

# Results of Assessment/Establishment of Cause

## Achieving Standards For Rangeland Health Conforming with Guidelines for Livestock Grazing Management

**Resource Area:** Deschutes

**Geographic Area of Assessment:** Southwest of Redmond east of the Deschutes River (See Map - Appendix)

**Allotment Areas Assessed:** Lamb Allotment # 5004

**Period Assessment Conducted:** October 22, 2004

### Assessment determination:

**Assessment Benchmark:** Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands in Oregon and Washington. Approved on August 12, 1997 by the Secretary of the Interior.

### Assessment Objectives:

Per USDI/USDA Tech Reference 1734-6 of 2000: Provide preliminary assessment of soil/site stability, hydrologic function, biological integrity. Help land managers identify areas that are potentially at risk for degradation. Provide early warnings of potential problems and opportunities. Provide capability to communicate fundamental ecological concepts to a variety of audiences. Improve communications among interest groups. Provide capability to select monitoring sites for future monitoring programs. Help understand and communicate rangeland health issues.

Per BLM, Oregon State Office IB No. OR-98-315 of 7/24/98: Assess rangeland condition relative to Rangeland Health Standards; determine cause in those cases where standards are not being met; and take action that will result in progress toward standards attainment where these are not being met.

### Assessment Preparers

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Date 12/3/04

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Date 12/3/04

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Date 3/3/05

### Assessment Approval

Robert Towne, Field Manager



Date 10/1/05

### Appendices:

- A Allotment Assessment Findings
- B Maps
- C Plant List
- D List of Lichens
- E Wildlife

## Appendix A Allotment Assessment Findings

### Notes:

1. This information applies only to BLM-administered lands within the allotment.
2. Where Allotment Monitoring Sites are referenced, information from these sites will include photographs, vegetation data, trend rating forms, cover worksheets, and/or Rangeland Health Evaluation Summary Worksheets (all located in the respective allotment's monitoring files).

### Allotment

Public Land Upland Acres: 23  
Public Land Riparian/Wetland Acres: 0  
Public Land Stream Miles: 0

#### I. Standard 1 (Watershed Function - Uplands)

##### A. Determination

- Meeting the Standard  
 Not Meeting the Standard; Making Significant Progress Toward  
 Not Meeting the Standard; Not Making Significant Progress Toward Standard

##### B. Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard  
 Current livestock grazing is not a significant contributor to the failure to meet the standard  
 Failure to meet the standard is related to other uses or conditions:   x   on-site    off-site

##### C. Rationale/Evidence

Bare ground on this allotment often exceeds 80 percent. There has been soil movement especially near the Deschutes River Canyon rim where rills and pedestalling are most noticeable P435. Away from the rim there are areas of wind scour P464 and soil deposition. Biological soils crusts are poorly developed except around some shrub and tree bases P489. Interspaces are usually without lichens or mosses; however some cyanobacterial crust is occasionally present P470. There has been no fire in the allotment recently; however there are signs that at least two fires burned significant portions of the allotment more than 50 years ago P465, P469, P493, P495. The Lamb Allotment has not been grazed for at least 8 years and was also not grazed during the late 1980's. The fences are in poor condition or non-existent in the case of the western boundary into the Deschutes River canyon.

Although past grazing may have been heavy, other severe disturbances suggest this allotment has been used frequently as a dump site P452, P454, P455, P496 and possibly contained a homestead in the northeast portion. More recently an area of several acres has been excavated P427 and an easement for power lines was cleared P434, P437. Associated with these disturbances there has been extensive offroad vehicle use P424. Currently a barricade effectively limits vehicle access although one set of ATV tracks were seen within the allotment. Numerous limbs had been cut from the older juniper trees (hobbywood) within the allotment P439, P453, P457, P460, P462. Most of the cutting is recent, although older signs were observed.

