

BLM - SURPRISE FIELD OFFICE
Long Valley Allotment #01005

DOCUMENTATION FORM FOR DETERMINATIONS:
 ACHIEVEMENT OF RANGELAND HEALTH STANDARDS,
 CONTRIBUTING FACTORS AND APPROPRIATE ACTION PRIORITIES

THIS FORM DOCUMENTS, FOR THE INDICATED AREA: (1) DETERMINATIONS AND SUPPORTING RATIONALE REGARDING IF FUNDAMENTAL RANGELAND HEALTH CONDITIONS CITED IN 43 CFR 4180.1 EXIST IN THESE AREAS; (2) DETERMINATIONS, IN CASES WHERE ONE OR MORE CONDITIONS OF FUNDAMENTAL RANGELAND HEALTH DO NOT EXIST, REGARDING THE STANDARD(S) THAT IS (ARE) NOT ACHIEVED; (3) DETERMINATIONS, IN THOSE CASES WHERE ONE OR MORE STANDARDS ARE NOT ACHIEVED, REGARDING THE CONTRIBUTING FACTOR(S) THAT IS (ARE) PREVENTING STANDARD(S) ACHIEVEMENT OR IS (ARE) PREVENTING SIGNIFICANT PROGRESS TOWARDS ITS (THEIR) ACHIEVEMENT; AND, (4) THE INFORMATION THAT WAS EXAMINED THAT SUPPORT THESE DETERMINATIONS.

Indicate the date(s) or period the information review occurred: **1997- 2008**

PART I - IDENTIFICATION OF RELEVANT AREA

A. Indicate area where these determinations and rationale apply:

1. **Site (Specific Geographic Area) within Management Unit (allotment or pasture):**
 Allotment name/no.: _____
 Place name: _____
 Legal location (if needed to ID site): _____
 Approximate size in acres: _____
 (or linear length if lotic riparian)
2. **Management Unit (allotment or pasture - list name / no. / acres):**
 Long Valley Allotment #01005 - 59,079 acres public; 18,500 acres private
3. **Landscape (identify by groups of management units, or by watershed if cross-cutting MU's and list):**

4. **Other Stratification (identify - e.g., all riparian areas in XYZ Pasture):**

PART II - IDENTIFICATION OF INFORMATION REVIEWED

The following information was reviewed in **April – June of 2008** to determine standards attainment in compliance with 43 CFR 4180.2: **Actual use reports, utilization, and field data from 1997 - 2008.**

The following information (e.g. monitoring, literature, personal communication, etc.) was considered to determine standards attainment and, if applicable, contributing factor(s) to their non-achievement and failure to make significant progress towards their achievement. **Field data indicators observed at 4 evaluation sites on the Long Valley Allotment (#1005) in April and June 2008:**

Rangeland Health Attributes		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight	Σ
Soils	Soils/Site Stability Indicators 1-9 & 11	0	0	0	3	37	40
Hydrologic	Hydrologic Function Indicators 1-5, 8-11 & 14	0	1	1	6	32	40
Biotic	Biotic Integrity Indicators 8-9 & 11-17	0	3	1	6	26	36

Discussion of Specific Indicators (as needed):

Long Valley Allotment 2008 Evaluation Sites:

Percent of Allotment	<u>Pasture Name</u>	<u>SMU#</u>	<u>Site Number</u>	<u>Ecological Site Name</u>	<u>(by Soil</u>
<u>Mapping Unit)</u>					
25.6	Valley Bottomlands Pasture	#522/1045	NV 23 - 06	Loamy 8 - 10" P. Z.	
22.0	Valley Bottomlands Pasture	#1310	NV 24 - 22	Sodic Terrace 8 - 10" P.Z.	
8.6	Valley Bottomlands Pasture	#1206	NV 23 - 51	Sandy 8 - 12" P.Z.	
5.6	Mountain Pasture	#579/1440	NV 23 - 54	Steep North Slope 14+" P.Z.	

RHA #1 – Valley Bottom Pasture, SMU #522/1045, NV 23 - 06 Loamy 8 – 10" P.Z.

