

BLM - SURPRISE FIELD OFFICE

Upper Lake Allotment #01125

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: **July, 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):
Upper Lake Allotment #01125 - 1,054 acres total (759 public, 295 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 (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.

The following field data indicators were observed during July 2008 at the evaluation site on the "Lyonman soil map unit # 452" representing up to 85% of the Upper Lake Allotment #1125.

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	0	10	10
Hydrologic	Hydrologic Function Indicators 1-5, 8-11 & 14	0	0	0	0	10	10
Biotic	Biotic Integrity Indicators 8-9 & 11-17	0	0	0	2	7	9

Discussion of Specific Indicators (as needed):

Upper Lake Allotment 2008 Evaluation Site:

<u>Allotment Name</u>	<u>Site Number</u>	<u>Ecological Site Name</u>	<u>Percent of Allotment</u>
Upper Lake	R021XE205CA	South Slope 16 – 30” P.Z.	93.8

RHA #1 – Upper Lake, SMU #452, R021XE205CA South Slope 16 – 30” P.Z.

Two slight to moderate departure rating for “Functional/Structural Group” was observed in the Upper Lake Allotment on the South Slope 16 – 30” P.Z. (Mountain big sagebrush/antelope bitterbrush – bluegrass) ecological site. In comparison with the ecological site description there is a slight to moderate departure ratings were based on low composition of Bluebunch wheatgrass, however, there were higher than normal compositions of needlegrasses, and other deep rooted perennial grasses. Also there was higher than expected compositions of Mountain big sagebrush and antelope bitterbrush. Cheatgrass, and Japanese brome were present in small amounts. Western juniper invasion is occurring on this ecological site throughout the allotment.

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 data collected on the Upper Lake Allotment # 01125 in July 2008 Upland Health Assessment, Line-Point Intercept and Soil Site Stability, 2006 Soil Survey of Surprise Valley – Home Camp California and Nevada and actual use data.**

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, data summarized from the Line-Point Intercept transects (on the above evaluation site) as: 70% Canopy Cover, 19% Bare Ground, 1% Basal Cover and 47% Litter Cover. The Soil Stability Test data rating for the allotment was: 2.50 for all samples, 2.58 for protected samples and 2.33 for the unprotected samples. The Upper Lake Allotment has an abundance of total cover to protect the soil from wind and water (raindrop and surface flow) impacts.**

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, there is an abundance of total cover to protect the soil from wind and water (raindrop and surface flow) impacts and there are no signs of rills, gullies, pedestalling or abnormal erosion that would be considered uncharacteristic of the 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 for the most part. The South Slope 16 – 30” P.Z. ecological site is not dominated by Bluebunch wheatgrass although it was observed on site, along with Thurber’s needlegrass, and several Poa species, great basin wild rye, and bottlebrush squirreltail. Western juniper is also becoming well established on this soil throughout the allotment (and region). Overall, most of the vegetation in the allotment is vigorous and diverse including a healthy stand of Antelope bitterbrush.**

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: **N/A - There are no perennial streams located on public lands within the allotment.**

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:

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 and groundwater is associated with ephemeral drainages and spring/seeps and neither surface water nor groundwater within the allotment has been listed for exceeding State water quality standards. All springs/seeps 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**
1. 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 are based on data collected on the Upper Lake Allotment (# 01125) during the 2008 Upland Health Assessment and field observations. According to the BLM and USGS quad maps and records seven spring and seep areas are found on the allotment. In 2008 five of these springs were observed during the RHA.**

