

BLM - SURPRISE FIELD OFFICE

Denio Allotment # 01000

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: February-July 2009

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):**
Denio Allotment # 00902; contains 22,267 public acres and 1,230 acres of private lands, approximately 120 acres of private land is fenced, and remainder is intermingled with public land.
 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 June 2009 to determine standards attainment in compliance with 43 CFR 4180.2: **Actual use reports, utilization data, trend data, photo points, rangeland health assessment, riparian functional assessments, water source inventory data, and other field data.**

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. **Rangeland Health indicators from 2 evaluation sites on the Denio Allotment:**

Rangeland Health Attributes		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight	Σ
Soils	Soils/Site Stability Indicators 1-9 & 11				6	16	22
Hydrologic	Hydrologic Function Indicators 1-5, 8-11 & 14				8	12	20
Biotic	Biotic Integrity Indicators 8-9 & 11-17				11	9	20

Discussion of Specific Indicators (as needed):

Denio Allotment 2005 Evaluation Sites:

<u>Soil Mapping Unit #/ Percent of Allotment</u>	<u>Ecological Site Number</u>	<u>Ecological Site Name</u>
305/26%	023XY093NV	Gravelly Clay10 12" P.Z.
342/26%	023XY094NV	Ashy Slope 12-14" P.Z.

Attached is a summary of the evaluation sites, which includes percentages from line-intercept transect data such as cover and litter, etc.

- 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.

Comments / Remarks:

Answers to the following criteria is based on the rangeland health assessment data collected on the Denio Allotment, primarily from October 2005 to July 2009, along with monitoring data collected from 1968 to 2008 on the Denio Allotment. Soils and ecological site information was developed by NRCS, including the 2006 Soil Survey of Surprise Valley-Home Camp Area 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, the attribute rating for Soil/Site Stability and Hydrologic was rated as functioning for both evaluations sites in 2005. The sites were revisited in 2008 and 2009 and the ratings are still valid based on a review of RHA evaluation sheet indicators. Site #1 has abundant rock cover. Litter amounts are adequate at both sites. Other components such as ground cover and herbaceous vegetation are adequate and above coverage amounts expected for the sites. Percentages of cover for perennial grasses, forbs and shrubs, including sagebrush, were adequate on both sites.**
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? **Yes, as stated above, the attribute rating for Soil/Site Stability rated stable and the Hydrologic Function rated as functioning for both sites. Wind and water erosion, or pedestalling indicators were rated slight to moderate departments at both sites. The Soil Stability rating at both assessments sites varied from 2.2 to 2.5, which is less than the reference area rating of 3-6. This resulted in a slight to moderate department for soil surface resistance to erosion. This rating is more closely correlated to water erosion than wind erosion. The low rating is somewhat offset by relatively high canopy, basal and litter cover amounts.**
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, site 1 is dominated by Lahontan sagebrush and Douglas rabbitbrush; native perennial grasses and forbs are reflective of the ecological site description. However, this site does not have Thurber's needlegrass in amounts comparable with the reference sites, and the most common grass is Sandberg's bluegrass. The site contains Thurber's needlegrass in patches, but was not recorded on the 2008 line transects. Site 1 has a relatively low potential, as annual production is 500 lbs/acre in normal years. Site 2 is dominated by Idaho fescue and Mountain sagebrush, and has a relatively high potential and annual production. The vegetation at site 2 is vigorous and diverse, and is reflective of potential natural community. Although there is some Mountain sagebrush mortality at site 2, sagebrush seedlings were also common, indicating adequate recruitment and normal ecological processes.**

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:

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.

Surface and groundwater complies with objectives of the Clean Water Act and other applicable water quality requirements, including meeting the State standards within the respective boundaries of the States of California and Nevada.

Comments / Remarks : **Surface water is associated with ephemeral systems, seeps, pit reservoirs and wells. All pit reservoirs and wells are currently meeting the needs of beneficial use 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? **Yes, (See standard 4 below)**
3. DO aquatic organisms and plants (e.g., macro-invertebrates, 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.