One moderate departure in "Litter Amount" was observed in the south end of the Valley Bottom Pasture in a Loamy 8 - 10" Wyoming big sagebrush/Thurber's needlegrass ecological site. The moderate departure rating was based on the lack of the deep rooted perennial bunchgrass Thurber's needlegrass and Indian ricegrass on this site. Although present, the grass composition is less than the ecological site description, therefore reducing the amount of herbaceous litter.

RHA #3 – Valley Bottom Pasture, SMU #1206, NV 23 - 51 Sandy 8 – 12" P.Z.

Moderate to extreme departures in "Plant Community Composition and Distribution Relative to Infiltration", "Functional/Structural Group", "Litter Amounts" and "Annual Production" were observed in the Valley Bottom Pasture in a Sandy 8 – 12"P.Z. big sagebrush/needle-and-thread – Indian ricegrass ecological site. The moderate to extreme departure ratings were based on the lack of deep rooted perennial grasses, which are the dominant grass component at Potential Natural Community (PNC).

No moderate or greater departures were observed at RHA #2 and #4 evaluation site.

A. Information relevant to UPLAND SOILS, STANDARD 1:

Susanville Resource Advisory Council Standards and Guidelines:

Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate and landform, and exhibit functional biological, chemical, and physical characteristics.

Meaning that: Precipitation is able to enter the soil surface and move through the soil profile at a rate appropriate to soil type, climate, and landform; the soil is adequately protected against human caused wind or water erosion; and the soil fertility is maintained at, or improved to, the appropriate level.

Indicator(s) Observed Information Reference (i.e. identify the information source used by type and date)

Comments / Remarks:

Answers to the following were based on the field data collected on the Long Valley Allotment #1005 in April and June of 2008, along with management records and monitoring data from 1997 to 2007. Soils and ecological site information was obtained from the 1999 Soil Survey of Washoe County, North Part and the 2006 Soil Survey of Surprise Valley – Home Camp California and Nevada.

Criteria

1. IS ground cover (vegetation, litter, and other types of ground cover, such as rock fragments) sufficient to protect sites from accelerated erosion? **Yes, except at site 3, which lacked a grass component as well as litter. The attribute rating for Soil/Site Stability was stable and the Hydrologic Function rated as functioning for all four evaluation sites. During the evaluation process, ocular observations were made on additional Sandy 8 – 12" P.Z. and Loamy 8 – 10" P.Z. ecological sites in June 2008; a good understory of perennial grasses such as Thurber's needlegrass, squirreltail and needle-and-thread was observed. Great Basin wildrye is also increasing in density in the interspaces between the greasewood and big sagebrush plants in the Valley Bottom and North Alkali Lake Pastures.**
2. IS evidence of wind and water erosion, such as rills and gullies, pedestalling, scour, or sheet erosion, and

deposition of dunes either absent or, if present, does not exceed what is natural for the site? **The soils at all evaluation sites in the allotment have sufficient cover to protect the soil from wind and water (raindrop and surface flow) impacts. Some wind scouring and deposition of soil is occurring on the Sandy 8 – 12” ecological site, but these soils are naturally extremely susceptible to wind erosion due to their texture. The small blow-out spots appear to be within the natural range of variability for this ecological site.**

3. IS vegetation vigorous and diverse in species composition and age class, and does it reflect the Potential Natural Community or Desired Plant Community for the site? **Yes, on most sites observed. One Sandy 8 – 12” P.Z. site in the Valley Bottom Pasture lacked the deep rooted perennial bunchgrass Thurber’s needlegrass, needle-and-thread, and Indian ricegrass and also had a higher amount of cryptobiotic crust present on site. This area seems to have been heavily impacted from historic heavy grazing use along with periods of drought conditions and is now being dominated by Wyoming and Basin big sagebrush with very little perennial bunchgrass component. Other Sandy 8 – 12” P.Z. sites in the same pasture just upslope and to the east were observed to be in good condition with the appropriate amount of deep rooted perennial grasses present. Overall, most of the vegetation in the allotment is vigorous and diverse and reflects DPC.**

B. Information relevant to the [STREAM HEALTH, STANDARD 2:](#)

Susanville Resource Advisory Council Standards and Guidelines:

Stream channel form and function are characteristic for the soil type, climate, and landform.

