Mountain bench one to two miles east of Pequop Spring. Perennial grasses are common in this area. *Sage grouse strutting grounds are located near this new proposed use area; therefore, this water will not be operated earlier than July 1 so that all of the grass growth each year is available for hiding cover for sage grouse nesting and brood rearing activities.*

(9). Add a water storage tank to Pequop Well so there is adequate storage to water cattle, elk and other wildlife.

(10). Evaluate the water development designs of the spring developments on public lands in this pasture and determine if the spring developments warrant modification to encourage the growth of riparian vegetation. Nearly all of the springs in this pasture were developed by capturing all of the water from the spring source and piping it to a trough which precludes the growth of riparian habitat at or near the spring source.

The Nevada Division of Wildlife and the interested public will be consulted prior to the approval of the above proposed projects. Required National Environmental Policy Act (NEPA) documentation will be completed prior to the development and redesign of projects on public lands.

Table 6. Proposed Range Improvements for the West Big Springs Allotment	
Project	**Units**
Well in the NW portion of the Independence Valley Pasture	1
Independence Valley Pasture Seedings	4,000 acres
Holborn Pasture Seeding	1,000 acres
East/West Big Springs Boundary Fence	3 miles
Well near Fenelon (NW Pequop Mtn. Pasture)	1
Lower Pequop Well (NE Pequop Mtn. Pasture)	1
Pequop Well Storage Tank	1
Spring Developments (as prioritized)	n/a

Rationale: Deferred rotation grazing is intended to help the forage plants remain healthy, provide seed to populate the plant communities for watershed stability and long-term sustainable use for livestock, wildlife and other multiple uses.

The deferred rotation plan for the N. Pequop Mountain Pasture in particular is also intended to lessen the use of bitterbrush on the south end where cattle prefer to be in the summer.

The proposed boundary fence that will separate the West Big Springs Allotment from the East Big Springs Allotment in the North Pequop Mountain Pasture will prevent the drift of cattle between the two allotments and also serve as part of the pasture management fences proposed for the east side. The fence will be designed as a let-down fence to be let down before the opening of the rifle hunting season on mule deer. Dropping down the fence wire is necessary to allow deer free movement through the area during the hunting season as well as reduce the need for some fence repairs from elk passing through the area.

Fencing the use area associated with the Warm Springs Ranch in the Independence Valley Pasture may be valuable in controlling the degree of utilization on key forage plants by preventing cattle from drifting to this area from other use areas in the valley.

The proposed water developments will expand grazing use and offer more use areas with which to plan deferred rotation strategies. In addition, by not operating the proposed water development east of Pequop Spring before July 1, new grass growth each year will be available as hiding cover for sage grouse nesting and brood rearing activities. Adding to the water storage capability at Pequop Well will improve the ability of this water source to support cattle, elk and other wildlife use.

The proposed seedings will increase vegetative production and diversity for livestock and wildlife, particularly antelope, and provide a forage reserve to lessen the need for reductions in livestock use during dry precipitation cycles.

b. East Big Springs Allotment

Deferred rotation grazing will be applied to all pastures receiving grazing use during the critical growing season. Pastures receiving only fall or winter use will be deferred from grazing during the growing season every year. The management practices to be applied will limit use so as not to exceed the utilization objectives and allow the preferred forage plants in each pasture/use area to frequently complete their growth stages and disseminate seed. The final grazing system incorporates new water sources to expand grazing distribution, new seedings to increase forage and habitat around the water sources, and additional fencing to protect riparian habitat and new seedings to improve the management of cattle under the deferred rotation practices. Maps 2 and 3 show pasture locations and the approximate locations of proposed projects. The interim and final grazing systems are described below.

Table 7. *Interim Grazing System(s)*		
Periods-Of-Use By Pasture		
PASTURE/USE AREA	**YEARS 1 & 2**	**YEARS 3 & 4**
Shafter	10/01 - 4/15	10/01 - 4/15
East Pequop Bench North Bench South Bench/Hardy Creek Pipeline	03/01 - 06/30[1] Period of use within each use area to be defined on an annual basis.	03/01 - 06/30[1] Period of use within each use area to be defined on an annual basis.
Payne Basin/Six-Mile Canyon	05/16 - 09/30	07/01 - 09/30
East Squaw Creek	04/01 - 10/15 Period of use to be defined on an annual basis.	04/01 - 10/15 Period of use to be defined on an annual basis.
North Pequop Mountain East Beacon/Upper Squaw Creek Baker Spring	 05/01 - 07/31 07/01 - 09/30	 05/01 - 07/31 07/01 - 09/30
Windmill Seeding	07/01 - 10/31	07/01 - 10/31
Railroad	07/01 - 10/31	07/01 - 10/31
Squaw Creek Ranch	Up to 3 Weeks 05/01 - 07/31	Up to 3 Weeks 05/01 - 07/31
Lower Squaw Creek Ranch	Up to 3 Weeks 08/01 - 10/31	Up to 3 Weeks 08/01 - 10/31
Collar & Elbow	08/15 - 01/31	08/15 - 01/31
North of Home	Period of use to be defined on an annual basis.	Period of use to be defined on an annual basis.

[1] A fire rehabilitation seeding was completed for a portion of the North Bench use area in the Fall of 2000. This rehabilitation area is closed to livestock use for two growing seasons or until seeding establishment criteria have been met.

Shafter Pasture - This is the primary pasture for winter/early spring use. Cattle will graze this pasture beginning in November. Many of the cattle graze the northern part of this pasture in November called the Silver Zone area and are then moved south to the use areas associated with Shafter Well #1, Shafter Well, and Shafter Well #2. The cattle remain in the Shafter Wells area up to mid April.. However, if snowmelt/rains provide enough water in the late winter/early spring, the Shafter Wells will be turned off and the cattle moved to the west side of the Shafter Pasture into the greasewood plains and sagebrush draws to graze. The cattle are moved out of the Shafter Pasture and into the East Pequop Bench Pasture in March to mid April.

East Pequop Bench Pasture - Fire rehabilitation actions following the Big Springs Fire of 2000 resulted in the installation of a fence on the south end of the fire and seeding the burn area. The fence separates the northern part of the east Pequop bench from the remainder of the pasture. The fire rehabilitation seeding is within this North Bench use area and is closed to livestock grazing for at least two growing seasons or until the seeding establishment criteria have been met. While the North Bench use area is closed to livestock use, the South Bench/Hardy Creek use area and the Pipeline use area (east of the Big Springs Ranch) will be available for livestock use.

The grazing of each use area will be planned annually. The permittee will meet with Elko Field Office personnel prior to use in this pasture to discuss and gain the Bureau's concurrence on the planned grazing schedule. Planned use will be directed at deferring grazing use in one of the use areas during the critical growing season and/or managing for a utilization level on key forage grasses not to exceed the light use category (21 - 40% use of current years growth). When the North Bench use area is opened to livestock use following fire rehabilitation, this area will be included in the annual plan for grazing use in this pasture.

Payne Basin/Six Mile Canyon Pasture - This pasture will receive two years of use which includes the critical growing season followed by two years of deferred use.

East Squaw Creek Pasture - The grazing in this pasture will be planned annually. The permittee will meet with Elko Field Office personnel prior to use in this pasture to discuss and gain the Bureau's concurrence on the planned grazing schedule. Planned use will be directed at deferring grazing use in the native part of the pasture during the critical growing season and/or managing for a utilization level on key forage grasses not to exceed the light use category (21 - 40% use of current years growth).

The South Seeding portion of this pasture will be grazed each year between 04/01 and 10/15. The South Seeding will commonly be grazed in the spring prior to the cattle being moved into the North Pequop Mountain Pasture, and grazed again in the late summer/fall as the cattle come off the summer range. Use during late summer/fall depends on the level of use made in the spring and the degree of regrowth available for later use.

The native portion of this pasture will be grazed in conjunction with the seeding on the south end; however, use in the native area is expected to be light because most of the cattle tend to graze the South Seeding portion of this pasture. However, if the level of grazing use on the native key forage grasses at key area 4306-14 exceeds the light utilization category by the end of the growing season for two years in a row, or more than two out of four consecutive years, use on the native area will be deferred until 07/01 for two out of four consecutive years.

North Pequop Mountain Pasture - This pasture is the primary summer range for the cattle operation as well as a major use area and travel corridor for mule deer. The elk population has also been increasing, and there is sage grouse habitat. The portion of this pasture associated with Upper East Squaw Creek and East Beacon Spring encompasses most of the riparian areas within the pasture. Controlling the use levels on the riparian habitat as well as forage grasses and bitterbrush (important shrub for deer browse) are primary considerations.

In order to begin making significant progress toward proper functioning condition of riparian habitat in this pasture prior to construction of the riparian management fences, it will be important to leave some of the perennial herbaceous riparian growth to help stabilize and expand the riparian area. Therefore, management will be directed at achieving the following stubble height objective during the interim:

- Stubble Height of Herbaceous Riparian Species: A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank and wet meadow areas at the end of the growing season or grazing season, whichever occurs later.

Deferred rotation grazing will be applied to use areas within this pasture. Riparian management fences and water development modifications are proposed under the final grazing system/practices described below. In the interim, prior to the installation of riparian protection fences, livestock will graze the upper East Squaw Creek and East Beacon Spring areas between 5/1 and 07/31 and then moved north to the Baker Spring/Pipeline area. The Baker Spring/Pipeline area will be grazed from as early as 07/01 - 09/30 in conjunction with the Railroad and Windmill Seeding Fields. The permittee will be responsible for monitoring cattle

drift outside the planned use area(s) and moving them back to the planned use area(s) in a timely manner. Removing cattle drifting back into the East Squaw Creek and East Beacon Spring areas will be particularly important prior to the installation of the proposed pasture and/or riparian management fences in these areas.

Railroad Field and Windmill Seeding Field - The interim system calls for these two fields to be used in conjunction with the Baker Spring use area in the North Pequop Mountain Pasture. These two fields will be needed to supplement the vegetation for summer use when the cattle are not to be grazing the Upper East Squaw Creek and East Beacon Spring use areas in the North Pequop Mountain Pasture.

Squaw Creek Ranch Field - This field includes a portion of East Squaw Creek and will be managed as a riparian pasture with use limited to no more than three weeks. Monitoring of the utilization on streambank herbaceous riparian plants and willows will be used to determine if further adjustments will be made in order to achieve proper functioning condition and habitat objectives. *Each year, the permittee will meet with the Elko Field Office to plan when this area will be grazed.* Management will be directed at achieving riparian habitat objectives including proper functioning condition. Annual stubble height/utilization limits on herbaceous riparian vegetation and willows will be used to tailor the period of use. These annual stubble height/utilization limits are described as follows:

- Stubble Height of Herbaceous Riparian Species: A minimum of four (4) inches average stubble height for selected key herbaceous riparian species (sedges/rushes) will be left along the streambank at the end of the growing season or grazing season, whichever occurs later.

- Willow Utilization: Do not exceed thirty-five (35%) average utilization of the total current year's leader growth on the portion of the willow within five (5) feet of ground level by the end of the growing season or grazing season, whichever occurs later.

Lower Squaw Creek Ranch Field - This field has been irrigated to grow meadow grasses for livestock use in the late summer/fall. This field will continue to be irrigated by the permittee and grazed up to three weeks between 8/01 and 10/31. *Each year, the permittee will meet with the Elko Field Office to plan when this area will be grazed.*

Collar and Elbow Pasture - This pasture will be used beginning on or after 8/15 for late summer/fall/early winter use. The valley portions of this pasture tends to be dusty when the dry surface is disturbed during the summer/fall. To avoid dust pneumonia in the calves, the permittee plans to wean the calves from the mother cows, which usually occurs beginning about August 20th and later, before placing the mother cows in this pasture.

North of Home Pasture - Use in this pasture is generally trailing cattle to and from other pastures; however, some cattle may periodically be held in this pasture for a longer period of time. *Because of the variability in the use of this pasture, the permittee will meet with the Elko Field Office each year to plan when this area will be grazed.* Planned use will be directed toward maintaining healthy forage plants, and a stable watershed for the proposed Source Water Area Protection Zone associated with the watershed that supplies water to West Wendover, Nevada.

Final Grazing Plan

The final grazing plan will continue deferred rotation practices in those pastures scheduled for use during the critical growing season. The final grazing plan proposes some new pasture fences and riparian management fences as well as new water developments and seedings that enhance the ability to implement deferred rotation strategies. Since there will be enough changes in grazing use as a result of the proposed projects, table 8 below includes the proposed periods of use for all the pastures to facilitate an understanding of how the year-round operation will look under the final grazing plan. Table 9 and the narrative below lists proposed range improvements.

Table 8. Final Grazing Plan Periods Of Use By Pasture		
PASTURE/USE AREA	**YEARS 1 & 2**	**YEARS 3 & 4**
Shafter	10/01 - 4/15	10/01 - 4/15
East Pequop Bench North Bench/Seeding/Long Canyon South Bench/Seeding/Hardy Creek Pipeline Seeding Pipeline Native	 05/01 - 07/15 05/01 - 07/15 03/01 - 05/15 09/01 - 12/31 03/01 - 05/15	 03/01 - 05/15 09/01 - 12/31 03/01 - 05/15 09/01 - 12/31 05/01 - 07/15 05/01 - 07/15
Payne Basin	05/16 - 09/30	07/01 - 09/30
Six-Mile Canyon	Period of use to be defined on an annual basis.	Period of use to be defined on an annual basis.
East Squaw Creek South Seeding North Native	 04/01 - 10/15 Period of use to be defined on an annual basis. 05/01 - 10/15	 04/01 - 10/15 Period of use to be defined on an annual basis. 07/01 - 10/15
North Pequop Mountain East Beacon/South Squaw Creek North Squaw Creek/Baker Spring	 05/01 - 07/31 07/01 - 09/30	 07/01 - 09/30 05/01 - 07/31
Upper Squaw Creek Riparian	Initially rest until PFC, then Up to 3 Weeks 05/01 - 07/31	Initially rest until PFC, then Up to 3 Weeks 05/01 - 07/31
Squaw Creek Ranch	Up to 3 Weeks 05/01 - 07/31	Up to 3 Weeks 05/01 - 07/31
Lower Squaw Creek Ranch	Up to 3 Weeks 08/01 - 10/31	Up to 3 Weeks 08/01 - 10/31
Windmill Seeding	04/01 - 10/31 Period of use to be defined on an annual basis.	04/01 - 10/31 Period of use to be defined on an annual basis.
Railroad	07/01 - 10/31	05/01 - 10/31
Collar & Elbow	08/15 - 01/31	08/15 - 01/31

Table 8. Final Grazing Plan Periods Of Use By Pasture		
PASTURE/USE AREA	**YEARS 1 & 2**	**YEARS 3 & 4**
North of Home	Period of use to be defined on an annual basis.	Period of use to be defined on an annual basis.

Shafter Pasture - Planned use in this pasture will be the same as described under the interim grazing plan. This pasture is the primary winter/early spring use area. No new projects are proposed.

East Pequop Bench Pasture - Under the final grazing plan, the fire rehabilitation fence and seeding have already created the North Bench use area. Additional projects are also proposed to implement the final grazing plan. These proposed projects are as follows:

(1). Construct a drift fence (100') near the bottom of Long Canyon.

(2). Add an 8,000 gallon water storage tank to Burnt Well.

(3). Develop a seeding of up to 3,000 acres within the area burned in the Oasis Fire located within the South Bench use area. Seeded species will include perennial grasses, shrubs/half shrubs, and forbs.

(4). Construct a reservoir in the vicinity of South Well to catch spring runoff, and add an 8,000 gallon water storage tank to South Well.

(5). Develop a new well in the lower Hardy Creek area in the vicinity of sections 15 or 22, T. 34 N., R. 66 E.

(6). Develop a seeding of up to 4,000 acres north of the West Wendover water pipeline. Seeded species will include perennial grasses, shrubs/half shrubs, and forbs.

(7). Construct approximately seven (7) miles of fence to encompass the new seeding north of the pipeline.

(8). Install four pipeline extensions of approximately one and one-half miles each. Two extensions will run north from the West Wendover water pipeline to provide water to the new seeding area, and two extension will run south to water the native range.

The final grazing plan for the East Pequop Bench Pasture will continue deferred rotation practices during the critical growing season (5/16 - 6/30) as shown in the table above. With the addition of the proposed projects, late summer and fall use is also planned.

Payne Basin Pasture - This pasture will continue to receive two years of use which includes the critical growing season followed by two years of deferred use. Development of additional grazing capacity within the East Pequop Bench Pasture, as described above, will support these cattle during those years when this pasture is deferred until 07/01. The only proposed project is described below.

(9). Lower Nanny Spring is the only riparian area that supports a small stand of aspen within the Payne Basin Pasture. To ensure the aspen stand can sustain itself over the long term, the aspen area will be fenced periodically to allow young aspen to grow to seven feet (7') in height or more so the terminal bud and upper branches are above the cattle browsing level.

(10). There are also a couple spring developments that capture all the water from the source and pipe it to a trough. Therefore, the water development designs of these spring developments on public lands will be evaluated to determine if the spring developments warrant modification to encourage the growth of riparian vegetation.

Six-Mile Canyon - Grazing in this canyon will be planned on an annual basis to take into account the availability of water. Grazing will be authorized periodically when water is available in the reservoir(s) as an alternative use area to Payne Basin.

(11). The only new project will be a drift fence near the bottom of the canyon.

(12). The existing reservoir part way up the canyon will be repaired and the reservoirs at the top of the canyon will be enlarged where feasible. These reservoirs catch snow melt/runoff but are not associated with any perennial water flows.

East Squaw Creek Pasture - New projects proposed for this pasture are:

(13). Construct a drift fence that will run easterly from the lower Squaw Creek Field to the fence along the highway to Montello, Nevada (Route 233). This fence will be approximately two and one-half miles long. The proposed fence that will separate the South Seeding use area from the native range to the north will be constructed in such a way as to allow the cattle using either field to water at the reservoir at the bottom of the Lower Squaw Creek Field.

(14). Expand the seeding within the southern portion of this pasture. Up to 1,200 acres of new seeding is proposed. The seed mix will include desirable grasses and forage kochia.

The final grazing plan calls for the South Seeding portion of this pasture to be grazed as described under the interim grazing plan. The South Seeding use area will commonly be grazed in the spring prior to the cattle being moved into the North Pequop Mountain Pasture, and grazed again in the late summer/fall as the cattle come off the summer range. Use during late summer/fall depends on the level of use made in the spring and the degree of regrowth available for later use. This pasture will be periodically deferred to allow a recovery period following dry years when there is little regrowth. *Each year, the permittee will meet with the Elko Office to plan when this area will be grazed.*

The North Native portion of this pasture north of the proposed fence will be grazed under a deferred rotation schedule with two years of use during the critical growing season and two years of deferred use.

North Pequop Mountain Pasture - The final grazing plan will result in a fenced pasture south of the East Squaw Creek channel, a pasture north of East Squaw Creek, and a riparian pasture enclosing the main channel of East Squaw Creek. A deferred rotation grazing system will be implemented using the two large pastures. The Upper Squaw Creek Riparian Pasture will be managed as a separate field which is described below.

Additional riparian management fences/exclosures around some of the springs are also proposed along with some new water developments. The riparian fences will be designed to minimize fence maintenance resulting from the movement of elk through the area. When proper functioning condition has been achieved within any of the proposed riparian exclosures, livestock grazing may be periodically authorized if the authorized officer determines it is desirable to remove old growth and/or enhance wildlife use such as sage grouse brood rearing.

New projects proposed for this pasture include the following:

(15). Construct a boundary fence between the East and West Big Springs Allotments within the North Pequop Mountain Pasture. The fence will be approximately three miles long and run along the boundary line from Interstate 80 at Pequop Summit to Rocky Point, with a short gap fence in the canyon immediately north of Rocky Point. This fence will be designed as a let-down fence to be let-down by 9/30 and put back up prior to the entry of livestock the following year. This fence will also be part of an interior pasture fence proposed for the east side of this pasture as described under the grazing management

practices for the East Big Springs Allotment below. The livestock permittees will be responsible for letting the fence down and putting it back up in a timely manner.

(16). Construct a pasture fence that will connect with the fence described above at a location just north of the middle fork of East Squaw Creek and run easterly to the Squaw Creek Ranch Field. This fence will be approximately three miles long. This fence will be designed as a let-down fence to be let-down by 9/30 and put back up prior to the entry of livestock the following year. The livestock permittee on the east side will be responsible for letting the fence down and putting it back up in a timely manner. The lower one and one-half miles of fence will create the border for the north side of the Upper Squaw Creek Riparian Pasture.

(17). Construct approximately two miles of drift fence that will run north from the Pequop Exit on Interstate 80 toward the southwest corner of the Squaw Creek Ranch Field.

(18). Construct the following riparian management fences/exclosures:

(a). Enclose the main channel of East Squaw Creek with a fence on the south and west sides to create a riparian pasture in conjunction with the proposed fence on the north side described above. This fence will enclose the main spring complex near the middle of section 8, T. 37 N., R. 66 E. and the main channel eastward to the Squaw Creek Ranch Field fence. To provide water outside the riparian pasture, water will be piped from one of the main channel springs at the upper end of the riparian pasture to a location north of the riparian pasture fence. A water gap where animals could water directly from East Squaw Creek will also be considered at the lower end of the riparian pasture.
(b). Fence the spring and channel leading to the reservoir at Lower Beacon Spring located in the northeast corner of section 17, T. 37 N., R. 66 E. A portion of the area just above the reservoir will be left open as a loafing area for cattle.
(c). Fence the spring at East (Upper) Beacon Spring located in the southwest corner of section 17, T. 37 N., R. 66 E. and pipe water to a trough outside the fence and to a location approximately one mile east/southeast of the spring.
(d). Fence Wally Spring including the aspen stand nearby and install a rock gabion or apron where the spring flows over the lip of the cut bank.
(e). Fence the three spring complex at the head of the middle fork of East Squaw Creek located in the NESW section 7, T. 37 N., R. 66 E.
(f). Fence the spring on the north fork of East Squaw Creek located in the northeast corner of section 7, T. 37 N., R. 66 E.
(g). Eliminate and/or control noxious and invasive plants and reseed as necessary.
(h).There are also a couple spring developments that capture all the water from the source and pipe it to a trough. Therefore, the water development designs of these

spring developments on public lands will be evaluated to determine if the spring developments warrant modification to encourage the growth of riparian vegetation.

(19). Extend a pipeline from the proposed well at the north end of the pasture to a location east of the rangeline between the East and West Big Springs Allotments. The proposed well will be located one to two miles east of Pequop Spring as described under the final grazing plan for the West Big Springs Allotment. Each permittee will be responsible for monitoring the drift of their cattle across the unfenced boundary line and moving their cattle back to their authorized use area in a timely manner.

The Nevada Division of Wildlife and the interested public will be consulted prior to the approval of the above proposed projects. Required National Environmental Policy Act (NEPA) documentation will be completed prior to development of the proposed projects on public lands.

Upper Squaw Creek Riparian Pasture - When this pasture is fenced as described above, it will be rested from livestock grazing until it has achieved proper functioning condition. Once it has reached proper functioning condition, grazing management will be directed at maintaining proper functioning condition and achieving additional riparian habitat objectives. When initial grazing use is authorized in this pasture, monitoring of the utilization on streambank herbaceous riparian plants and willows/aspen will be used to determine if further adjustments will be made in order to achieve proper functioning condition and habitat objectives. *Each year, the permittee will meet with the Elko Field Office to plan when this area will be grazed.* When initial use is authorized in this pasture, the following stubble height/utilization limits will apply:

- Stubble Height of Herbaceous Riparian Species: A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank at the end of the growing season or grazing season, whichever occurs later.

- Willow and Aspen Utilization: Do not exceed thirty-five (35%) average utilization of the total current year's leader growth on the portion of the willow or aspen within five (5) feet of ground level by the end of the growing season or grazing season, whichever occurs later.

Proposed projects within this pasture are listed below:

As mentioned under proposed projects for the N. Pequop Mountain Pasture above, a pipeline is proposed to bring water outside the riparian pasture fence into the North Squaw Creek/Baker Spring Pasture. Water will be piped from one of the springs at the upper end of the riparian pasture.

A water gap at the lower end of the riparian pasture fence will be considered in the design of the fence to provide water for use in the North Squaw Creek and/or South Squaw Creek Pastures.

Eliminate and/or control noxious and invasive plants. Treatments are envisioned to include the use of herbicides and/or digging on existing populations in conjunction with reseeding treated areas and other patches of bare ground that are likely to be invaded by weeds once the riparian pasture fence is in place.

Squaw Creek Ranch Field - This field will be managed as a riparian pasture as described under the interim grazing plan with use limited to no more than three weeks. Monitoring of the utilization on streambank herbaceous riparian plants and willows will be used to determine if further adjustments will be made in order to achieve proper functioning condition and habitat objectives. *Each year, the permittee will meet with the Elko Field Office to plan when this area will be grazed.* Management will be directed at achieving riparian habitat objectives including proper functioning condition. Annual stubble height/utilization limits on herbaceous riparian vegetation and willows will be used to tailor the period of use. These annual stubble height/utilization limits are described as follows:

- Stubble Height of Herbaceous Riparian Species: A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank at the end of the growing season or grazing season, whichever occurs later.

- Willow Utilization: Do not exceed thirty-five (35%) average utilization of the total current year's leader growth on the portion of the willow within five (5) feet of ground level by the end of the growing season or grazing season, whichever occurs later.

Lower Squaw Creek Ranch Field - This field has been irrigated to grow meadow grasses for livestock use in the late summer/fall and will continue to be managed as described under the interim grazing plan. This field will continue to be irrigated by the permittee and grazed up to three weeks between 8/01 and 10/31. *Each year, the permittee will meet with the Elko Field Office to plan when this area will be grazed.*

Windmill Seeding Field - The preponderance of forage in this pasture is provided by two seeded species, Russian wildrye and crested wheatgrass. This pasture will commonly be grazed in the spring/summer but periodically deferred to allow a recovery period following dry years when there is little regrowth. *Each year, the permittee will meet with the Elko Field Office to plan when this area will be grazed.*

Railroad Field - Deferred rotation grazing will be implemented on this pasture. There will be two consecutive years of use beginning 07/01 or later followed by two years of use beginning 05/01 or later. Actual use will not be expected to span the entire period of use displayed in the table above. *Each year, the permittee will include the actual planned period of use in the application for grazing use.*

Collar and Elbow Pasture - This pasture will be managed as described under the interim system. Use will begin on 08/15 or later and end by 01/31. The actual period of use during this time will tend to be variable. For example, during those years when water and/or forage runs short in the North Pequop Mountain Pasture, the cattle may be moved into this pasture beginning in August. When water and/or forage is adequate elsewhere, the cattle may not enter this pasture until late September or October. The cattle may remain in this pasture until November and moved to the Shafter Pasture or stay into the late fall/winter until snows require removal.

North of Home Pasture - Use in this pasture is generally trailing cattle to and from other pastures; however, some cattle may periodically be held in this pasture for a longer period of time. *Because of the variability in the use of this pasture, the permittee will meet with the Elko Field Office each year to plan when this area will be grazed.* Planned use will be directed toward maintaining healthy plants, and a stable watershed for the Source Water Area Protection Zone associated with the watershed that supplies water to West Wendover, Nevada.