C Comments / Remarks: **Answers to the following were based on the riparian functional data, water source inventory, and other monitoring data collected on the Denio Allotment.**

Riparian Functional Assessment summary for the Denio Allotment

Site Name	Rating/Trend	Approximate riparian size (acres)	Approximate enclosure size (acres)	PFC Indicator ratings			
				Yes (positive)	No (negative)	Undecided	Not applicable
Gillman Spring	FAR-down (2009)	1 (public)	None – most is private land	15	2	0	2
Al Owens Spring enclosure	PFC	1.5	5				
Docking Corral spring	Not assessed*	0	0				
Un-named seep	FAR-not apparent (2009)	0.0625	N/A	11	2	2	5
Paso Spring development	Not assessed*	0.125	N/A				
Little Mahogany	FAR-not apparent	0.125	N/A	16	2	0	2
Little Weimer enclosure	PFC	4	43				
Little Weimer development	Not assessed*	0.14	N/A				
Wagon Tire spring and enclosure	PFC	0.5	1.5				

* Paso Spring, Al Owens Spring, Wagon Tire Spring, Docking Corral Spring and Little Weimer Spring developments were mostly constructed in the 1960's. The PFC ratings conducted apply to the riparian site at the water source or at the spring development overflow depending on the project layout. Riparian habitats within enclosures were not rated using the PFC worksheet because the sites are not being impacted by grazing authorizations. For purposes of this determination the sites were given an apparent rating of FAR with an upward trend or PFC based on photographs or other field data. The PFC ratings don't apply to the physical developments, such as reservoirs, or at water troughs connected to a spring development (Northeast California/northwest Nevada Standards and Guidelines). Docking Corral spring is a low volume spring that is fully developed, and no riparian habitat exists at the site, so the site was not rated. Some spring projects need maintenance or redevelopment to bring the site into conformance with current standards and policy. For example, the trough at Gillman Spring is located in the riparian zone; this development is affecting the overall functionality of the riparian site. Moving the trough to an upland location would improve riparian conditions. The Gillman Spring source is on public lands and most of the riparian habitat is on private lands. Prior to this RHA determination, BLM had developed plans to reconstruct the spring development and fence the riparian habitat on public land.

The spring sources at Little Weimer and Wagon Tire Springs are within enclosures. Little Weimer Spring has a 43 acre enclosure below the spring source and there is a 137 acre enclosure below the Paso Springs development. This enclosure is located entirely in the adjoining Home Camp Allotment, therefore is not included in the above table, but the associated riparian habitat would likely be rated at properly functioning condition.

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?

Not applicable, the Denio Allotment has no lotic habitat.

2. IS riparian vegetation and large woody debris well anchored and capable of withstanding high streamflow events?
Not applicable, the Denio Allotment has no lotic habitat.

3. IS accelerated erosion (as a result of human related activities) evident?
Yes. Heavy cattle and horse use was noted at assessed reaches at Gillman and Little Mahogany Spring with resulting changes in water flow patterns, and accelerated erosion.

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

Rosa sp. or Woods rose (also an upland species) was noted above both the un-named seep and Little Mahogany Spring and age class distribution was rated positive at both sites. Woods rose were also noted near Little Weimer but no woody riparian species were present in the large enclosure below the spring source. Riparian site capability and the potential to support woody species such as willows species have not been made for these riparian sites in the allotment. Age class distribution was rated positive at all assessed sites (including enclosures) that are capable of supporting wetland vegetation and all had surface water except for the un-named seep.

Riparian vegetation is perennial and plants exhibit high vigor and appropriate age class distribution, except for the riparian systems not within enclosures at Gillman and Little Mahogany Springs. These systems are receiving yearlong trampling impacts from wild horses and seasonal impacts from livestock. Other riparian resources in the allotment occur on the private lands, including Big Weimer Springs, Gillman Spring and Denio Camp. These sites were not rated, and are listed here for informational purposes.

Grazing impacts were not noted within enclosures, except at Little Weimer Spring source where the fence is down around the spring source. Previously, plans were made to reconstruct the enclosure. Office records indicate that other enclosures in the allotment have been well maintained. While no assessments were conducted in the Little Weimer, Al Owens, or Wagon Tire Spring enclosures, field observations and recent BLM information including photos indicate that riparian habitats within these enclosures are properly functioning. Vegetation is vigorous and diverse with no apparent off site impacts.