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? **In July of 2008, all sites visited were classified as lentic riparian sites with limited amounts of surface water. No sites visited were classified as lotic. In July, seeps were currently dry meadows, with no visibility of surface water. On July 10, 2008, riparian area vegetation was noted as being vigorous, diverse and mostly perennial.**
2. IS riparian vegetation and large woody debris well anchored and capable of withstanding high streamflow events? **Since riparian areas on the allotment are classified as lentic, large woody debris is not necessary for their stability. However, three of the five sites visited had woody species on them and all sites had sufficient vegetation on them to withstand spring runoff flows. The riparian plants were deep rooted perennial grasses and grasses like species including Baltic rush - juncus species, spike-rush, carex species, and several forbs such as trifolium species, and monkey flower**
3. IS accelerated erosion (as a result of human related activities) evident? **No accelerated erosion was observed.**

4. ARE age class and structure of woody riparian and wetland vegetation appropriate for the site? **Yes. Woody species were observed at spring sites (woody species had been crowded out by junipers at one site). Younger age classes of willows were observed at two sites. Wetland vegetation in the form of grasses and grass like plants was tall and vigorous at all sites with little evidence of current use by cattle, or wildlife.**

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.

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

■ plant vigor (production, mortality, decadence)	Field observations in 2008
■ diversity of age classes	Field observations in 2008
■ recruitment	Field observations in 2008
■ community structure (layers)	Field observations in 2008
■ community diversity	Field observations in 2008
■ exotic plants (or invaders)	Field observations in 2008
■ wildlife life forms present	
■ special status species	Greater sage-grouse (BLM sensitive) seen in 2008.

On 10 July 2008 observed; blue grouse, sage-grouse, elk (sign), racer, several different birds including American robin and flicker and possibly a flycatcher as well. Three distinct butterfly species were seen but no Carson wandering skipper, also biting insects, flies, and many grasshoppers. Cougar and mule deer are known from the adjacent allotment to the north. Archeology crews reported in 2008 current sign of bear, and many cavity nesters and woodrat nests in the pine stands.

Criteria

1. DO wildlife habitats include seral stages, vegetation structure, and patch size to promote diverse and viable wildlife populations? **Yes, wildlife observations combined with observations of plant diversity indicate that habitat attributes are adequate to support a variety of wildlife species and populations. Especially important are that riparian areas currently have a diverse species composition.**
2. ARE a variety of age classes present for most species? **Yes, most communities are healthy and productive, including sagebrush, pine, and bitterbrush communities. Younger age classes of antelope bitterbrush and mountain and low sagebrushes are relatively common throughout the assessment site and several age classes of ponderosa pine are in the allotment. Western juniper is actively increasing on all ecological sites on the allotment.**
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, reproductive capability of plants was rated as “none to slight” departure from what was expected for the site assessed. Young bitterbrush and sagebrush was seen at the assessment site and young ponderosa pine was observed on the upper slopes of the allotment.**
4. DOES the distribution of plant species and their habitats allow for reproduction and recovery from localized catastrophic events? **Yes. Plant species and habitats are adequately distributed across the landscape to recover from localized catastrophic events.**
5. ARE natural disturbances, such as fire, evident, but not catastrophic? **There was no evidence of large historic fires on the allotment. GIS databases indicate that two small fires are known to have occurred in the allotment. One approximately 0.1 acre fire occurred in 1978 and the second approximately 2 acres in size occurred in 1996. Both were located on private lands within the allotment boundary.**
6. ARE non-native plant and animal species present at acceptable levels? **The 2008 RHA rated invasive plants as a slight to moderate departure. Western juniper is actively encroaching within the lower elevation sections of the allotment, however, juniper removal projects are planned throughout the allotment. Cheatgrass and medusahead are present on clayey sites, but these represent about 1% of the allotment. No, known non-native animal species are found on the allotment.**

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

Aerial photography and ground observations indicate that habitats are sufficient to support diverse, viable, and desired wildlife populations, and they are adequately connected to other similar habitat areas.