Meaning that: Channel gradient, pool frequency, width to depth ratio, roughness, sinuosity, and sediment transport are able to function naturally and are characteristic of the soil type, climate, and landform.

Comments / Remarks: **This standard is not applicable to the Long Valley Allotment. The surface water in the allotment is associated with shallow ephemeral lakebeds, several ephemeral drainage systems and spings/seeps that are classified as lentic systems.**

Criteria

1. ARE gravel bars and other coarse textured stream deposits successfully colonized and stabilized with woody riparian species? **N/A**
2. IS streambank vegetation vigorous and diverse, mostly perennial, and holding/protecting banks during high streamflow events? **N/A**
3. DOES the stream water surface have a high degree of shading, resulting in cooler water in summer and reduced icing in winter? **N/A**
4. ARE portions of the primary floodplain frequently flooded (inundated every 1 to 5 years)? **N/A**

C. Information relevant to the [WATER QUALITY, STANDARD 3:](#)

Susanville Resource Advisory Council Standards and Guidelines:

Water will have characteristics suitable for existing or potential beneficial uses. Surface and groundwater complies with objectives of the Clean Water Act and other applicable water quality requirements, including meeting the California and Nevada State standards, excepting approved variances.

Comments / Remarks: **Surface and groundwater are associated with ephemeral drainages, seeps, pit reservoirs and wells and neither surface water nor groundwater within the allotment has been listed for exceeding State water quality standards. All springs/seeps, pit reservoirs and groundwater are currently meeting the needs of beneficial uses for watering livestock and wildlife.**

Indications

1. ARE the chemical constituents, water temperature, nutrient loads, fecal coliform, turbidity, suspended sediment, and dissolved oxygen levels within the applicable requirements? **N/A**
2. ARE the standards for riparian, wetlands, and water bodies achieved? **N/A**
3. DO aquatic organisms and plants (e.g., macroinvertebrates, fish, algae, and plants) indicate support for

beneficial uses? **N/A**

4. ARE there acceptable results from implementation and effectiveness monitoring or changes in management to address deficiencies identified by such monitoring? **N/A**

D. Information relevant to the [RIPARIAN AND WETLAND SITES, STANDARD 4](#)

Susanville Resource Advisory Council Standards and Guidelines:

Riparian and Wetland areas are in properly functioning condition and are meeting regional and local management objectives.

Meaning that: The riparian and wetland vegetation is controlling erosion, stabilizing stream banks, shading water areas to reduce water temperature, filtering sediment, aiding in floodplain development, dissipating energy, delaying floodwater and increasing recharge of ground water that is characteristic for these sites. Vegetation surrounding seeps and springs is controlling erosion and reflects the potential natural vegetation for the site.

Comments / Remarks: Answers to the following questions were based on management records and observations on the Long Valley Allotment in 2007 and 2008.

Two springs/seeps in the allotment on BLM lands are located in the Mountain pasture; these are Lone Spring and an un-named spring/seep northeast of Lone Spring. These sites have been developed for livestock water. Developed sites cannot be rated for PFC under the exemption for standard 4 (see the 1998 Rangeland Health Standards and Guidelines for California and Northwestern Nevada Final EIS, 2-61); however, riparian vegetation associated with those sites such as seeps or springs above or below a development can be rated.

In 2007 and 2008, Lone Spring, a spring meadow obtained by BLM around 1995 during a land exchange was visited. The spring was developed for livestock use prior to the exchange and is currently functioning as a livestock and wild horse watering facility. Negative impacts to residual riparian grasses above and below the troughs are occurring from cattle and yearlong use by wild horses due to the placement of the troughs and fencing concentrating use on the riparian zone. The BLM is currently in the planning stages to address problems at this site. Recent observations in 2007 and 2008 indicate that riparian habitat surrounding the spring could be improved for wildlife by moving and replacing watering troughs and enlarging the small enclosure on site. After the enclosure is built, fences rerouted, and troughs are relocated, a riparian functional assessment will be conducted on the restored riparian area. In 2008, the riparian area below the development (in the Lone Spring seeding) was rated FAR (Functioning at Risk).

The un-named spring/seep system was also visited in 2008. Although both a reservoir and small berm have altered water flow along this system/reach, about 1,000 feet of riparian between these features was rated for PFC due to the presence of surface moisture.