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.

<u>Indicator(s) Observed</u>	<u>Information Reference (i.e. identify the information source used by type and date)</u>
■ plant vigor (production, mortality, decadence)	RHA, field visits
■ diversity of age classes	RHA, bitterbrush transects, field visits, RFA
■ recruitment	RHA, bitterbrush transects
■ community structure (layers)	RHA, bitterbrush transects, RFA
■ community diversity	RHA, bitterbrush transects, RFA
■ exotic plants (or invaders)	RHA, bitterbrush transects
■ wildlife life forms present (obligate)	RHA, bitterbrush transects, RFA, NDOW data, field visits

Mule deer and pronghorn antelope use throughout the year on the western ½ of the allotment.

■ special status species **There are no special status species on the allotment, but there are several BLM sensitive species including Sage-grouse, golden eagle, California bighorn sheep and pygmy rabbit. One historic golden eagle nest was surveyed in 2002 and found to be inactive at the time. Two active pygmy rabbit burrows are known in the allotment. NDOW classified about 800 acres within the allotment as occupied bighorn sheep habitat, about 100 acres being on private lands. Eighteen ewes and five rams were reintroduced into Little High Rock Canyon about 8 miles east of the Denio Allotment in January of 1999.**

Criteria

1. DO wildlife habitats include seral stages, vegetation structure, and patch size to promote diverse and viable wildlife populations?

Yes. Since no large scale vegetation removal has taken place on the allotment, patch size is considered adequate for most species. Criteria # 7 below also addresses this question.

2. ARE a variety of age classes present for most species?
Yes, there are variety of age classes, particularly for shrubs and forbs.

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, plant vigor was high in assessed riparian sites and on the uplands. Range health assessments indicators

were rated at "slight to moderate" or "none to slight" departures at sites 1 and 2. Sagebrush seedlings were found at both assessment sites. Few bitterbrush seedlings have been noted at bitterbrush transects; however natural revegetation is often sporadic. Use pattern mapping data indicates that most of the allotment is meeting utilization guidelines, however heavy use was noted on some riparian areas which would affect plant vigor in the long term.

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

Yes. No large scale disturbances have occurred in the allotment (see below).

5. ARE natural disturbances, such as fire, evident, but not catastrophic?

Yes. Only one 225 acre fire burned in the allotment in 1964; however it is believed to have been caused by trash burning. No other point or polygon information exists for fires in the allotment and no other large scale disturbances have occurred.

6. ARE non-native plant and animal species present at acceptable levels?

Yes. At site 1, cheatgrass was rated as slight to moderate departure and none to slight at site 2. No other non-native species was recorded on the allotment. Chukar (a naturalized species) was not noted in the allotment files, but likely occurs in the rimrock areas of the allotment.

7. ARE habitat areas sufficient to support diverse, viable, and desired populations, AND are they adequately connected with other similar habitat areas?

Yes. Land cover data for Washoe County shows habitats within the allotment well connected to those outside.

NDOW brood and harvest data from the mid 1950's through the early 1980's show sage-grouse use of the allotment from summer through fall, sometimes associated with springs or developments. Recent signs of sage-grouse use and observations have been found around Docking Corral, Paso Springs, and Gillman Spring in the spring and summer. Some sage-grouse use of the allotment in the spring and winter is apparent from NDOW data. This data indicates that the Docking Corral lek may still be active, however only 1 bird was found on this lek in 2005. Three of four other leks within about 3.5 miles (outside of the allotment) are now all considered historic. A new lek was discovered in the same pasture (North or Upper Pasture) in 2007. This lek, the Little Mahogany lek, had 14 birds on it in 2007. No birds were found in 2008. At both assessment sites, sagebrush cover is within the range that should be managed for breeding sage-grouse (Connelly et al. 2000). At site #1 the average canopy cover for Lahontan sagebrush was 16.7% and 23% for Mountain big sagebrush at site #2,

Habitat needs for sage-grouse and pygmy rabbit differ. During the 2006 survey for pygmy rabbits on the Surprise Field Office pygmy rabbit were more likely to be found in areas with less herbaceous understory (Larraucea 2006). There are two known active pygmy rabbit burrows within the Denio Allotment. Aerial photography information suggests there may be more active burrows within the Denio Allotment. Field survey information indicate additional active burrows outside the allotment, including four active burrows within 2 miles of the Denio Allotment.

