

**RANGELAND HEALTH STANDARDS - ASSESSMENT -O'KEEFFE SECTION 15
ALLOTMENT #1303**

This allotment is a section 15 grazing lease outside the grazing district and is 280 acres of public land leased for 20 AUMS from May 15- July 30th. The allotment contains two separate parcels of public land 2-4 miles west of Lakeview and borders the National Forest.

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 .

There is no Ecological Site Inventory data for this allotment so no information is available for the Soil Surface Factor and Determination of Erosion Condition Class. There is a soil survey for the area. The dominant soils in the two parcels of public land are the Booth-Nuss-Royst Association. About 160 acres is on 40-60% south slopes and 110 acres is on 15-40% south slopes. All three soils are brown to black stoney loams on the surface with clay to stoney clay in the subsurface. The Booth soil is moderately deep to bedrock but very shallow to a claypan and is well drained but has slow permeability. The Nuss soil is shallow to bedrock and well drained with moderate permeability. The Royst soil has a surface layer that may include ponderosa pine needles or mountain big sagebrush leaves. The soil is moderately deep to bedrock a well drained with slow permeability.

A tour of the sites and an evaluation of rangeland health indicators were conducted and the 10 soil site stability indicators were rated as slight to none in their departure from the expected. This indicates there is very little active soil erosion and while there is lots of water leaving the sites because of the steep slopes, this flow is concentrated and occurring in the natural drainages.

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. There is no data from the 1988 Ecological Site Inventory for this allotment, but the evaluation of the rangeland health indicators for hydrologic function and biotic integrity does examine several plant community indicators. The evaluation of these indicators found there was slight to none in their departure from the expected. The plant community composition was close to what is expected for these sites with several perennial grass species and antelope bitter brush providing the expected cover, litter and production. There is a good mixture of old and young plants that all appear to have high vigor and are reproducing. The only negative is the increase of juniper into the site which may eventually result in a reduction in cover of the perennial grasses and shrubs.

It does not appear that livestock grazing is having any noticeable impact on the soils or the vegetation community in the allotment.

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 as no jurisdictional wetlands occur within the allotment.

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 being met

There is no Ecological Site Inventory data for this allotment so no information on the observed apparent trends (OAT) or the ecological site rating is available. However the site was evaluated using the indicators for rangeland health and the indicators examined for plant communities included 12-17 on the evaluation sheet. These indicators include functional/structural groups, plant mortality/decadence, litter amount, annual production, invasive weeds and reproductive capability of perennial plants. The indicators all were rated as being slight to none in their departure from the expected. This indicates the plant communities which include scattered juniper with antelope bitterbrush, mount mahogany and an understory of bluebunch wheatgrass Thurber's needlegrass, Idaho fescue, Sandbergs bluegrass and bottlebrush squirreltail are healthy and closely resemble what a natural community in this range site should look like.

The allotment is capable of supporting the current and proposed number of mule deer identified by Oregon Department of Fish and Wildlife management plans. The ten AUM's allocated for wildlife in the current RMP are adequate to support wildlife populations.

In the allotment there are no known noxious weeds present.

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 for native, T&E and locally important wildlife species. The deer populations are healthy and stable in number within the allotment. Habitat quantity and quality do not appear to be limiting population size or health. The allotment also provides habitat for numerous small and nongame birds and mammals common to the Great Basin. There are no known sage grouse leks found within the allotment or pygmy rabbit habitat. The allotment provides habitat for raptors and sensitive bat species, however, no critical habitat or limitations have been identified for any of these species.

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

Current Management and Recent Management Changes

The current management is grazing this allotment in conjunction with the private land that borders the National Forest and the permittee's forest service grazing permit. The permittee uses the private land and the 20 AUMS on the BLM parcel during June and July depending the conditions. This management will continue.

Team Members

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Title


Range Management Specialist
Fishery Biologist
Wildlife Biologist
Botanist
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Supervisory NRS
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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.