Table 9. Proposed Range Improvements for the East Big Springs Allotment

Project	Units
Long Canyon Drift Fence	1/4 miles
Burnt Well Storage Tank	8,000 gallons
Oasis Fire Seeding	3,000 acres
South Well Storage Tank (8,000 gallons)	1
South Well Reservoir	1
Lower Hardy Creek Well	1

West Wendover Pipeline Seeding	4,000 acres
West Wendover Seeding Fence	7 miles
West Wendover Pipeline Extensions	4
Six Mile Canyon Drift Fence	1/4 miles
Lower Nanny Creek Exclosure	1/2 miles
East and West Big Springs Boundary Fence	3 miles
Lower Squaw Creek Drift Fence (East Squaw Creek Pasture)	2 1/2 miles
East Squaw Creek Pasture Seeding	1,200 acres
North Squaw Creek Pasture Pipeline Extension	3 miles
Upper East Squaw Creek Exclosure	3 miles
Pequop Exit Drift Fence	2 miles
Middle Fork East Squaw Creek Exclosure	2 miles
Lower Beacon Spring Exclosure	1/2 mile
Upper Beacon Spring Exclosure	1/2 mile
Wally Spring Exclosure	1/2 mile
North Fork East Squaw Creek Exclosure	1 mile
North Pequop Mountain Well Pipeline Extension	2 miles

Rationale: Deferred rotation grazing is intended to help the vegetation remain healthy, provide seed to populate the plant communities for watershed stability and long-term sustainable use for livestock, wildlife and other multiple uses. Periods of livestock use between pastures generally overlap to provide flexibility in movement dates needed to deal with weather variations and other unpredictable events, and move livestock to pastures/use areas when most compatible with achieving good distribution.

The periods of use in some pastures or use areas within some pastures will be determined on an annual basis. This allows management to consider factors affecting the pasture/use area the previous year(s), project current years production and water availability, and direct use to best achieve multiple use objectives and standards for rangeland health.

Riparian habitats will improve as a result of proposed fencing, stubble height/utilization limits and deferred rotation grazing practices. Managing for proper functioning condition riparian habitat and other habitat values will improve watershed stability and provide more desirable habitat for wildlife including habitat for sage grouse brood rearing.

The proposed boundary fence that will separate the East Big Springs Allotment from the West Big Springs Allotment in the North Pequop Mountain Pasture will prevent the drift of cattle between the two allotments and also serve as part of the pasture management fences proposed for the east side. The fence will be designed as a let-down fence to be let down before the opening of the rifle hunting season on mule deer. Dropping down the fence wires is necessary to allow deer free movement through the area during the hunting season as well as reduce the need for some fence repairs from elk passing through the area.

The proposed water developments will either replace water sources fenced to manage riparian areas or provide new water sources that will expand grazing use and offer more use areas with which to implement deferred rotation strategies. In addition, by not operating the proposed water development east of Pequop Spring before July 1, new grass growth each year will be available as hiding cover for sage grouse nesting and brood rearing activities.

The proposed seedings will increase vegetative production and diversity for livestock and wildlife, particularly antelope. Vegetation diversity was generally identified as a limiting habitat attribute for antelope and the addition of forage kochia and forbs to the seed mix will improve vegetation diversity. The increased livestock vegetative production from the new seedings will provide a forage reserve during dry cycles that will improve consistency in livestock stocking rates and management over the long-term.

c. Terms and Conditions for Livestock Grazing Use

(1). Authorized grazing use will be in accordance with the Big Springs Allotment Final Multiple Use Decision dated _____.

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

(3). Supplemental feeding is limited to salt, mineral, and/or protein supplements in block, granular or liquid form. Such supplements will be placed at least 1/4 mile from live waters (springs, streams and troughs), wet or dry meadows, and aspen stands.

(4). An actual use report showing use by pasture, and by use area, will be turned in within 15 days after completing annual use.

(5). All riparian exclosures, including spring development exclosures, are closed to livestock use unless specifically authorized in writing by the authorized officer.

(6). The numbers of livestock to be grazed will remain flexible according to the needs of the permittee. The grazing plan is based on the number of AUMs that may be removed from each pasture. Livestock numbers and periods of use will be applied for on an annual basis. Deviations beyond the flexibility described above may be allowed to meet the needs of the resources and the permittee as long as these deviations are consistent with multiple use objectives. Deviations beyond the limits of flexibility outlined above, including deviations in the turnout date, increases in livestock numbers and deviations from the grazing plan, will require an application, and written authorization from the authorized officer.

(7). Pursuant to 43 CFR 10.4 (g), the holder of this authorization must notify the authorized officer, by telephone with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects or objects of cultural patrimony. 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.

Rationale: The above are standard terms and conditions for grazing use.

4. Continue to conduct necessary monitoring studies and periodically evaluate the effects of grazing to determine if progress is being made in meeting the multiple use objectives and standards for rangeland health. The Big Springs Allotment(s) will be re-evaluated in accordance with priorities established in the Elko Field Office Monitoring and Evaluation Schedule.

Establish new key areas or supplement studies in the following locations (Establish only the minimum number of monitoring sites needed to analyze if management actions are effective in meeting the rangeland health standards are multiple use objectives and resolving issues):

Independence Valley Pasture - Utilization studies/use patterns that represent the principal use areas, and condition and trend transects in ecological sites that represent the principal use areas.

Holborn Pasture - Utilization and condition and trend studies at one or two new key areas that will replace existing key areas 03, 04 & 06. The new key area(s) are to be established in range sites with Thurber needlegrass and/or bluebunch wheatgrass which are highly preferred forage species. One suggested location is in section 34 or 35, T. 38 N., R. 64 E. south of the Holborn private pasture from which water flows from a spring with flows extending southward during spring snowmelt/rains. A second suggested location is south or west of Independence Well in section 13, T. 38 N., R. 64 E. One or both of the key species noted above are common in these areas and are commonly grazed by livestock.

Upper East Squaw Creek (Proposed Riparian Pasture) - Riparian stubble height/utilization transects and trend photos.

Squaw Creek Ranch Field - Riparian stubble height/utilization transects and trend photos.

Lower Squaw Creek Ranch Field - Utilization studies.

Railroad Field - Utilization and condition and trend studies.

Windmill Seeding - Utilization and trend studies.

East Squaw Creek Pasture - Utilization and trend studies on the seeding at the south end.

Collar and Elbow Pasture - Utilization studies within each principal use area, and condition and trend transects in sites that represent the principal use areas.

Shafter Pasture - Condition and trend studies at key area 4306-21 (Shafter Well #2).

East Pequop Bench Pasture - Utilization studies within each principal use area, and condition and trend transects in ecological sites that represent the principal use areas.

Six-Mile Canyon Pasture - Utilization studies and condition and trend transects in ecological sites that represent the principal use areas.

Riparian Exclosures - Trend photos.

New Seedings - Utilization and trend studies.

Rationale: Establishment of additional monitoring sites will be based on the need to determine the effectiveness of implemented management actions and determine progress towards objectives.

Authority for the actions contained in this proposed decision is found in 43 CFR 4100.0-3, 4100.0-8, 4110.2-2 and 4110.2-4, 4110.3, 4110.3-2, 4110.3-3, 4120.2, 4120.3-1, 4130.2, 4130.3, 4130.3-1, 4130.3-2, 4130.3-3, 4160.1, 4160.2, 4180.1, and 4180.2.

Any applicant, permittee, lessee or other interested public may protest the livestock grazing portion of this Proposed Decision under 43 CFR 4160.1 and 4160.2 in person or in writing, to Clinton R. Oke, Assistant Field Manager of Renewable Resources, 3900 E. Idaho Street, Elko, Nevada, 89801 within 15 days after receipt of the decision. The protest, if filed, should clearly and concisely state the reason(s) as to why the Proposed Decision is in error.

Subsequent to the protest period, a final multiple use decision will be issued specifying the appeal procedures.

II. OTHER MANAGEMENT ACTIONS

1. Implement the Big Springs Allotment Fire Management Plan (See Appendix 2).

A summary of the planned actions is provided below. Specific details can be found in Appendix 2.

- Institute an aggressive prescribed fire program in the mixed conifer sites on the Pequop Mountains and in the Bluebell Wilderness Study Area (WSA) on the Goshute Mountains to reduce fuel loadings, create uneven aged stands and reduce the amount of disease (spruce budworm) within the stands.

- Evaluate the use of prescribed fire or mechanical thinning to reduce juniper encroachment into sagebrush/grass and bitterbrush areas in the areas around West Spring in the North Pequop Mountains and the area south of I-80 in the Pequop Mountains.

Required National Environmental Policy Act (NEPA) documentation will be completed for specific project proposals.

Rationale: The 1998 Elko Field Office Fire Management Plan identified fire and fuels management goals and objectives for the Elko Field Office. The Big Springs Allotment Fire Management Plan is tiered from the field office plan and identifies site specific fire suppression, prescribed fire, and mechanical fuels treatments goals and objectives for the public lands.

2. Implement artificial reforestation efforts within burn areas where natural regeneration is unlikely due to fire intensity or severity.

Rationale: The dry, hot climate common during the summer months intensifies fires within our forest types, usually killing most or all of the seedlings and seed. Due to the lack of a seed source, forest sites which have experienced high intensity fires typically do not regenerate before the microorganisms within the soils die out. These microorganisms are critical to tree survival. Those forest sites must then regenerate outward from the

edges of the remaining stands, bringing the microorganisms with them. This can cause burned sites to be deforested for extended periods of time, perhaps hundreds of years.

3. Continue sustained yield management of pinyon/juniper woodlands for forest products. Improve access and utilization of woodland product harvest areas to enhance understory vegetation, provide for public demand, and improve or maintain the health of the forest.

Rationale: Sustained yield management permits the utilization of a resource without depleting the resource. For example, in the case of forest products, harvesting no more in a year or decade than will regrow during the same time period. This ensures a continued supply of the resources for future generations. Thinning within a forest stand will usually release the remaining trees (improving the health) by reducing competition for water, light, and nutrients. Harvesting within stands makes forest products available to the public for various uses. Thinned stands usually produce larger quantities of understory vegetation which may be desirable to various wildlife species.

4. Implement thinnings and possibly planting within areas that are desirable for Christmas tree production. Areas managed will be within high public use zones with good public access.

Rationale: The demand for Christmas trees within the Wells Resource Area exceeds the sustained yield capabilities of the forest. Many of the Christmas tree production sites require stand maintenance to increase the growing space for Christmas tree formed trees. Natural regeneration for pinyon pine has also been very limited within the past decade due mostly to drought conditions. Poor cone crops combined with poor seedling germination and survival has been the result of the limited soil moisture.

5. Treat noxious and invasive weeds in a manner that is most appropriate to the weed species and degree of infestation. Treatment will be in accordance with the Final Environmental Impact Statement for Vegetation Treatment on BLM Lands in Thirteen Western States, the Programmatic Environmental Assessment of Integrated Weed Management on Bureau of Land Management Lands, and the Elko Field Office site specific Invasive-nonnative Vegetation Treatment environmental assessment.

Rationale: The BLM is mandated to manage vegetation on public lands. The BLM must control noxious weeds and undesirable plants to maintain or improve the quality of forests and rangelands for multiple resources.

6. Administer all grazing and any projects within the Bluebell Wilderness Study Area in full compliance with the Interim Management Policy for Lands Under Wilderness Review.

Rationale: The BLM is mandated by the Federal Land Policy and Management Act (FLPMA) to manage Wilderness Study Areas so as not to impair the suitability of each area for preservation of wilderness. This is referred to as the "non-impairment criteria".

7. Drinking Water Source Protection Plan for the City of West Wendover, Nevada. The BLM agrees not to locate or allow the location of any Potential Contamination Sources (PCS), as defined by the United States Environmental Protection Agency and the Nevada Division of Environmental Protection, in Protection Zones (PZ) 1,2,3, and 4, so far as this is consistent with the authority granted to BLM to regulate public land activities.

Rationale: Managing activities that could adversely affect the quality of drinking water is important for public health.

III. WILDLIFE DECISION

1. Modify the wire spacing on the West Pequop Bench Fence (#5608) to meet current BLM specifications. On three wire fences, the wire spacing will be 18"-8"-12" from the ground up, and the bottom wire will be smooth. On four wire fences, the wire spacing will be 16"-6"-8"-12" from the ground up, and the bottom wire will be smooth.

2. Inventory the remaining fences on public lands and modify those fences to BLM specifications as needed to facilitate the movement of big game.

3. Modify existing fences and design new fences to facilitate the movement of deer, antelope and elk, and reduce maintenance costs.

4. Improve vegetation diversity for antelope through the seeding of grass, shrub/half-shrub and forb seeds. The areas to be seeded will be associated with the water developments in the Independence Valley and Holborn Pastures of the West Big Springs Allotment, and the East Pequop Bench and East Squaw Creek Pastures of the East Big Springs Allotment as described under the Livestock Grazing Management section above.

5. Install additional big game guzzlers to provide more water locations and to attract big game to areas little used by livestock. The specific locations for new water guzzlers will be identified at a later date.
6. Manage sage grouse habitat (i.e. leks/strutting grounds, nesting, brooding,and summer and winter habitats) consistent with the Western States Sage Grouse Guidelines, as adapted for use in Nevada.

Rationale: Designing new fences and modifying existing fences to facilitate big game movements improves access to their habitat and reduces fence maintenance.

Insufficient vegetation diversity for antelope was cited as a limitation for antelope habitat in this allotment. The proposed seedings are intended to provide areas of increased vegetation diversity for antelope as well as other wildlife.

Installing additional big game guzzlers expands big game distribution and provides water for other wildlife.

Maintaining and improving sage grouse habitat will assist in maintaining or increasing populations.

IV. WILD HORSE MANAGEMENT

1. Establish an Appropriate Management Level (AML) for wild horses of 672 AUMs (56 wild horses for 12 months) within that portion of the Goshute Herd Management Area in the Shafter Pasture of the Big Springs Allotment.

Table 10. Summary of Changes to Wild Horse Management Levels

Pasture	Pre-Evaluation Initial Management Level (AUMs/Animal Numbers)	Post-Evaluation AML (AUMs/Animal Numbers)
Shafter	768 AUMs = 64 Horses for 12 Months	672 AUMs = 56 Horses for 12 Months

Rationale: The Wells Resource Management Plan (RMP) Wild Horse Amendment established a utilization objective of ten percent (10%) on key vegetative species for wild horse use prior to entry by livestock on winter range so as not to exceed the utilization objective of 55% on key forage species by the end of the combined wild horse and cattle winter use period. Evaluation of use by wild horses has concluded that wild horse use prior to the entry of livestock on the winter range in the Shafter Pasture is the most limiting factor. The principal concern with wild horse use is their use of key grasses during the growing season. Limiting wild horse use to an average of 10% use prior to entry by livestock is considered to be a prudent stocking level to protect the health of key plants exposed to grazing during the critical growing season every year. Most of the wild horse use prior to entry by livestock has occurred during the growing season.

Monitoring information collected at key area 4306-21 and vicinity is most representative of pre-livestock use by wild horses; therefore the data collected in this area was used to establish the AML. The calculated capacity for wild horse use, based on pre-livestock utilization and actual use, is 389 AUMs for seven (7) months of use. Since the Shafter

Pasture is considered to be a year-long wild horse use area, extrapolation of horse use for a full 12 month period results in a calculated AML of 672 AUMs (56 wild horses).

Maintaining wild horses at the appropriate management level will result in a thriving, natural, ecological balance between horses and other resource values. Continued monitoring within the allotment will show if any adjustment in the AML is needed.

2. Remove sufficient numbers of wild horses associated with the Goshute Herd Management Area to attain the appropriate management level (AML) and maintain wild horse populations at a level which will maintain a thriving natural ecological balance consistent with other resource values.

Rationale: See rationale for establishing the AML above.

3. Remove all wild horses that are occupying areas managed as horse free areas.

Rationale: Current census flights confirm that wild horses are occupying areas within the Big Springs Allotment that are currently supposed to be horse free. In particular, wild horses are occupying areas within the Independence Valley Pasture designated as horse free. These horses will be removed to comply with the Wells RMP Wild Horse Amendment. If the wild horses are not removed, their use could disrupt the planned deferred rotation system by reducing the carrying capacity planned for livestock use.

4. Inventory, identify, and eliminate existing wire hazards. Clean up and dispose of old wire, especially where it creates a significant hazard to wild horses.

Rationale: Wild horses have become tangled in old barbed wire especially in old spring exclosures and wild horse traps. Entanglement in barbed wire causes extensive injuries and in some cases the need for the animal to be destroyed.

5. Continue to collect pre-livestock use by wild horses and combined use (cattle and horses) utilization data.

Rationale: Collection of utilization data is necessary to determine if management practices are meeting objectives and will indicate management changes needed in response to climatological changes, such as drought, etc.

6. Continue to collect seasonal distribution and census data on the Goshute HMA. Continue to collect seasonal distribution and census data on horse populations that are occupying areas managed as horse free.

Rationale: In 1991, intensive seasonal distribution flights were begun within the Elko District. These census flights have provided valuable information on horse movements and will continue until monitoring data indicates that the appropriate management level has been attained in all HMAs, and regularly thereafter.

7. Do not construct the fence described in the Wells RMP Wild Horse Amendment that was intended to prevent wild horses from drifting north into the checkerboard land pattern of the Goshute Herd Management Area.

Rationale: The movement of wild horses into the checkerboard area is expected to be minimal when the numbers of wild horses are managed at the AML. The need to construct this fence will again be considered if substantial numbers of wild horses occupy the checkerboard area.

Authority for the wild horse management actions described in this proposed decision is found in Section 3(a) and (b) of the Wild Free-Roaming Horse and Burro Act, as amended, and 43 CFR Parts 4700.0-6, 4710.1, 4710.4, and 4720.1.

The Wild Horse and Burro Regulations at 43 CFR 4770.3 (a) states:

"Any person who is adversely affected by a decision of the authorized officer in the administration of these regulations may file an appeal. Appeals and petitions for stay of a decision of the authorized officer must be filed within 30 days of receipt of the decision in accordance with 43 CFR Part 4."

Although these regulations do not provide for a protest period associated with a decision affecting wild horses, for the purpose of consistency, this Multiple Use Decision is issued as a Proposed Decision with a 15 day protest period. Subsequent to the protest period (15 days from receipt of the proposed decision), a Final Decision will be issued. Therefore, should you wish to protest this decision, you are allowed fifteen (15) days, from receipt, to file your reasons as to why the proposed decision is in error with the Bureau of Land Management, Clinton R. Oke, Assistant Field Manager for Renewable Resources, 3900 E. Idaho Street, Elko, Nevada, 89801.

Sincerely,

CLINTON R. OKE,
Assistant Field Manager
Renewable Resources

Enclosures: Appendix 1 - Standards for Rangeland Health and Multiple Use Objectives

Appendix 2 - Big Springs Fire Management Plan

Map1 - Allotment Boundary for the East and West Big Spring Allotments
Map2 - North of Interstate 80 - Pastures and Proposed Project Locations
Map3 - South of Interstate 80 - Pastures and Proposed Project Locations

cc: BSR Associates, LTD
Newmont Gold Company
Nevada Division of Wildlife, Region II
Nevada State Clearinghouse Dept. Of Administration
Nevada Cattleman's Association
Nevada Land and Resource Company
Nevada State Division of Agriculture
Elko Board of County Commissioners
U.S. Fish and Wildlife Service
Resource Concepts, Inc.
Toiyabe Chapter Sierra Club
Friends of Nevada Wilderness
M. Jeanne Hermann
Charles and John Young
Marti P. Hoots
HTT Resource Advisors
Nevada Commission for the Preservation of Wild Horses
Wild Horse Organized Assistance
Fund for Animals, Rocky Mountain Coordinator
Fund for Animals
Colorado Wild Horse and Burro Coalition
Western Watersheds Project
Committee for Idaho's High Desert

Appendix 1

Standards for Rangeland Health and Multiple Use Objectives

Big Springs Allotment

BIG SPRINGS ALLOTMENT
Standards for Rangeland Health and Multiple Use Objectives

Changes to the allotment specific objectives as a result of the Big Springs Allotment Evaluation process are described below followed by the listing of objectives to be carried forward for the next allotment evaluation. The standards for rangeland health and resource management plan (RMP) objectives, as amended, remain unchanged.

Allotment Specific Objectives

a. Delete the portion of the objective related to improving livestock distribution in the Holborn Pasture in the West Big Springs Allotment and add to the objective to improve distribution within the East Pequop Bench Pasture and Six-Mile Canyon Pasture in the East Big Springs Allotment. The objective to improve the distribution in certain other pastures remains unchanged.

Rationale: Current livestock distribution patterns are considered acceptable in the Holborn Pasture given the availability of existing stockwaters, and there are no management actions proposed to change the current patterns. Improving livestock distribution in the East Pequop Bench and Six-Mile Canyon Pastures is needed, and projects are planned to improve distribution.

b. Delete the general objectives regarding the improvement or maintenance of ecological status in certain pastures.

Rationale: These objectives are not measurable as stated. The specific key area objectives to be carried forward are stated in measurable terms and it is therefore unnecessary to carry forward the less specific objectives.

c. Delete the objective to construct the fence described in the Wells RMP Wild Horse Amendment that was intended to prevent wild horses from drifting north into the checkerboard land pattern of the Goshute Herd Management Area.

Rationale: The movement of wild horses into the checkerboard area of the Goshute Mountains is expected to be minimal when the numbers of wild horses are managed at the AML. The need to construct this fence will again be considered if substantial numbers of wild horses occupy the checkerboard area.

Upland Key Area Objectives

d. Key Area 4306-01 (Independence Valley) -

Revise the ecological condition objective to read "maintain or improve the ecological condition rating of this Shallow Calcareous Loam 8-10" site at or above 48% of the potential natural community".

Revise the frequency trend objective to read "maintain or increase the percent frequency of Indian ricegrass and the needlegrass species".

Rationale: This ecological site is normally dominated by black sagebrush, Indian ricegrass and needle and thread grass, with white sage being a small component. However, the percent composition of white sage at this key area is at least twice as high as the percent allowable in the range site description; therefore, increasing white sage will not improve the condition rating. To increase the ecological condition rating significantly, Indian ricegrass will need to increase. The percent composition for Indian ricegrass that is allowable in the condition rating is 35%; however, it currently represents only 2% of the composition by weight, whereas both black sagebrush and rabbitbrush exceed the maximum allowable composition. Since there is a relatively low composition of Indian ricegrass currently, it is not expected to increase significantly over the next 10 - 20 years due to the paucity of seed produced by the small population of Indian ricegrass plants and the difficulty of overcoming the competition from shrubs in the existing community. Therefore, the intention of the objective stated above is to portray that the plant community will not change significantly over the next 10-20 years while also allowing for the possibility of some improvement if the weather cycles favor an increase in the key forage grasses, particularly Indian ricegrass. Any analysis will need to take into account the effects of precipitation when making comparisons between years.

e. Key Area 4306-02 (Independence Valley) -

Delete the condition and trend objectives, but retain the utilization objective for Great basin wildrye.

Rationale: This community has been disturbed in the past and now support only rubber rabbitbrush along with a small amount of wildrye. This community won't change significantly as long as the rabbitbrush continues to dominate. The wildrye was grazed only slightly during the evaluation period and is expected to remain a small component as long as use conforms to the utilization objective; therefore, only utilization will continue to be monitored at this site.

f. Key Areas 4306-03 & 04 & 06 (Holborn Pasture)

Delete the condition and trend objectives for these key areas and monitor utilization during use pattern mapping. Retain these records for future reference. Develop condition and trend objectives for the proposed new key areas following the collection of baseline data. The utilization objective for the native key forage species will continue to be 50% average use; not to exceed 55% in any single year.

Rationale: The establishment of new key areas will better represent the highly preferred forage grasses in areas that are preferred sites for livestock grazing in this pasture. The existing key areas have not shown to receive consistent use by livestock and/or the studies didn't capture the highly preferred key forage species. Development of key area objectives at the new key areas is best accomplished after the baseline information has been collected.

g. Key Area 4306-05 (N. Pequop Mountain Pasture) -

Revise the frequency trend objective to read "maintain or increase the frequency of Thurber needlegrass".

Rationale: The previous trend objective called for significant increases in bluebunch wheatgrass, Thurber needlegrass and western wheatgrass. Bluebunch wheatgrass is only a small component at this key area and is not expected to increase significantly due to a paucity of seed from the few plants in the community. However, the frequency data collected in 2000 showed significant increases in both Thurber needlegrass and western wheatgrass which are the two common grasses on this site. Thurber needlegrass is the most abundant grass on this site and the most highly preferred forage plant. Thurber needlegrass is also a bunchgrass whereas western wheatgrass is a grass that spreads by underground rhizomes. Grasses that can spread through underground rhizomes can increase dramatically during above average moisture years and likewise shrink back dramatically during drought years. Well established Thurber needlegrass plants are less subject to large swings in frequency and therefore more amenable to analysis of trends. Revising the objective to allow for the maintanence or increase of Thurber needlegrass frequency recognizes that the frequency is high and there may not be room for additional significant increases, but doesn't preclude that possibility.

h. Key Area 4306-19 (East Pequop Bench - North Bench Pasture)

Revise this objective following completion of the fire rehabilitation.

Rationale: This key area was burned twice in the 1990s. The most recent fire rehabilitation actions resulted in the seeding of this area; therefore it is necessary to develop revised objectives after we see the results of the fire rehabilitation.

Note: When additional monitoring data is collected at established key areas, particularly those key areas where data has not been recently collected, the BLM will review the data and determine if the objective to improve or maintain ecological conditions continues to be appropriate and will be modified as necessary.

Specific Riparian and Wetland Site Objectives

i. Add specific objectives for riparian and wetland sites - Please refer to the tables below for the description of desired condition objectives for riparian and wetland sites including the timeframes associated with achieving significant progress towards proper functioning condition (PFC).

Rationale: Management of riparian and wetland sites to achieve proper functioning condition (PFC) is in conformance with the standards for rangeland health. The desired condition objective for several riparian areas includes management for woody riparian plants such as aspen and willow, where they are present, that are also tied to the achievement of wildlife habitat and other multiple use objectives.

The following is the listing of objectives to be carried forward for the next allotment evaluation; however, additional objectives are expected to be established following the data collections at new key areas as well as revision of existing key area objectives as more recent data is collected and analyzed.

A. STANDARDS AND GUIDELINES FOR RANGELAND HEALTH

Standard 1. Upland Sites: Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate and land form.

Standard 2. Riparian and Wetland Sites: Riparian and wetland areas exhibit a properly functioning condition and achieve state water quality criteria.

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 life cycle requirements of threatened and endangered species.

Standard 4. Cultural Resources: Land use plans will recognize cultural resources within the context of multiple use.

B. WELL RESOURCE MANAGEMENT PLAN OBJECTIVES, AS AMENDED:

1. Livestock Grazing

a. Public rangelands are managed to: enhance the productivity of the rangelands by preventing overgrazing and soil deterioration; stabilize the livestock industry dependent on public range; provide for inventory and categorization based on conditions and trends; and provide for orderly use, improvement and development.

b. To provide for livestock grazing consistent with other resource uses...

Attainment or non-attainment of the general objectives above are based on the conclusions for the more specific Allotment/Rangeland Program Summary and Key Area Objectives listed below.

2. Wild Horses (As Applicable to the Big Springs Allotment)

a. Manage wild horses outside of checkerboard areas where land ownership patterns are not a problem for management.

b. Manage wild horses within HMAs and maintain a thriving natural ecological balance consistent with other resource needs.