Without grazing, off road vehicle use, dumping or excavation this allotment should slowly recover. There are areas of recovered grasses P459 but these could easily be destroyed by any kind of overuse. Currently the most extensive use is by horseback riders who have established several trails through the allotment P438 especially along the rim above the Deschutes River. Signs at the entrance of the allotment, along SW 77<sup>th</sup> Street, indicate that only foot and horse traffic are allowed in the area. It is recommended that the dominant horse trails be marked and the developing offshoots be blocked to prevent a pattern of spreading damage.

Evidence: Photos and lists of vascular vegetation, lichens and mosses.

## II. Standard 2 (Watershed Function - Riparian/Wetland Areas)

### A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress Toward
- Not Meeting the Standard; Not Making Significant Progress Toward
- Standard Does Not Apply

### B. Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: \_\_\_ on-site; \_\_\_ off-site

### C. Rationale/Evidence

## III. Standard 3 (Ecological Processes)

### A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress Toward
- Not Meeting the Standard; Not Making Significant Progress Toward
- Standard Does Not Apply

### B. Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: \_\_\_ on-site; \_\_\_ off-site

### C. Rationale/Evidence

Past overuse of this allotment has reduced biological diversity, energy flow and nutrient cycling. The lack of recent fires has allowed some increase in juniper and slowed the recovery of grasses and shrubs in the allotment P488. Excavation P428, roads P461 and dumping have caused extensive bare areas where weeds have sometimes become established P425 and where wind scour or mechanical removal has often resulted in the loss of the nutrient rich organic portion of the sandy soil found throughout this allotment.

With recent restrictions in access and use, the damage is showing some signs of healing. There is evidence of some recent grass recovery P482 and the formation of a cyanobacterial crust P478 over some of the bare areas. These aspects of recovery if not disrupted by further heavy use will help to trap organic material and nitrogen in the soil and allow water to be more effectively retained and vegetation to increase. As vegetation and lichen species increase in diversity, habitat will be created for an increased diversity of animal life from microbes to mammals.

## IV. Standard 4 (Water Quality)

### A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress Toward Standard
- Not Meeting the Standard; Not Making Significant Progress Toward Standard
- Standard Does Not Apply

### B. Establishment of Cause (if applicable)

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: \_\_\_ on-site; \_\_\_ off-site

C. Rationale/Evidence

Evidence:

**V. Standard 5 (Habitat for Native, T&E and Locally Important Species)**

A. Determination

- Meeting the Standard
- Not Meeting the Standard; Making Significant Progress Toward
- Not Meeting the Standard; Not Making Significant Progress Toward
- Standard Does Not Apply

B. Establishment of Cause:

- Livestock are significantly contributing to the failure to meet the standard
- Livestock are not significant contributors to the failure to meet the standard
- Failure to meet the standard is related to other uses or conditions: \_\_\_ on-site; \_\_\_ off-site

C. Rationale/Evidence

No known special status animal or plant species are located within the Lamb Allotment.

**VI. Guidelines for Livestock Grazing Management:**

- Conforms with Guidelines for Livestock Grazing Management
- Does Not conform with Guidelines for Livestock Grazing Management, Guideline Numbers:

## Livestock Grazing Management Guidelines

1: The season, timing, frequency, duration and intensity of livestock grazing use should be based on the physical and biological characteristics of the site and the management in order to:

- a. provide adequate cover to promote infiltration, conserve soil moisture and to maintain soil stability in upland areas
- b. provide adequate cover and plant community structure to promote streambank stability, debris and sediment capture and floodwater energy dissipation in riparian areas.
- c. promote soil surface conditions that support infiltration
- d. avoid sub-surface soil compaction that retards the movement of water in the soil profile.
- e. help prevent the increase and spread of noxious weeds
- f. maintain or rest for diverse plant populations and communities that fully occupy the potential rooting volume of the soil
- g. maintain or restore plant communities to promote photosynthesis throughout the potential growing season
- h. promote soil and site conditions that provide the opportunity for the establishment of desirable plants
- i. protect or restore water quality
- j. provide for the life cycle requirements and maintain or restore the habitat elements of native and desired plants and animals

2: Grazing mgmt plans should be tailored to site specific conditions and plan objectives. Livestock grazing should be coordinated with the timing of precipitation, plant growth and plant form. Soil moisture, plant growth stage and timing of peak stream flows are key factors in determining when to graze. Response to different grazing strategies varies with differing ecological sites.

3: Grazing mgmt systems should consider nutritional and herd health requirements of the livestock

4: Integrate grazing mgmt systems into the year-round mgmt strategy and resources of the permittee(s) or lessee(s). Consider the use of collaborative approaches in this integration.

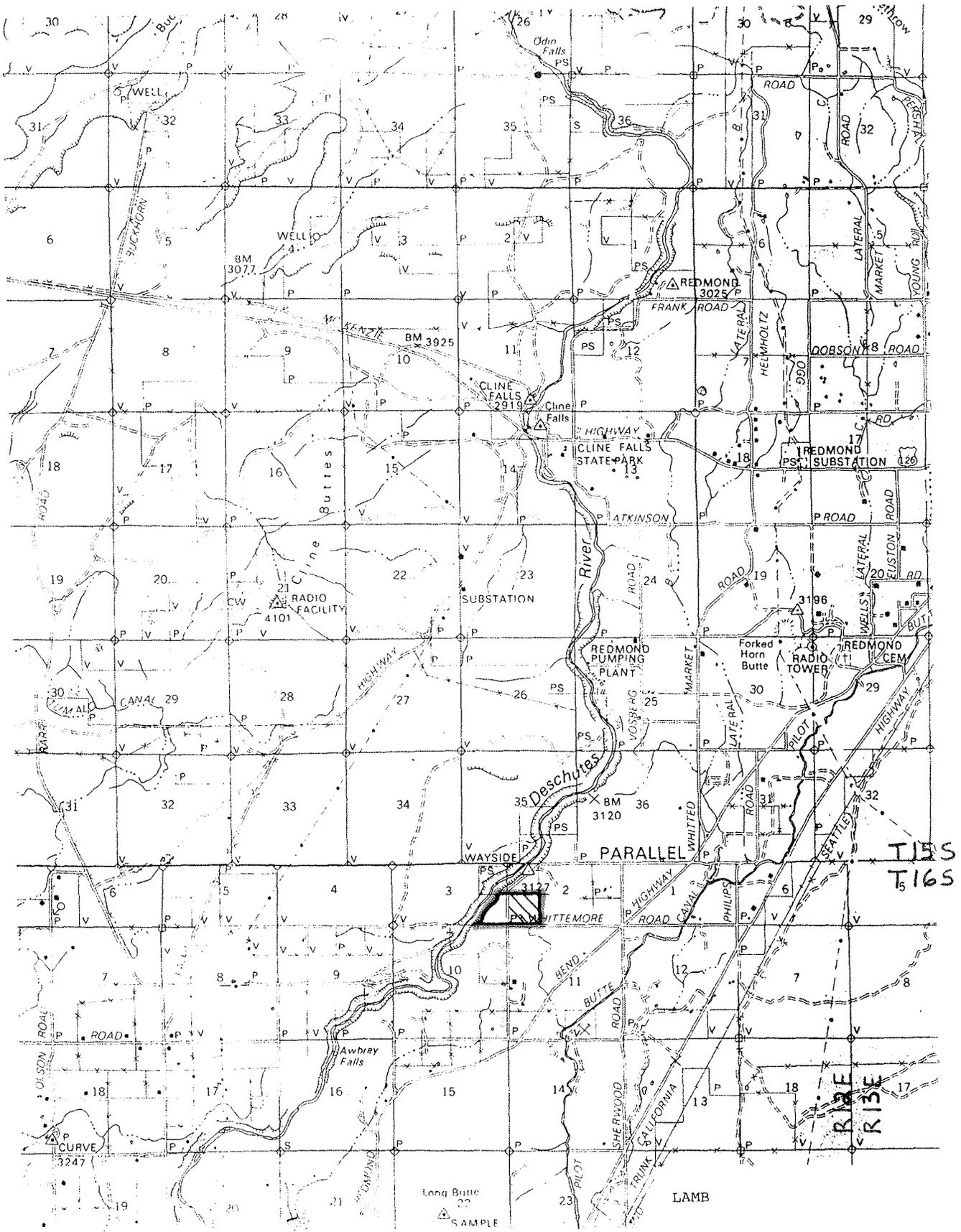
5: Consider competition for forage and browse among livestock, big game animals and wild horses in designing and implementing a grazing plan.

6: Provide periodic rest from grazing for rangeland vegetation during critical growth periods to promote plant vigor, reproduction and productivity.

7: Range improvement practices should be prioritized to promote rehabilitation and resolve grazing concerns on transitory grazing land.

8: Consider the potential for conflict between grazing use on public land and adjoining land uses in the design and implementation of a grazing mgmt plan.

# Appendix Maps



Appendix C  
Plant List

Allotment: Lamb # 5004

Field Date: October 22, 2004

*Achillea millefolium*  
*Agropyron cristatum*  
*Agropyron dasystachyum*  
*Alyssum alyssoides*  
*Amsickia* sp.  
*Antennaria dimorpha*  
*Arabis* sp.  
*Artemisia tridentata*  
*Asfi*  
*Aster* sp.  
*Bromus tectorum*  
*Calochortus macrocarpus*  
*Carex rossii*  
*Centaurea maculosa*  
*Chaenactis douglasii*  
*Chrysothamnus nauseosus*  
*Chrysothamnus viscidiflorus*  
*Cryptantha* spp.  
*Descurainia pinnata*  
*Elymus elymoides*  
*Eriastrum sparsiflorum*  
*Eriogonum microthecum*  
*Eriogonum sphaerocephalum*  
*Eriogonum strictum*  
*Festuca idahoensis*  
*Gayophytum* sp.

*Huechera* sp.  
*Juniperus occidentalis*  
*Koeleria cristata*  
*Leptodactylon pungens*  
*Lomatium* sp.  
*Oryzopsis hymenoides*  
*Penstemon richardsonii*  
*Phlox hoodii*  
*Plectritis macrocera*  
*Poa pratensis*  
*Poa secunda*  
*Pseudoroegneria spicata* (AGSP)  
*Purshia tridentata*  
*Purshia tridentata*  
*Ribes cereum*  
*Salsola kali*  
*Salidago* sp.  
*Senecio* sp.  
*Stipa comata*  
*Stipa thurberiana*  
*Tragopogon dubius*  
*Verbascum thapsus*  
*Vulpia octoflora*  
*Zigadenus venenosus*

**Appendix D**  
**List of Lichens and Mosses**

**Allotment: Lamb**

**Field Date: October 22, 2004**

**LICHENS**

**Crustose**

	COMMON NAME	SUBSTRATE
<i>Acoraspora schleicheri</i>	Rimmed Cobblestone Lichen	Soil and cow-pie lichen
<i>Amandinea punctata</i>	Tiny button lichen	Soil, litter, bark and wood
<i>Buellia alboatra</i>	Button Lichen	Juniper wood
<i>Caloplaca epithellina</i>	Parasitic fire-dot lichen	Rock
<i>Caloplaca stillicidiorum</i>	Fire-dot lichen	Bone and organic matter
<i>Candelariella aurella</i>	Hidden goldspeck lichen	Bone and rock
<i>Candelariella terrigena</i>	Tundra goldspeck lichen	Soil
<i>Candelariella vitellina</i>	Common goldspeck lichen	Rock
<i>Cyphelium inquinans</i>	Cupped soot lichen	Sagebrush bark
<i>Lecanora hagenii</i>	Hagen's rim-lichen	Tree and shrub twigs
<i>Lecanora zosteriae</i>	Flat-fruited rim-lichen	Bone
<i>Lecidella tessellata</i>	Tile lichen	Rock
<i>Leprocaulon subalbicans</i>	Cottonhead lichen	Soil and moss
<i>Megaspora verrucosa</i>	False sunken disk lichen	Moss and organic matter
<i>Ochrolechia upsaliensis</i>	Tundra saucer lichen	Soil and dead vegetation
<i>Pleopsidium flavum</i>	Gold cobblestone lichen	Rock
<i>Rhizocarpon badioatrum</i>	Map lichen	Rock
<i>Rhizocarpon bolanderi</i>	Map lichen	Rock
<i>Rhizocarpon disporum</i>	Single-spored map lichen	Rock
<i>Rinodina sp</i>	Pepper-spore lichen	Sagebrush bark
<i>Tepphomela aglaea</i>		Rock