Criteria

1. IS riparian vegetation sufficiently vigorous, mostly perennial, and sufficiently diverse in species composition, age class and life form to stabilize stream banks and shorelines? **No. In the reach below the Lone Spring development, most water was removed from the riparian zone and used to provide water for troughs in both the Mountain pasture and the Lone Spring seeding. This along with fencing and a gate between the Mountain pasture and Lone Spring seeding which concentrate livestock, have reduced riparian vegetation within the assessed reach below Lone Spring. At the unnamed seep/spring northeast of Lone Spring, both cattle and wild horse use has trampled riparian vegetation leaving few plants within the riparian zone. Water continues to seep as subsurface flow from the upper spring/seep**

2. IS riparian vegetation and large woody debris well anchored and capable of withstanding high streamflow events? **Not applicable; there are no lotic systems in this allotment.**

3. IS accelerated erosion (as a result of human related activities) evident? **Yes. Range developments have concentrated livestock and wild horses at both sites resulting in less vegetation and increased erosion at those sites.**

4. ARE age class and structure of woody riparian and wetland vegetation appropriate for the site? **N/A**

E. Information relevant to the BIODIVERSITY STANDARD 5:
Susanville Resource Advisory Council Standards and Guidelines:

Viable, healthy, productive, and diverse populations of native and desired plant and animal species, including special status species, are maintained.

Meaning that: Native and other desirable plant and animal populations are diverse, vigorous, able to reproduce, and support nutrient cycles and energy flows.

Comments / Remarks : **Answers to the following were based on the field data collected on the Long Valley Allotment in 2008, as well as management records and observations on the Long Valley Allotment.**

Indicator(s) Observed Information Reference (i.e. identify the information source used by type and date)

- plant vigor (production, mortality, decadence) - Observed during the 2008 RHA.
- diversity of age classes - Observed during the 2008 RHA.
- recruitment - Observed during the 2008 RHA.
- community structure (layers) - Observed during the 2008 RHA.
- community diversity - Observed during the 2008 RHA.
- exotic plants (or invaders) - Observed during the 2008 RHA.
- wildlife life forms present (obligate) - **Approximately 27 different bird species were found during the 1999 and 2000 Great Basin Bird Observatory survey for the Nevada Breeding Bird Atlas; however, not all species can be correlated to this allotment due to the transect only being partially located in the Long Valley Allotment. Coyote, mule deer, rodent, and black-tailed jack rabbit sign were noted in April of 2008.**

■ **special status species:** Sage-grouse use was noted in the eastern half of allotment including at Lone Spring. The Chester Lyon lek is no longer active, possibly since the 1970's. This lek was located in the Mountain Pasture. No Carson wandering skipper or habitat was found. In 2002, the one known golden eagle nest in the allotment was surveyed and found to be active. Three active pygmy rabbit sites were found and one historical site during the 2006 field office survey for pygmy rabbits.

Criteria

1. DO wildlife habitats include seral stages, vegetation structure, and patch size to promote diverse and viable wildlife populations? **Photos and line intercept data show that vegetation structure and species diversity are somewhat limited in the lower elevations compared to the upper elevations of the allotment. Plant community composition is approximately what is expected for the sites in the lower elevations except for Site 3, which has almost no grass or forb component. The soil mapping unit at Site 3 encompasses about 8.6 % of the allotment. Plant community composition is excellent in the upper elevations of the allotment (Site 4) with observed songbird nesting occurring. The percent sagebrush cover for all line intercepts ranged from 15-35% which generally falls within the reported range required by sage-grouse and pygmy rabbit. Line intercept data indicates that sagebrush species in the lowlands were Wyoming big sagebrush while Mountain big sagebrush was found in the higher elevations. More than 40% of this allotment is not suitable for sage grouse or pygmy rabbit due to early season flooding of the lowlands and lack of sagebrush sites (rock, greasewood and saltbrush, or playa). Pygmy rabbit were found only in the Wyoming big sagebrush sites in the lowlands.**

At Sites 1 and 2 (representing approximately 47.6% of the allotment soils), vegetation structure was noted to be adequate as hiding cover for rodents, songbirds and young ungulates. Site 3 provides little cover or diversity for ground nesting birds or rodents due to its lack of grasses expected for the site. Although site 4 (representing about 5.6% of soils in the allotment) was noted to not have as much Idaho fescue as expected, it provides excellent overall hiding cover for wildlife with good plant structural and species diversity noted. Site 4 is located approximately 1.5 miles from the historic Chester Lyon lek and no sage-grouse sign was found at this site.

2. ARE a variety of age classes present for most species? **Except at Site 3, reproductive capability of plants was good, and therefore a variety of age classes would be expected for most species.**

3. IS vigor adequate to maintain desirable levels of plant and animal species to ensure reproduction and recruitment of plants and animals when favorable events occur? **Yes, for the most part; except at Site 3 which had lower than expected amounts of grasses and forbs. Plant vigor and overall cover was much higher in the upper elevations of the allotment (site 4).**

4. DOES the distribution of plant species and their habitats allow for reproduction and recovery from localized

catastrophic events? **Point intercept data shows individual plant species well distributed across the allotment, especially in the upper elevations.**

5. ARE natural disturbances, such as fire, evident, but not catastrophic? **Yes, several small fires have occurred in the allotment, and due to their size, would be expected to have no great effect on plant communities or wildlife, although one 104 acre fire in 1998 burned within 1/3 mile of the historic Chester Lyon lek.**

6. ARE non-native plant and animal species present at acceptable levels? **Yes, they are present at acceptable levels with cheatgrass found mainly in the seedings. Chukar, a desirable non-native upland game bird is present in the Mountain Pasture.**

7. ARE habitat areas sufficient to support diverse, viable, and desired populations, AND are they adequately connected with other similar habitat areas? **Most of the vegetation in the allotment was noted to be vigorous and diverse with increases in Great Basin wildrye noted and most of the indicators for biotic integrity fell into the "none to slight" departure rating. Therefore, most of the allotment is expected to be providing diverse and viable plant communities for wildlife. Site 3 however, which could represent as much as 8.5% of the allotment, has almost no grass or forb component, and therefore would not provide necessary food and cover for many species including pygmy rabbit. Two active pygmy rabbit sites occur within the same soil mapping unit and one site as close as 2 miles from Site 3. While this may be problematic in terms of lack of native grasses that pygmy rabbits require in the spring, the 2006 pygmy rabbit survey had a higher probability of finding pygmy rabbits at sites with less understory.**

Line intercept data for sagebrush cover ranged from 7% to 35% for all lines with an average range of 10.5% to 26.5% cover for each assessed site. While Sites 2 and 3 had the lowest percentages of sagebrush canopy cover (10.5% and 19% respectively), these were within the expected range for the sites assessed. Site 1 also had a canopy cover (26.5%) of sagebrush within the expected range while Site 4 had more than expected cover for the site (25.7%). This higher than expected amount of sagebrush likely contributed to the lower percent cover of grasses at that site. However, these cover values are generally within the reported ranges required by sage-grouse and pygmy rabbit.

Between 2002 and 2004 the Chester Lyon lek was searched for aerially during the active strutting season and never found. Chester Lyon is located about 1.8 miles south of Site 4, albeit in a different mapping unit, a big sagebrush/low sagebrush site as opposed to a mountain big sagebrush/herbaceous vegetation site. Prior to these surveys, the last lek survey known was conducted in 1977 and no birds were found. Brood surveys at that site have shown progressively less birds since 1951. The last brood survey in the current database shows that 16 total birds (young and adults) were found in 1969 at that site. Two other brood surveys conducted within several miles of Chester Lyon show no or very few birds after 1983. It is unknown why this lek is no longer active or how much livestock use could be attributed to this. In 2007, two areas to the west of this site were rated as slight (0-20%) and moderate use (40-60%) and both aerial observations and topographic maps indicate that the slopes this site was located on are very steep.

Proportionally more important riparian habitat around Lone Spring and an un-named seep/spring system are receiving negative impacts from cattle and yearlong wild horse use due to livestock developments at those sites. While it is unclear if woody species would be present at either site, heavy use is churning the wet soils at those sites leading to altered water flow patterns and less dense and varied vegetation.

Although about 15% of the allotment is now in crested wheatgrass seedings. Fragmentation from these disturbances is too small to affect most species as evidenced by the occurrence of active pygmy rabbit (sagebrush obligate) sites on the perimeters of the seedings. This may be due to the presence of sagebrush and other native vegetation within the seedings.

8. IS adequate organic matter (litter and standing dead plant material) present for site protection and decomposition to replenish soil nutrients and maintain soil health? **Yes, litter was adequate at all sites; although somewhat excessive at Site 2.**

PART III - SUMMARY OF STANDARDS ACHIEVEMENT DETERMINATION AND RATIONALE

A. DETERMINATION ON STANDARDS ACHIEVEMENT

As of the date of the completion of this form, an examination of the information listed in Part II and recent field visits, if applicable, indicate the following with regard to standards achievement for the area identified in Part I:

<u>Standard</u>	<u>Determination on Standard Achievement</u> (check appropriate box for each standard)
Upland Soils	<input checked="" type="checkbox"/> Met / <input type="checkbox"/> Not met but progressing towards / <input type="checkbox"/> Not met and not progressing towards / <input type="checkbox"/> N/A
Stream Health	<input type="checkbox"/> Met / <input type="checkbox"/> Not met but progressing towards / <input type="checkbox"/> Not met and not progressing towards / <input checked="" type="checkbox"/> N/A
Water Quality	<input type="checkbox"/> Met / <input type="checkbox"/> Not met but progressing towards / <input type="checkbox"/> Not met and not progressing towards / <input checked="" type="checkbox"/> N/A
Riparian/Wetland	<input type="checkbox"/> Met / <input checked="" type="checkbox"/> Not met but progressing towards / <input type="checkbox"/> Not met and not progressing towards / <input type="checkbox"/> N/A
Biodiversity	<input checked="" type="checkbox"/> Met / <input type="checkbox"/> Not met but progressing towards / <input type="checkbox"/> Not met and not progressing towards / <input type="checkbox"/> N/A

B. RATIONALE SUPPORTING STANDARDS ACHIEVEMENT DETERMINATION

The Standard for Upland Soils is currently being met for the Long Valley Allotment #01005. Data from the four Upland Health Assessments rated Soil/Site Stability as stable and Hydrologic Function as functioning for all sites evaluated. Ocular observations made during the upland health assessments in the Long Valley Allotment verified the above determination that the allotment has an abundance of total cover to protect the soil from wind and water (raindrop and surface flow) impacts and the Soil/Site Stability ratings are well within the range for the reference sites.

The Standard for Stream Health: N/A - There are no perennial streams located on public lands within the allotment; only ephemeral drainages which run for a short period of time during the winter and early spring runoff period.

The Standard for Water Quality: N/A – Surface and ground water is associated with ephemeral drainages and ephemeral lakes, springs/seeps, pit reservoirs and wells that are currently meeting the needs of beneficial use for watering livestock and wildlife. Neither surface water nor groundwater within the allotment has been listed for exceeding State water quality standards.

The Standard for Riparian Wetland Areas: N/A – The standard for riparian and wetland areas has not been met but progressing towards. The allotment contains two springs; Lone Spring and an un-named spring/seep northeast of Lone Spring. Riparian reaches below developments at Lone Spring and the un-named seep/spring system are either FAR (Lone Spring) or non-functional. Lone Spring (including the spring development) was previously rated as FAR with an upward trend in 1993. Trend cannot be determined for the unnamed seep/spring (which has no previous rating). The factors identified which led to these ratings have been previously summarized.

Both springs/seeps and associated riparian areas have been impacted by the development of water. The development of water has resulted in alteration of several key riparian characteristics associated with hydrology, vegetation, and resistance to erosion. The physical factors which are affecting riparian function associated with the water developments include; reductions in surface flow, reductions in the health vigor and surface cover of riparian vegetation, encroachment into the historical wetland footprint by upland species such as sagebrush, and decreases in the quantity and the availability of surface water within the historic channel.

Livestock and yearlong wild horse use is apparent at all sites and in some instances has been observed to be heavy to severe. Current livestock use, however, is not a casual factor for the non-attainment of this standard based on the following rationale: first, range improvements are not livestock use or livestock management. Range improvements are constructed to facilitate livestock management, or manipulate livestock use, but they are not, in and of themselves, livestock use or livestock management.