Riparian areas are extremely important in arid areas. While most of the riparian sites are functional, two riparian habitats within the allotment are currently being negatively impacted by livestock and horses. As evidenced by the enclosure at Little Wiemer Spring, modification of this 1960's fence would quickly improve the riparian systems at the spring source. Wild horse use, sage-grouse and antelope use was noted at several riparian sites.

The Denio allotment is not within a wild horse herd management area (HMA or HA), and the current population of about 40 wild horses that are using the allotment on a yearlong basis came from an adjacent HMA.

From 1979 to 2008, the trends seen in bitterbrush transects in the Denio Allotment shifted from a higher proportion of plants in the severely hedged class to the little or no hedging class. Cattle, deer, and horse sign were noted at all sites and rabbit use noted at one site. Horses generally do not use bitterbrush. In 1981, tent caterpillar presence was noted with some current mortality at two of the four transects. Two of these transects recorded seedlings from 1979-1981. But generally, seedlings have rarely been noted on the Cole Browse transects in the Denio Allotment.

Site #1 was rated as a slight to moderate departure for functional structural groups. This was due to a lack of Thurber's needlegrass at the assessment site, however Thurber's needlegrass is found near the line transects. Sandberg's bluegrass is the most abundant grass recorded along the line transects. The Thurber's needlegrass is generally more robust than Sandberg bluegrass, and more desired forage by deer and antelope while also providing more cover for wildlife.

Assessment site #2 had abundant grass cover under and between sagebrush plants. RHA indicator rated as

“none to slight” departure for functional structural groups. Dominant grasses include Idaho fescue, Thurber’s needlegrass, Great Basin wildrye and bottlebrush squirreltail. Assessment site #2 is about 0.8 miles from the Docking Corral lek site.

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 coverage is adequate as well as other ground cover components, including herbaceous vegetation as measured at both assessment sites. Perennial grasses, forbs, sagebrush and other shrubs species cover percentages were consistent with site potential.**

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	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 checked="" type="checkbox"/> Met / <input type="checkbox"/> Not met but progressing towards / <input type="checkbox"/> Not met and not progressing towards / N/A
Riparian/Wetland	<input type="checkbox"/> Met / <input type="checkbox"/> Not met but progressing towards <input checked="" 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

B. RATIONALE SUPPORTING STANDARDS ACHIEVEMENT DETERMINATION

The Standard for Upland Soils: Is currently being met for the Denio Allotment #01004. The standard achievement determination was based on monitoring data, including Denio Upland Health Assessments, actual use data, composite utilization mapping, photos taken during the assessment process, and using Soil Survey information. Data from the Upland Health Assessments rated Soil/Site Stability as stable and for Hydrologic Function as functioning for sites evaluated. The Denio Allotment has abundance total cover to protect the soil from wind and water (raindrop and surface flow) impacts. The Soil Stability rating at both assessments sites varied from 2.2 to 2.5, which is less than the reference area rating of 3-6. This resulted in a slight to moderate department for soil surface resistance to erosion. This rating is more closely correlated to water erosion than wind erosion. The low rating is somewhat offset by relatively high canopy, basal and litter cover amount. The following summary of line point Intercept data is from the evaluation sites:

Site 1 Average for the Gravelly Clay 10-12" ecological site.
37% Canopy Cover, 23% Bare Ground, 4% Basal Cover and 42% Litter Cover

Site 2 Average for the Ashy Loam 10-12" ecological site.
59% Canopy Cover, 23% Bare Ground, 14% Basal Cover and 47% Litter Cover

Line-Point Intercept and Gap Intercept transect data was collected on the Denio Allotment during July 2008, and is summarized in the attached tables.

The Standard for Stream Health: N/A - There are no perennial streams within the allotment.

The Standard for Water Quality: N/A - Surface water is associated with ephemeral systems, seeps, pit reservoirs and wells. All pit reservoirs and wells are currently meeting the needs of beneficial use for watering livestock and wildlife.