Specific objectives for wild horse management in the Big Springs Allotment have been developed based on the objectives above. These objectives are included under the Allotment Specific Objectives below.

3. Terrestrial Wildlife habitat

a. Conserve and enhance wildlife habitat to the maximum extent possible.

b. Eliminate all of the fencing hazards in crucial big game habitat and most of the fencing hazards in noncrucial big game habitat.

c. Eliminate all of the high and medium priority terrestrial riparian habitat conflicts in coordination with other resource uses.

Attainment or non-attainment of the general objectives above are based on the conclusions under the Standards and Guidelines for Rangeland Health, and Allotment Specific Objectives below.

d. Manage public lands in the Wells Resource Area on a sustained yield basis to support elk populations at a level consistent with other resource needs, while minimizing impacts to adjacent private and public land resources. Manage elk habitat in good or better condition within six management areas within the resource area to provide forage to sustain a total resource area target population level of 1,980 - 2,420.

The Big Springs Allotment falls within three larger elk management areas. The portion of the allotment north of Interstate 80 and west of the highway to Montello, Nevada falls within the Goose Creek Management Area. The portion of the allotment south of Interstate 80 falls within the Spruce/Pequop Management Area. The portion of the allotment north of Interstate80 and east of the highway to Montello, Nevada falls within the Pilot Mountain Management Area. The conclusions pertaining to these three elk management areas are described under the allotment specific objectives below.

4. Riparian/Stream Habitat

Note: This RMP objective was directed at improving riparian/stream habitat for fish and thus improve riparian habitat for other resources. However, there is only one stream in this allotment (East Squaw Creek) and it is not classified as nor supports a fishery. Therefore, riparian habitat objectives in this allotment are addressed through the Standards and Guidelines for Rangeland Health, and multiple use objectives for terrestrial riparian habitat.

C. ALLOTMENT SPECIFIC OBJECTIVES INCLUDING RANGELAND PROGRAM SUMMARY (RPS) OBJECTIVES:

1. *"Improve livestock distribution in the following pastures: Independence Valley, North Pequop Mountain, Collar and Elbow, Shafter, East Squaw Creek, East Pequop Bench, and Six-Mile Canyon."*

2. *"Improve or maintain all seasonal big game habitat in the Big Springs Allotment to good or excellent condition to provide forage and habitat capable of supporting the following reasonable numbers by 2005: 4,834 mule deer - 6,211 AUMs; 76 antelope - 182 AUMs; 22 bighorn sheep - 53 AUMs."*

3. *"Facilitate big game movements by modifying existing fences to Bureau standards where necessary (17 miles)."*

4. *"Improve, enhance, or develop 5 springs in the Big Springs Allotment to good or excellent condition."*

5. *"Improve crucial deer winter habitat by: cutting (thinning) within 17,000 acres of the pinyon/juniper forest type; chaining or burning and seeding 2,500 acres of sagebrush."*

6. *"Reintroduce bighorn sheep into the Goshute Mountains."*

7. *"Elk - (a.) Manage elk habitat in good or better condition within the Goose Creek Management Area to support a target elk population level of 1,070 plus or minus 10 percent. (Note: Some of the elk are expected to utilize habitat in the Big Springs Allotment.)*

(b.) Manage elk habitat in good or better condition within the Spruce/Pequop Management Area to support a target elk population level of 340 plus or minus 10 percent. (Note: Some of the elk are expected to utilize habitat in the Big Springs Allotment.)

(c.) Manage elk habitat in good or better condition within the Pilot Mountain Management Area to support a target elk population level of 250 plus or minus 10 percent. (Note: Some of the elk are expected to utilize habitat in the Big Springs Allotment.)"

8. *"Manage for a wild horse herd size which will maintain a thriving ecological balance consistent with other multiple uses while remaining within the wild horse herd management area."*

9. *Remove sufficient wild horses to attain the initial herd size and maintain populations at a level which will maintain a thriving natural ecological balance consistent with other resource values.*

D. KEY AREA OBJECTIVES:

1. Short Term Objectives:

The short term objectives are utilization objectives.

The utilization objective for native key forage grasses is as follows:

- 50% average use; not to exceed 55% in any single year.

The utilization objective for introduced seeded grasses is as follows:

- 65% average use; not to exceed 70% in any single year.

The utilization objective for native half-shrubs such as white sage and saltbush is as follows:

- 55% average use; not to exceed 60% in any single year.

The utilization objective for bitterbrush is as follows:

- 25% average use by livestock at the end of the summer use period;
- 45% average use by wildlife and livestock combined at end of winter.

The utilization objective applicable to wild horses is as follows:

- 10% average use by wild horses prior to entry by livestock on winter range;
- 55% average use by wild horses and livestock combined at end of winter.

2. Long Term Objectives:

The specific long term objectives for each key area have been listed below.

4306-01 *"Maintain or improve the ecological condition at or above 48% of the potential natural community."*

"Maintain or increase the percent frequency of Indian ricegrass and the needlegrass species."

4306-02 *Retain the utilization objective.*

4306-03 *Establish new key areas for the Holborn Pasture.*

4306-04 *Establish new key areas for the Holborn Pasture.*

4306-06 *Establish new key areas for the Holborn Pasture.*

4306-05 *"Maintain the ecological condition as measured in 1987 at 66% of PNC by 1996."*

"Maintain or increase the frequency of Thurber needlegrass (STTH2)."

4306-08 *"Improve the ecological condition as measured in 1987 from 43% to 50% of PNC by 1996."*

"Achieve a statistically significant upward trend on the key species AGSP by 1996."

4306-09 *"Improve the ecological condition as measured in 1987 from 43% to 50% of PNC by 1996."*

"Achieve a statistically significant upward trend on the key species FEID, STCO4, AGSP, and PUTR2 by 1996."

4306-10 *"Improve the ecological condition as measured in 1987 from 50% to 55% of PNC by 1996."*

"Achieve a statistically significant upward trend on the key species AGSP by 1996."

"Maintain a stable or static trend on the key species FEID by 1996."

4306-11 *"Maintain the ecological condition at 69% of PNC by 1996."*

"Maintain a stable or static trend on the key specie FEID by 1996."

"Achieve a statistically significant upward trend on the key specie PUTR2"

4306-12 *"Maintain the ecological condition at 72% of PNC."*

"Maintain a stable or static trend on the key species AGSP and SIHY."

4306-13 *"Improve the ecological condition as measured in 1987 from 52% to 60% of PNC by 1996."*

"Achieve a statistically significant upward trend on the key species AGSP and PUTR2 by 1996."

4306-14 *"Maintain the ecological condition at 58% of PNC."*

"Maintain a stable or static trend on the key species STTH2."

4306-16 *"Maintain the ecological condition at 89% of PNC."*

"Maintain a stable or static trend on the key specie AGSP."

4306-17 *"Improve the ecological condition as measured in 1987 from 36% to 45% of PNC by 1996."*

"Achieve a statistically significant upward trend on the key specie AGSP by 1996."

4306-19 Develop new objectives for this area following fire rehabilitation.

4306-20 *"Maintain the ecological condition as measured at 80% of PNC.*

"Maintain a stable or static trend on the key species EULA5 and ATNU2."

E. Riparian Objectives - See tables that follow.

BIG SPRINGS ALLOTMENT				
Location	**Baseline Data**	**Time Frame and Parameters**		
		2 Years after Management Changes Implemented[1]	**4 Years after Management Changes Implemented[1]**	**Desired Condition 2010**
East Squaw Creek -				Based on site potential, a riparian community composed of sedges and rushes, willow, and aspen is expected with at least two age classes of aspen and willow.
Upper East Squaw Creek Pasture	Nonfunctional	Functional at Risk - Upward Trend	Proper Functioning Condition	
Squaw Creek Ranch Field	Functional at Risk (Static)	Functional at Risk - Upward Trend	Proper Functioning Condition	
		A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank at the end of the growing season or grazing season, whichever occurs later. Use on current years growth of aspen and willow is 35% or less.	A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank at the end of the growing season or grazing season, whichever occurs later. Use on current years growth of aspen and willow is 35% or less. There will be less than 20% hummocking and hoof action of the surface area with recovery occurring after a season of rest.	A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank at the end of the growing season or grazing season, whichever occurs later. Use on current years growth of aspen and willow is 35% or less. There will be less than 20% hummocking and hoof action of the surface area with recovery occurring after a season of rest.

[1] Implementation of interim grazing systems.

BIG SPRINGS ALLOTMENT				
Location	**Baseline Data**	**Time Frame and Parameters**		
		2 Years after Management Changes Implemented[1]	**4 Years after Management Changes Implemented[1]**	**Desired Condition 2010**
Lower Nanny Spring	Proper Functioning Condition	Proper Functioning Condition	Proper Functioning Condition	Based on site potential, a riparian herbaceous community composed primarily of sedges and rushes is expected with an aspen stand around the spring with at least two age classes of aspen expected. Fencing of the aspen is planned to ensure recruitment of younger aged trees to perpetuate the stand.
[1] Implementation of interim grazing systems.				

BIG SPRINGS ALLOTMENT				
Location	**Baseline Data**	**Time Frame and Parameters**		
		2 Years after Management Changes Implemented[1]	**4 Years after Management Changes Implemented[1]**	**Desired Condition**
Springs	Nonfunctional and Functional at Risk (Static)	Functional at Risk - Upward Trend A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank and wet meadow areas at the end of the growing season or grazing season, whichever occurs later.	Proper Functioning Condition A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank and wet meadow areas at the end of the growing season or grazing season, whichever occurs later. There will be less than 20% hummocking and hoof action of the surface area with recovery occurring after a season of rest.	Based on site potential of the springs, a riparian herbaceous community composed primarily of sedges and rushes is expected. A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank and wet meadow areas at the end of the growing season or grazing season, whichever occurs later. There will be less than 20% hummocking and hoof action of the surface area with recovery occurring after a season of rest.

[1] Implementation of interim grazing systems or redesign of spring developments that are nonfunctional due to development design.

BIG SPRINGS ALLOTMENT				
Location	**Baseline Data**	**Time Frame and Parameters**		
		2 Years after Management Changes Implemented[1]	**4 Years after Management Changes Implemented[1]**	**Desired Condition 2010**
Other Springs	Nonfunctional and Functional at Risk (Static)	Functional at Risk - Upward Trend A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank and wet meadow areas at the end of the growing season or grazing season, whichever occurs later.	Proper Functioning Condition A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank and wet meadow areas at the end of the growing season or grazing season, whichever occurs later. There will be less than 20% hummocking and hoof action of the surface area with recovery occurring after a season of rest.	Based on site potential of the springs, a riparian herbaceous community composed primarily of sedges and rushes is expected. A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank and wet meadow areas at the end of the growing season or grazing season, whichever occurs later. There will be less than 20% hummocking and hoof action of the surface area with recovery occurring after a season of rest.

[1] Implementation of interim grazing systems or redesign of spring developments that are nonfunctional due to development design.

BIG SPRINGS ALLOTMENT				
Location	**Baseline Data**	**Time Frame and Parameters**		
		2 Years after Management Changes Implemented[1]	**4 Years after Management Changes Implemented[1]**	**Desired Condition 2010**
Wally Spring	Nonfunctional	Functional at Risk - Upward Trend A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank at the end of the growing season or grazing season, whichever occurs later. Use on current years growth of aspen and willow is 35% or less.	Proper Functioning Condition A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank at the end of the growing season or grazing season, whichever occurs later. Use on current years growth of aspen and willow is 35% or less. There will be less than 20% hummocking and hoof action of the surface area with recovery occurring after a season of rest.	Based on site potential, a riparian herbaceous community composed primarily of sedges and rushes is expected with some willows at the spring and scattered along the stream course and an aspen stand at the base of the hill on the south side. At least two age classes of aspen and willow are expected. A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank at the end of the growing season or grazing season, whichever occurs later. Use on current years growth of aspen and willow is 35% or less. There will be less than 20% hummocking and hoof action of the surface area with recovery occurring after a season of rest.

[1] Implementation of interim grazing systems.

Appendix 2
Fire Management Plan
Big Springs Allotment

Introduction:

In 1998, the Elko Field Office prepared a new district-wide fire management plan that encompasses all BLM administered public lands within the Elko District boundaries. This plan was prepared as per national direction and went through public review and internal review. This plan was approved at the national level in 1999. This plan defines the goals and general objectives for fire suppression, prescribed fire and fuels management for the District.

This site specific plan tiers off the Field Office plan and sets specific objectives for this area in the areas of prescribed fire fuels management. The wildland fire suppression objectives remain constant with the Field Office plan. The site specificity of this plan will assist in meeting the goals and objectives of the Elko Field Office Plan.

Background Information:

The Field Office Fire Management Plan differentiated fire management goals and objectives by area and vegetation type. These "polygons" are the basis for all fire management activity within the district. The Big Sprigs Allotment Fire Management Plan has ten (10) of these polygons located within its scope.

These polygons (Map 10, Appendix 1) and their descriptions are as follows:

A-3 Cultural Sites, Historic and Protohistoric

Current Condition - These areas of high cultural concern contain perishable sites, which are easily damaged by wildfire. They occur in vegetation types ranging from low sagebrush to pinyon-juniper woodlands.

Future Desired Condition - Maintain integrity of these cultural sites.

Constraints - Mechanized equipment can be used to keep wildfire out of these areas only with the on-site presence and approval of an archaeologist. No mechanized equipment is to be used within the perimeter of the sites.

Appropriate Fire Management Response - All fires will be kept to minimum possible acreage based on firefighter safety and restrictions on mechanized equipment usage. There will be no planned ignitions within these boundaries. Fire history for these areas is 1.4 fires per year burning an average of 17 acres.

Prescribed Fire/Fuels Management Opportunities - None within boundaries. Outside of boundaries some limited prescribed fire or mechanical treatments to create buffer zone around the sites.

B-2 Toano Range, South of I-80

Current Condition - Primary vegetation type is pinyon pine intermixed with mountain mahogany, bitterbrush, perennial grasses and sagebrush. This area's resource management goals are for woodland products, especially pine nut collection and Christmas tree production, and livestock grazing.

Future Desired Condition - Maintain current vegetative structure.

Constraints - None, unless archaeological sites are present.

Appropriate Fire Management Response - Hold unplanned ignitions to 300 acres at least 90 percent of the time. Fire history for the area is that of isolated occasional small (0-1 acre) fires. The vegetation type is conducive to large wind-driven or plume dominated fires that can burn 500 to 5,000 acres in one to two burning periods. fire history for this area shows an average of 0.25 fire per year burning 0 acres.

Prescribed Fire/Fuels Management Opportunities - Use mechanical treatments to change vegetation age structure and composition. Chainings and seedings within this polygon can be maintained through the use of planned ignitions. These ignitions will not be considered part of the decadal burn targets since they are maintenance of existing developments.

B-3 District-wide Areas of Annual Vegetation Invasion

Current condition - Cheatgrass and other annuals dominate these polygons. Isolated areas of sagebrush in early to mid seral condition and native perennial grasses are also present.

Future Desired Condition - Resource management objectives for these areas are to restrict the expansion of cheatgrass into surrounding native plant communities and to increase the amount of native vegetation available for livestock grazing, wildlife habitat and watershed improvement.

Constraints - None, unless archaeological sites are present. Pole Creek on the south side of the Cortez Range and Pearl Creek on the west side of the Ruby Mountains are critical watersheds within these polygons. Primary emphasis is on preventing the spread of fire into areas of native vegetation.

Appropriate Fire Management Repsonse - Hold unplanned ignitions to 300 acres at least 90 percent of the time. The Battle Mountain Field Office has their adjacent areas in a "C" category. They will prevent the spread of fire in their "C" polygon into this polygon. Fire history in these areas is dominated by large acreage fast- burning fires that often exceed 20,000 acres. They are dependent on the amount of winter/spring precipitation and the resultant amount of annual vegetation growth. These fires expand

the annual vegetation areas by burning into native vegetation, which allows the annuals to colonize the burned areas in the year after the fire. Fire history for this area shows an average of 21 fires per year burning 12,149 acres.

Prescribed Fire/Fuels Management Opportunities - Prescribed fire is to be used in a selective manner in these areas, usually in conjunction with mechanical or chemical treatments. Planned ignitions can be used in a limited way to accomplish specific management objectives within areas of native vegetation. Chainings and seedings within this polygon will be maintained through the use of planned ignitions. These ignitions will not be considered part of the decadal burn targets since they are maintenance of existing developments.

B-6 Low Sagebrush & Desert Shrub

Current Condition - These areas are dominated by plant communities that do not have fire as part of their natural ecology. Vegetation types are dominated by desert shrub and low sage communities with varying degrees of perennial grasses and forb composition. Management objectives in these areas are to maintain the native community, to provide for livestock and wildlife forage. Some of the areas are important for winter antelope habitat.

Future Desired Condition - Prevent annual vegetation or non-native plant inursions into this vegetation type resulting from disturbance of the existing community. Maintain native vegetation composition.

Constraints - Low vegetation response potential, limited precipitation and fragile soils mean that mechanized equipment will scar the land and make rehabilitation expensive. Engine usage should be the preferred alternative since most of the fires occur next to roads.

Appropriate Fire Management Response - Hold unplanned ignitions to 100 acres at least 90 percent of the time. All human caused fires will be fully suppressed using minimal impact suppression techniques (MIST). At low fire activity levels, natural ignitions may be monitored if this will cause less ecological impact than suppression. All fires will be fully suppressed using MIST. Ely Field Office has an acreage target for unplanned ignitions of 50 acres for adjacent areas (Steptoe Valley) in the same vegetative community. Elko Field Office will suppress all fires within two (2) miles of the boundary to the higher Ely standard. Fire history in these areas show an average of 6.5 fires per year burning 513 acres.

Prescribed Fire/Fuel Treatment Opportunities - Prescribed fire should be a very minor component in these areas and then only to achieve site specific resource objectives within the context of the larger area.

B-7 Big Sagebrush Areas with Low to Moderate Response Potential

Current Condition - The vegetation in these areas is dominated by big sagebrush and perennial grasses with bitterbrush on higher elevation sites. The management objectives in these areas are to maintain and improve the native vegetation conditions while protecting critical watersheds and providing forage for livestock and wildlife. These areas occur in lower precipitation zones (primarily 8-10"/year). The response potential following wildfire is limited due to current ecological conditions. This means that most wildfires in these areas will need rehabilitation to restore the native community and ground cover.

Future Desired Condition - Maintain and improve the native vegetation and species diversity. Increase perennial grass production. Improve riparian areas to make fully functioning.

Constraints - The low to moderate response potential of these sites means that mechanized equipment will leave long-term scars on the land and will increase the rehabilitation costs. Therefore, mechanized equipment should be used only to protect areas of high resource concerns or values, such as critical watersheds or streams and intermixed private property.

Appropriate Fire Management Response - Hold unplanned ignitions to 300 acres or less at least 90 percent of the time. Minimize disturbance and retardant use in critical watersheds. Fire history in these areas is moderate with most fires being limited to one to 100 acres but 10-15 percent of the ignitions burn from 500 to 5,000+ acres. These areas also contain intermingled private property. Fire history for these areas show an average of 11.3 fires per year burning 2,894 acres.

Prescribed Fire/Fuel Management Opportunities - Prescribed fire may be used in limited areas to achieve specific management goals. Chainings and seedings within this polygon will be maintained through the use of planned ignitions. These ignitions will not be considered part of the decadal burn targets since they are maintenance of existing developments.

B-8 Wood Hills, Pequops and North end of Toanos

Current Condition - These areas are dominated by woody vegetation consisting of pinyon pine, mountain mahogany and bitterbrush with associated perennial grasses and shrubs. The response potential of the lower elevation sagebrush/grassland types is limited due to lower precipitation and current ecological conditions. The potential for invasion by annual vegetation following wildfire is high. The vegetative response potential increases in the higher elevations. Management objectives are for woodland products, maintaining crucial big game habitat, and providing livestock forage.

Future Desired Condition - Maintain woodland characteristics of the area. Improve age structure class of woody vegetation. Maintain and improve wildlife forage production. Maintain perennial grass diversity and prevent the incursion of annual and non-native species.

Constraints- Vehicle access is fairly limited, so aerial delivery of resources may be effective at higher elevations. Potential for cheatgrass colonization is high so ground disturbance should be limited.

Appropriate Fire Management Response - Hold unplanned ignitions to 300 acres or less at least 90 percent of the time. This is a high fire occurrence area with primarily small (0-10 acres) fires; five to 10 percent of the fires burn between 100 and 500 acres. This vegetation type is conducive to wind-driven or plume-dominated fires that can burn 500 to 5,000 acres in one to two burning periods. Fire history for these areas show an average of 7 fires per year burning 353 acres.

Prescribed Fire/Fuels Management Opportunities - Prescribed fire can play a limited role in improving big game habitat where it does not conflict with woodland resources. Mechanical treatments are preferable in the woodland areas to change stand age structure and composition. Use mechanical vegetation treatments to create openings of 10 to 50 acres. Prescribed fire will be used to met wildlife objectives only if mechanical treatments are not feasible. Chainings and seedings within this polygon will be maintained through the use of planned ignitions. These ignitions will not be considered part of the decadal burn targets since they are maintenance of existing developments.

B-9 North Pequops, Murdock and Toano Draws

Current Condition - These areas are dominated by Utah juniper, pinyon pine, bitterbrush and mountain mahogany at the higher elevations and by sagebrush and perennial grasses in the drainage bottoms. The management objectives for this area are for woodland products, maintaining crucial big game habitat, protecting the extensive cultural sites and producing forage for livestock.

Future Desired Condition - Maintain woody vegetation characteristics of this area. Maintain and improve woody species age class distribution. Improve wildlife habitat. Maintain perennial grass diversity. Prevent incursion of annual and non-native plant species.

Constraints - Extensive cultural sites limit mechanized equipment use. An archaeologist needs to be on-site to approve any such usage. Intermixed private lands and the town of Montello need higher levels of protection.

Appropriate Fire Management Response - Hold unplanned ignitions to 300 acres or less at least 90 percent of the time. Planned ignitions should not exceed 1,000 acres. Planned ignitions will be curtailed if unplanned ignitions accomplish management objectives. Fire history consists of primarily small (0-10 acres) fires with approximately 20 percent of the fires burning between 100 and 500 acres. This vegetation type is conducive to wind-driven or plume-dominated fires that can burn from 500 to 5,000 acres in one or two burning periods. fire history for this area shows an average of 4.6 fires per year burning 330 acres.

Prescribed Fire/Fuels Management Opportunities - The Wells RMP identified 1,000 acres of prescribed fire in this polygon to achieve resource management goals . If the goals of prescribed fire are met with unplanned ignitions, no planned ignitions will be undertaken. Chainings and seedings within this polygon will be maintained through the use of planned ignitions. These ignitions will not be considered part of the decadal burn targets since they are maintenance of existing developments.

C-1 Wilderness Study Areas (WSA's)

Current Condition - The vegetation types in these areas vary from sagebrush and perennial grasses to pinyon-juniper woodlands to mixed conifer woodlands. Primary management objectives for these areas are to maintain their natural characteristics and to comply with the Interim Management Policy for Lands under Wilderness Review.

Future Desired Condition - Maintain the natural ecology of the areas including pre-settlement fire activity. Prevent the encroachment of annual and non-native vegetation into the areas.

Constraints - No mechanized equipment usage. All vehicular traffic must be on routes identified during the initial inventory (1979-1981). Use MIST and "light hand on the land" techniques. Several critical streams and watersheds are within the WSAs' boundaries, including the South Fork Little Humboldt River and tributaries, South Fork Owyhee River, Bruneau River and Salmon Falls Creek.

Appropriate Fire Management Response - Hold unplanned ignitions to 2,000 acres or less at least 90 percent of the time. The fire histories in these areas range from low to high with most being small (0-10 acres). Occasional large (10,000+ acres) fires have occurred in some areas. Both planned and unplanned ignitions can be managed to maintain fire as part of the natural ecology, to reduce fuel loadings and to meet specific management objectives. Fire history for these areas show an average of 3.2 fires per year burning 66 acres.

Prescribed Fire/Fuels Management Opportunities - Use planned ignitions to reintroduce fire into the ecology of the areas. Develop and apply fire prescription guidelines to allow for management of unplanned ignitions through monitoring and/or minimal suppression efforts in these areas if prescription guidelines are met. Planned ignitions will be curtailed if unplanned ignitions meet management objectives. Use MIST in all suppression actions.

C-2 Mixed Conifer

Current Condition - These are high elevation areas with the predominant vegetation type being white fir, limber pine, bristlecone pine and spruce. These stands isolated on the tops of the higher elevation mountain ranges in the eastern part of the district. Because of the lack of disturbance most of these stands are becoming even aged stands and are dominated by dead standing and down trees. There is a heavy fuel load associated with these areas, making them more susceptible to a large stand replacing fire. Desired management for this area is to restore the health of the forest community.

Future Desired Condition - Healthy mosaic of uneven aged conifer stands with reduced fuel loadings.

Constraints - Limited access into these areas makes aerial delivery of resources the most effective tool.

Appropriate Fire Management Response - Hold unplanned ignitions to 100 acres at least 90 percent of the time. Fire history in these areas is that of occasional very small (0-1 acre) fires. The present stand composition would make any large wildfire (unplanned ignition) a lethal, stand replacement fire.

Prescribed Fire/Fuels Management Opportunities - Prescribed fire should play a large part in this process. Because of the fuels build-up in these areas, a series of low-intensity prescribed fires should be done to reduce fuel loadings, open up mineral soil for seedling germination, and increase nutrient recycling and create a mosaic of uneven aged pockets within the stand while avoiding total destruction of the stand as a whole. Prescribed fire can be used in conjunction with thinning projects to reduce the number of stems per acre. Planned ignitions will be used in these areas to meet the management objective of maintaining a healthy stand. Planned ignitions will be low-intensity surface fires with allowable torching of pockets of heavy fuels and will be planned in cycles (five years prior to reentry) to gradually reduce fuel loadings and create a mosaic of different aged stands. The entire polygon will be put into a planned ignition plan. The decadal burn target of approximately 23,500 acres is based on burning one half the area once with low-intensity fire. Develop and apply fire prescription guidelines to allow for management of unplanned ignitions through monitoring and/or minimal suppression efforts in these areas if prescription guidelines are met. Planned ignitions will be curtailed if unplanned ignitions meet the decadal acreage target.

U-1 Small Towns, Mining Operations and Recreation Sites (Urban Interface)

Current Condition - The primary vegetation type around these areas is sagebrush and perennial grasses with intrusions of cheatgrass and other annual vegetation. The management objective for these areas is to preserve and protect the developed features, life and property. This area also includes the rapidly growing urban interface around Elko and Spring Creek Recreation sites may be developed or undeveloped, but receive from moderate to heavy use during the summer and fall months.

Future Desired Condition - Maintain or improve the native vegetation in the area. Use vegetation manipulation to create buffer areas around critical developed sites to provide for public safety.

Constraints - Construction of fire line within the recreation sites should be avoided. If necessary, the minimum line needed should be located outside of developed sites, areas of concentrated use or Special Recreation Management Areas. Efforts should be made to keep unplanned ignitions from reaching these areas. Powerlines, communication sites and other critical sites within the mining and oil/gas sites need full protection. Problems associated with these areas include powerlines and arcing and chemical and explosive storage areas. Fire history for these areas shows an average of 9.4 fires per year burning 2,901 acres.