**Squamulose**

<i>Psora tuckermanii</i>	Brown-eyed Scale	Rock
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**Gelatinous**

<i>Leptochidium albociliatum</i>	Whiskered Jelly Lichen	Moss
<i>Leptogium lichenoides</i>	Tattered Jellyskin	Soil, moss and litter

**Foliose**

<i>Candelaria concolor</i>	Candleflame lichen	Bone, Bark and wood
<i>Lecanora muralis</i>	Stonewall rim-lichen	Moss over rock
<i>Melanelia exasperatula</i>	Lustrous camouflage lichen	Tree and shrub bark
<i>Neofuscelia subhosseanna</i>	Erupted camouflage lichen	Rock
<i>Peltigera rufescens</i>	Field Dog-Lichen	Soil and moss
<i>Physcia biziana</i>	Frosted rosette lichen	Rock
<i>Physcia dubia</i>	Powder-tipped rosette lichen	Rock, bone and wood
<i>Physcia tenella</i>	Fringed rosette lichen	Rock
<i>Physconia enteroxantha</i>	Yellow-edged frost lichen	Moss over rock
<i>Physconia isidiigera</i>	Bottlebrush frost lichen	Juniper bark
<i>Rhizoplaca chrysoleuca</i>	Orange rock-posy	Rock
<i>Rhizoplaca melanophthalma</i>	Green rock-posy	Rock
<i>Umbilicaria hyperborea</i>	Blistered Rock Tripe	Rock
<i>Umbilicaria phaea</i>	Emery rock tripe	Rock
<i>Xanthoparmelia plittii</i>	Plitt's rock shield	Rock
<i>Xanthoria elegans</i>	Elegant sunburst lichen	Rock
<i>Xanthoria fallax</i>	Hooded sunburst lichen	Bone
<i>Xanthoria fulva</i>	Bare-bottomed sunburst lichen	Tree and shrub bark

**Fruiticose**

*Aspicilia filiformis*

*Cladonia fimbriata*

*Letharia columbiana*

*Letharia vulpina*

*Pseudophebe pubescens*

Trumpet Lichen

Brown-eyed wolf lichen

Wolf lichen

Fine rockwool

Soil

Soil, moss and litter

Bark and wood

Bark and wood

Rock

## Appendix E Wildlife

### Allotment: Lamb

Field Date: October 22, 2004

This is only a partial list of species that would be expected in the Allotment.

#### Mammals

Badger  
Coyote  
Mule deer  
Northern pocket gopher  
Mountain cottontail rabbit  
Porcupine  
Bushy-tailed woodrat  
Chipmunk

#### Bird species seen in the vicinity around the time of the evaluation (not necessarily breeding in the area)

Golden eagle  
Bald eagle  
Red-tailed hawk  
Canada geese  
California quail  
Mourning dove  
Northern flicker  
Clark's Nutcracker  
Pinyon jay  
Black-billed magpie  
Common raven  
European Starling  
Rock wren  
Canyon wren  
Bushtit  
Mountain chickadee  
Cedar waxwing  
Mountain bluebird  
Western bluebird  
American robin  
Townsend's Solitaire  
Yellow-rumped warbler  
American goldfinch  
Dark-eyed junco

**Oregon Breeding Bird Atlas Species List of known breeding the kind of habitat found in the Bend /Redmond area.** To see more information control/click on the hyperlink, Click on a hexagon in Deschutes county and find your way to the map hexagon [26202 Oregon Breeding Bird Atlas](#).

#### Reptiles

Wandering garter snake  
Gopher snake  
Racer  
Fence lizard

#### Amphibians

Pacific tree frog