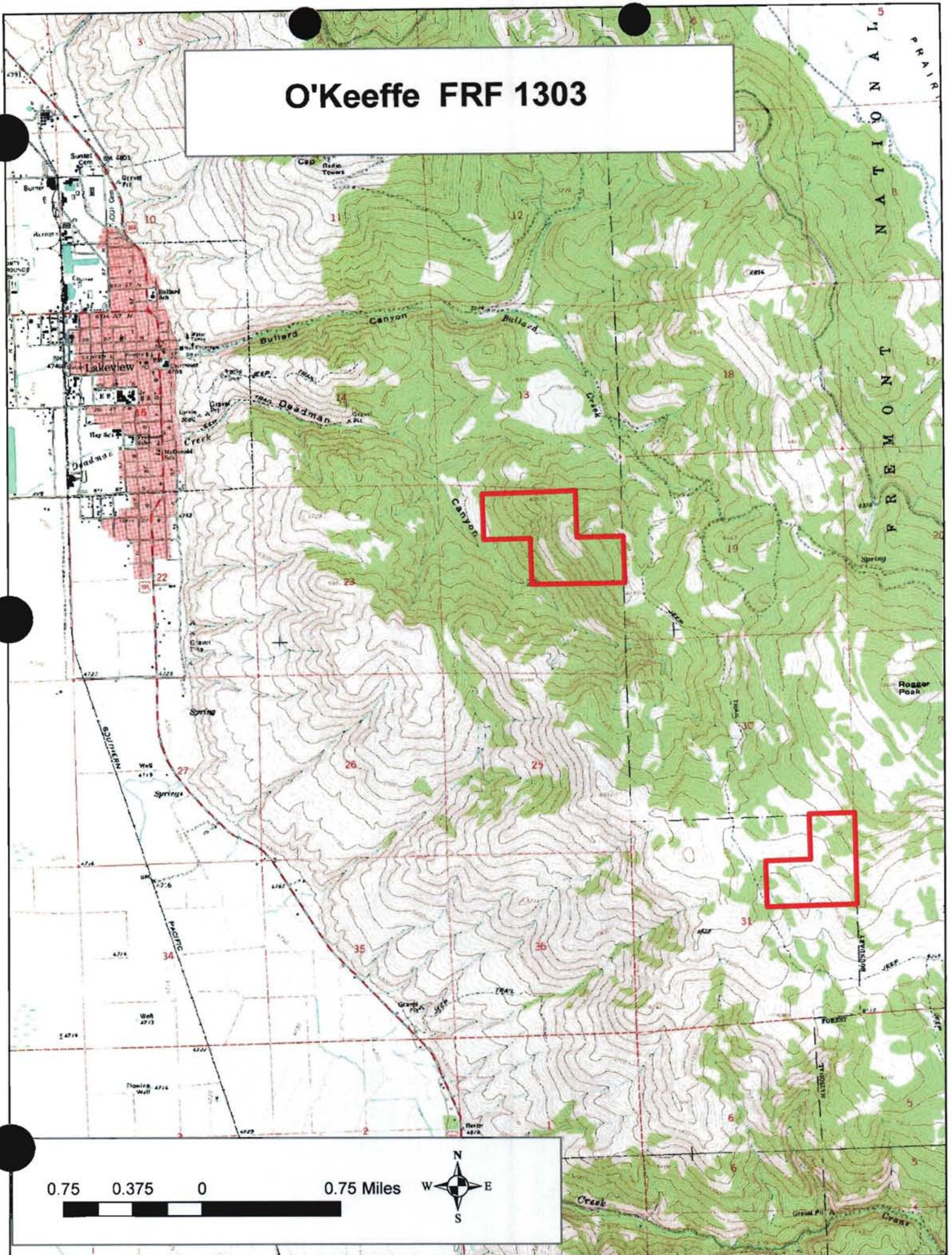


Acting Area Manager, Lakeview Resource Area



Date

O'Keeffe FRF 1303



Evaluation Matrix

State Oregon Office Lakeview Ecological Site _____ Site ID _____

Authors Booth Revision Date _____

Departure from Reference Sheet

Indicator *	Extreme to Total	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
1. Rills _____	_____	_____	_____	_____	Reference Sheet: _____
_____	_____	_____	_____	_____	<u>Non-existent</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Generic Descriptor Rill formation is severe and well defined throughout most of the site. Rill formation is moderately active and well defined throughout most of the site. Active rill formation is slight at infrequent intervals; mostly in exposed areas. No recent formation of rills; old rills have blunted or muted features. Current or past formation of rills as expected for the site.

2. Water Flow Patterns _____	_____	_____	_____	_____	Reference Sheet: _____
_____	_____	_____	_____	_____	<u>Minimal evidence of water flow except in drainage steep slopes</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Generic Descriptor Water flow patterns extensive and numerous; unstable with active erosion; usually connected. Water flow patterns more numerous and extensive than expected; deposition and cut areas common; occasionally connected. Number and length of water flow patterns nearly match what is expected for the site; erosion is minor with some instability and deposition. Number and length of water flow patterns match what is expected for the site; some evidence of minor erosion. Flow patterns are stable and short. Matches what is expected for the site; minimal evidence of past or current soil deposition or erosion.

3. Pedestals and/or Terracettes _____	_____	_____	_____	_____	Reference Sheet: _____
_____	_____	_____	_____	_____	<u>No evidence of pedestaled plants or rocks</u>
_____	_____	_____	_____	_____	<u>Terracettes absent</u>
_____	_____	_____	_____	_____	_____

Generic Descriptor Abundant active pedestalling and numerous terracettes. Many rocks and plants are pedestaled; exposed plant roots are common. Moderate active pedestalling; terracettes common. Some rocks and plants are pedestaled with occasional exposed roots. Slight active pedestalling; most pedestals are in flow paths and interspaces and/or on exposed slopes. Occasional terracettes present. Active pedestalling or terracette formation is rare; some evidence of past pedestal formation, especially in water flow patterns on exposed slopes. Current or past evidence of pedestaled plants or rocks as expected for the site. Terracettes absent or uncommon.

* Descriptions for each indicator should be more specific than those listed in the Generic Descriptors, if possible, and refer to the criteria included in the None to Slight description, which is based on the Reference Sheet (Appendix 1).

Departure from Reference Sheet

Indicator*	Extreme to Total	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
Bare Ground					Reference Sheet: Amount of bare ground expected for this site.
Generic Descriptor	Much higher than expected for the site. Bare areas are large and generally connected.	Moderate to much higher than expected for the site. Bare areas are large and occasionally connected.	Moderately higher than expected for the site. Bare areas are of moderate size and sporadically connected.	Slightly to moderately higher than expected for the site. Bare areas are small and rarely connected.	Amount and size of bare areas match that expected for the site.
5. Gullies					Reference Sheet: Drainages are natural stable channels.
Generic Descriptor	Common with indications of active erosion and downcutting; vegetation is infrequent on slopes and/or bed. Nickpoints and headcuts are numerous and active.	Moderate in number to common with indications of active erosion; vegetation is intermittent on slopes and/or bed. Headcuts are active; down-cutting is not apparent.	Moderate in number with indications of active erosion; vegetation is intermittent on slopes and/or bed. Occasional headcuts may be present.	Uncommon, vegetation is stabilizing the bed and slopes; no signs of active headcuts, nickpoints, or bed erosion.	Match what is expected for the site; drainages are represented as natural stable channels; vegetation common and no signs of erosion.
6. Wind Scoured, Blowout, and/or Depositional Areas					Reference Sheet: No scoured areas
Generic Descriptor	Extensive.	Common.	Occasionally present.	Infrequent and few.	* Match what is expected for the site.

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Departure from Reference Sheet

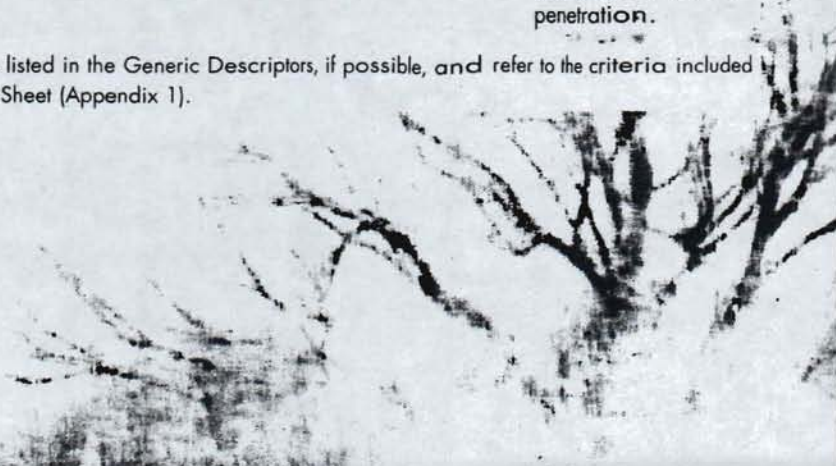
Indicator *	Extreme to Total	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
7. Litter Movement (wind or water)					Reference Sheet: No real evidence of Litter movement
Generic Descriptor	Extreme; concentrated around obstructions. Most size classes of litter have been displaced.	Moderate to extreme; loosely concentrated near obstructions. Moderate to small size classes of litter have been displaced.	Moderate movement of smaller size classes in scattered concentrations around obstructions and in depressions.	Slightly to moderately more than expected for the site with only small size classes of litter being displaced.	Matches that expected for the site with a fairly uniform distribution of litter.
8. Soil Surface Resistance to Erosion					Reference Sheet: Soil surface appears stable resistant to erosion
Generic Descriptor	Extremely reduced throughout the site. Biological stabilization agents including organic matter and biological crusts virtually absent.	Significantly reduced in most plant canopy interspaces and moderately reduced beneath plant canopies. Stabilizing agents present only in isolated patches.	Significantly reduced in at least half of the plant canopy interspaces, or moderately reduced throughout the site.	Some reduction in soil surface stability in plant interspaces or slight reduction throughout the site. Stabilizing agents reduced below expected.	Matches that expected for the site. Surface soil is stabilized by organic matter decomposition products and/or a biological crust.
9. Soil Surface Loss or Degradation					Reference Sheet: Soil surface intact.
Generic Descriptor	Soil surface horizon absent. Soil structure near surface is similar to, or more degraded, than that in subsurface horizons. No distinguishable difference in subsurface organic matter content.	Soil loss or degradation severe throughout site. Minimal differences in soil organic matter content and structure of surface and subsurface layers.	Moderate soil loss or degradation in plant interspaces with some degradation beneath plant canopies. Soil structure is degraded and soil organic matter content is significantly reduced.	Some soil loss has occurred and/or soil structure shows signs of degradation, especially in plant interspaces.	Soil surface horizon intact. Soil structure and organic matter content match that expected for site.

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Departure from Reference Sheet

Indicator*	Extreme to Total	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
Plant Community Composition and Distribution Relative to Infiltration and Runoff					Reference Sheet: The plant community composition and distribution is what is expected. Some increase in junipers may be increasing runoff in future.
Generic Descriptor	Infiltration is severely decreased due to adverse changes in plant community composition and/or distribution. Adverse plant cover changes have occurred.	Infiltration is greatly decreased due to adverse changes in plant community composition and/or distribution. Detrimental plant cover changes have occurred.	Infiltration is moderately reduced due to adverse changes in plant community composition and/or distribution. Plant cover changes negatively affect infiltration.	Infiltration is slightly to moderately affected by minor changes in plant community composition and/or distribution. Plant cover changes have only a minor effect on infiltration.	Infiltration and runoff are not affected by any changes in plant community composition and distribution. Any changes in infiltration and runoff can be attributed to other factors (e.g. compaction).
11. Compaction Layer (below soil surface)					Reference Sheet: No compaction
Generic Descriptor	Extensive; severely restricts water movement and root penetration.	Widespread; greatly restricts water movement and root penetration.	Moderately widespread, moderately restricts water movement and root penetration.	Rarely present or is thin and weakly restrictive to water movement and root penetration.	Matches that expected for the site; none to minimal, not restrictive to water movement and root penetration.

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Departure from Reference Sheet

Indicator*	Extreme to Total	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
12. Functional/ Structural Groups (F/S Groups) See Functional/ Structural Groups Worksheet				There is more POSB than expected but Feid and Agsp STTH are all present And Putr and Cemo are present and dominant	Reference Sheet: _____
Generic Descriptor	Number of F/S groups greatly reduced and/or Relative dominance of F/S groups has been dramatically altered and/or Number of species within F/S groups dramatically reduced.	Number of F/S groups reduced and/or One dominant group and/or one or more sub-dominate group replaced by F/S groups not expected for the site and/or Number of species within F/S groups significantly reduced.	Number of F/S groups moderately reduced and/or One or more sub-dominant F/S groups replaced by F/S groups not expected for the site and/or Number of species within F/S groups moderately reduced.	Number of F/S groups slightly reduced and/or Relative dominance of F/S groups has been modified from that expected for the site and/or number of species within F/S slightly reduced.	F/S groups and number of species in each group closely match that expected for the site.
13. Plant Mortality/ Decadence					Reference Sheet: _____ Plant mortality matches expected
Generic Descriptor	Dead and/or decadent plants are common.	Dead plants and/or decadent plants are somewhat common.	Some dead and/or decadent plants are present.	Slight plant mortality and/or decadence.	Plant mortality and decadence match that expected for the site.
14. Litter Amount				There is less litter than would be expected for this site.	Reference Sheet: _____
Generic Descriptor	Largely absent or dominant relative to site potential and weather.	Greatly reduced or increased relative to site potential and weather.	Moderately more or less relative to site potential and weather.	Slightly more or less relative to site potential and weather.	Amount is what is expected for the site potential and weather.

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Departure from Reference Sheet

Indicator*	Extreme to Total	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
Annual Production					Reference Sheet: _____ About 90% of potential production for this site based on dry conditions.
Generic Descriptor	Less than 20% of potential production for the site based on recent weather.	20-40% of potential production for the site based on recent weather.	40-60% of potential production for the site based on recent weather.	60-80% of potential production for the site based on recent weather.	Exceeds 80% of potential production for the site based on recent weather.
16. Invasive Plants					Reference Sheet: _____ NO invasive plants present.
Generic Descriptor	Dominate the site.	Common throughout the site.	Scattered throughout the site.	Present primarily in disturbed areas within the site.	If present, composition of invasive species, matches that expected for the site.
Reproductive Capability of Perennial Plants (native or seeded)					Reference Sheet: _____ There appears to be good capability to produce seeds and tillers.
Generic Descriptor	Capability to produce seed or vegetative tillers is severely reduced relative to recent climatic conditions.	Capability to produce seed or vegetative tillers is greatly reduced relative to recent climatic conditions.	Capability to produce seed or vegetative tillers is moderately reduced relative to recent climatic conditions.	Capability to produce seed or vegetative tillers is slightly reduced relative to recent climatic conditions.	Capability to produce seed or vegetative tillers is not reduced relative to recent climatic conditions.

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