Appropriate Fire Management Response - Hold unplanned ignitions to minimal acreage within this polygon. Fire history is minimal because of their size, however, many can be easily threatened by wildfire. .

Prescribed Fire/Fuels Management Opportunities - Use planned ignitions to reduce fuel loadings. Most of the mining areas (Carlin Trend) and urban interface are within Nevada Division of Forestry protection zones. Work with NDF and the mining companies to do hazard fuel reduction (either mechanical or planned ignitions) around critical sites. Area also has great potential for green stripping projects to create buffers around critical areas. The small towns in greatest risk from wildfire are Midas and Tuscorora and are priority for greenstripping or other fuels modification treatments.

Fire History

The Big Springs allotment has one of the highest wildland fire occurrences in the Elko Field Office. In the period from 1980 to 1996 there were 113 documented wildland fires within the boundaries of the allotment. There is no easily assessable data for the years 1997 to 1999, but based on prior history, there were probably an additional 30 to 40 wildland fires. The majority of these fires occur in the pinyon-juniper and mixed conifer vegetative areas on the Pequop Mountains, the Toano Range and Wood Hills. Most of these fires were small averaging less than ½ acre, with occasional fires of from 100 to 300 acres and from 1000 to 3500 acres. (See Map 10).

Fire History. Table 1

Polygon	Number of Fires	False Alarms	Largest Fire Size and Year	Total Acres
A3 Cultural Areas	6	0	10 - 1986	15.5
B2 Toano's South of I-80	2	2	0.1 - 1991	0.2
B3 Cheatgrass Areas	1		260 - 1984	260.0
B6 Low Sage/Desert Shrub	18	4	3871 - 1991	3,877.8
B7 Big Sagebrush	13	4	2 - 1981/84	9.0
B8 Toano Range	9	3	103.6 - 1989	116.2
B8 Wood Hills	17	5	3249.8 - 1994	3.254.4
B8 Pequops Mtns.	26	4	315.1 - 1984	380.7
B9 N. Pequops	11	2	1178 - 1985	2,208.5
C1 WSA	0 in Allot	0	0	0
C2 Mixed Conifer	7	0	1.0 - 1981	1.6
E1 Urban Interface	3	0	0.1 - 1990	0.3
Totals	**113**	**24**		**10,125.3**

Note: This includes total wildland fire ignitions from 1980 to 1996 and large fire occurrence from 1980 to 1999.

Wildland Fire Suppression Tactics:

A. **Recommendation:** Maintain the current suppression strategies as called for in the 1998 Elko Field Office Fire Management Plan for "polygons" A3,B2,B3,B6,B7,B8,B9, and U1.

Rationale: The fire management plan takes into account fire occurrence and size and location of suppression resources to achieve the "Most Effective Level" of fire suppression for the district in its entirety. The effectiveness of suppression is monitored through periodic evaluations.

B. **Recommendation:** Create Wildland Fire Use Areas in the Bluebell WSA (entire area), and the Pequops Mountains from 7,500 feet up. Allow fire to be re-introduced into the ecosystem to assist in maintaining the remnant mixed conifer forests and their associated aspen stands, grass and sage "balds" and associated brush species. This phase will include the cultural inventories necessary under the 1999 State Protocol Agreement between the BLM and the Nevada State Historic Preservation Office.

Wildland Fire Use Areas will follow the guidelines described in Wildland and Prescribed Fire Management Policy, Implementation Procedures Guide of August 1998 and future revisions. This includes:

1. Stage I: Initial Fire Assessment and Go-No-Go decision within two (2) hours of discovery.
2. Stage II: Short-Term Implementation Actions within 24 hours (currently under revision)
3. Stage III: Long Term Implementation Actions if periodic Fire Assessment indicates need.

Fires occurring in these areas may go through one or more of the above stages dependent on fire size, complexity and longevity. Stage 1 is the initial Go-No-Go decision. Stages II and III represent tactical implementation plans which include fire behavior, risk assessment, overall objectives and mitigation plans (holding, limited suppression actions, closures, etc.).

Prescriptive Parameters:

1. Remote Area Weather Station (RAWS) to be used is Spruce Mountain for National Fire Danger Rating System (NFDRS) fuel models F (pinyon-juniper) and G (mixed Conifer).

2. Local Fire Preparedness Levels: 1 to 5

3. Great Basin and/or National Preparedness Levels : 1 to 5. At levels 4 and 5 State and/or National Concurrence is needed.

4. Energy Release Component (ERC) of appropriate fuel model (F or G) as calculated as a seven day average of a maximum of 80%.

Rationale: Bluebell WSA - The Interim Management Policy and Guidelines for Lands Under Wilderness Review states that fire is a natural component of many wildernesses and that the natural role of fire and fire history be considered in fire management planning. The WSAs' vegetation , especially the pinyon-juniper, mixed conifer and higher elevation sagebrush meadows and "balds" had fire as a natural part of their ecology. Due to fire suppression and other management decisions, these areas have missed one to two fire cycles. Wildland fire use areas with the defined prescription parameters would allow fire be reintroduced as part of the natural landscape. The wildland fire use areas will cover the entire WSAs, not just the portions in the Sheep Complex. They will also be covered in allotment specific fire management plans for the Big Springs and the Spruce Allotments.

Mixed Conifer on the Pequops - Allowing natural ignitions within defined prescription parameters would allow fire to start assuming its natural role in the higher elevation mixed conifer, aspen and sagebrush communities on the Pequops Mountains. The use of natural ignitions in conjunction with prescribed fire and mechanical treatments will maintain the vegetation communities above 7,500 feet. This will also include portions of pinyon-juniper on the steeper rocky slopes. This is based on the following reasons: 1- The steep slopes in these areas pose definite safety hazards to the firefighter, 2- The fuels on the slopes are very broken and discontinuous, 3- There is visual evidence that naturally ignited fires only burn one or two trees per ignition, 4- The cost of suppressing a fire in the steep rocky slopes far exceeds any resource damage done by occasional one tree fires, 5- The natural fire regime in this area is that of infrequent, single tree fires with little potential to become large.

Table 2. Dispatch Run Card for Wildland Fire Use Areas

Unit Priority	Staffing Class	#Units
E-1W*	1-5	1 engine for monitoring purposes or aerial recon Based on Duty Officer Decision. Immediately start WFIP process.

NOTE : USE SPRUCE MOUNTAIN RAWS SITE FOR ERC CALCULATIONS

****

Table 3. Goshute Peak, Bluebell WSAs, Sugar Loaf, White Horse and Kinsley Mountains Wildland Fire Implementation Plan Flow Chart

Local Fire Preparedness Level 1-5

|

Yes - Stage I time frame 2 hours

|

Great Basin/National Preparedness Level 1-3

| |

Yes No----- NSO/National Approval –No---- Suppress

| |

|----------Yes

|

ERC (7 Day Average) 80% or less

| |

Yes No------ Suppress

|

Implement Stage I

|

Ignition still burning after 24 hours (or proposed time frame revision in National Policy)

| |

Yes No----- confirm out and fire report

|

Implement Stage II

|

Need Assessment Indicates Maintaining Stage II Implementation Actions

| |

Yes No

| |

Continue Stage II Implement Stage III Actions

Prescribed Fire and Fuels Management Objectives

For an in-depth discussion of fire effects on fire dependent vegetation types, see "Vegetation Treatment by Fire" Environmental Assessment BLM/EK/PL-98/026.

This fire plan establishes baseline/minimum prescribed fire and fuels management goals for this complex. Other projects may be incorporated into this plan at a future date depending on additional resource needs.

A. Mixed Conifer Sites on the Pequop Mountains

Recommendation: Initiate an aggressive prescribed burn program to reduce fuel loadings and to reduce stand density. Use fire to create uneven-aged stands to reduce the possibility of large stand replacement fires. Concentrate management ignited fire in the areas of white fire domination to eliminate disease problems (spruce budworm) and to open up mineral soil for new seedling establishment. Use natural ignitions in conjunction with this to allow fire to reestablish itself as part of the naturally functioning ecosystem. Mechanical treatments should also be used in the mixed conifer. These treatments can consist of 1- Thinning from below and either piling or lopping the slash accumulation; 2- Burning of the thinning piles after thinning; 3- Using commercial harvest for wood products - this may be difficult without an established logging economy. The target goal is to treat 50 percent of the mixed conifer acreage within the next 10 years.

Rationale: The mixed conifer on the Pequop Mountains is a remnant forest. The current conditions are such that a stand replacement fire could eliminate portions of this forest. An aggressive fuels management program through mechanical treatments (thinning) and prescribed fire would reduce fuel loadings, create uneven aged stands and reduce the amount of disease (spruce budworm) within the stands. These objectives would increase the health of the stands and reduce the size of stand replacement events (crown fires). The goal of maintaining these remnant stands in a healthy condition and as a viable part of the ecosystem would be met.

B. Bluebell WSA

Recommendation: Institute an aggressive prescribed fire program in the mixed conifer within this WSA.

Rationale: The mixed conifer areas within this WSA are remnant forests where the lack of fire and extended drought periods have decreased the health of the forests and increased fuel loadings. Using prescribed fire in these areas would create a mosaic of uneven aged stands, reduce fuel loadings and reduce the incidence of diseased trees. These actions would lead to the increased health of the forest and reduce the chances of large stand replacement fires that may eliminate these remnants from the ecosystem. Opening up the stands would increase the numbers of pine trees while reducing white fir composition. Forest health in these stands is of great importance so that the mixed

conifer forests can be retained. These areas are managed as wilderness, so mechanical treatments are not possible.

C. Pinyon-Juniper Areas around West Spring and Pequop Mountains South of I-80.

Recommendation: Evaluate these areas for using prescribed fire or mechanical thinning to reduce juniper encroachment into sagebrush/grass and bitterbrush areas.

Rationale: Fire has played a role in preserving the sagebrush grasslands from encroachment of woodlands. These areas because of their importance to deer winter range must be evaluated more throughly prior to establishing fuels treatment objectives for the area.

Monitoring and Evaluation

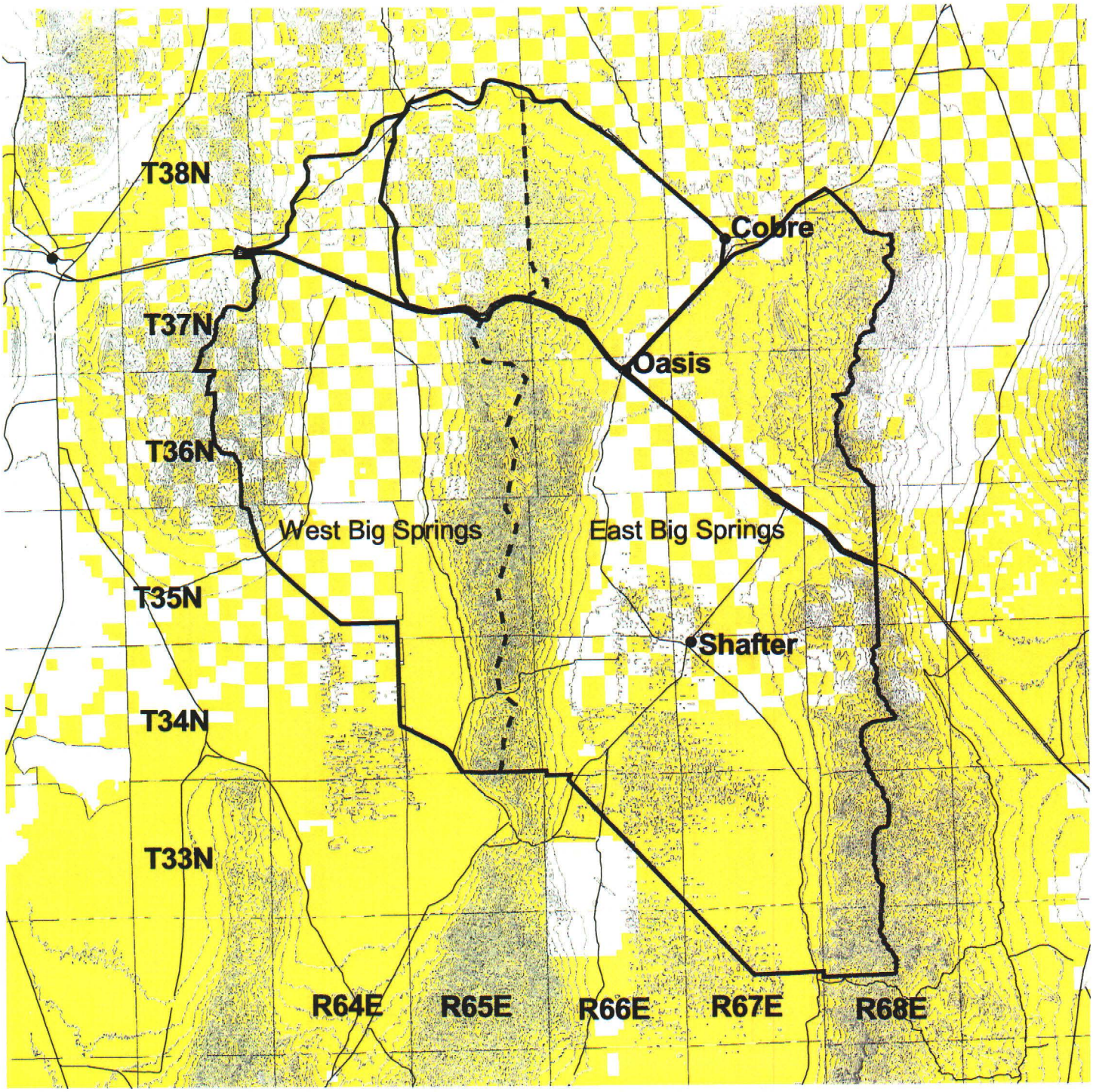
All prescribed fires and fuels treatment projects will be monitored. Plots will be established prior to the treatment. The plots will be read pre-treatment and post-treatment to ascertain if project objectives were met. Wildland fire suppression activity will be evaluated periodically to ensure that suppression objectives are being met. This information will be used in modifying future objectives.

Sites with mechanical thinning and/or natural ignition plans will have a cultural inventory meeting the standards as outlined in the 1999 State Protocol Agreement between the Nevada State Historic Preservation Office (SHPO) and the BLM. All mixed conifer and aspen sites will be inventoried to obtain accurate data on stand size and location and fire history.

Maps

Big Springs Allotment

Map 1
Big Springs East/West Division



Map 2
Big Springs Allotment Proposed Projects
Northern Pastures

West Big Springs Allotment

Holburn Pasture

1. Seeding- up to 1000 acres

North Pequop Mountain Pasture

2. Develop new water location
3. Develop new water location
4. Add a water storage tank to Pequop Well
5. Construct east/west boundary fence from I-80 to Rocky Point

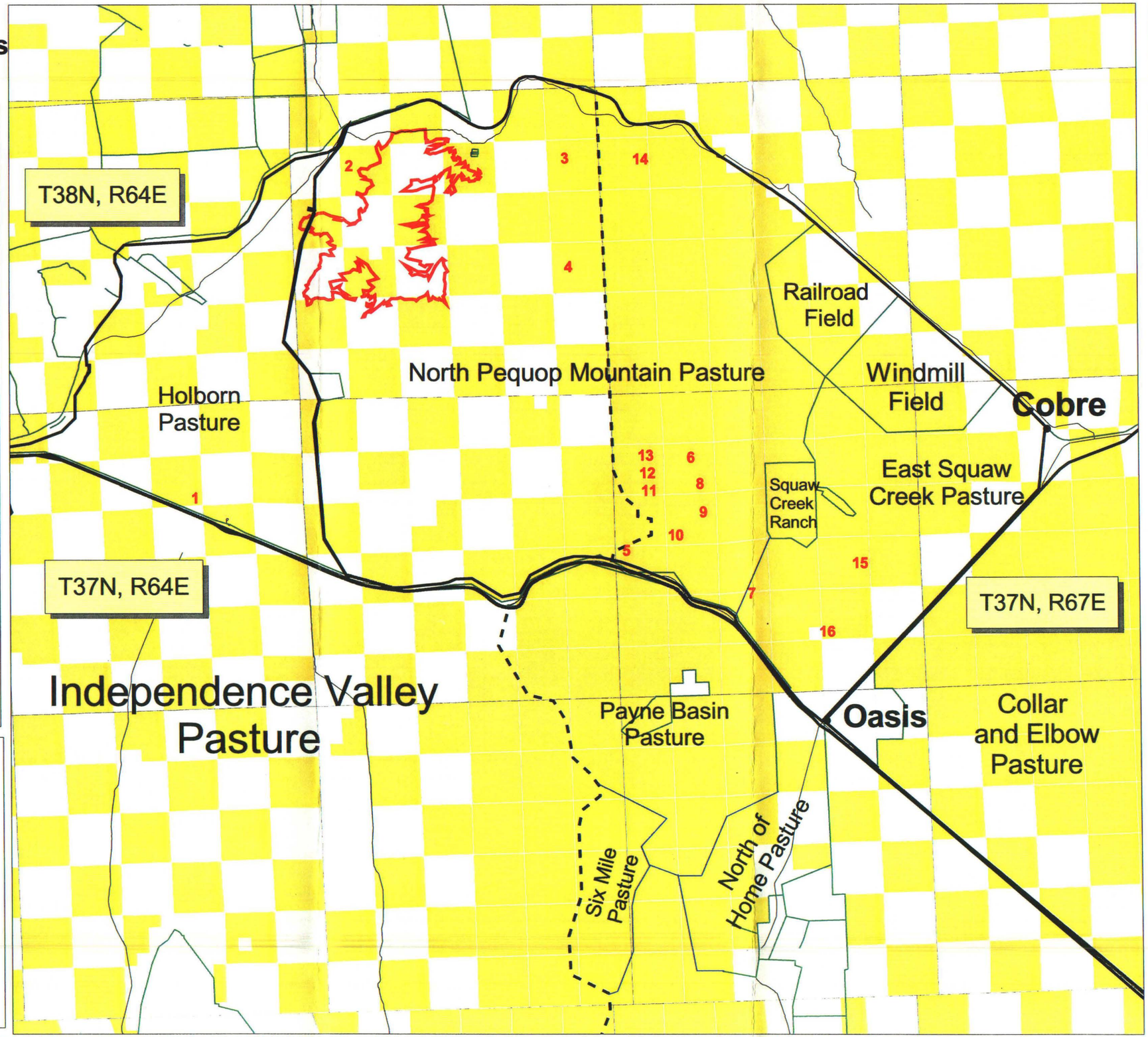
East Big Springs Allotment

North Pequop Mountain Pasture

5. Construct east/west boundary fence from I-80 to Rocky Point
6. Construct fence which connects boundary fence to Squaw Creek Ranch Field
7. Two miles of drift fence from I-80 to Squaw Creek Ranch Field
8. East Squaw Creek exclosure
9. Lower Beacon Spring exclosure
10. Upper Beacon Spring exclosure
11. Wally Spring exclosure and protect cutbank
12. Middle fork of East Squaw Creek spring exclosure
13. North fork of East Squaw Creek spring exclosure
14. Extend a pipeline from the proposed well west half of pasture East Squaw Creek Pasture

East Squaw Creek Pasture

15. 2.5 mile drift fence from Squaw Creek Field to Montello Highway
16. Expand the seeding to 1200 acres and fence



- Cities
- Allotment Boundary
- Pasture divisions
- Fences/ Pasture Divisions
- East/West Division
- Roads
- West Pequop Fire- 2001
- Township/Range
- Sections

Land Status

- Public (Administered by BLM)
- Private

N

Scale 1:125000

2 0 2 4 6 Miles

Map 3
Big Springs Allotment Proposed Projects
Southern Pastures

West Big Springs Allotment

Independence Valley

1. Develop a new water location
   - Seeding up to 4000 acres of public land on locations within this pasture.

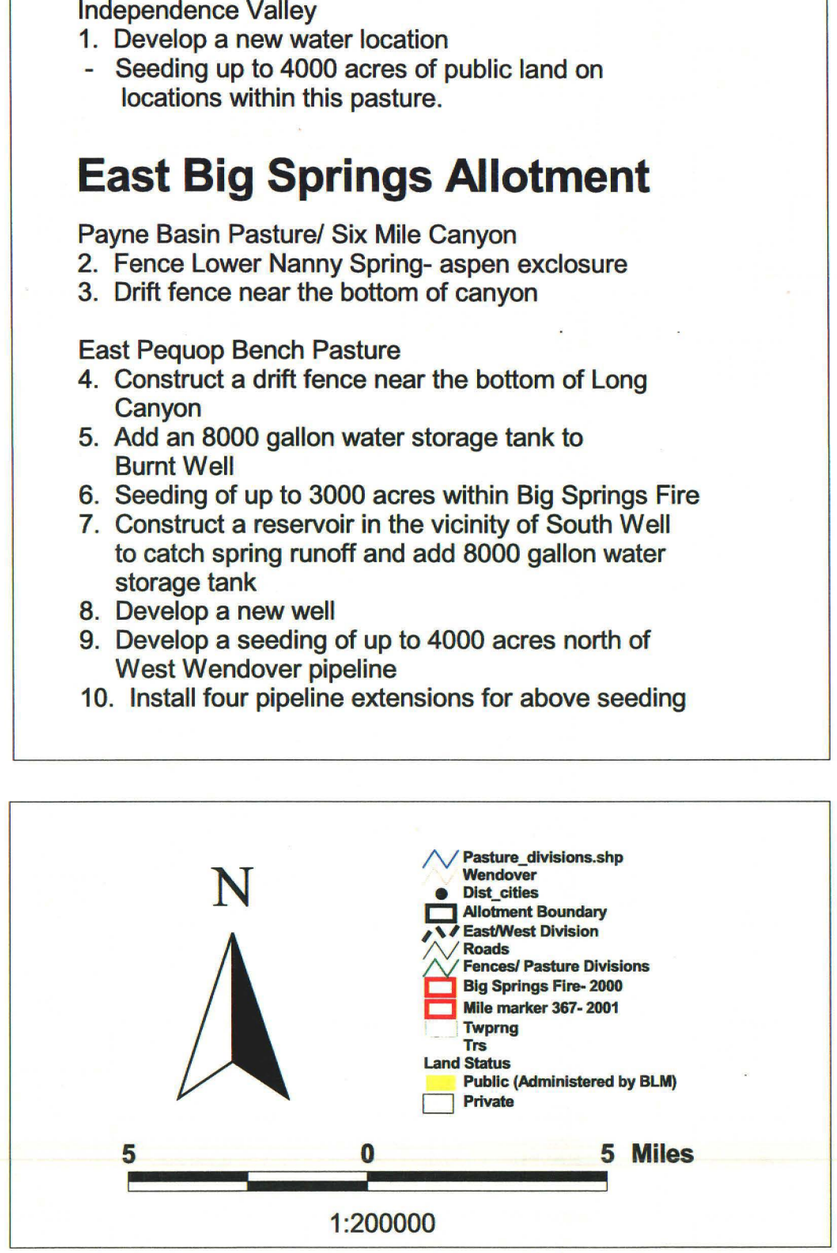
East Big Springs Allotment

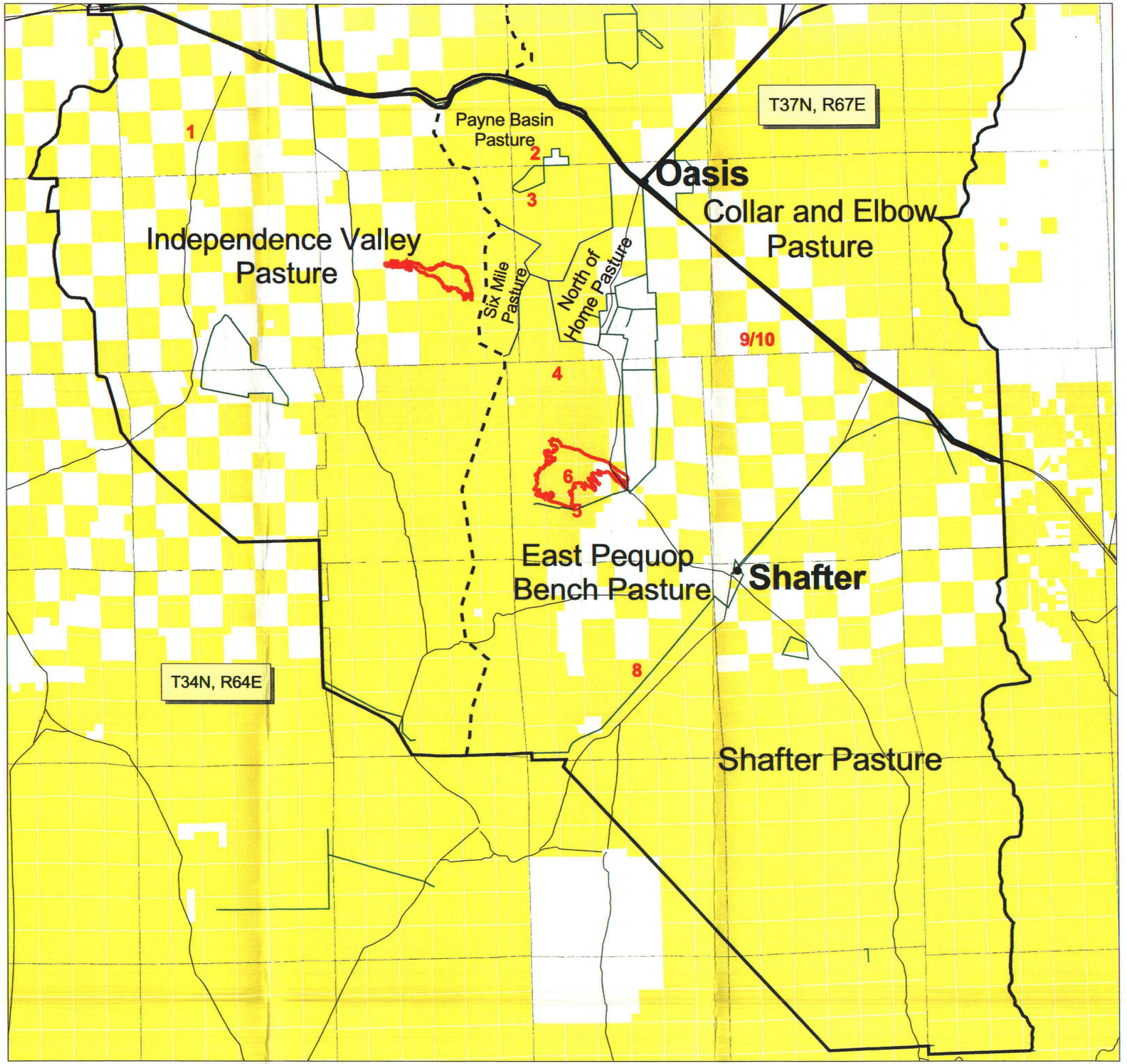
Payne Basin Pasture/ Six Mile Canyon

2. Fence Lower Nanny Spring- aspen exclosure
3. Drift fence near the bottom of canyon

East Pequop Bench Pasture

4. Construct a drift fence near the bottom of Long Canyon
5. Add an 8000 gallon water storage tank to Burnt Well
6. Seeding of up to 3000 acres within Big Springs Fire
7. Construct a reservoir in the vicinity of South Well to catch spring runoff and add 8000 gallon water storage tank
8. Develop a new well
9. Develop a seeding of up to 4000 acres north of West Wendover pipeline
10. Install four pipeline extensions for above seeding





BIG SPRINGS ALLOTMENT
MANAGEMENT ACTION SELECTION REPORT - OCTOBER 2001
Bureau of Land Management (BLM) - Elko Field Office

A. INTRODUCTION

This report responds to public comments on the Big Springs Allotment Evaluation issued in September 2000, describes changes to the evaluation based on public comments and additional input from the Elko BLM Field Office staff, and outlines the management actions selected for implementation in the Big Springs Allotment.

The Big Springs Allotment Evaluation analyzed monitoring data that had been collected during the evaluation period (1987 - 2000). The evaluation drew conclusions to determine whether existing management practices were meeting or making significant progress towards the standards for rangeland health and Resource Management Plan (RMP), Rangeland Program Summary (RPS), and key area multiple use objectives. The evaluation included technical recommendations that proposed changes in management related to livestock and wild horse use, along with other management recommendations, in order to make significant progress towards and achieve the standards for rangeland health and multiple use objectives established for the public lands.

A 30-day comment period was provided for individuals, organizations and agencies to submit written comments, information and concerns regarding the evaluation. Comments were received from the Nevada Division of Water Resources dated October 2, 2000, Larry L. and Antionette Schutte (Parasol Ranching LLC) dated October 16, 2000 and January 4, 2001, the Nevada Division of Wildlife (NDOW) dated October 24, 2000, and F. Scott Egbert (Egbert Livestock LLC) dated October 27, 2000. Copies of the comment letters are available at the Elko Field Office. Comments pertinent to the issues presented and evaluated in the allotment evaluation are addressed below.

Following the responses to comments, there is a list of changes made to the allotment evaluation which is then followed by a summary of progress towards meeting the standards for rangeland health and multiple use objectives, and ending with the description of selected actions to be implemented in the Big Springs Allotment.

B. RESPONSES TO COMMENTS

Nevada Division of Water Resources - October 2, 2000

The Nevada Division of Water Resources comment simply stated that all water sources used for stockwater must be in full compliance with Nevada State water laws.

Parasol Ranching LLC - October 16, 2000

Parasol Ranching strongly disagrees with any permanent reduction in AUMs in the Big Spring Allotment. They stated several reasons for their protest of the proposed reductions which are discussed in the following comments.

Comment #1: *Horse number in Shafter pasture have been miscounted and mismanaged. Private counts of horse numbers are substantially greater than BLM counts. These horses use the same country as livestock and are disturbing the key areas. Horses are allowed year round use of pastures. A substantial reduction in horse numbers is necessary for improvement of rangeland, not a reduction of AUMs for livestock.*

Response: The number of wild horses occupying the Big Springs Allotment during the evaluation period often exceeded the number of wild horses to be managed for as described in the RMP and related RMP amendment due primarily to insufficient funding for timely horse removals and holding facilities. Wild horse use prior to the entry of livestock also exceeded the utilization objectives. Nevada BLM's strategy is now focused on establishing AMLs (Appropriate Management Levels) for wild horses based on monitoring data analyzed through multiple use allotment evaluations and through that process gain support for additional funding to gather the excess horses and maintain their number so as not to exceed the AML. Soon after the AML is established, we plan to remove the excess horses. The number of horses remaining after the gather would be at a population level expected to increase to the AML over a four year period at which time the next removal would be planned. The next removal of excess wild horses in the Big Springs Allotment is scheduled for this Fall 2001.

In the Technical Recommendation section on page 105 (D. Wild Horses) of the allotment evaluation, the Bureau states that wild horse use prior to the entry of livestock on the winter range in the Shafter Pasture is the most limiting factor in determining the AML. The wild horse AML in the Shafter Pasture is based on limiting wild horse utilization of key forage plants to10 percent during the Spring/Summer/Fall use period in order to leave most of the forage for the winter use period when livestock as well as wild horses are present. Although wild horses are expected to graze in the Shafter Pasture year-round, management of horse numbers so as not to exceed the AML is expected to be compatible with maintaining a thriving natural ecological balance consistent with other resource values.

A portion of the comment infers that livestock use is being reduced due to a need to improve rangeland conditions that should be attributed to excess wild horse use. However, the recommended reduction in livestock use in the Shafter Pasture is not the result of a decline in range conditions during the evaluation period. The allotment evaluation concluded that range condition and trend objectives for the winter range in the Shafter Pasture had been met during the evaluation period. The recommended level of livestock use was based on the analysis of actual use and utilization data for both cattle and wild horses during the evaluation period. The amount of forage proposed for allocation to livestock would have been smaller if the total grazing capacity had been allocated to livestock and wild horses based on

the end of winter utilization only; however, the allowable use level of 10 percent by wild horses prior to the entry of cattle on the winter use area resulted in a lesser percentage of the total capacity allocated to wild horses and a higher percentage allocated for livestock use.

Comment #2: *Key Areas 4306-20 and 4306-21 are an inaccurate evaluation of Shafter Pasture because of their relation to trails away from water sources. Key area 4306-20 intersects horse migration trails from Morris Basin to Shafter Butte and key area 4306-21 intersects the horse migration trail from Johnson Canyon to Goshute Pond. Much greater feed is available in the pasture and can be seen in any direction from either well site.*

Response: Key Areas 4306-20 and 4306-21 provide an accurate evaluation of grazing impacts on important forage resources in the Shafter Pasture. These sites are typical of the white sage/sweet sage communities in the Shafter area in terms of species composition, plant vigor and production. These communities provide most of the forage for livestock and wild horses during the winter use period. The key winter forage specie (white sage) is expected to receive moderate use under proper stocking conditions. Although key area 4306-20 is located 2 miles from the closest water (Shafter Well #1), use pattern maps show this area represents the common level of use on white sage observed over much of the winter grazing area. Key area 4306-21 is located 0.5 miles from Shafter Well #2 and is near a regular wild horse travel route. This key area was established in 1990 and is most representative of pre-livestock use by wild horses on the key grass specie (Indian ricegrass) on the winter use portion of the Shafter Pasture; therefore the data collected in this area was used to establish the AML.

These sites were selected using the Nevada Rangeland Monitoring Handbook Procedures for Selecting a Key Management Area. Our files indicate that on September 15, 1987, G.W. Reno of Connecticut General Life Insurance Company signed a key area concurrence form. The key area concurrence form simply states that the permittee approves the locations of the key areas, which is the basis for the monitoring for the allotment. This allotment evaluation is the result of all monitoring data on the Big Springs Allotment. In the future, a new key area may be established in this pasture.

Comment #3: *Incomplete data concerning saltbush communities in relation to livestock/horse use or vole/mole degradation to plant root structure, in areas east of Shafter #2 well, bench area and Boxcar flat, east of Shafter #1 well.*

Response: It is impractical to measure or sample every part of a grazing unit. The two key areas selected in the Shafter Pasture represent the vegetation communities most commonly grazed by livestock and wild horses in the pasture. Implementation of the recommended livestock stocking rates and wild horse AML is expected to result in healthy rangelands in the pasture in general. If there are areas of concern not adequately represented by the current key areas, the Elko Field Office will look at establishing additional studies.

Comment #4: *The trend and use studies performed in late 1980's to 1993 were reflecting drought cycle. Regardless, management will of course place livestock numbers according to feed and water available.*

Response: The allotment evaluation does recognize that the Big Springs Allotment experienced a drought cycle during the evaluation period. There were also years of above normal precipitation. The evaluation period was representative of the normal fluctuations in precipitation and its effect on forage production and plant community conditions and trends. We also recognize the permittees have, on their own initiative, reduced their stocking levels during those years when water and/or forage were in short supply.

Comment #5: *Pertains to Collar and Elbow Pasture. Insufficient data is presented to support this reduction. The key area provides inaccurate data because of relation to water and good feed. We suggest fencing the white sage in the concerned area or move key area.*

Response: There is sufficient data collected for this pasture, not only from the key area studies, but also from use pattern maps and other observations. The studies at key area 4306-15 will be continued to see how this area evolves in the future; however, newkey areas need to be established to represent other important grazing areas.

Regarding the suggestion to fence the white sage area to protect it, there are only a few white sage plants remaining. Absent treatments to remove the big sagebrush that has now invaded this site, it is unlikely the white sage will have an opportunity to reoccupy its previous area even if fenced and rested from further grazing. Although the Elko Field Office is not proposing to rehabilitate or restore this relatively small area at this time, it may be included in future restoration efforts.

Comment #6: *Livestock use, prior to Parasol Ranching allowed grazing in summer months with 400 pairs for 6 months, 2400 AUMs, with four wells, and left nothing but dust. Current management allows 900 dry cows for two months, September and October, after seed ripe. Four wells, hauling water and fall rains and snow help to utilize 70% of pasture instead of 40%.*

Response: The proper stocking rate and timing allowed in a pasture is critical for the improvement of rangelands. It is important to have the livestock distributed throughout the pasture. Adequate water sources are necessary because livestock tend to congregate around water.

Progress in these pastures has been noted for improving livestock distribution (VI. Conclusions; C. Allotment Specific Objectives;1. Page 66). Distribution in the valley/low foothill portion of this pasture is adequate when all the water wells are operated, while livestock use within the Toano Range in this pasture is limited by the lack of water.

Comment #7: *Pertains to Payne Basin and Six-mile Pasture. Changes to the grazing system (such as water improvements and moving cattle to high country) in these areas have increased feed sources. Again, key areas provide inaccurate data because of relation to water.*

Response: Key Areas 4306-16 & 17 represent use in Payne Basin. Key Area 4306-16 was selected due to its proximity to the developed spring located 0.6 miles away; the plant communities composition of important forage species; and topography (gentle slope). Key area 4306-17 was chosen because it is equidistant (0.6 miles) from the Lower Nanny Reservoir and Adele Spring and is representative of the typical species composition within the big sagebrush type. Use pattern maps show these key areas represent broad areas of the pasture that provide the bulk of the forage consumed by livestock. Also see the response to comment #3 above.

The Six-Mile Canyon area is not represented by the key areas in Payne Basin. Grazing in this pasture/use area has not been on a consistent basis due to the lack of perennial water. In addition, wild horses often grazed the upper canyon area leaving little forage for livestock in the vicinity of the reservoirs. Grazing in this pasture currently depends on water from snowmelt/rains to fill the reservoirs; therefore, use will be considered on an annual basis when water is available, and may serve as an alternate use area for a portion of the Payne Basin use. The BLM will look at establishing a key area for the Six-Mile Canyon area.

Comment #8: *Extreme horse use on upper six mile during the last two years has prevented livestock use.*

Response: Six mile pasture is located within a horse free area; therefore the wild horses should be removed in order to comply with the Wells RMP Wild Horse Amendment. The Bureau removed horses from the newly designated horse free area in 1993 in the Pequop Mountains. Since that time, horses have returned to the horse-free area. The next removal of wild horses is planned for this Fall 2001.

Comment #9: *We agree with the fence locations and we agree to maintain them if the fence is built to our specifications: Rock jacks with three wires, suspension fence on ridges; four wires, rock jack braces in saddles, all lay down fence, similar to large gates, possible 2-3 cattle guards. Riparian and springhead fences, which are controlled or closed to livestock use, will be maintained 100% by BLM. Fencing around Squaw Creek pastures should be discussed more because of constant repair due to elk damage.*

Response: The Big Springs Allotment Evaluation proposed various fences to control livestock grazing including let-down fences in big game migration corridors. The final fence design for each project will be determined by the BLM following the appropriate National Environmental Policy Act (NEPA) analysis and public consultation.

Regarding the assignment of fence maintenance, it is BLM policy to assign maintenance responsibility to the primary beneficiaries of improvement projects. The livestock permittee is often viewed to be the primary benefitting party for fences constructed to protect and manage the riparian areas from the impacts of livestock grazing. Alternatives other than fencing can be more adverse to the permittee (e.g. changes in season of use and short periods of use).

Regarding fence maintenance that can arise from elk movements, new fences would be designed to minimize fence maintenance due to elk movements. The BLM will also look at redesigning existing fences to facilitate big game movements and reduce fence maintenance costs.

Parasol Ranching LLC- January 4, 2001

Comment #10: *The BLM should continue the active preference of 16,598 AUMs for the Big Springs Allotment. The average AUMs used is 12,482 AUMs. These additional AUMs are pertinent in the case of further improvements, seeding and water development. We recommend the balance of 4116 AUMs be placed in Conservation Non-use for 5 years, then reevaluated.*

Response: The recommended stocking level/permitted use for livestock in the East Big Springs Allotment is 9,454 AUMs based on pre-BSR Land Exchange numbers which is equivalent to 12,175 AUMs based on post-BSR Land Exchange numbers. Actual livestock use during the evaluation period was generally similar to or below the recommended stocking level. The recommended stocking level is considered by the BLM to be a reasonable approximation of the *average* amount of forage available for livestock use under the conditions that existed during the evaluation period and which continue to the present. The average is based largely on a combination of below normal and above normal forage production years. During below normal production years, the permittees reduced stocking levels resulting in total use below the average. The proposed seedings and certain water developments are expected to increase the forage available or accessible for livestock use; however, this additional forage will first be used to support the deferred rotation grazing systems so that the deferred systems can better operate as planned during the years of below average forage production and also provide a "forage bank or reserve" for use during those years when a pasture is closed to livestock use such as following a fire or seeding establishment. These steps will benefit the livestock operation. In addition, the new seedings are expected to improve big game habitat, particularly for antelope, with some of the extra forage used to support expected increases in big game. During those years when forage available for livestock use exceeds permitted use, temporary increases in livestock use may be authorized when compatible with meeting multiple use objectives. The BLM will consider permanent increases in livestock permitted use after the planned grazing systems have been in operation and evaluation of additional monitoring data supports a permanent increase compatible with achieving and maintaining the standards for rangeland health and multiple use objectives.

The latter part of the above comment requests the livestock AUM reduction be placed in conservation non-use. Conservation use may be approved for periods up to 10 years when the proposed use will promote rangeland resource protection or enhancement of resource values or uses, including more rapid progress toward resource condition objectives. Placing all or a portion of livestock permitted use into conservation use assumes that the livestock forage is present but the AUMs are being placed in nonuse for a period of time to protect or enhance other resource values. However, the proposed reduction in livestock use on the Big Springs Allotment is recommended because the evaluation concluded the present livestock grazing capacity is less than current permitted use. Since the AUM reduction is saying that a certain amount of the current permitted use is not present/available (on a permanent basis), it would be inappropriate to place the AUM reduction in the conservation use category.

There are two other categories to which AUMs can be placed in "nonuse", namely the categories of "temporary nonuse" and "suspension". Temporary nonuse is normally requested by the permittee due to such things as fluctuation of livestock numbers or financial conditions, or drought conditions prevail that year. The assumption is that the livestock forage under full permitted use is regularly available. Temporary nonuse may be approved for no more than 3 consecutive years. The "suspension" category is defined as the temporary withholding from active use of part or all of the permitted use in a grazing permit. When AUMs are placed in the suspension category, such as during periods of fire rehabilitation or other range restoration activities, those AUMs are considered only temporarily unavailable with the expectation those AUMs will become available for active use in the forseeable future. When the BLM can reasonably forsee that additional livestock forage will become available for active use, such as following water developments and seeding establishment, these AUMs may also be placed in the suspension/required nonuse category until they are available for active use. Although it is possible that the new seedings, water developments and grazing systems *may* result in a permanent increase in livestock permitted use, the Elko Field Office cannot forsee with a high level of certainty that these improvements *will* result in a permanent increase. Therefore, it is not appropriate to place the reduction from current permitted use in the suspended category.

Comment #11: *We insist upon proper management by the BLM in accordance to Wild Horse and Burro Act. Reducing and maintaining Goshute horse herds and removing horses from the Pequop horse free area will enhance the management practices of Big Springs.*

Response: The Bureau agrees that removal of sufficient numbers of wild horses from the Goshute Herd Management Area is important to maintain a thriving natural ecological balance consistent with other resource values. The removal of all horses from the Pequop horse free area is necessary to comply with the Wells RMP Wild Horse Amendment and avoid conflicts with other planned uses.

Egbert Livestock LLC - October 27, 2000

Comment #12: *The evaluation does not mention that almost all areas of this allotment are improving despite the presence of 60 to 200 head of wild horses in the horse free area, and four to five times the allotted number in the HMA on the east side of the allotment.*

Response: In general, the Big Springs Allotment Evaluation concluded that upland ecological conditions remained the same, or improved where site potential allowed for improvement. In most cases, the levels of grazing use on native range were near or below the utilization objective(s) which was conducive to maintaining the health of forage plants.

As explained on page 68 of the evaluation, heavy use was recorded at some key areas; however, the data available for analysis shows that heavy use was infrequent or of short duration followed by modest levels of use or deferment or rest which, along with normal to above normal precipitation, allowed the plants to recover. During the years when above normal precipitation was received, observations of grazing use and regrowth following the removal of livestock showed that utilization levels were generally lower because plant productivity was much higher and growth extended for a longer period of time compared to dry years. Plants grazed during the spring/early summer growing season fully regrew the same year after grazing use had ended. Adequate soil moisture for regrowth was still present or was received after the grazing animals had been moved to other pastures. Therefore, in the absence of frequent high levels of grazing use on this allotment during the evaluation period, the changes in plant frequencies and ecological conditions were largely the result of above normal and below normal precipitation cycles. Most of the increase in wild horse numbers occurred during those years of above average production, therefore we didn't see lasting negative impacts to plant health; however, there were areas grazed by horses to a level that left little forage for other uses.

Comment #13: *A couple of the key areas are located in areas where livestock, wildlife, and wild horses must travel in order to get from their grazing area to water and back. Because of the heavy use of key area 4306-01 by wild horses, antelope, cattle, and deer, it has been recommended that the livestock AUMs be cut by 901 AUMs for the Independence Valley pasture. The rest of the pasture has a reading of no use to slight use. The first step should be the removal wild horses from this horse free area. Then a fence could be used to keep cattle off the key area until later in the year when everything has gone to seed.*

Response: The recommended stocking rate/permitted use for the Independence Valley Pasture was based primarily on the actual use and utilization data from 1997, 1998 and 1999. Data were available to calculate carrying capacities for these years and are most representative of stocking levels following the development of two new water sources and the increase in AUMs following reseeding of the Wood Hills Burn. Key area 4306-01 was the only useful key area in the Independence Valley Pasture and the data from this key area substantially influenced the stocking rate recommendations because of livestock's preference for this area serviced by the perennial water at the nearby Warm Springs Ranch and the tendency of livestock to drift back to this area from other use areas in the pasture. Observations of grazing in other use areas in the pasture were also considered in

arriving at the recommended stocking level. The recommended stocking level is considered by the BLM to be a reasonable approximation of the *average* amount of forage available for livestock use at the present time based on utilization objectives. The BLM will evaluate the benefits of installing a fence to prevent cattle from entering the Warm Springs Ranch area from other use areas in the pasture. The proposed reduction in authorized livestock use in the Independence Valley Pasture is only 601 AUMs if water is hauled to the northwest portion of the valley or a new water source developed in this area.

The wild horses located in areas designated horse free should be removed, with the next gather scheduled for the Fall 2001. Also see the response to comment #1.

Comment #14: *The areas south of Interstate 80 where wild horses are located have reductions in AUMs for cattle recommended, while north of Interstate 80, where there are no wild horse, increases in AUMs are being recommended. BLM should take care of the wild horses before reductions AUMs for cattle are made.*

Response: The recommended stocking rate for the Independence Valley Pasture was based on the total grazing capacity that was calculated using actual use by both livestock and wild horses. Since the Independence Valley Pasture is designated as a wild horse free management area, the grazing capacity was allocated to livestock.

Comment #15: *In the final grazing plan it is recommended that certain areas be seeded, but there is no mention of how soon there would be an increase in AUMs after the seeding. The final plan should stipulate that no more than two years should pass after each area has been seeded for an evaluation to be done.*

Response: Please see the response to comment #10.

Nevada Division of Wildlife- October 24, 2000

Comment #16: *Page 6. Pronghorn Antelope. It is estimated that the pronghorn antelope population within the Big Springs Allotment is between 100-150 animals.*

Response: The information on antelope numbers is appreciated.

Comment #17: *Page 6. Bighorn Sheep. The intent of the Division is to reintroduce bighorn to historic habitats within northeastern Nevada. At the present time, the presence of domestic sheep in adjacent allotments precludes reintroduction efforts in the Goshute Range.*

Response: The concern over reintroducing bighorn sheep due to the presence of domestic sheep on the east side of the Goshute Mountains is noted on page 72 of the allotment evaluation. Reintroducing bighorn sheep into the Goshute Mountains continues to be an objective.

Comment #18: *We realize that reasonable numbers for wildlife were included in the 1983 Wells RMP, however, there are no objectives or management actions tied to these numbers and, in our opinion, these numbers just add confusion to the evaluation process. Objectives should be tied to vegetative condition based on vegetative monitoring.*

Response: The general RMP objective for terrestrial wildlife habitat is to "Conserve and/or enhance wildlife habitat to the maximum extent possible...". There are also objectives for reasonable numbers based on estimates of big game populations following achievement of the habitat objectives. The BLM realizes the reasonable number objectives are estimates and that the emphasis is on meeting the objectives for wildlife *habitat*. Our allotment evaluations continue to emphasize meeting the habitat objectives.

Comment #19: *Page 8. Portions of the Allotment provide significant habitat for nesting birds of prey. There are 55 known birds of prey nesting territories on or within two miles of the allotment. The area encompassed by the allotment has 46 recorded ferruginous hawk nesting territories. The evaluation references six of these. It is our preference, given the recent surge in illicit traffic in wild birds of prey, that nest locations not be disclosed in public documents, as was done on page 8C.7.b.2.*

Response: The Elko Field Office will refrain from identifying specific birds of prey nesting locations in future documents.

Comment #20: *Page 8. The balance of known nesting territories include seven golden eagle and two prairie falcon nests. There are likely several un-recorded nesting territories as for the north harrier, American kestrel, northern goshawk, Cooper's hawk, red-tailed hawk, Swainson's hawk, short-eared owl, burrowing owl, flammulated owl, great horned owl, western screech owl and northern saw-whet owl. This allotment is also wintering habitat for the bald eagle, golden eagle, rough-legged hawk, red-tailed hawk, merlin, prairie falcon, and great horned owl. The allotment evaluation should address the needs of these species when assessing the impacts of livestock grazing on upland and riparian nesting and foraging habitats. Ground-nesting and near ground-nesting species such as the burrowing owl, short-eared owl, norther harrier and ferruginous hawk may be particularly sensitive to livestock grazing impacts. Many ferruginous territories stand empty today. Burrowing owl records are nonexistent for the allotment.*

Response: The Bureau of Land Management (BLM) manages habitat and relies on the Nevada Division of Wildlife (NDOW) to collect data on non game and game species. If NDOW provide's site specific nest locations and population trend data, perhaps we can jointly set up additional monitoring criteria which are more closely tied to prey availability, habitat preference and the impacts from grazing.

Comment #21: *The invasion of cheat grass, halogeton and other exotics are also major concerns as these species may be reducing forage availability for our native birds of prey.*

Response: Maintenance of healthy vegetation stands will aid in slowing the spread of less desirable species and their dominance of vegetation communities. The management practices described in the allotment evaluation will assist in this effort. In addition, an aggressive noxious weed reduction program is ongoing in the Elko District which includes herbicide application, disking, grubbing and planting more desirable vegetation.

Comment #22: *Most wildlife species, with the exception of those designated as either threatened, endangered, sensitive or game, are never mentioned in this evaluation. Nongame is mentioned in a general sense in a paragraph on page 8.C.8. The paragraph states that "riparian habitats are particularly important to the majority of these species". While healthy riparian habitats are indeed critical to the life cycles of several species within the allotment, the majority of wildlife in this allotment depend on healthy, native upland habitats for their survival.*

Response: Healthy upland and riparian habitats are important for the survival of wildlife, including nongame species. The proper management of livestock, wild horse and big game use are commonly addressed in allotment evaluations with the expectation that healthy habitats will also benefit nongame species. The Elko Field Office would be interested in receiving any information that NDOW has on nongame species in the Big Springs Allotment that indicates habitat management concerns not addressed in the allotment evaluation.

Comment #23: *Page 9.G. Wilderness Study Areas are to be managed "in a manner that maintain's the area's suitability for preservation as wilderness" pending Congressional action on BLM wilderness in Nevada. Grazing is allowed to continue as long as it doesn't "cause unnecessary or undue degradation of the lands". The appendix maps show no key areas identified within the Bluebell Wilderness Study Area. How is the BLM measuring whether or not their management is having an impact on this WSA?*

Response: Monitoring of the Bluebell WSA indicates that it does not receive significant livestock use because of topography and lack of water. However, the WSA does receive wild horse use. Management of wild horse numbers at the appropriate management level described in the allotment evaluation is expected to conform to the wilderness interim management guidelines.

Comment #24: *Pages 13-41. Summaries of Studies Data. There appears to be a consistent lack of data in the use pattern mapping and pasture production arena from which one can draw legitimate conclusions. Data points from these two areas were gathered during the late 1980's and early 1990's with no data obtained since 1994. There is little or no ecological condition data for the majority of key areas.*

Response: The use pattern maps are still representative of livestock distribution because no significant alterations have been made to management practices with the exception of the Independence Valley Pasture. Some additional water sources have been added to improve distribution in the Independence Valley Pasture and these were taken into account in drawing conclusions about impacts to ecological conditions. Specialists also noted areas with poor distribution in need of improvement during monitoring and other visits to the allotment.

Frequency study data were collected in 1999 and 2000 at four key areas in four of the largest pastures in the allotment. These key areas received the highest levels of use during the evaluation period compared to other key areas or use areas. Analysis of the frequency trend data resulted in the conclusion that the plant communities represented by these studies had maintained their satisfactory condition or improved their condition significantly during the evaluation period (See the conclusions for key areas 4306-01, -05, -14, and -20 beginning on page 73 of the allotment evaluation) . Since other key areas/use areas received lesser levels of use during the evaluation period, we would expect the ecological conditions represented by the other key areas/use areas would have also been maintained, or improved where site potential allowed for improvement.

Comment #25: *Page 53-59. Riparian Habitat. Of extreme concern is the state of existing riparian habitats in the Big Springs Allotment. Most areas are heavily impacted by grazing and developments. Only 23% of the springs on the allotment are in properly functioning condition. If the Bureau is to provide suitable habitats from wildlife species on public lands within this allotment, improvement of these riparian areas must be a priority. It would be our recommendation that the Bureau examine all developed springs to see if they can be modified to recreate historic stretches of riparian habitats.*

Response: The standard for rangeland health for riparian and wetland sites states that "Riparian and wetland areas exhibit a properly functioning condition and achieve state water quality criteria." To achieve this standard and multiple use objectives for most of the riparian areas on the allotment, the Bureau will be implementing changes in management practices and installing range improvements as described in the evaluation.

In addition, there are 10 spring developments that continue to capture all the water and pipe it to a trough. These need to be examined further to determine the likelihood of the spring supporting riparian vegetation such as where the water rises in rocks/rubble or due to low flows. If a water source is likely to support riparian vegetation, then we can consider leaving the development at the spring

source undisturbed and manage for a riparian area somewhere below, or put float valves in the troughs and let the water back-up to the spring source to grow riparian vegetation at that location, etc. There may be other ideas worth considering. On-the-ground examinations of these springs with NDOW, the permittees, and other interests are planned as an effective way to develop specific recommendations on what to do with the 10 springs.

Comment #26: *Conservation organizations, including the BLM, should pursue the acquisition of Warm Springs Ranch from Newmont Mining Company. The Warm Springs marsh, an extremely isolate wetland, has several rare and uncommon wildlife species associated with it including nesting greater sandhill cranes, long-billed curlew, short-eared owl, Independence Valley speckled dace and Independence Valley tui chub. This area should be promoted as a wildlife sanctuary with livestock grazing only as a prescriptive tool.*

Response: The Bureau is interested in acquiring this parcel of land and will be looking for opportunities to pursue this.

Comment #27: *No mention is made of relict dace habitats within the allotment on privately owned lands in Goshute Valley.*

Response: Springs in Goshute Valley which have historically contained dace are all on private lands. The latest survey conducted by NDOW in 1994 found six populations at two locations. To date, no springs are located on public land. Relict dace are located within fenced private lands and are therefore not subject to BLM review.

Comment #28: *Page 61-64. The BLM identifies 25 springs/seeps/ponds within the allotment and admits that 13 are nonfunctional and that 4 are at risk of not functioning (68%). Much of the only stream riparian is also nonfunctional or at risk of not functioning. In an allotment such as this, where water and attendant riparian habitats are so very rare, these oases take on an even greater importance than if water were plentiful. Several species of nongame songbirds use these oases as stopover and refueling sites on their fall and spring migrations. The BLM suggests on page 71 and later in the appendices that five springs should be improved to good or excellent condition. This is unacceptable. All 17 springs, that are not properly functioning, should be improved to good or excellent condition within three years. This will require redesigning several "developed" springs to allow surface water to once again irrigate spring riparian habitat rather than capturing all the water in a trough. It will also require improved management of livestock and feral horse grazing.*

Response: The technical recommendations in the evaluation propose to improve most of the riparian areas on the allotment in order to meet the expectations of the standards for rangeland health and multiple use objectives. The expectation to conform with the standard for riparian and wetland sites goes beyond the objective to improve 5 springs. Please refer to pages 98-102 in the evaluation for a description of many of the actions proposed to improve most of the riparian areas in the allotment. Please also refer to the response to comment #25 above.

Comment #29: *We would also question the designation of proper functioning condition (PFC) for the Nanny Creek drainage. A visit to this site in 1998 revealed an area heavily impacted by livestock.*

Response: A PFC determination was made for the Nanny Creek drainage because there was adequate riparian herbaceous vegetation present to dissipate energy, stabilize soils and prevent erosion. The reservoirs, which are functioning, are stabilizing the springs and the potential for erosion or downcutting is low. Livestock use is also noted in the description of these springs, but this use is not deteriorating the condition because sufficient vegetation remains. Regarding the Lower Nanny Spring area, we plan to periodically fence the spring area to ensure that young aspen can grow above the reach of the cattle and allow the aspen stand to perpetuate itself over the long term.

Comment #30: *Pages 67-70. Allotment Specific Objectives. Ecological Status. It is hard to believe that any legitimate conclusions can be drawn from the small pool of trend data which was collected within many of the pastures on the allotment.*

Response: See the response to comment #24.

Comment #31: *Page 71. Antelope. It is our recommendation that water be available for wildlife use at all livestock developments during the summer period (June - September).*

Response: Surface water will normally be available for wildlife use at or near the developed spring sources, and at well and pipeline troughs during livestock use. Although the technical recommendations didn't address this specific issue, we will consider the feasibility of making water available for wildlife during those times when livestock are not present. Some of the factors to consider include water rights for wildlife, who will pay for water system modifications (e.g. solar pumps, etc.), and operation and maintenance of the water system including shut down and draining, and potential problems of attracting wild horses to an area at an undesirable time of year.

Comment #32: *Page 83. Technical Recommendations. We would be opposed to any permanent fence structure running along the crest of the Pequop Range due to conflicts with big game movement patterns.*

Response: The proposed fence is expected to be a let-down design to minimize disruption of big game movements. An analysis of the proposed fence will be prepared in accordance with the National Environmental Policy Act (NEPA). NDOW, permittees and other interested publics will be provided additional opportunities to review and comment on the specific fence design during the consultation process.

Comment #33: *Pages 84-85. Proposed livestock AUMs and Wild horse AML. Pre-evaluation permitted use was 21,983 AUMs. Proposed post-evaluation permitted use is 16,963 AUMs, an apparent 23% reduction. We know what permitted livestock use is for each pasture of the allotment, however, we find no reference to actual livestock use by pasture for the evaluation period. Since many of the allotment objectives were not met, it would be beneficial to know what level of livestock promoted the nonattainment of so many of the objectives. Data inferred from individual pasture use indicates that average actual use has been 10,827 AUMs since 1987. If permittees were to stock up to the new proposed permitted use, a 57% increase in actual use would be realized. Given the poor condition of riparian habitats and the trend toward invasion of the allotment by exotic forbs and grasses, we don't believe the allotment can sustain this use without further resource damage. It is our opinion that data does not support any increase in the stocking rates for the North Pequop pasture particularly from a riparian condition standpoint.*

Response: Actual livestock and wild horse use during the evaluation period is located in Appendix 4, Key Area Data in the allotment evaluation. With the exception of riparian sites, most of the other allotment specific objectives, including upland condition and trend objectives, were met or adequate progress made towards the long term objectives. The recommended stocking levels for livestock use are based on analysis of upland forage capacities under proper use (See the response to comment #10 also). Generally, actual livestock use during the evaluation period was at or below the recommended stocking levels. Actual livestock use at times was below the recommended stocking level due to various reasons which included stocking down during drought conditions, or a shortage of cattle available for lease, or during periods of transition to new grazing permit holders. Achievement of the riparian objectives will be through fencing and adherence to stubble height and woody riparian utilization limits.

Comment #34: *We also wonder to what expense the Bureau is willing to go to accommodate current numbers of livestock. In the recommendations, a total of 13,200 acres of new seedings are proposed in addition to numerous fences and water developments. It is unlikely that the public will ever be compensated fully for these expenditures based on the level of current grazing fees.*

Response: The Bureau manages for multiple uses and believes that these projects will provide benefits to the public, wildlife, and the livestock permittees. The purposes of the seedings is to improve wildlife habitat by creating mosaic vegetation patterns and increasing species diversity by seeding desirable grass and forb species as well as providing a forage reserve for livestock use during drought years or when other parts of the allotment are closed during fire restoration. Increases in big game numbers may also increase NDOW's hunting tag receipts. NDOW will have an opportunity to comment on the seeding proposals as these projects are brought forward for further analysis. Fences and water developments are important tools for managing livestock by improving distribution and utilization of pastures. Water developments also provide water for wildlife. Fences around riparian areas greatly increase the value of the habitat for wildlife because they respond quickly to rest.

Some of the proposed projects, such as seedings and fences are expected to be partially funded by the permittee involved. The Taylor Grazing Act also states that a portion of grazing fees can be used for range improvements. In addition to these projects, season of use, duration of use, and stocking levels will be modified through the evaluation process to ensure significant progress and/or maintenance of desirable resource conditions in the allotment.

Comment #35: *Pages 104-106. Terms and Conditions for Livestock Use. It is our recommendation that pasture and site specific utilization objectives be established in the allotment. Examples of these objectives can already be found in the District on the Beaver Creek Allotment (i.e. no more than 35% use on riparian woody species, no more than 50% use on herbaceous riparian species or 4-6" stubble height remaining in all riparian habitats). Once objectives are met, cattle would be moved.*

Response: Utilization objectives are proposed for those riparian areas in need of improvement as described in the technical recommendation section of the allotment evaluation. A minimum of four inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank and wet meadow areas at the end of the growing season or grazing season, whichever occurs later. Willow utilization was also set at 35% average utilization of the total current year's leader growth for the Upper Squaw Creek Riparian Pasture and Squaw Creek Ranch Field.

Comment #36: *We would recommend that utilization objectives for livestock be placed on bitterbrush and little leaf mahogany in those areas which provide significant forage for deer during the winter period. It is recommended that livestock use be limited to 25% of current year's growth on bitterbrush and little leaf mahogany in the North Pequop Pasture, the Collar and Elbow Pasture, the Payne Basin Pasture and the Independence Valley Pasture.*

Response: Objectives for bitterbrush can be found in the allotment evaluation in Appendix 2, Objectives. D. Key Area Objectives, 1. Short Term Objectives. The utilization objectives for bitterbrush are as follows:

- 25% average use by livestock at the end of the summer use period.
- 45% average use by wildlife and livestock combined at the end of winter.

Since bitterbrush is as highly preferred by mule deer and cattle as is mountain mahogany, monitoring and adjustment of use on bitterbrush should also provide for proper use on mountain mahogany. Therefore, we do not propose to establish utilization objectives for mountain mahogany at this time. However, if observations of use on mountain mahogany raise concerns separate from those of bitterbrush, additional specific objectives may be established.

Comment #37: *Appendix Map 12 and Page 12. The west face of the Pequop Mountain Range is significant seasonal foraging habitat for several species of hummingbird. There are currently no key area sites monitoring ecological condition of the sagebrush steppe and mountain brush communities in this area. We would suggest three key sites be designated in this area to monitor the ecological condition of this habitat. We would suggest Indian Paintbrush (Castilleja sp) and Scarlet Gilia (Gilia sp) be used as key species. (Note: Key species are limited to grasses and shrubs on page 12. We believe our native forb component is one of the more sensitive and fragile elements of our sagebrush steppe, mountain brush and pinyon/juniper communities. Some of our wildlife species depend on forbs almost exclusively for their livelihood). We would be willing to work with the Bureau in the establishment and monitoring of these sites.*

Response: The Bureau is amenable to working jointly in the monitoring effort.

C. CHANGES TO THE ALLOTMENT EVALUATION

The following changes have been made to the evaluation for the Big Springs Allotment dated September 2000:

1. Page 76; VI. Conclusions; 2. Long Term Objectives; Key Area 4306-01

   Revise the conclusion to show that the ecological condition rating in 1987 was 52% and in 1990 it was 48%, based on recent corrections to the data summary forms. The difference in the ecological condition ratings between years is not considered significant; however, total vegetative production was down by 25% in 1990 compared to 1987 due to drought. By the year 2000, ecological condition would have returned to the 52% level and may have improved beyond that due to the above average precipitation cycle that occurred from 1992 - 1998 and the increase in needlegrasses. The increase in needlegrasses here and at key area 4306-05, as well as other observations in the Elko District, appears to show that the weather during the above average precipitation years of the 1990s favored an increase in needlegrasses. This is similar to the dramatic increase in bluebunch wheatgrass during the high precipitation years of 1982-84/86, although many of the seedlings/young plants from this episode did not survive the drought conditions that occurred in the latter 1980s through the early 1990s.

2. Page 83; VII. Technical Recommendations; A.

   Delete the reference to Map 13 and replace it with Map 14 regarding the location of the rangeline splitting the West and East Big Springs Allotments.

3. Add a Technical Recommendation regarding management activities that could affect drinking water quality of those water sources used to supply water to West Wendover, Nevada as follows:

   The BLM agrees not to locate or allow the location of any Potential Contamination Sources (PCS), as defined by the United States Environmental Protection Agency and the Nevada Division of Environmental Protection, in Protection Zones (PZ) 1,2,3, and 4, so far as this is consistent with the authority granted to BLM to regulate public land activities.

4. Changes to the allotment specific objectives are being made and include revisions, additions and deletions. These changes are described in item 12 below under the Selected Management Actions and more specifically listed in Appendix 1 of the Proposed Multiple Use Decision.

D. ANALYSIS OF MONITORING DATA

The allotment evaluation resulted in conclusions regarding progress towards achievement of the standards for rangeland health and multiple use objectives. Those conclusions are summarized below:

1. Standards for Rangeland Health

a. Upland Sites -	Met
b. Riparian and Wetland Sites	
Functioning Condition -	Partially Met/Partially Not Met
Water Quality -	Met
c. Habitat	
Uplands -	Partially Met with Adequate Progress
Riparian -	Partially Met/Partially Not Met
d. Cultural Resources -	Met

2. Allotment Specific Objectives

a. Livestock Distribution -	Adequate Progress except for the East Squaw Creek Pasture.

b. Improve Ecological Status - Adequate Progress except for the Oasis Burn area in the East Pequop Bench Pasture, the East (Upper) Beacon Spring area in the North Pequop Mtn. Pasture, and the Loray Wash white sage area in the Collar and Elbow Pasture.

c. Maintain Ecological Status - Adequate Progress

d. Seasonal Big Game Habitat (Upland)

Mule Deer - Adequate Progress

Antelope - Adequate Progress

e. Fence Modifications for Big Game - Inadequate Progress

f. Improve 5 springs - Inadequate Progress

g. Improve Deer Winter Habitat

Tree and Shrub Treatments- Adequate Progress

h. Reintroduce Bighorn Sheep - Inadequate Progress

i. Elk Habitat

Upland Adequate Progress

Riparian Inadequate Progress

j. Wild Horses

Manage Herd Size/Removal - Not Met

Fencing to Control Private Land Use - Adequate Progress

k. Key Area Objectives

Utilization - Met to Not Met for average utilization and maximum annual utilization objectives (See Page 74 of the Allotment Evaluation). Specific areas of concern include use on white sage in the Independence Valley Pasture during the critical growing season; use on bitterbrush in the North Pequop Mtn. Pasture; use on bluebunch wheatgrass and bitterbrush in the vicinity of East (Upper) Beacon Spring in the the North Pequop Mtn. Pasture; use on white sage in the Collar and Elbow Pasture; use on bluebunch wheatgrass and western wheatgrass in the Payne Basin Pasture; use on Thurber needlegrass and Indian ricegrass in the East Pequop Bench Pasture; and use on Indian ricegrass in the Shafter Pasture (wild horses).

Condition & Trend -	Met/Adequate Progress except in the vicinity of East (Upper) Beacon Spring in the North Pequop Mtn. Pasture northeast of Pequop Summit due to cheatgrass competition and livestock grazing. Undetermined for the East Pequop Bench Pasture.

E. SELECTED MANAGEMENT ACTIONS

The following selected actions are expected to achieve significant progress towards and attainment of the multiple use objectives for the Big Springs Allotment and the Standards for Rangeland Health approved for the Northeastern Great Basin Area of Nevada. These actions will be implemented through the issuance of Proposed and Final Multiple Use Decisions.

1. **Divide the Big Springs Allotment into two separate allotments called East and West Big Springs Allotments with the dividing line as shown on Map 1 in the Proposed Multiple Use Decision. This line falls on the crest/watershed divide, or nearly so, of the Pequop Mountains. Please note that the boundary line immediately south of Interstate 80 encloses a portion of the west side within the East Big Springs Allotment, and a portion of the area immediately north of Pequop Summit and east of the R. 65/66 E. line is included within the West Big Springs Allotment. If fences are constructed to separate all or a portion of these two allotments, the dividing line created by the new fence(s) will be considered the actual allotment boundary.**

   Rationale: The division line is based on the Rangeline Agreement authorized on September 5, 1990 with modifications as noted above. Currently the east and west sides of the Big Springs Allotment are identified as separate grazing use areas, under separate management regimes, by two permittees. This will establish this rangeline as the official allotment boundary.

   The small area on the west side just south of Interstate 80 is included in the use area for the east side because this area is most easily grazed by cattle using the east side/Payne Basin area and will preclude the need for a fence to split cattle use by the two permittees in this area. The area immediately north of Pequop Summit and east of the R. 65/66 E. line associated with the Beacon Reservoir area is included within the West Big Springs Allotment because this area is part of the watershed on the west side and most conducive to livestock management when included within the west side.

2. **Establish the Total Number of AUMs of Permitted Use for Livestock, and the Appropriate Management Level (AML) for Wild Horses within the Big Springs Allotment as follows:**

Table 1. Livestock Permitted Use and Wild Horse AML

Pasture	Pre-Evaluation Stocking Rates		Post-Evaluation Stocking Rates/AML	
	Livestock Permitted Use (AUMs) [1]	Wild Horse Initial Stocking Level (AUMs)[1]	Livestock Permitted Use (AUMs)	Wild Horse AML (AUMs)
Independence Valley	3,651	N/A	3,050 (2,750) [2]	N/A
Holborn	450	N/A	550	N/A
North Pequop Mountain	1,866	N/A	1,168 (West Side)	N/A
			1,244 (East Side)	N/A
Upper Squaw Creek Riparian	Part of the North Pequop Mttn. Pasture	N/A	To Be Determined	N/A
Squaw Creek Ranch	55 [4]	N/A	55	N/A
Lower Squaw Creek Ranch	6 [4]	N/A	100	N/A
East Squaw Creek	320	N/A	180	N/A
Windmill Seeding	68 [3]	N/A	390	N/A
Railroad Field	63	N/A	230	N/A
Collar and Elbow	2,243	N/A	1,181	N/A
Shafter	6,633	768	3,193	672
East Pequop Bench	2,424	N/A	2,424 [5]	N/A
North of Home	90	N/A	90	N/A
Payne Basin & Six-Mile Canyon	422	N/A	350	N/A
Fenced Federal Range (FFR)	20 (West Side) 17 (East Side)	N/A	20 (West Side) 17 (East Side)	N/A

1 Livestock AUMs based on adjudications from the 1937 - 40 range surveys.
The initial herd size for the Goshute Herd Management Area (HMA) was160 wild horses or 1,920 AUMs for 12 months. Approximately 40% of the horses in the HMA use the Shafter Pasture of the Big Springs Allotment for a total of 768 AUMs for 12 months.

2 3,050 AUMs authorized if stockwater is hauled to the northwest portion of the valley or a new water source is developed in this area.

3 AUMs based on range survey data prior to seeding.

4 This pasture was all private land prior to the BSR Land Exchange of 1999. AUMs based on range survey data.

5 Subject to temporary reductions due to closure during the Big Springs Fire Rehabilitation.

Based on Table 1 above, livestock permitted use for the West and East Big Springs Allotments would be as shown in Table 2 below:

Table 2. Summary of Changes to Livestock Permitted Use		
Livestock Permittee	**Pre-Evaluation Permitted Use (AUMs)**	**Post-Evaluation Permitted Use (AUMs)**
Egbert Livestock LLC (West Side)	5,385 [1]	4,788 [1,3]
Parasol Ranching LLC (East Side)	12,887 (16,598) [1,2]	9,454 (12,175) [1,2,3]

1 Includes FFR AUMs.
2 All of the stocking rates were evaluated with actual use data reported prior to the change in AUMs prompted by the BSR Land Exchange and therefore do not reflect the increase in permitted use following the BSR Land Exchange. The numbers in parenthesis (-) show permitted use adjustments as a result of the BSR Land Exchange.
3 The AUMs credited to owned and leased private lands intermingled with public lands will be reduced by the same percentage as public land permitted use.

Based on Table 1 above, the Appropriate Management Level for Wild Horses in the Shafter Pasture within the East Big Springs Allotment is shown in Table 3 below:

Table 3. Summary of Changes to Wild Horse Management Levels		
Pasture	**Pre-Evaluation Initial Management Level (AUMs/Animal Numbers)**	**Post-Evaluation AML (AUMs/Animal Numbers)**
Shafter	768 AUMs = 64 Horses for 12 Months	672 AUMs = 56 Horses for 12 Months

Rationale: Independence Valley Pasture - The stocking rate for this pasture was based primarily on the actual use and utilization data from 1997, 1998 and 1999. Data was available to calculate carrying capacities for these years. In addition, these years are most representative of stocking levels following the development of two new water sources (Miners Well and the Honor Camp Troughs) and the increase in AUMs following reseeding of the Wood Hills Burn. The calculations of stocking rates from 1997 and 1999 represent spring use while the data from 1998 best represents fall/winter use. Spring and fall/winter use were combined to represent the capacity of this pasture. The 1997 calculated capacity was 1,724 AUMs and the capacity calculated for 1999 was 840 AUMs. The average between these two years is 1,282 AUMs for spring use. The 1998 calculations show a capacity of 1,760 AUMs for fall/winter use. The combination of 1,282 AUMs for spring use plus 1,760 AUMs from fall/winter use equals 3,042 total AUMs; however, some adjustments were made to account for the kinds of precipitation years from which the data was derived and the availability of additional forage due to

water hauling. The data from 1997 and 1998 represent above average production years, therefore the capacity in an average precipitation year would be somewhat less. Conversely, additional forage is available in the northwest portion of this pasture that is not represented in the calculated capacities. Taking into account these two factors, permitted use will be authorized up to 3,050 AUMs if the permittee hauls water to the northwest use area, or a new permanent water is developed; however, if water is not provided to the northwest use area, permitted use will be authorized up to 2,750 AUMs.

Holborn Pasture - The information available from 1999 was used as the basis for the stocking rate. Use patterns during 1999 reflected pasture wide use during an average forage production year. The calculated capacity for 1999 ranged from 552 AUMs at key area 4306-04 to 876 AUMs at key area 4306-03. The limiting factor was 552 AUMs and therefore 550 AUMs was selected as the stocking rate.

North Pequop Mountain Pasture - The information available for 1997 and 1999 was used as the basis for the stocking rate(s).

On the west side of the pasture, data from key areas 4306-8 and 4306-9 in 1997 were most representative of pasture capacities when the south end is used first under a deferred rotation strategy, and data from key areas 4306-5 and 4306-10 from 1999 were most representative of pasture capacity when the north end is used first under a deferred rotation strategy. The capacity of the west side of the pasture based on grazing the south end first was 1,396 AUMs and the capacity based on using the north end first 940 AUMs. The average of these two values is 1,168 AUMs which was the recommended stocking rate.

On the east side of the pasture, there was only data from 1999. The calculated capacity from 1999, an average precipitation year, was 1,244 AUMs which was selected as the stocking rate.

Upper Squaw Creek Riparian Pasture - Under the interim grazing plan, this area will be part of the North Pequop Mountain Pasture. This pasture will be created by fencing described under the final grazing plan for the East Big Springs Allotment. This pasture will be rested initially until proper functioning condition is achieved and then be opened for grazing under stubble height/utilization limits. The AUMs in this pasture will be defined through monitoring once it is authorized for grazing use.

Squaw Creek Ranch Field - This was a separate private pasture prior to completion of the BSR Land Exchange in 1999 and there is no capacity data; therefore, the capacity assigned to this acreage by the range survey is selected until the capacity can be defined through monitoring.

Lower Squaw Creek Ranch Field - This field was also a separate private pasture prior to the BSR Land Exchange. This field is irrigated and grows an abundance of grasses. This field is approximately 50 acres in size with an estimated rating of ½ acre/AUM which results in the selected capacity of 100 AUMs.

East Squaw Creek Pasture - The average capacity, based on two widely divergent years, was 179 AUMs. This was considered a reasonable stocking level based on the fact that the 640 acres of seeding on the south end supports most of the use in this pasture. Assigning a 5 acre/AUM average value to the capacity of this seeding results in a seeding capacity of 120 AUMs. The difference between the 120 AUMs provided by the seeding and the average calculated capacity of this pasture leaves a 60 AUM capacity to the remainder of the pasture. This falls short of the range survey capacity, however livestock do not prefer to stay in the northern part of this pasture. A conservative approach to stocking this pasture during the growing season is prudent considering there is a sage grouse strutting ground in the area and it would be important to leave much of the native grass growth for nesting cover. If the proposed drift fence is constructed within this pasture, livestock use of much of the native range will expand to the north and also be easier to manage for periods of use separate from the seeding on the south end.

Windmill Seeding - The selected capacity of 390 AUMs for this seeding is based on high levels of utilization. When the cattle graze this pasture, they graze the relatively small area of Russian wildrye south of the well first, and graze it heavily before making much use of the larger seeding consisting of Russian wildrye and crested wheatgrass. Observations of the density and health of the Russian wildrye indicate it has remained healthy under heavy use when periodically deferred from use during all or a portion of the growing season. Therefore, continuing in this manner is expected to be compatible with meeting objectives.

Railroad Field - The two years of actual use and utilization data show widely differing estimates of capacity which average 291 AUMs. Recent observations of use in this pasture indicate the range survey rating of 63 AUMs is low; however, the high calculated capacity of 540 AUMs in 1997 is high considering it was an above average precipitation year. The selected stocking rate of 230 AUMs is considered a reasonable estimate of the average capacity considering the acreage in this pasture.

Collar and Elbow Pasture - The selected capacity is based on data from 1999. In 1999, all the wells were operated whereas it is unclear from previous years. Therefore, the capacity of 1,181 AUMs is selected.

Shafter Pasture - The appropriate management level for wild horses was based on data from utilization and actual use and the objective of 10% use prior to the entry of livestock. The selected stocking rate for livestock is also based on actual use and utilization. The AML for wild horses and livestock stocking level total the average capacity calculations for end of winter use.

East Pequop Bench Pasture - The selected stocking rate is based on the range survey ratings. There was insufficient information collected during the evaluation period to analyze capacity.

North of Home Pasture - The selected stocking rate is based on grazing privileges adjudicated following the range surveys. There was insufficient information collected during the evaluation period to analyze capacity.

Payne Basin & Six Mile Pastures - The selected stocking rate is based on the average calculated capacity of the two key areas. The average for key area 4306-16 was 382 AUMs, and the average for key area 4306-17 was 315 AUMs. The average of these two numbers is 350 AUMs. When stocking this pasture, the levels of use need to be balanced between the areas represented by the two key areas. More data is needed to draw any conclusions about stocking rates for the Six-Mile Canyon area.

Fenced Federal Range - The AUM values for the FFR parcels are based on the range survey ratings.

3. Implement Livestock Grazing Management Systems within the West and East Big Springs Allotments as follows:

a. West Big Springs Allotment

Deferred rotation grazing will be applied to all pastures. The management practices to be applied will limit use so as not to exceed the utilization objectives and allow the preferred forage plants in each pasture/use area to frequently complete their growth stages and disseminate seed. The final grazing system incorporates new water sources to expand grazing distribution and seedings to increase forage and habitat around the water sources. Pasture locations and the approximate locations of proposed range improvements are shown on Maps 2 and 3 in the Proposed Multiple Use Decision. The interim and final grazing plans are described below.

Interim Grazing Plan

Independence Valley Pasture - Implement deferred rotation grazing practices amongst use areas within this pasture. Some *use areas* will be grazed in the spring/early summer and the remaining use areas grazed in the late summer/fall/winter/early spring. Generally, areas grazed in the spring/early summer of one year will be grazed in the late summer/fall/winter/early spring of the next year, and areas grazed in the fall/winter of one year will be grazed in the spring/early summer the following year. Use areas will be associated with the water sources in this pasture. The permittee plans to pipe water from Wadel Spring, located west of the allotment boundary in the northwest part of the pasture, and place a trough on the West Big Springs Allotment side of the boundary fence (this will all be done on leased private lands). The permittee also plans to haul water to the northwest portion of the valley/bench and on the bench in the northeast corner. The southeast part of Independence Valley associated with Boxcar Well will normally be reserved for late fall/winter use annually. *Each year, prior to spring use, the permittee will meet with the Elko Office to plan when the different use areas will be grazed for the year.* An example of the rotation is shown in Table 4 below. The locations of water sources are shown on the pasture map in Appendix 1 of the allotment evaluation.