Bitterbrush, and mountain mahogany were generally in good condition however serviceberry plants were hedged indicating it as favored browse by wildlife. This area is used mostly in the winter and early spring by mule deer and elk. Both species especially mule deer favor serviceberry as browse. The amount of Bluebunch wheatgrass is lower than expected. Considering the decline in cattle use over the last 20 years on the allotment, the lack of Bluebunch wheatgrass is likely due to ecological site capabilities, and historic livestock use. Bluebunch wheatgrass is the preferred forage for large game, rodents, and small birds as well as livestock. Line-Point intercept data indicates high values of canopy cover and percent litter which are beneficial to small birds and rodents.

Riparian grasses and other herbaceous plants are vigorous although there may be a lack of younger age class woody plants. Woody species make-up a small composition of the riparian vegetation at three of five sites however these types of lentic riparian systems typically are not dominated by woody species.

Various wildlife are found on the allotment including sage-grouse, blue grouse, bear, elk, cavity nesting birds, wood rats, snakes, and various birds, and insects.

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. There is sufficient litter and standing dead material to replenish soil nutrients and maintain soil health on most sites. Litter amount was rated as “none to slight” departure at the assessed site.**

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 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
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 2008 Upland Health Assessment, the 2008 Riparian Functional Assessment, upland trend monitoring, and field observations, were all used in determining the above “Standards Achievement”.

The Standard for Upland Soils is currently being met for the Upper Lake Allotment # 01125. The standard achievement determination was based on information/data from the 2006 Soil Survey of Surprise Valley – Home Camp California and Nevada, Upper Lake Upland Health Assessments, Line-Point Intercept data, Soil Site Stability data, actual use data, and photos taken during the assessment process along with observations on the allotment since 1988. Data from the Upland Health Assessments rated Soil/Site Stability as stable and for Hydrologic Function as functioning for the evaluated site. Ocular observations made during the upland health assessments in the Upper Lake 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. The Soil Stability rating is in a range for soils that have a high amount of vitric volcanic ash and glass throughout the soil profile (per Steve Slusser, NRCS Soil Scientist-retired, Reno State Office).

Line-Point Intercept data average on the evaluation site:

Site: South Slope 16 – 30” P.Z. CA21 - 205 ecological site.

70% Canopy Cover, 19% Bare Ground and 47% Litter Cover

Livestock actual use averaged 29% from 1997 – 2007. No use was made from 2001 - 2004 and 2006 – 2007.

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 springs/seeps 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 and Wetlands is currently being met. Riparian and wetland vegetation consists mostly of grasses and grass like plants that are tall, diverse and vigorous. Vegetation surrounding seeps and springs is more than adequate at all sites to control erosion, stabilize wetland edges, shade watered areas, and filter sediment.

The Standard for Biodiversity is currently being met. Diverse populations of native and desired plant and animal species, including special status species (sage-grouse) are located in the allotment. Vegetation is vigorous, diverse, and with younger age classes, to support wildlife species.

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)

<input type="checkbox"/> Wild horse and Burro use	<input type="checkbox"/> census / distribution data _____ <input type="checkbox"/> other _____
<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

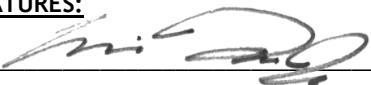
PART V - BLM STAFF WHO REVIEWED THE INFORMATION AND RECOMMENDED PRIORITY FOR DEVELOPMENT AND IMPLEMENTATION OF APPROPRIATE ACTION TO MAKE SIGNIFICANT PROGRESS TOWARDS ACHIEVING THE STANDARD(S)


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 M. Uchida, Watershed Specialist
Richard Knox, Rangeland Management Specialist
Steve Surian, Sup. Rangeland Management Specialist/Wild Horse Specialist


SIGNATURES:

TITLES:









Wildlife Biologist
Watershed Specialist
Rangeland Management Specialist
Sup. Rangeland Management 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 -

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): **The documentation form was completed by BLM staff.**

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 Upper Lake Allotment # 01125 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 Upper Lake Allotment # 01125 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

8/25/08

DATE

COMMENTS: