### RANGELAND HEALTH STANDARDS - ASSESSMENT -SCHADLER ALLOTMENT #0209

The Schadler allotment has three separate parts, which will be referred to as three pastures (see map), but they are not connected and have three different permittees and different grazing plans. Pasture one is located along the Oregon-Nevada border and contains 272 acres of public land and 1,892 acres of private land with 11 AUMS of grazing use on the public land. Pasture two is located south of Adel along the county road to Ft. Bidwell and contains 924 acres, all public land and has 30 AUMS of grazing use. Pasture three is located west of Sagehen Butte and contains 721 acres of public land and 2,662 acres of private land. Pasture three has 16 AUMS of grazing use on the public land. These pastures will be discussed separately in the following discussions.

### **STANDARD 1 - UPLAND WATERSHED**

### Upland soils exhibit infiltration and permeability rates, moisture storage and stability that are appropriate to soil, climate and landform.

#### This standard is being met in all three pastures of the allotment.

The indicators used to evaluate this standard are Soil Surface Factor (SSF), which documents accelerated erosion; and plant community composition, which indicates root occupancy of the soil profile. A copy of the form used to document SSF is attached (Appendix A, "Determination of Erosion Condition Class").

Soil Surface Factor (SSF) is an indicator of accelerated erosion and is a method of documenting observations regarding erosion. In pasture 1 the SSF is rated slight on 20% (55 acres) of the public land acres in the pasture and unknown on the remaining 80%. However in pasture 1, the public land occupies only 13% of the pasture and is along the edges of the pasture where grazing has a minimum impact.

In pasture two there are 390 acres (42%) with an SSF rating of slight and 170 acres (18%) that are unknown. The remaining 364 acres (40%) are rockland and the entire pasture is steep and there is very little grazing in the pasture.

Pasture three is the largest of the pastures and has the most grazing of the three pastures. The 721 public land acres in the pasture are intermingled with private and occupy about 21% of the total 3,383 acres in the pasture. Because the ESI inventory included the entire pasture and the land ownership is mixed, the results will not be broken out by ownership. In pasture three about 76% (2,576 acres) of the pasture had an SSF of slight and 2% (79 acre) had a rating of moderate. There was 30 acres (1%) of rockland and 698 (21%) acres were unknown.

Another indicator of Upland Watershed condition is plant composition and community structure. Current plant composition is compared to a defined Potential Natural Plant Community for the identified soil type and precipitation zone. Using the 1988 Ecological Site Inventory, the percent of each pasture in the allotment in each seral stage is summarized in the table below. As described above, pasture 1 is 87% private land and the ESI inventory only included 24% of the public land acres in this pasture. This 24% was rated in mid seral and again because the location of the public land in this pasture the grazing has little impact on the condition of the public land in this pasture.

In pasture two, 43% of the acreage is in the mid or late seral stage with 29% being rockland. This pasture is not grazed much at all because it lies entirely along the steep slope of South Warner Rim.

In pasture three, most of the pasture is in Mid seral (78%) with 1% in the Late Seral stage. About 20% of the pasture was not rated by the ESI inventory and one percent was rockland.

Seral Stage	Percent comparability to Potential Natural Community	Percent of allotment in seral stage		
		Pasture 1	Pasture 2	Pasture 3
		272 public land	924 acres	3,383 acres
		acres (13% of the pasture)	All public land	21% is public land
Early	0-25%	0%	0%	0
Mid	26-50%	20% (55 acres)	24% (218 acres)	78% (2,630 acres)
Late	51-75%	0%	19% (171 acres)	1% (30 acres)
Rockland		0%	29% (272 acres)	1% (30 acres)
Unknown*		80% (217 acres)	28% (263 acres)	20% (698 acres)

\* The unknown acres are the inclusions within a vegetation community that include transition areas and plant communities too small to be mapped separately.

### STANDARD 2 - RIPARIAN/WETLAND

Riparian-wetland areas are in properly functioning physical condition appropriate to soil, climate and landform.

### Standard 2 is being met for Riparian/Wetland function.

The two acres of wetlands found in the allotment are currently at Proper Functioning Condition (PFC). Livestock grazing does not appear impacting these area.

### **STANDARD 3 - ECOLOGICAL PROCESSES**

.

Healthy, productive and diverse plant and animal populations and communities appropriate to soil, climate and landform are supported by ecological processes of nutrient cycling, energy flow and the hydrologic cycle.

### This standard is heing met in all three pastures of the allotment.

The Observed Apparent Trend (Appendix B) was determined during ESI and in Pasture one it was static on all the public land for which it was determined.

In Pasture two the Observed Apparent Trend was static on 15% (135 acres) and upward on 28% (255 acres) with 29% in rockland and 28% unknown. The upward trend and the Mid and Late seral stages seen in Standard one would indicate the ecological processes are functioning in this pasture.

In Pasture three the Observed Apparent Trend was upward on 48% (1,635 acre) of the allotment and static on 30% (1,020 acres), with 21% being unknown and 1% rockland. This upward trend combined with 78% of the pasture being in mid seral stage would indicate that ecological processes are functioning. An interdisciplinary team toured the allotment on May 30, 2002 and confirmed that the allotment has a diverse plant community and appears to be on an upward trend.

The Schadler Allotment (0209) supports most of the terrestrial animals common to the sagebrush steppe in the Great Basin. The allotment provides habitat for huntable populations of mule deer, pronghorn antelope, Rocky Mountain elk, and sage grouse. There is currently no major competition between wildlife and domestic livestock for forage, either with early green-up grasses and forbs or winter browse such as antelope bitterbrush and curl-leaf mountain mahogany.

Standard three is being met for animal populations. The allotment is supporting the current and proposed number of mule deer and pronghorn antelope identified by Oregon Department of Fish and Wildlife (ODFW) management plans.

In Pasture one no known noxious weeds are present though potential for introduction is high due to the pasture boundary being along a main vehicular travel route. In Pasture two there is a large infestation of Mediterranean sage at the base of the rim along the county road. The area is under evaluation for treatment. In Pasture three Mediterranean sage is sparsely scattered along roads and along the creek downstream from the Schadler cabin on private land.

### **STANDARD 4 - WATER QUALITY STANDARDS**

### Surface and groundwater quality, influenced by agency actions, complies with State water quality standards.

This standard is not applicable to this allotment since there are no 303d listed water bodies within the allotment.

### **STANDARD 5 - NATIVE, T&E, and LOCALLY IMPORTANT SPECIES**

This standard is being met. Habitats support healthy, productive and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate and landform.

Standard 5 is being met for native, T&E, and locally important wildlife species. There are no known sage grouse leks within the allotment but there are 3 identified sage grouse leks and nesting habitat within the surrounding allotments and sage grouse have been seen using the allotment at different times of the year. Livestock grazing does not appear to be limiting sage grouse use within the allotment. Peregrine falcons have been seen within the allotment, probably from releases from the Crump Lake hack site, however, no nesting occurs within the area. Bald eagles use the area in the winter feeding off carrion.

No Special Status plants have been found and none are suspected.

### **Current Management and Recent Management Changes**

The current management of the three pastures is different for each one with three different permittees. Pasture 1 contains only 13% public land (272 acres) and the permittee uses this pasture in conjunction with the home ranch in Nevada. The public land is in small parcels (40 - 120 acres) along the edges of the pasture and the public land is not grazed much providing only 11 AUMS of forage.

Pasture two is along the South Warner Rim and borders the private land and another allotment of the permittee. Therefore there is a little grazing use in the spring as the permittee moves the cattle up to the other allotment on the rim. However the steepness of the pasture severely limits the amount of grazing use (30 AUMS) and utilization is slight to light at the most.

Pasture three is the largest of the pastures but still only 21% (721 acres) of the allotment and 16 AUMS is on public land. Most of the grazing use occurs on the private land as most of the public land is the steep slopes where grazing use is minimal. The pasture as a whole appears to be improving as the use occurs at the end of the growing season as the permittee is moving his cattle toward the higher elevation forest service permits.

<u>Team Members</u>	<u>Title</u>
Les Boothe	Range Management Specialist
Alan Munhall	Fishery Biologist
Vern Stofleth	Wildlife Biologist
Lucile Housley	Botantist
Bill Cannon	Archaeologist
Ken Kestner	Supervisory NRS
Robert Hopper	Supervisory RMS

Erin McConnell

Weed Management Specialist

#### **Determination**

- () Existing grazing management practices or levels of grazing use on the Schadler Allotment promote achievement of significant progress towards the Oregon Standards for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.
- () Existing grazing management practices or levels of grazing use on the Schadler Allotment will require modification or change prior to the next grazing season to promote achievement of the Oregon Standards for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.

Acting Area Manager, Lakeview Resource Area

<u>9/30/02</u>

### Appendix A.

#### DETERMINATION OF EROSION CONDITION CLASS Soil Surface Factors

Soil Movement	No visable cvidence of movement	Some Movement of soils particles	Moderate Movement of soil is visable and recent Slight terracing generally less than 1" in	Occurs with each event. Soil and Debris deposited against minor obstructions	Subsoil exposed over much of area, may have embryonic dunes and wind scoured dunes
	0 1 2 3	4 5	height 6 7 B.	9 10 11	12 13 14
SURFACE LITTER	Accumulating in place	May show slight movement	Moderate movement is apparent, deposited against obstacles 7 A	Extreme movement apparent, large and numerous deposits against obstacles 9 10 11	Very little remaining (use care on low productive sites)
SURFACE ROCK	If present, the distribution of fragments show no movement caused by wind or water.	If present, course fragments ahve a truncated appearance or spotty distribution caused by wind or water	If present, fragments have a poorly developed distribution pattern caused by wind or water	If present, surface rock or fragments exhibit some movement and accumulation of snaller fragments behind obstacles	If present, surface rock or fragments or dissected by rills and gullies or are already washed away
	0 1 2	3 4 5	6 7 8	9 10 11	
PEDESTALLING	No visable evidence of pedestalling	Slight pedestalling, in flow patterns	Small rock and plant pedestals occuring in flow patterns	Rocks and plants on pedestals generally evident, plant roots extosed	Most rocks and plants pedestalled and roots exposed
	0 1 2 3	4 5 6	7 8 9	10 11	12 13 14
FLOW PATTERNS	No visable evidence of flow patterns	Deposition of particles may be in evidence	Well defined, small, and few with intermittent deposits	Flow patterns contain silt and sand deposits and alluvial fans	Flow patterns are numerous and readily noticeable. May have large barren fan deposits.
	0 1 2 3	4 5 6	7 8 9	10 11 12	13 14 15
RILLS	No visable evidence of rills.	Some rills in evidence at infrequent intervals over 10'.	Rills ½" to 6" deep occur in exposed places at approximately 10' intervals.	Rills ½" to 6" deep occui in exposed area at intervals of 5 to 10".	May be present at 3" to 6" deep at intervals less than 5'.
	0 1 2 3	4 5 6	7 8 9	10 11 12	13 14 15
GULLIES May be present in stable condition. Vegetation on channel bed and side slopes 0 1 2 3		A few gullies in evidence which show little bed or slope erosion. Some vegetation present on slopes. 4 5 6	Gullies are well developed with active erosion along less than 10% of their length. Some vegetation may be present. 7 6 9	Gullies are numerous and well devloped with active erosion along 10-50% of their lengths or a few well developed gullies with active erosion along more than 50% of their length 10 11 12	Sharply incised gullies cover most of the area and over 50% are actively eroding.
SITUATION	TOTAL				
<b>-</b> -		<u> </u>			
		<u> </u>	├── <b>──</b> ──		<b></b>

Erosion Condition Classes: stable 0-20: Slight 21-40: Moderate 41-60: Critical 61-80: Severe 81-100

Appendix B. OBSERVED APPARENT TREND (Check appropriate box in each category which best fits area being observed) -

ł

VIGOR (10 Points)	Desirable grasses, forbs and shrubs are vigorous, showing good health. These plants should have good size, color and produce abundant herbage.
(6 Points)	Desirable grasses, forbs and shrubs have moderate vigor. They are medium size with fair color and producing moderate amounts of herbage, some seed stalks and seedheads are present.
(2 Points)	Desirable grasses, forbs and shrubs have low vigor. They appear unhealthy with small size and poor color.Portions of clumps or entire plants are dead or dying. Seed stalks and seedheads almost non-existent except in protected areas.
SEEDLINGS (10 Points)	There is seedling establishment of desirable grasses, forbs and shrubs. Seedlings are present in open spaces between plants and along edges of soil pedestals. Few seedlings of invader or undesirable plants are present.
(6 Points)	Some seedlings of desirable grasses, forbs and shrubs may or may not be present in open spaces between plants. Some seedlings of invader or undesirable plant species may or may not be present.
(2 Points)	Few if any seedlings of desirable grasses, forbs and shrubs are being established. Seedlings of invaders or undesirable should be present in open space between plants.
SURFACE LITTER (5 Points)	Surface litter is accumulating in place.
(3 Points)	Moderate movement of surface litter is apparent and deposited against obstacles.
(1 Point)	Very little surface litter is remaining.
PEDESTALS (5 Points)	There is little visual evidence of pedestalling. Those pedestals are sloping or rounding and accumulating litter. Desirable forage grasses may be found along edges of pedestals.
(3 Points)	Moderate plant pedestalling. No visual evidence of healing or deterioration. Small rock and plant pedestals may be occurring in flow patterns.
(1 Point)	Most rocks and plants are pedestalled. Pedestals are sharped sided and eroding often exposing grass roots.
GULLIES (5 Points)	Gullies may be present in stable condition with moderate sloping or rounded sides. Perennials should be establishing themselves on bottom and sides of channel.
(3 Points)	Gullies are well developed with small amounts of active erosion. Some vegetation may be present.
(1 Point)	Sharply incised V-shaped gullies cover most of the area with most of the gullies actively eroding. Gullies are mostly devoid of perennial plants with fresh cutting of the bottom.









No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of this data for individual use or as aggregate use with other data.

Lee Boothe 09/20/02

# **Schadler 209 Pasture 1**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of this data for individual use or as aggregate use with other data.

Les Boothe 09/26/02

# Schadler 209 Pasture 2



Roads_100 Cities	1:30117	U.S. DEPARTMENT OF THE INTERIOR	N
Resource Area Boundaries Rmp own			WEE
BL PV			
Lakes			Ś

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of this data for individual use or as aggregate use with other data.

Les Boothe 09/26/02

## **Schadler 209 Pasture 3**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or

PV ST

I as Rontha