Table 4. Example of the Independence Valley Pasture Rotation		
USE AREAS	**YEAR 1**	**YEAR 2**
Boxcar Well	Late Fall/Winter (12/01 - 03/31)	Late Fall/Winter (12/01 - 03/31)
North Boxcar Well Miners Well Rattlesnake Well NE Water Haul Site Honor Camp Troughs	Spring/Early Summer (04/01 - 06/30)	Late Summer/Fall/Winter/Early Spring (09/01 - 03/31)
Section 12 Well Warm Springs Johnson Well NW Water Haul Site	Late Summer/Fall/Winter/Early Spring (09/01 - 03/31)	Spring/Early Summer (04/01 - 06/30)
The private field at the Warm Springs Ranch is often grazed in the late summer/fall offering an additional use area. This field is currently leased by the permittee.		

Holborn Pasture - Between mid May and early July, cattle will be moved from the Independence Valley Pasture into the Holborn Pasture north of Interstate 80. The deferred rotation plan calls for two years of use beginning as early as mid May followed by two years of use beginning in July. During years one and two, the cattle will be moved into the pasture as early as mid May. In years three and four, the cattle will be moved into the pasture in early July.

The years the cattle are moved into this pasture in early July are considered the years of deferment as most of the forage plants will be at seedripe or seed dissemination.

Cattle may remain in this pasture for only a short period of time (two weeks) and then moved to the North Pequop Mountain Pasture and/or cattle may remain in this pasture until late September. The length of time the cattle remain in this pasture will partly depend on the availability of water from snow runoff/rain which enhances distribution, and the amount of forage growth in any one year. If the cattle remain in the pasture for a short period of time, some water sources may not be operated resulting in no use in some areas; however, if the cattle remain in the pasture for an extended period of time, most/all water sources will be operated so as not to exceed the utilization objectives in any one use area. Table 5 below displays the planned rotation in use periods.

Table 5. Holborn Pasture Rotation of Use Periods	
YEAR 1 & 2	**YEAR 3 & 4**
05/15 - 09/30	07/01 - 09/30

North Pequop Mountain Pasture - This pasture is the primary summer range for the cattle operation as well as a major use area and travel corridor for mule deer. The elk population has also been increasing, and there is sage grouse habitat. Controlling the use levels on the forage grasses and bitterbrush (important shrub for deer browse) are primary considerations.

This pasture will receive deferment from livestock use in two ways. Cattle use will be rotated between the north and south ends of this pasture, and secondly, cattle will remain in the Holborn Pasture until some time in July in some years before moving into the North Pequop Mountain Pasture.

The deferred rotation plan calls for the cattle to begin their use at the south end for two years in a row. This area is associated with Ralph Spring, West Spring, Rocky Point Spring, Beacon Spring, and West Squaw Creek Well. The permittee will move cattle drifting into the north end back to the south end in a timely manner; however, the cattle don't tend to drift to the north end since there is only one spring at the far north end and it is somewhat lower in elevation. Some of the cattle grazing the south end will likely drift onto the east side of this pasture where the adjoining permittee grazes; therefore, the livestock operator on the west side will be responsible for monitoring his cattle drift and move his cattle back onto the west side in a timely manner. Removing cattle drifting into the East Squaw Creek and Upper Beacon Spring areas will be particularly important the first year or two prior to the installation of riparian management fences in these areas. On 8/1 or later, most of the cattle will be spread across the northern part of the west side. The permittee will make a good faith effort to move and keep the cattle in the northern use areas at this time to reduce the potential of cattle drifting onto the east side of this pasture. By the end of September, the cattle are moved out of this pasture.

During the third and fourth years, the cattle will begin their grazing on the north end for two years in a row. This area is associated with Independence Well, Pequop Spring and Pequop Well. The cattle tend to drift into the south end where there are several springs and higher elevation country; therefore, the permittee will move cattle drifting into the south end back to the north end in a timely manner. Beginning on 8/1 or later, most of the cattle will be spread across the south part of the pasture. Some of the cattle grazing the south end will likely drift onto the east side of this pasture where the adjoining permittee grazes; therefore, the livestock operator on the west side will be responsible for monitoring cattle drift and move the cattle back onto the west side in a timely manner.

Table 6 below displays the planned rotation in use periods.

Table 6. North Pequop Mountain Pasture Rotation in Use Areas

USE AREA	YEARS 1 & 2	YEARS 3 & 4
North	08/01 - 09/30	05/15 - 09/30
South	05/15 - 09/30	08/01 - 09/30

Final Grazing Plan

The final grazing plan will continue the deferred rotation practices described under the interim systems above. The final grazing plan differs from the interim grazing plan only by the proposed addition of permanent water locations and seedings in various locations along with an allotment boundary fence on a portion of the North Pequop Mountain Pasture. The allotment boundary fence and additional water developments and seedings are described below by pasture.

Independence Valley Pasture -

(1). Develop a new water location in the northwest part of the valley, between Interstate 80 and Johnson Well. Perennial grasses are common along the upper bench and mountain.

(2). Seed up to 4,000 acres of public land associated with existing and proposed water locations. The seed mix will include grasses, shrubs/half-shrubs and forbs. The areas to be seeded will be lower bench and valley big sagebrush and rabbitbrush areas poor in grasses and other forage. The locations of areas and acres of proposed seeding will be more specifically identified through the environmental analysis process on individual projects.

(3). Monitor the use and condition of Hogan Spring/seep located on the west bench of the Pequop Mountains and determine if protective measures should be taken protect the water source if wild horses continue to occupy this area or from cattle use.

(4). Consider a fence that will prevent cattle from drifting back to the Warm Springs Ranch area from other use areas.

Holborn Pasture -

(5). Seed up to 1,000 acres of public land associated with the NDOT well adjacent to the Interstate 80 exit. The seed mix will include grasses, shrubs/half-shrubs and forbs. The areas to be seeded will be the big sagebrush areas poor in grasses.

North Pequop Mountain Pasture -

(6). Construct a boundary fence between the East and West Big Springs Allotments within the North Pequop Mountain Pasture. The fence will be approximately three miles long and run along the boundary line from Interstate 80 at Pequop Summit to Rocky Point, with a short gap fence in the canyon immediately north of Rocky Point. This fence will be designed as a let-down fence to be let-down by 9/30 and put back up prior to the entry of livestock the following year. This fence will also be part of an interior pasture fence proposed for the east side of this pasture as described under the grazing management practices for the East Big Springs Allotment below. The livestock

permittees will be responsible for letting the fence down and putting it back up in a timely manner.

(7). Develop a new water location on the north Pequop Mountain bench a couple of miles west of Pequop Spring. Perennial grasses are common in this area.

(8). Develop a new water location on the north Pequop Mountain bench one to two miles east of Pequop Spring. Perennial grasses are common in this area. *Sage grouse strutting grounds are located near this new proposed use area; therefore, this water will not be operated earlier than July 1 so that all of the grass growth each year is available for hiding cover for sage grouse nesting and brood rearing activities.*

(9). Add a water storage tank to Pequop Well so there is adequate storage to water cattle, elk and other wildlife.

(10). Evaluate the water development designs of the spring developments on public lands in this pasture and determine if the spring developments warrant modification to encourage the growth of riparian vegetation. Nearly all of the springs in this pasture were developed by capturing all of the water from the spring source and piping it to a trough which precludes the growth of riparian habitat at or near the spring source.

The Nevada Division of Wildlife and the interested public will be consulted prior to the approval of the above proposed projects. Required National Environmental Policy Act (NEPA) documentation will be completed prior to the development and redesign of projects on public lands.

Rationale: Deferred rotation grazing is intended to help the forage plants remain healthy, provide seed to populate the plant communities for watershed stability and long-term sustainable use for livestock, wildlife and other multiple uses.

The deferred rotation plan for the N. Pequop Mountain Pasture in particular is also intended to lessen the use of bitterbrush on the south end where cattle prefer to be in the summer.

The proposed boundary fence that will separate the West Big Springs Allotment from the East Big Springs Allotment in the North Pequop Mountain Pasture will prevent the drift of cattle between the two allotments and also serve as part of the pasture management fences proposed for the east side. The fence will be designed as a let-down fence to be let down before the opening of the rifle hunting season on mule deer. Dropping down the fence wire is necessary to allow deer free movement through the area during the hunting season as well as reduce the need for some fence repairs from elk passing through the area.

Fencing the use area associated with the Warm Springs Ranch in the Independence Valley Pasture may be valuable in controlling the degree of utilization on key forage plants by preventing cattle from drifting to this area from other use areas in the valley.

The proposed water developments will expand grazing use and offer more use areas with which to plan deferred rotation strategies. In addition, by not operating the proposed water development east of Pequop Spring before July 1, new grass growth each year will be available as hiding cover for sage grouse nesting and brood rearing activities. Adding to the water storage capability at Pequop Well will improve the ability of this water source to support cattle and elk as well as other wildlife use.

The proposed seedings will increase vegetative production and diversity for livestock and wildlife, particularly antelope, and provide a vegetative reserve to lessen the need for reductions in livestock use during dry precipitation cycles.

b. East Big Springs Allotment

Deferred rotation grazing will be applied to all pastures receiving grazing use during the critical growing season. Pastures receiving only fall or winter use will be deferred from grazing during the growing season every year. The management practices to be applied would limit use so as not to exceed the utilization objectives and allow the preferred forage plants in each pasture/use area to frequently complete their growth stages and disseminate seed. The final grazing system incorporates new water sources to expand grazing distribution, new seedings to increase forage and habitat around the water sources, and additional fencing to protect riparian habitat and new seedings to improve the management of cattle under the deferred rotation practices. Pasture locations and the approximate locations of proposed range improvements are shown on Maps 2 and 3 in the Proposed Multiple Use Decision. The interim and final grazing systems are described below.

Interim Grazing System(s)

Table 7. Periods-Of-Use By Pasture		
PASTURE/USE AREA	**YEARS 1 & 2**	**YEARS 3 & 4**
Shafter	10/01 - 4/15	10/01 - 4/15
East Pequop Bench North Bench South Bench/Hardy Creek Pipeline	03/01 - 06/30[1] Period of use within each use area to be defined on an annual basis.	03/01 - 06/30[1] Period of use within each use area to be defined on an annual basis.
Payne Basin/Six-Mile Canyon	05/16 - 09/30	07/01 - 09/30
East Squaw Creek	04/01 - 10/15 Period of use to be defined on an annual basis.	04/01 - 10/15 Period of use to be defined on an annual basis.
North Pequop Mountain East Beacon/Upper Squaw Creek Baker Spring	 05/01 - 07/31 07/01 - 09/30	 05/01 - 07/31 07/01 - 09/30
Windmill Seeding	07/01 - 10/31	07/01 - 10/31
Railroad	07/01 - 10/31	07/01 - 10/31
Squaw Creek Ranch	Up to 3 Weeks 05/01 - 07/31	Up to 3 Weeks 05/01 - 07/31
Lower Squaw Creek Ranch	Up to 3 Weeks 08/01 - 10/31	Up to 3 Weeks 08/01 - 10/31
Collar & Elbow	08/15 - 01/31	08/15 - 01/31
North of Home	Period of use to be defined on an annual basis.	Period of use to be defined on an annual basis.

[1] A fire rehabilitation seeding was completed for a portion of the North Bench use area in the Fall of 2000. This rehabilitation area is closed to livestock use for two growing seasons or until seeding establishment criteria have been met.

Shafter Pasture - This is the primary pasture for winter/early spring use. Cattle will graze this pasture beginning in November. Many of the cattle graze the northern part of this pasture in November called the Silver Zone area and are then moved south to the use areas associated with Shafter Well #1, Shafter Well, and Shafter Well #2. The cattle remain in the Shafter Wells area up to mid April.. However, if snowmelt/rains provide enough water in the late winter/early spring, the Shafter Wells will be turned off and the

cattle moved to the west side of the Shafter Pasture into the greasewood plains and sagebrush draws to graze. The cattle are moved out of the Shafter Pasture and into the East Pequop Bench Pasture in March to mid April.

East Pequop Bench Pasture - Fire rehabilitation actions following the Big Springs Fire of 2000 resulted in the installation of a fence on the south end of the fire and seeding the burn area. The fence separates the northern part of the east Pequop bench from the remainder of the pasture. The fire rehabilitation seeding is within this North Bench use area and is closed to livestock grazing for at least two growing seasons or until the seeding establishment criteria have been met. While the North Bench use area is closed to livestock use, the South Bench/Hardy Creek use area and the Pipeline use area (east of the Big Springs Ranch) will be available for livestock use.

The grazing of each use area will be planned annually. The permittee will meet with Elko Field Office personnel prior to use in this pasture to discuss and gain the Bureau's concurrence on the planned grazing schedule. Planned use will be directed at deferring grazing use in one of the use areas during the critical growing season and/or managing for a utilization level on key forage grasses not to exceed the light use category (21 - 40% use of current years growth). When the North Bench use area is opened to livestock use following fire rehabilitation, this area will be included in the annual plan for grazing use in this pasture.

Payne Basin/Six Mile Canyon Pasture - This pasture will receive two years of use which includes the critical growing season followed by two years of deferred use.

East Squaw Creek Pasture - The grazing in this pasture will be planned annually. The permittee will meet with Elko Field Office personnel prior to use in this pasture to discuss and gain the Bureau's concurrence on the planned grazing schedule. Planned use will be directed at deferring grazing use in the native part of the pasture during the critical growing season and/or managing for a utilization level on key forage grasses not to exceed the light use category (21 - 40% use of current years growth).

The South Seeding portion of this pasture will be grazed each year between 04/01 and 10/15. The South Seeding will commonly be grazed in the spring prior to the cattle being moved into the North Pequop Mountain Pasture, and grazed again in the late summer/fall as the cattle come off the summer range. Use during late summer/fall depends on the level of use made in the spring and the degree of regrowth available for later use.

The native portion of this pasture will be grazed in conjunction with the seeding on the south end; however, use in the native area is expected to be light because most of the cattle tend to graze the South Seeding portion of this pasture. However, if the level of grazing use on the native key forage grasses at key area 4306-14 exceeds the light utilization category by the end of the growing season for two years in a row, or more than two out of four consecutive years, use on the native area will be deferred until 07/01 for two out of four consecutive years.

North Pequop Mountain Pasture - This pasture is the primary summer range for the cattle operation as well as a major use area and travel corridor for mule deer. The elk population has also been increasing, and there is sage grouse habitat. The portion of this pasture associated with Upper East Squaw Creek and East Beacon Spring encompasses most of the riparian areas within the pasture. Controlling the use levels on the riparian habitat as well as forage grasses and bitterbrush (important shrub for deer browse) are primary considerations.

In order to begin making significant progress toward proper functioning condition of riparian habitat in this pasture prior to construction of the riparian management fences, it will be important to leave some of the perennial herbaceous riparian growth to help stabilize and expand the riparian area. Therefore, management will be directed at achieving the following stubble height objective during the interim:

> - Stubble Height of Herbaceous Riparian Species: A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank and wet meadow areas at the end of the growing season or grazing season, whichever occurs later.

Deferred rotation grazing will be applied to use areas within this pasture. Riparian management fences and water development modifications are proposed under the final grazing system/practices described below. In the interim, prior to the installation of riparian protection fences, livestock will graze the upper East Squaw Creek and East Beacon Spring areas between 5/1 and 07/31 and then moved north to the Baker Spring/Pipeline area. The Baker Spring/Pipeline area will be grazed from as early as 07/01 - 09/30 in conjunction with the Railroad and Windmill Seeding Fields. The permittee will be responsible for monitoring cattle drift outside the planned use area(s) and moving them back to the planned use area(s) in a timely manner. Removing cattle drifting back into the East Squaw Creek and East Beacon Spring areas will be particularly important prior to the installation of the proposed pasture and/or riparian management fences in these areas.

Railroad Field and Windmill Seeding Field - The interim system calls for these two fields to be used in conjunction with the Baker Spring use area in the North Pequop Mountain Pasture. These two fields will be needed to supplement the vegetation for summer use when the cattle are not to be grazing the Upper East Squaw Creek and East Beacon Spring use areas in the North Pequop Mountain Pasture.

Squaw Creek Ranch Field - This field includes a portion of East Squaw Creek and will be managed as a riparian pasture with use limited to no more than three weeks. Monitoring of the utilization on streambank herbaceous riparian plants and willows will be used to determine if further adjustments will be made in order to achieve proper functioning condition and habitat objectives. *Each year, the permittee will meet with the Elko Field Office to plan when this area will be grazed.* Management will be directed at achieving riparian habitat objectives including proper functioning condition. Annual stubble height/utilization limits on herbaceous riparian vegetation and willows will be used

to tailor the period of use. These annual stubble height/utilization limits are described as follows:

- Stubble Height of Herbaceous Riparian Species: A minimum of four (4) inches average stubble height for selected key herbaceous riparian species (sedges/rushes) will be left along the streambank at the end of the growing season or grazing season, whichever occurs later.

- Willow Utilization: Do not exceed thirty-five (35%) average utilization of the total current year's leader growth on the portion of the willow within five (5) feet of ground level by the end of the growing season or grazing season, whichever occurs later.

Lower Squaw Creek Ranch Field - This field has been irrigated to grow meadow grasses for livestock use in the late summer/fall. This field will continue to be irrigated by the permittee and grazed up to three weeks between 8/01 and 10/31. *Each year, the permittee will meet with the Elko Field Office to plan when this area will be grazed.*

Collar and Elbow Pasture - This pasture will be used beginning on or after 8/15 for late summer/fall/early winter use. The valley portions of this pasture tends to be dusty when the dry surface is disturbed during the summer/fall. To avoid dust pneumonia in the calves, the permittee plans to wean the calves from the mother cows, which usually occurs beginning about August 20th and later, before placing the mother cows in this pasture.

North of Home Pasture - Use in this pasture is generally trailing cattle to and from other pastures; however, some cattle may periodically be held in this pasture for a longer period of time. *Because of the variability in the use of this pasture, the permittee will meet with the Elko Field Office each year to plan when this area will be grazed.* Planned use will be directed toward maintaining healthy forage plants, and a stable watershed for the proposed Source Water Area Protection Zone associated with the watershed that supplies water to West Wendover, Nevada.

Final Grazing Plan

The final grazing plan will continue deferred rotation practices in those pastures scheduled for use during the critical growing season. The final grazing plan proposes some new pasture fences and riparian management fences as well as new water developments and seedings that enhance the ability to implement deferred rotation strategies. Since there will be enough changes in grazing use as a result of the proposed projects, Table 8 below includes the proposed periods of use for all the pastures to facilitate an understanding of how the year-round operation will look under the final grazing plan.

Table 8. Periods Of Use By Pasture		
PASTURE/USE AREA	**YEARS 1 & 2**	**YEARS 3 & 4**
Shafter	10/01 - 4/15	10/01 - 4/15
East Pequop Bench		
North Bench/Seeding/Long Canyon	05/01 - 07/15	03/01 - 05/15 09/01 - 12/31
South Bench/Seeding/Hardy Creek	05/01 - 07/15	03/01 - 05/15 09/01 - 12/31
Pipeline Seeding	03/01 - 05/15 09/01 - 12/31	05/01 - 07/15
Pipeline Native	03/01 - 05/15	05/01 - 07/15
Payne Basin	05/16 - 09/30	07/01 - 09/30
Six-Mile Canyon	Period of use to be defined on an annual basis.	Period of use to be defined on an annual basis.
East Squaw Creek		
South Seeding	04/01 - 10/15 Period of use to be defined on an annual basis.	04/01 - 10/15 Period of use to be defined on an annual basis.
North Native	05/01 - 10/15	07/01 - 10/15
North Pequop Mountain		
East Beacon/South Squaw Creek	05/01 - 07/31	07/01 - 09/30
North Squaw Creek/Baker Spring	07/01 - 09/30	05/01 - 07/31
Upper Squaw Creek Riparian	Initially rest until PFC, then Up to 3 Weeks 05/01 - 07/31	Initially rest until PFC, then Up to 3 Weeks 05/01 - 07/31
Squaw Creek Ranch	Up to 3 Weeks 05/01 - 07/31	Up to 3 Weeks 05/01 - 07/31
Lower Squaw Creek Ranch	Up to 3 Weeks 08/01 - 10/31	Up to 3 Weeks 08/01 - 10/31
Windmill Seeding	04/01 - 10/31 Period of use to be defined on an annual basis.	04/01 - 10/31 Period of use to be defined on an annual basis.
Railroad	07/01 - 10/31	05/01 - 10/31
Collar & Elbow	08/15 - 01/31	08/15 - 01/31

North of Home	Period of use to be defined on an annual basis.	Period of use to be defined on an annual basis.

Shafter Pasture - Planned use in this pasture will be the same as described under the interim grazing plan. This pasture is the primary winter/early spring use area. No new projects are proposed.

East Pequop Bench Pasture - Under the final grazing plan, the fire rehabilitation fence and seeding have already created the North Bench use area. Additional projects are also proposed to implement the final grazing plan. These proposed projects are as follows:

(1). Construct a drift fence (100') near the bottom of Long Canyon.

(2). Add an 8,000 gallon water storage tank to Burnt Well.

(3). Develop a seeding of up to 3,000 acres within the area burned in the Oasis Fire located within the South Bench use area. Seeded species will include perennial grasses, shrubs/half shrubs, and forbs.

(4). Construct a reservoir in the vicinity of South Well to catch spring runoff, and add an 8,000 gallon water storage tank to South Well.

(5). Develop a new well in the lower Hardy Creek area in the vicinity of sections 15 or 22, T. 34 N., R. 66 E.

(6). Develop a seeding of up to 4,000 acres north of the West Wendover water pipeline. Seeded species will include perennial grasses, shrubs/half shrubs, and forbs.

(7). Construct approximately seven (7) miles of fence to encompass the new seeding north of the pipeline.

(8). Install four pipeline extensions of approximately one and one-half miles each. Two extensions will run north from the West Wendover water pipeline to provide water to the new seeding area, and two extension will run south to water the native range.

The final grazing plan for the East Pequop Bench Pasture will continue deferred rotation practices during the critical growing season (5/16 - 6/30) as shown in the table above. With the addition of the proposed projects, late summer and fall use is also proposed.

Payne Basin Pasture - This pasture will continue to receive two years of use which includes the critical growing season followed by two years of deferred use. Development of additional grazing capacity within the East Pequop Bench Pasture, as described above, will support these cattle during those years when this pasture is deferred until 07/01. The only proposed project is described below.

(9). Lower Nanny Spring is the only riparian area that supports a small stand of aspen within the Payne Basin Pasture. To ensure the aspen stand can sustain itself over the long term, the aspen area will be fenced periodically to allow young aspen to grow to seven feet (7') in height or more so the terminal bud and upper branches are above the cattle browsing level.

(10). There are also a couple spring developments that capture all the water from the source and pipe it to a trough. Therefore, the water development designs of these spring developments on public lands will be evaluated to determine if the spring developments warrant modification to encourage the growth of riparian vegetation.

Six-Mile Canyon - Grazing in this canyon will be planned on an annual basis to take into account the availability of water. Grazing will be authorized periodically when water is available in the reservoir(s) as an alternative use area to Payne Basin.

(11). The only new project will be a drift fence near the bottom of the canyon.

(12). The existing reservoir part way up the canyon will be repaired and the reservoirs at the top of the canyon will be enlarged where feasible. These reservoirs catch snow melt/runoff but are not associated with any perennial water flows.

East Squaw Creek Pasture - New projects proposed for this pasture include the following:

(13). Construct a drift fence that will run easterly from the lower Squaw Creek Field to the fence along the highway to Montello, Nevada (Route 233). This fence will be approximately two and one-half miles long. The proposed fence that will separate the South Seeding use area from the native range to the north will be constructed in such a way as to allow the cattle using either field to water at the reservoir at the bottom of the Lower Squaw Creek Field.

(14). Expand the seeding within the southern portion of this pasture. Up to 1,200 acres of new seeding is proposed. The seed mix will include desirable grasses and forage kochia.

The final grazing plan calls for the South Seeding portion of this pasture to be grazed as described under the interim grazing plan. The South Seeding use area will commonly be grazed in the spring prior to the cattle being moved into the North Pequop Mountain Pasture, and grazed again in the late summer/fall as the cattle come off the summer range. Use during late summer/fall depends on the level of use made in the spring and

the degree of regrowth available for later use. This pasture will be periodically deferred to allow a recovery period following dry years when there is little regrowth. *Each year, the permittee will meet with the Elko Office to plan when this area will be grazed.*

The North Native portion of this pasture north of the proposed fence will be grazed under a deferred rotation schedule with two years of use during the critical growing season and two years of deferred use.

North Pequop Mountain Pasture - The final grazing plan will result in a fenced pasture south of the East Squaw Creek channel, a pasture north of East Squaw Creek, and a riparian pasture enclosing the main channel of East Squaw Creek. A deferred rotation grazing system will be implemented using the two large pastures. The Upper Squaw Creek Riparian Pasture will be managed as a separate field which is described below.

Additional riparian management fences/exclosures around some of the springs are also proposed along with some new water developments. The riparian fences will be designed to minimize fence maintenance resulting from the movement of elk through the area. When proper functioning condition has been achieved within any of the proposed riparian exclosures, livestock grazing may be periodically authorized if the authorized officer determines it is desirable to remove old growth and/or enhance wildlife use such as sage grouse brood rearing.

New projects proposed for this pasture include the following:

(15). Construct a boundary fence between the East and West Big Springs Allotments within the North Pequop Mountain Pasture. The fence will be approximately three miles long and run along the boundary line from Interstate 80 at Pequop Summit to Rocky Point, with a short gap fence in the canyon immediately north of Rocky Point. This fence will be designed as a let-down fence to be let-down by 9/30 and put back up prior to the entry of livestock the following year. This fence will also be part of an interior pasture fence proposed for the east side of this pasture as described under the grazing management practices for the East Big Springs Allotment below. The livestock permittees will be responsible for letting the fence down and putting it back up in a timely manner.

(16). Construct a pasture fence that will connect with the fence described above at a location just north of the middle fork of East Squaw Creek and run easterly to the Squaw Creek Ranch Field. This fence will be approximately three miles long. This fence will be designed as a let-down fence to be let-down by 9/30 and put back up prior to the entry of livestock the following year. The livestock permittee on the east side will be responsible for letting the fence down and putting it back up in a timely manner. The lower one and one-half miles of fence will create the border for the north side of the Upper Squaw Creek Riparian Pasture.

(17). Construct approximately two miles of drift fence that will run north from the Pequop Exit on Interstate 80 toward the southwest corner of the Squaw Creek Ranch Field.

(18). Construct the following riparian management fences/exclosures:

(a). Enclose the main channel of East Squaw Creek with a fence on the south and west sides to create a riparian pasture in conjunction with the proposed fence on the north side described above. This fence will enclose the main spring complex near the middle of section 8, T. 37 N., R. 66 E. and the main channel eastward to the Squaw Creek Ranch Field fence. To provide water outside the riparian pasture, water will be piped from one of the main channel springs at the upper end of the riparian pasture to a location north of the riparian pasture fence. A water gap where animals could water directly from East Squaw Creek will also be considered at the lower end of the riparian pasture.
(b). Fence the spring and channel leading to the reservoir at Lower Beacon Spring located in the northeast corner of section 17, T. 37 N., R. 66 E. A portion of the area just above the reservoir will be left open as a loafing area for cattle.
(c). Fence the spring at East (Upper) Beacon Spring located in the southwest corner of section 17, T. 37 N., R. 66 E. and pipe water to a trough outside the fence and to a location approximately one mile east/southeast of the spring.
(d). Fence Wally Spring including the aspen stand nearby and install a rock gabion or apron where the spring flows over the lip of the cut bank.
(e). Fence the three spring complex at the head of the middle fork of East Squaw Creek located in the NESW section 7, T. 37 N., R. 66 E.
(f). Fence the spring on the north fork of East Squaw Creek located in the northeast corner of section 7, T. 37 N., R. 66 E.
(g). Eliminate and/or control noxious and invasive plants and reseed as necessary.

(h).There are also a couple spring developments that capture all the water from the source and pipe it to a trough. Therefore, the water development designs of these spring developments on public lands will be evaluated to determine if the spring developments warrant modification to encourage the growth of riparian vegetation.

(19). Extend a pipeline from the proposed well at the north end of the pasture to a location east of the rangeline between the East and West Big Springs Allotments. The proposed well will be located one to two miles east of Pequop Spring as described under the final grazing plan for the West Big Springs Allotment. Each permittee will be responsible for monitoring the drift of their cattle across the unfenced boundary line and moving their cattle back to their authorized use area in a timely manner.

The Nevada Division of Wildlife and the interested public will be consulted prior to the approval of the above proposed projects. Required National Environmental Policy Act (NEPA) documentation will be completed prior to development of the proposed projects on public lands.

Upper Squaw Creek Riparian Pasture - When this pasture is fenced as described above, it will be rested from livestock grazing until it has achieved proper functioning condition. Once it has reached proper functioning condition, grazing management will be directed at maintaining proper functioning condition and achieving additional riparian habitat objectives. When initial grazing use is authorized in this pasture, monitoring of the utilization on streambank herbaceous riparian plants and willows/aspen will be used to determine if further adjustments will be made in order to achieve proper functioning condition and habitat objectives. *Each year, the permittee will meet with the Elko Field Office to plan when this area will be grazed.* When initial use is authorized in this pasture, the following stubble height/utilization limits will apply:

- Stubble Height of Herbaceous Riparian Species: A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank at the end of the growing season or grazing season, whichever occurs later.

- Willow and Aspen Utilization: Do not exceed thirty-five (35%) average utilization of the total current year's leader growth on the portion of the willow or aspen within five (5) feet of ground level by the end of the growing season or grazing season, whichever occurs later.

Proposed projects within this pasture are listed below:

As mentioned under proposed projects for the N. Pequop Mountain Pasture above, a pipeline is proposed to bring water outside the riparian pasture fence into the North Squaw Creek/Baker Spring Pasture. Water will be piped from one of the springs at the upper end of the riparian pasture.

A water gap at the lower end of the riparian pasture fence will be considered in the design of the fence to provide water for use in the North Squaw Creek and/or South Squaw Creek Pastures.

Eliminate and/or control noxious and invasive plants. Treatments are envisioned to include the use of herbicides and/or digging on existing populations in conjunction with reseeding treated areas and other patches of bare ground that are likely to be invaded by weeds once the riparian pasture fence is in place.

Squaw Creek Ranch Field - This field will be managed as a riparian pasture as described under the interim grazing plan with use limited to no more than three weeks. Monitoring of the utilization on streambank herbaceous riparian plants and willows will be used to determine if further adjustments will be made in order to achieve proper functioning condition and habitat objectives. *Each year, the permittee will meet with the Elko Field Office to plan when this area will be grazed.* Management will be directed at achieving riparian habitat objectives including proper functioning condition. Annual stubble height/utilization limits on herbaceous riparian vegetation and willows will be used to tailor the period of use. These annual stubble height/utilization limits are as follows:

- Stubble Height of Herbaceous Riparian Species: A minimum of four (4) inches average stubble height of selected key herbaceous riparian species (sedges/rushes) will be left along the streambank at the end of the growing season or grazing season, whichever occurs later.

- Willow Utilization: Do not exceed thirty-five (35%) average utilization of the total current year's leader growth on the portion of the willow within five (5) feet of ground level by the end of the growing season or grazing season, whichever occurs later.

Lower Squaw Creek Ranch Field - This field has been irrigated to grow meadow grasses for livestock use in the late summer/fall and will continue to be managed as described under the interim grazing plan. This field will continue to be irrigated by the permittee and grazed up to three weeks between 8/01 and 10/31. *Each year, the permittee will meet with the Elko Field Office to plan when this area will be grazed.*

Windmill Seeding Field - The preponderance of forage in this pasture is provided by two seeded species, Russian wildrye and crested wheatgrass. This pasture will commonly be grazed in the spring/summer but periodically deferred to allow a recovery period following dry years when there is little regrowth. *Each year, the permittee will meet with the Elko Field Office to plan when this area will be grazed.*

Railroad Field - Deferred rotation grazing will be implemented on this pasture. There will be two consecutive years of use beginning 07/01 or later followed by two years of use beginning 05/01 or later. Actual use will not be expected to span the entire period of use displayed in the table above. *Each year, the permittee will include the actual planned period of use in the application for grazing use.*

Collar and Elbow Pasture - This pasture will be managed as described under the interim system. Use will begin on 08/15 or later and end by 01/31. The actual period of use during this time will tend to be variable. For example, during those years when water and/or forage runs short in the North Pequop Mountain Pasture, the cattle may be moved into this pasture beginning in August. When water and/or forage is adequate elsewhere, the cattle may not enter this pasture until late September or October. The cattle may remain in this pasture until November and moved to the Shafter Pasture or stay into the late fall/winter until snows require removal.

North of Home Pasture - Use in this pasture is generally trailing cattle to and from other pastures; however, some cattle may periodically be held in this pasture for a longer period of time. *Because of the variability in the use of this pasture, the permittee will meet with the Elko Field Office each year to plan when this area will be grazed.* Planned use will be directed toward maintaining healthy forage plants, and a stable watershed for the proposed Source Water Area Protection Zone associated with the watershed that supplies water to West Wendover, Nevada.

Rationale: Deferred rotation grazing is intended to help plants remain healthy, provide seed to populate the plant communities for watershed stability and long-term sustainable use for livestock, wildlife and other multiple uses. Periods of livestock use between pastures generally overlap to provide flexibility in movement dates needed to deal with weather variations and other unpredictable events, and move livestock to pastures/use areas within pastures when most compatible with achieving good distribution.

The periods of use in some pastures or use areas within some pastures will be determined on an annual basis. This allows management to consider factors affecting the pasture/use area the previous year(s), project current years production and water availability, and direct use to best achieve multiple use objectives and standards for rangeland health.

Riparian habitats will improve as a result of proposed fencing, stubble height/utilization limits and deferred rotation grazing practices. Managing for proper functioning condition riparian habitat and other habitat values will improve watershed stability and provide more desirable habitat for wildlife including habitat for sage grouse brood rearing.

The proposed boundary fence that will separate the East Big Springs Allotment from the West Big Springs Allotment in the North Pequop Mountain Pasture will prevent the drift of cattle between the two allotments and also serve as part of the pasture management fences proposed for the east side. The fence will be designed as a let-down fence to be let down before the opening of the rifle hunting season on mule deer. Dropping down the fence wires is necessary to allow deer free movement through the area during the hunting season as well as reduce the need for some fence repairs from elk passing through the area.

The proposed water developments will either replace water sources fenced to manage riparian areas or provide new water sources that will expand grazing use and offer more use areas with which to implement deferred rotation strategies. In addition, by not operating the proposed water development east of Pequop Spring before July 1, new grass growth each year will be available as hiding cover for sage grouse nesting and brood rearing activities.

The proposed seedings will increase vegetative production and diversity for livestock and wildlife, particularly antelope. Vegetation diversity was generally identified as a limiting habitat attribute for antelope and the addition of forage kochia and forbs to the seed mix will improve forage diversity. The increased livestock forage production from the new seedings will provide a forage reserve during dry cycles that will improve consistency in livestock stocking rates and management over the long-term.

c. Terms and Conditions for Livestock Grazing Use

(1). Authorized grazing use will be in accordance with the Big Springs Allotment Final Multiple Use Decision dated _____.

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

(3). Supplemental feeding is limited to salt, mineral, and/or protein supplements in block, granular or liquid form. Such supplements will be placed at least 1/4 mile from live waters (springs, streams and troughs), wet or dry meadows, and aspen stands.

(4). An actual use report showing use by pasture, and by use area, will be turned in within 15 days after completing annual use.

(5). All riparian exclosures, including spring development exclosures, are closed to livestock use unless specifically authorized in writing by the authorized officer.

(6). The numbers of livestock to be grazed will remain flexible according to the needs of the permittee. The grazing plan is based on the number of AUMs that may be removed from each pasture. Livestock numbers and periods of use will be applied for on an annual basis. Deviations beyond the flexibility described above may be allowed to meet the needs of the resources and the permittee as long as these deviations are consistent with multiple use objectives. Deviations beyond the limits of flexibility outlined above, including deviations in the turnout date, increases in livestock numbers and deviations from the grazing plan, will require an application, and written authorization from the authorized officer.

(7). Pursuant to 43 CFR 10.4 (g), the holder of this authorization must notify the authorized officer, by telephone with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects or objects of cultural patrimony. 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.

Rationale: The above are standard terms and conditions for grazing use.

4. Wild Horses

a. Inventory, identify, and eliminate existing wire hazards. Clean up and dispose of old wire, especially where it creates a significant hazard to wild horses.

Rationale: Wild horses have become tangled in old barbed wire especially in old spring exclosures and wild horse traps. Entanglement in barbed wire causes extensive injuries and in some cases the need for the animal to be destroyed.

b. **Establish an Appropriate Management Level (AML) for wild horses of 672 AUMs (56 wild horses for 12 months) within that portion of the Goshute Herd Management Area in the Shafter Pasture of the Big Springs Allotment.**

Rationale: The Wells Resource Management Plan (RMP) Wild Horse Amendment established a utilization objective of ten percent (10%) on key forage species for wild horse use prior to entry by livestock on winter range so as not to exceed the utilization objective of 55% on key vegetative species by the end of the combined wild horse and cattle winter use period. Evaluation of use by wild horses has concluded that wild horse use prior to the entry of livestock on the winter range in the Shafter Pasture is the most limiting factor. The principal concern with wild horse use is their use of key grasses during the growing season. Limiting wild horse use to an average of 10% use prior to entry by livestock is considered to be a prudent stocking level to protect the health of plants exposed to grazing during the critical growing season every year. Most of the wild horse use prior to entry by livestock has occurred during the growing season.

Monitoring information collected at key area 4306-21 and vicinity is most representative of pre-livestock use by wild horses; therefore the data collected in this area was used to establish the AML. The calculated capacity for wild horse use, based on pre-livestock utilization and actual use, is 389 AUMs for seven (7) months of use. Since the Shafter Pasture is considered to be a year-long wild horse use area, extrapolation of horse use for a full 12 month period results in a calculated AML of 672 AUMs (56 wild horses).

Maintaining wild horses at the appropriate management level will result in a thriving, natural, ecological balance between horses and other resource values. Continued monitoring within the allotment will show if any adjustment in the AML is needed.

c. **Remove sufficient numbers of wild horses associated with the Goshute Herd Management Area to attain the appropriate management level (AML) and maintain wild horse populations at a level which will maintain a thriving natural ecological balance consistent with other resource values.**

Rationale: See rationale for establishing the AML above.

d. **Remove all wild horses that are occupying areas managed as horse free areas.**

Rationale: Current census flights confirm that wild horses are occupying areas within the Big Springs Allotment that are currently supposed to be horse free. In particular, wild horses are occupying areas within the Independence Valley Pasture designated as horse free. These horses will be removed to comply with the Wells RMP Wild Horse Amendment. If the wild horses are not removed, their use could disrupt the planned deferred rotation system by reducing the carrying capacity planned for livestock use.

e. **Continue to collect pre-livestock use by wild horses and combined use (cattle and horses) utilization data.**

Rationale: Collection of utilization data is necessary to determine if management practices are meeting objectives and will indicate management changes needed in response to climatological changes, such as drought, etc.

f. **Continue to collect seasonal distribution and census data on the Goshute HMA. Continue to collect seasonal distribution and census data on horse populations that are occupying areas managed as horse free.**

Rationale: In 1991, intensive seasonal distribution flights were begun within the Elko District. These census flights have provided valuable information on horse movements and will continue until monitoring data indicates that the appropriate management level has been attained in all HMAs, and regularly thereafter.

g. **Do not construct the fence described in the Wells RMP Wild Horse Amendment that was intended to prevent wild horses from drifting north into the checkerboard land pattern of the Goshute Herd Management Area.**

Rationale: The movement of wild horses into the checkerboard area is expected to be minimal when the numbers of wild horses are managed at the AML. The need to construct this fence will again be considered if substantial numbers of wild horses occupy the checkerboard area.

5. **Wildlife**

a. **Modify the wire spacing on the West Pequop Bench Fence (#5608) to meet current BLM specifications. On three wire fences, the wire spacing will be 18"-8"-12" from the ground up, and the bottom wire will be smooth. On four wire fences, the wire spacing will be 16"-6"-8"-12" from the ground up, and the bottom wire will be smooth.**

b. **Inventory the remaining fences on public lands and modify those fences to BLM specifications as needed to facilitate the movement of big game.**

c. **Modify existing fences and design new fences to facilitate the movement of deer, antelope and elk, and reduce maintenance costs.**

d. **Improve vegetative diversity for antelope through the seeding of grass, shrub/half-shrub and forb seeds. The areas to be seeded will be associated with the water developments in the Independence Valley and Holborn Pastures of the West Big Springs Allotment, and the East Pequop Bench and East Squaw Creek Pastures of the East Big Springs Allotment as described under the Livestock Grazing Management section above.**

e. **Install additional big game guzzlers to provide more water locations and to attract big game to areas little used by livestock. The specific locations for new water guzzlers will be identified at a later date.**

f. **Manage sage grouse habitat (i.e. leks/strutting grounds, nesting, brooding,and summer and winter habitats) consistent with the Western States Sage Grouse Guidelines, as adapted for use in Nevada.**

Rationale: Designing new fences and modifying existing fences to facilitate big game movements improves access to their habitat and reduces fence maintenance.

Insufficient vegetative diversity for antelope was cited as a limitation for antelope habitat in this allotment. The proposed seedings are intended to provide areas of increased diversity for antelope as well as other wildlife.

Installing additional big game guzzlers expands big game distribution and provides water for other wildlife.

Maintaining and improving sage grouse habitat will assist in maintaining or increasing populations.

6. **Monitoring**

a. **Continue to conduct necessary monitoring studies and periodically evaluate the effects of grazing to determine if progress is being made in meeting the multiple use objectives and standards for rangeland health. The Big Springs Allotment(s) will be re-evaluated in accordance with priorities established in the Elko Field Office Monitoring and Evaluation Schedule.**

b. **Establish new key areas or supplement studies in the following locations (Establish only the minimum number of monitoring sites needed to analyze if management actions are effective in meeting the rangeland health standards and multiple use objectives and resolving issues):**

Independence Valley Pasture - Utilization studies/use patterns that represent the principal use area, and condition and trend transects in ecological sites that represent the principal use areas.

Holborn Pasture - Utilization and condition and trend studies at one or two new key areas that will replace existing key areas 03, 04 & 06. The new key area(s) are to be established in range sites with Thurber needlegrass and/or bluebunch wheatgrass which are highly preferred forage species. One suggested location is in section 34 or 35, T. 38 N., R. 64 E. south of the Holborn private pasture from which water flows from a spring with flows extending southward during spring snowmelt/rains. A second suggested location is south or west of Independence Well in section 13, T. 38 N., R. 64 E. One or both of the key species noted above are common in these areas and are commonly grazed by livestock.

Upper East Squaw Creek (Proposed Riparian Pasture) - Riparian stubble height/utilization transects and trend photos.

Squaw Creek Ranch Field - Riparian stubble height/utilization transects and trend photos.

Lower Squaw Creek Ranch Field - Utilization studies.

Railroad Field - Utilization and condition and trend studies.

Windmill Seeding - Utilization and trend studies.

East Squaw Creek Pasture - Utilization and trend studies on the seeding at the south end.

Collar and Elbow Pasture - Utilization studies within each principal use area, and condition and trend transects in ecological sites that represent the principal use areas.

Shafter Pasture - Condition and trend studies at key area 4306-21 (Shafter Well #2).

East Pequop Bench Pasture - Utilization studies within each principal use area, and condition and trend transects in ecological sites that represent the principal use areas.

Six-Mile Canyon Pasture - Utilization studies and condition and trend transects in ecological sites that represent the principal use areas.

Riparian Exclosures - Trend photos.

New Seedings - Utilization and trend studies.

Rationale: Additional monitoring sites will be established to determine the effectiveness of management actions and determine progress towards objectives.

7. Fire Management

Implement the Big Springs Allotment Fire Management Plan as described in Appendix 2 of the Proposed Multiple Use Decision.

A summary of the planned actions is provided below. Specific details can be found in Appendix 2 of the Proposed Multiple Use Decision.

- Institute an aggressive prescribed fire program in the mixed conifer sites on the Pequop Mountains and in the Bluebell Wilderness Study Area (WSA) on the Goshute Mountains to reduce fuel loadings, create uneven aged stands and reduce the amount of disease (spruce budworm) within the stands.

- Evaluate the use of prescribed fire or mechanical thinning to reduce juniper encroachment into sagebrush/grass and bitterbrush areas in the areas around West Spring in the North Pequop Mountains and the area south of I-80 in the Pequop Mountains.

Required National Environmental Policy Act (NEPA) documentation will be completed for specific project proposals.

Rationale: The 1998 Elko Field Office Fire Management Plan identified fire and fuels management goals and objectives for the Elko Field Office. The Big Springs Allotment Fire Management Plan is tiered from the field office plan and identifies site specific fire suppression, prescribed fire, and mechanical fuels treatments goals and objectives for the public lands.

8. Forestry

a. Implement artificial reforestation efforts within burn areas where natural regeneration is unlikely due to fire intensity or severity.

Rationale: The dry, hot climate common during the summer months intensifies fires within our forest types, usually killing most or all of the seedlings and seed. Due to the lack of a seed source, forest sites which have experienced high intensity fires typically do not regenerate before the microorganisms within the soils die out. These microorganisms are critical to tree survival. Those forest sites must then regenerate outward from the edges of the remaining stands, bringing the microorganisms with them. This can cause burned sites to be deforested for extended periods of time, perhaps hundreds of years.

b. **Continue sustained yield management of pinyon/juniper woodlands for forest products. Improve access and utilization of woodland product harvest areas to enhance understory vegetation, provide for public demand, and improve or maintain the health of the forest.**

Rationale: Sustained yield management permits the utilization of a resource without depleting the resource. For example, in the case of forest products, harvesting no more in a year or decade than will regrow during the same time period. This ensures a continued supply of the resources for future generations. Thinning within a forest stand will usually release the remaining trees (improving the health) by reducing competition for water, light, and nutrients. Harvesting within stands makes forest products available to the public for various uses. Thinned stands usually produce larger quantities of understory vegetation which may be desirable to various wildlife species.

c. **Implement thinnings and possibly planting within areas that are desirable for Christmas tree production. Areas managed will be within high public use zones with good public access.**

Rationale: The demand for Christmas trees within the Wells Resource Area exceeds the sustained yield capabilities of the forest. Many of the Christmas tree production sites require stand maintenance to increase the growing space for Christmas tree formed trees. Natural regeneration for pinyon pine has also been very limited within the past decade due mostly to drought conditions. Poor cone crops combined with poor seedling germination and survival has been the result of the limited soil moisture.

9. **Noxious Weeds and Invasive Plants**

Treat noxious and invasive weeds in a manner that is most appropriate to the weed species and degree of infestation. Treatment will be in accordance with the Final Environmental Impact Statement for Vegetation Treatment on BLM Lands in Thirteen Western States, the Programmatic Environmental Assessment (EA) of Integrated Weed Management on Bureau of Land Management Lands, and the Elko Field Office site specific Invasive-nonnative Vegetation Treatment EA.

Rationale: The BLM is mandated to manage vegetation on public lands. The BLM must control noxious weeds and undesirable plants to maintain or improve the quality of forests and rangelands for multiple resources.

10. **Wilderness Study Areas**

Administer all grazing and any projects within the Bluebell Wilderness Study Area in full compliance with the Interim Management Policy for Lands Under Wilderness Review.

Rationale: The BLM is mandated by the Federal Land Policy and Management Act (FLPMA) to manage Wilderness Study Areas so as not to impair the suitability of each area for preservation of wilderness. This is generally referred to as the "non-impairment criteria".

11. **Drinking Water Source Protection Plan for the City of West Wendover, Nevada**

The BLM agrees not to locate or allow the location of any Potential Contamination Sources (PCS), as defined by the United States Environmental Protection Agency and the Nevada Division of Environmental Protection, in Protection Zones (PZ) 1,2,3, and 4, so far as this is consistent with the authority granted to BLM to regulate public land activities. The protection zones are shown on Map 8 in the allotment evaluation.

Rationale: Managing activities that could adversely affect the quality of drinking water is important for public health.

12. **Standards for Rangeland Health and Multiple Use Objectives**

The Standards for Rangeland Health for the Northeastern Great Basin Area of Nevada and multiple use objectives to be carried forward for the next allotment evaluation are listed in Appendix 1 in the Proposed Multiple Use Decision. The standards for rangeland health and resource management plan (RMP) objectives, as amended, remain unchanged. However, some of the allotment specific and key area objectives have been revised, removed or added as follows:

Allotment Specific Objectives

a. Delete the portion of the objective related to improving livestock distribution in the Holborn Pasture in the West Big Springs Allotment and add to the objective to improve distribution within the East Pequop Bench Pasture and Six-Mile Canyon Pasture in the East Big Springs Allotment. The objective to improve the distribution in certain other pastures remains unchanged.

Rationale: Current livestock distribution patterns are considered acceptable in the Holborn Pasture given the availability of existing stockwaters, and there are no management actions proposed to change the current patterns. Improving livestock distribution in the East Pequop Bench and Six-Mile Canyon Pastures is needed, and projects are planned to improve distribution.

b. Delete the general objectives regarding the improvement or maintenance of ecological status in certain pastures.

Rationale: These objectives are not measurable as stated. The specific key area objectives to be carried forward are stated in measurable terms and it is therefore unnecessary to carry forward the less specific objectives.

c. Delete the objective to construct the fence described in the Wells RMP Wild Horse Amendment that was intended to prevent wild horses from drifting north into the checkerboard land pattern of the Goshute Herd Management Area.

Rationale: The movement of wild horses into the checkerboard area of the Goshute Mountains is expected to be minimal when the numbers of wild horses are managed at the AML. The need to construct this fence will again be considered if substantial numbers of wild horses occupy the checkerboard area.

Upland Key Area Objectives

d. Key Area 4306-01 (Independence Valley) -

Revise the ecological condition objective to read "maintain or improve the ecological condition rating of this Shallow Calcareous Loam 8-10" site at or above 48% of the potential natural community".

Revise the frequency trend objective to read "maintain or increase the percent frequency of Indian ricegrass and the needlegrass species".

Rationale: This ecological site is normally dominated by black sagebrush, Indian ricegrass and needle and thread grass, with white sage being a small component. However, the percent composition of white sage at this key area is at least twice as high as the percent allowable in the range site description; therefore,

increasing white sage will not improve the condition rating. To increase the ecological condition rating significantly, Indian ricegrass will need to increase. The percent composition for Indian ricegrass that is allowable in the condition rating is 35%; however, it currently represents only 2% of the composition by weight, whereas both black sagebrush and rabbitbrush exceed the maximum allowable composition. Since there is a relatively low composition of Indian ricegrass currently, it is not expected to increase significantly over the next 10 - 20 years due to the paucity of seed produced by the small population of Indian ricegrass plants and the difficulty of overcoming the competition from shrubs in the existing community. Therefore, the intention of the objective stated above is to portray that the plant community will not change significantly over the next 10-20 years while also allowing for the possibility of some improvement if the weather cycles favor an increase in the key forage grasses, particularly Indian ricegrass. Any analysis will need to take into account the effects of precipitation when making comparisons between years.

e. Key Area 4306-02 (Independence Valley) -

Delete the condition and trend objectives, but retain the utilization objective for Great basin wildrye.

Rationale: This community has been disturbed in the past and now support only rubber rabbitbrush along with a small amount of wildrye. This community won't change significantly as long as the rabbitbrush continues to dominate. The wildrye was grazed only slightly during the evaluation period and is expected to remain a small component as long as use conforms to the utilization objective; therefore, only utilization will continue to be monitored at this site.

f. Key Areas 4306-03 & 04 & 06 (Holborn Pasture)

Delete the condition and trend objectives for these key areas and monitor utilization during use pattern mapping. Retain these records for future reference. Develop condition and trend objectives for the proposed new key areas following the collection of baseline data. The utilization objective for the native key forage species will continue to be 50% average use; not to exceed 55% in any single year.

Rationale: The establishment of new key areas will better represent the highly preferred forage grasses in areas that are preferred sites for livestock grazing in this pasture. The existing key areas have not shown to receive consistent use by livestock and/or the studies didn't capture the highly preferred key forage species. Development of key area objectives at the new key areas is best accomplished after the baseline information has been collected.

g. Key Area 4306-05 (N. Pequop Mountain Pasture) -

Revise the frequency trend objective to read "maintain or increase the frequency of Thurber needlegrass".

Rationale: The previous trend objective called for significant increases in bluebunch wheatgrass, Thurber needlegrass and western wheatgrass. Bluebunch wheatgrass is only a small component at this key area and is not expected to increase significantly due to a paucity of seed from the few plants in the community. However, the frequency data collected in 2000 showed significant increases in both Thurber needlegrass and western wheatgrass which are the two common grasses on this site. Thurber needlegrass is the most abundant grass on this site and the most highly preferred forage plant. Thurber needlegrass is also a bunchgrass whereas western wheatgrass is a grass that spreads by underground rhizomes. Grasses that can spread through underground rhizomes can increase dramatically during above average moisture years and likewise shrink back dramatically during drought years. Well established Thurber needlegrass plants are less subject to large swings in frequency and therefore more amenable to analysis of trends. Revising the objective to allow for the maintanence or increase of Thurber needlegrass frequency recognizes that the frequency is high and there may not be room for additional significant increases, but doesn't preclude that possibility.

h. Key Area 4306-19 (East Pequop Bench - North Bench Pasture)

Revise this objective following completion of the fire rehabilitation.

Rationale: This key area was burned twice in the 1990s. The most recent fire rehabilitation actions resulted in the seeding of this area; therefore it is necessary to develop revised objectives after we see the results of the fire rehabilitation.

Note: When additional monitoring data is collected at established key areas, particularly those key areas where data has not been recently collected, the BLM will review the data and determine if the objective to improve or maintain ecological conditions continues to be appropriate and will be modified as necessary.

Specific Riparian and Wetland Site Objectives

i. Add specific objectives for riparian and wetland sites - Please refer to Appendix 1 in the Proposed Multiple Use Decision for the description of desired condition objectives for riparian and wetland sites including the timeframes associated with achieving significant progress towards proper functioning condition (PFC).

Rationale: Management of riparian and wetland sites to achieve proper functioning condition (PFC) is in conformance with the standards for rangeland health. The desired condition objective for several riparian areas includes management for woody riparian plants such as aspen and willow, where they are present, that are also tied to the achievement of wildlife habitat and other multiple use objectives.

CLINTON R. OKE, Assistant Field Manager
Renewable Resources

10/4/01
Date