Livestock use is not unusual or unexpected within a riparian area. Depending on the period use (number of days) as it relates to the duration of time that water is available at the site, livestock use may or may not lead to adverse impacts to riparian function. In the case of the riparian areas in question, the duration of use associated with the water developments has been increased due to the capture/storage and longer availability of water. In other words, the placement of reservoirs in the channel has enabled water from deeper in the soil profile to be available later into the year than it would otherwise have been available if surface topography had not been altered. Similarly, the installation of a spring box at a spring site enables the capture of water deeper in the profile leading to a similar result. This deeper harvest of water and resultant unavailability of this captured water by the vegetation is the cause for reductions in surface flow, reductions in the health vigor and surface cover of riparian vegetation, encroachment into the historical wetland footprint by upland species such as sagebrush, and decreases in the quantity and the availability of surface water within the historic channel.

In addition to the period of use, the intensity of use is often a major consideration in whether or not livestock use in a riparian area leads to negative effects. In the case of these sites, the storage of water and the availability of this water for longer periods during the scheduled livestock use period have resulted in an

increase in use and the number of livestock which can remain in the area and surrounding landscape.

The relationship between the location of adequate water and the availability of forage is also critical to determining the extent to which livestock use will produce adverse impacts to riparian areas. The troughs or reservoirs associated with the two sites are all either within the historic channel (as with the reservoir) or within one hundred feet of the riparian area/source/historic channel (as with troughs). This means that livestock using these water sources are able to acquire adequate water and forage and minimize effort. This leads to longer residence time at the sites and causes the heavier use.

For all of the above reasons, it is reasonable to conclude that livestock use is not a causal factor for the nonattainment of this standard. This conclusion is further supported by the observations and measurements of upland forage utilization. Despite the conclusion that major vegetation communities are sustaining lower densities and frequencies of perennial grasses, they are not experiencing heavy and severe utilization.

The Standard for Biodiversity: The standard for biodiversity is currently met for the Long Valley Allotment. Office records and field visits indicate that native and other desirable plant and animal populations are present, diverse, vigorous, and able to reproduce throughout most areas of the allotment and several BLM sensitive and/or sage-brush obligate species actively use the allotment including golden eagle, pygmy rabbit, and sage-grouse. While grasses are lacking in some areas it was noted that in other areas they were on the increase. Riparian habitat used by wildlife is being negatively impacted by the concentration of livestock and wild horses in and around livestock developments. While proportionally a more important habitat type, riparian habitat within the allotment is concentrated within the Mountain Pasture and is receiving much greater impacts from wild horses.

PART IV - FOR THOSE STANDARDS NOT ACHIEVED, SUMMARY OF CONTRIBUTING FACTOR(S) DETERMINATION AND SUPPORTING RATIONALE

A. DETERMINATION OF CONTRIBUTING FACTORS

As of the date of the completion of this form, an examination of the information listed in Part II and recent field visits, if applicable, indicate that the following are contributing factors for failing to achieve the standards as indicated in Part III for the area identified in Part I:

Non-achieved Standard (s) (from Part III):

<u>FLPMA Principal or Major Uses</u>	<u>Information Reference (what data was reviewed - type and information date)</u>
<input type="checkbox"/> Domestic Livestock Grazing	<input type="checkbox"/> actual grazing use _____ <input type="checkbox"/> grazing "licenses" _____ <input type="checkbox"/> utilization records _____ <input type="checkbox"/> field notes / photographs _____ <input type="checkbox"/> other _____
<input type="checkbox"/> Fish and Wildlife Development and Utilization	<input type="checkbox"/> utilization _____
<input type="checkbox"/> Mineral Exploration and Development	<input type="checkbox"/> road building _____
<input type="checkbox"/> Rights-of-way	<input type="checkbox"/> _____
<input type="checkbox"/> Outdoor Recreation	<input type="checkbox"/> road building _____
<input type="checkbox"/> Timber Production	<input type="checkbox"/> _____

Other Events or Circumstances Considered Information Reference (what data was reviewed - type and information date)