The Standard for Riparian Wetland Areas: The standard for riparian wetland areas is not met on 3 sites that are functioning at risk; 1 site has a downward trend, and 2 sites have a static trend. There are 3 riparian sites that are properly functioning. Reasons cited for not meeting the riparian standard were altered water flow patterns, and reduced species diversity as result of grazing impacts.

Currently there are 6 riparian enclosures in the allotment that were built around spring sources or below the spring and water source catchment site, and around the water overflow area. One is in disrepair; the others are in good condition. Riparian habitat within these enclosures is diverse and vigorous. For those sites not meeting standards, survey and design of structural improvements to enhance riparian habitat were completed previous to this determination, but not yet implemented.

The Standard for Biodiversity: The Standard for Biodiversity is met. Rangeland Health Assessments and field visits indicate that higher elevations of the allotment have varied habitats with higher diversities and densities of grasses and forbs consistent with ecological site descriptions. The lower elevation sites have less potential and have lower production, but the dominant plants are consistent with ecological site descriptions and soils information. The allotment has several sagebrush species including Low, Wyoming, Mountain, Lahontan, and Basin. This habitat is intact and adequately distributed across the landscape based on site potential with no notable reductions due to wildfire or other causes. Cheatgrass composition varies annually, and is present in small percentages on both sites assessed, but less common at the higher elevations. Riparian habitat conditions vary on the allotment, but generally are improving for several unprotected sites on the allotment. Overall riparian conditions have an upward trend on the allotment.

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 checked="" type="checkbox"/> Domestic Livestock Grazing	<input checked="" type="checkbox"/> actual grazing use 1997 to 2008 <input type="checkbox"/> grazing "licenses" <input checked="" type="checkbox"/> utilization records Stubble height measurements/use pattern mapping data <input checked="" type="checkbox"/> field notes / photographs <input checked="" type="checkbox"/> other Riparian Functional assessment data
<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	<input checked="" type="checkbox"/> census / distribution data _____ <input checked="" type="checkbox"/> other: field observations _____
<input type="checkbox"/> exotic plant presence	_____
<input type="checkbox"/> insect impacts	_____
<input type="checkbox"/> abnormal fire frequency or lack of fire	_____
<input type="checkbox"/> abnormal climatic events	_____
<input type="checkbox"/> other	_____

CONTRIBUTING FACTOR(S) (LIST):

B. RATIONALE FOR CONTRIBUTING FACTOR DETERMINATION

The non-attainment of the riparian standard for several riparian habitats in the allotment is attributed to livestock grazing and yearlong wild horse grazing and use, based on utilization information, actual use information, census data and the RFA. While the deferred rotational grazing system for livestock grazing will generally improve or maintain riparian conditions, this system has been ineffective in maintaining or improving unprotected riparian systems, in part due to yearlong wild horse use in the Denio Allotment.

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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
Richard Knox, Rangeland Management Specialist
Steve Surian Sup. Rangeland Management Specialist

<u>SIGNATURES:</u>	<u>TITLES:</u>
_____	Wildlife Biologist
_____	Rangeland Management Specialist
_____	Sup. Rangeland Management 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 - expected not expected unknown
 Legal requirements compelling not compelling
 Other _____

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):

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

- () Existing grazing management practices or levels of grazing use in the Denio Allotment #01004 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 Denio Allotment #01004 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

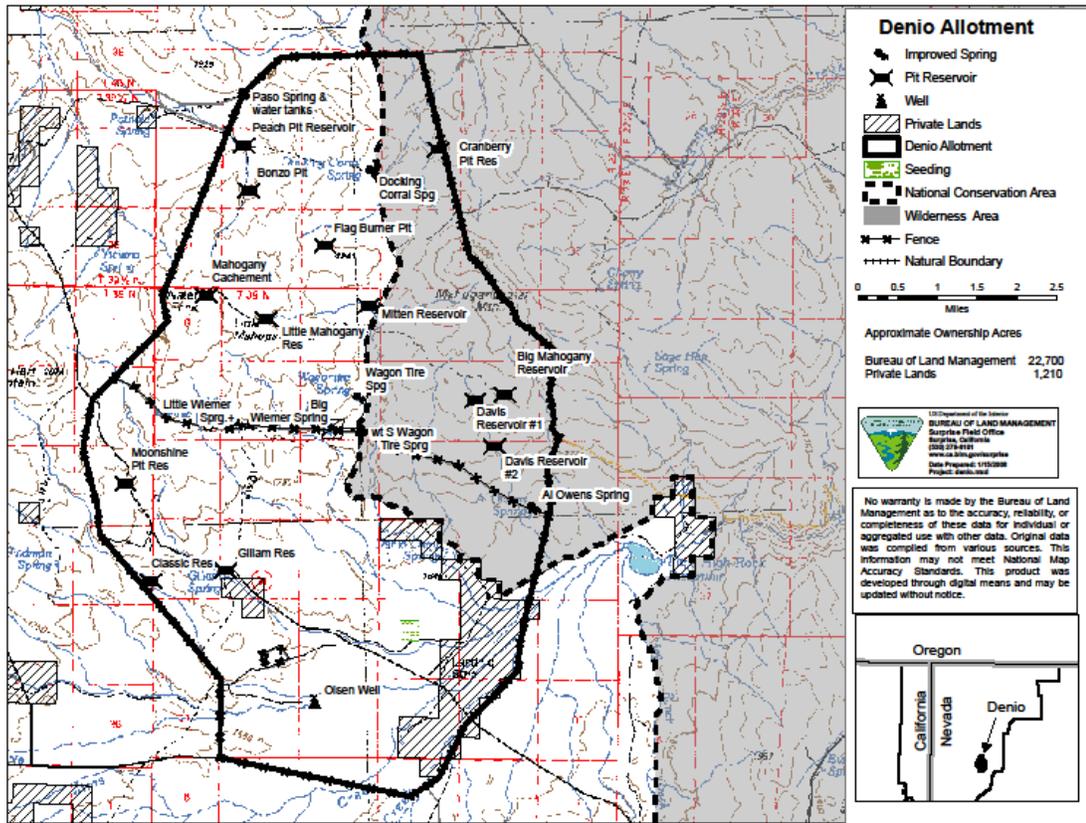
DATE

Comments.

Literature Cited

Larrucea, E. S. 2006. Bureau of Land Management Surprise Field Office Pygmy Rabbit (*Brachylagus idahoensis*) Survey, May-September 2006. 21 pp. Available On file at the Surprise Field Office.

Connelly, J. W., M. A. Schroeder, A. R. Sands, and C. E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. *Wildlife Society Bulletin* 28:967-985.



Denio Allotment Land Health Assessment Information Through 2008

UHA Number	Ecological Site Name	Soil Name/MU	Soil Stability	Biotic	Hydrologic	Indicators							Indicators Indicators			Indicators						
						I-1	I-2	I-3	I-4	I-5	I-6	I-7	I-8	I-9	I-10	I-11	I-12	I-13	I-14	I-15	I-16	I-17
Site 1	Gravelly Clay 10-12;23-93	Saraph/342	1	1	1	1	1	2	1	1	1	1	3	2	2	1	2	1	2	2	2	2
Site 2	Ashy Slope 12-14; 23-94	Ashtre/305	1	1	1	1	2	1	1	1	1	1	1	1	2	1	2	1	2	1	1	1

0	1	1	1	1	2	2	1	1	1	1	2	2	2	1	2	1	2	2	2	2	
Total Acres in Denio Allot.		24,231																			
Acres Represented In LHA																					
Percent of the Allot. Sampled																					

MU Acres	% Canopy Cover	% Bare Ground	% Basal cover	% litter	Soil Stability			Average Soil Stability	CANOPY				Gap Indicator		BASAL			
					All	Protected	Unprotected		1-2"	2.1-3"	3.1-6"	>6"	AVG	1-2"	2.1-3"	3.1-6"	>6"	AVG
1-5768	37	20.67	4.33	41.33	2.22	2.42	1.83	2.16	8.43	7.50	29.33	26.26	17.88	4.80	5.26	14.96	71.23	24.06
2-5745	58.67	22.67	14	46.67	2.28	2.25	2.33	2.29	17.33	7.80	18.10	2.16	11.35	12.60	14.00	30.50	15.36	18.12