- Wild horse and Burro use
 - census / distribution data _____
 - other: BLM staff noted heavy use by wild horses at the Lone Spring Development as well as the unnamed seep/spring.
- exotic plant presence _____
- insect impacts _____
- abnormal fire frequency or lack of fire _____
- abnormal climatic events _____
- other - Range Improvements
 - Relationship between range improvements and conditions as compared to conditions in other similar ecological sites and surrounding uplands. Based on site assessments in

CONTRIBUTING FACTOR(S) (LIST):

B. RATIONALE FOR CONTRIBUTING FACTOR DETERMINATION

PART V - BLM STAFF WHO REVIEWED THE INFORMATION AND RECOMMENDED PRIORITY FOR DEVELOPMENT AND IMPLEMENTATION OF APPROPRIATE ACTION TO MAKE SIGNIFICANT PROGRESS TOWARDS ACHIEVING THE STANDARD(S)

The following staff have participating in examining the information listed in Part II and in making the standard(s) achievement and contributing factor determination(s).

Elias Flores, Wildlife Biologist
Alan Uchida, Watershed Specialist
Steve Mathews, Rangeland Management Specialist
Steve Surian, Sup. Natural Resource Specialist/Wild Horse Specialist

SIGNATURES:

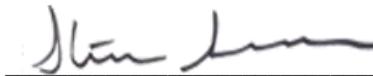
TITLES:



Wildlife Biologist



Watershed Specialist



Rangeland Management Specialist

Sup. Natural Resource Specialist/Wild Horse Specialist

In the cases where the standards are not achieved and after considering all relevant information, we recommend that the priority for developing and implementing appropriate action to achieve standards in the area identified in Part I be (check one):

high medium low .

We base our recommendation on the following ratings of the following factors:

Biological / Physical

Severity of resource impacts resulting from non-achievement of the standard - high medium low

Size of affected area -

Ability to arrest further degradation - easily done unknown difficult

Other:

Administrative

Proportion of federal land in the allotment - high medium low

Pending administrative actions (permit lease renewal / transfer, etc.) - pending not pending until FY _____

Other

Social

Anticipated cooperation of the permittee / lessee -
Legal requirements
Other

expected not expected unknown
 compelling not compelling

Economic Considerations

PART VI - DOCUMENTATION OF THE INVOLVEMENT OF PERMITTEES, STATE AGENCIES AND THE INTERESTED PUBLIC IN MAKING STANDARDS CONFORMANCE DETERMINATION AND CONTRIBUTING FACTORS DETERMINATION

Indicate the occurrence of public participation (e.g. permittee, interested public, other Federal or State /local agency), or opportunities for public participation that pertains to the review of standards achievement and contributing factors (who, when, and conversation or meeting summary): **The public was notified of the project in January 2008, and a scoping letter was sent to 66 interested publics of record (including the permittee) on January 17, 2008. Western Watersheds Project and Nevada Department of Wildlife contributed comments that were carefully considered.**

PART VII - AUTHORIZED OFFICER'S DETERMINATION AND PRIORITY FOR APPROPRIATE ACTION DEVELOPMENT AND IMPLEMENTATION

- (X) Existing grazing management practices or levels of grazing use in the Long Valley Allotment # 01005 promotes achievement of significant progress towards the Approved Northeastern California and Northwestern Nevada Standards and Guidelines for Livestock Grazing of July, 2000 and conforms with the Guidelines for Livestock Grazing Management.
- () Existing grazing management practices or levels of grazing use in the Long Valley Allotment # 01005 will require modification or a change prior to the next grazing season to promote achievement of the Approved Northeastern California and Northwestern Nevada Standards and Guidelines for Livestock Grazing of July, 2000 and conforms with the Guidelines for Livestock Grazing Management.

I have reviewed and concur with the determinations and supporting rationale regarding the achievement or lack thereof of rangeland health standards documented herein and, in the cases where standards are not achieved, the determination and rationale regarding the contributing factor(s) for failure to achieve the standards. I have determined that the priority for developing and implementing appropriate action to achieve significant progress to achieve standards for the area identified in Part I is (check one)

Priority: high medium low

Staff is directed to develop appropriate action for my consideration and implementation in accordance with this priority.



SURPRISE FIELD MANAGER

12-2-08

DATE

COMMENTS: