

Chapter 6

References, Glossary and Appendices

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GLOSSARY

Allotment Evaluation-The process of evaluation is the examination and professional judgment concerning the worth, quality, significance, amount, degree, or condition of the natural resources based on interpretation of monitoring data. An allotment evaluation provides a subjective assessment of all available information concerning a specific area and its management. The goal of an evaluation is to determine whether satisfactory progress is occurring, to identify the necessary actions necessary to correct deficiencies. Since resource objectives and monitoring methods vary from location to location, no standard set of criteria or format for the evaluation process is prescribed. Permittees, lessees, other rangeland users, and interested parties are consulted and encouraged to participate in monitoring evaluations. (USDI, BLM 1985)

Allotment Management Plan - A documented program developed as an activity plan, consistent with the definition at 43 U.S.C. 1702(k), that focuses on, and contains the necessary instructions for, the management of livestock grazing on the public lands to meet resource condition, sustained yield, multiple use, economic and other objectives. (43 Code of Federal Regulations 4100.0-5)

Animal Unit Month (AUM) - The amount of forage (780 pounds of dry matter) necessary for the sustenance of one cow or its equivalent for a period of one month. (43 Code of Federal Regulations 4100.0-5)

Annual Operating Plan (AOP) - The annual operating plan prescribes the annual plan of action that implements management actions of the allotment management plan. It specifies the grazing permittee and BLM's responsibilities for the current grazing season. The AOP is used to set objectives, implement utilization standards, and modify a grazing system to meet management and vegetative objectives for the allotment.

Axillary [bud] - Are also known as lateral buds which occur in the axils of leaves (in the upper angle of where the leaf grows from the stem).

Criteria, Rangeland Health - The [standard, or rule, or principle, used for testing in making a] determination of whether a rangeland is healthy, at risk, or unhealthy is based on the evaluation of three criteria: degree of soil stability and watershed function, integrity of nutrient cycles and energy flows, and the presence of functioning recovery mechanisms. (National Research Council 1994)

Desired Plant Community (DPC) - A plant community which produces the kind, proportion, and amount of vegetation necessary for meeting or exceeding land use plan (LUP) or activity plan objectives established for an ecological site(s). The determined DPC must be consistent with the site's capability to produce the desired vegetation through management, land treatment, or a combination of the two. Also defined as the plant community that has been identified through a management plan to best meet the plan's objectives for the site". (Society for Range Management 1989, 1995)

DPC has also been defined as "of the several plant communities that may occupy a site, the one that has been identified through a management plan to best meet the plan's objectives for the site". (Society for Range Management 1995)

Dormancy - The condition of a plant or seed in which life functions are virtually at a standstill. (Soil Conservation Society of America 1982)

Drainage, soil - As a natural condition of the soil, refers to the frequency and duration of periods when the soil is free of saturation; for example, in well-drained soils the water is removed readily but not rapidly; in poorly drained soils the root zone is waterlogged for long periods unless artificially drained, and the roots of ordinary crop plants cannot get enough oxygen; in excessively drained soils the water is removed so completely that most crop plants suffer from lack of water. Strictly speaking, excessively drained soils are a result of excessive runoff due to steep

slopes or low available water holding capacity due to small amounts of silt and clay in the soil material. (Soil Conservation Society of America 1982)

Ecological Site (ES) - A kind of land with a specific potential natural community and specific site characteristics, differing from other kinds of land in its ability to produce vegetation and to respond to management. (Society for Range Management 1989)

A kind of land with specific physical characteristics which differs from other kinds of land in its ability to produce distinctive kinds of vegetation and in its response to management. (Society for Range Management 1995)

Emergent [Vegetation] - Herbaceous wetland vegetation that is erect and rooted. (Soil and Water Conservation Society 2006)

Farm Products - All crops, crop products, plants or portions thereof, but not including livestock (Wyoming Weed and Pest Control Act of 1973).

Grazing System - The manipulation of grazing animals to accomplish a desired result. (Soil and Water Conservation Society 2006)

Functioning-At-Risk-Riparian-wetland areas - Are those riparian/wetland areas that are in functioning condition, but an existing soil, water, or vegetation attribute makes them susceptible to degradation. (USDI, BLM 1993)

Geographic Information System (GIS) - A data base management system used to store, retrieve, manipulate, analyze, and display spatial information.

Gully - A channel or miniature valley cut by concentrated runoff but through which water commonly flows only during and immediately after heavy rains or during the melting of snow; may be dendritic or branching or it may be linear, rather long, narrow, and of uniform width. The distinction between gully and rill is one of depth. A gully is sufficiently deep [(>6 inches)] that it would not be obliterated by normal tillage operations, whereas a rill is of lesser depth [(< 6 inches)] and would be smoothed by ordinary farm tillage. (Soil Conservation Society of America 1982)

Key Observation Point (KOP) - One or a series of points on a travel route or at a use area or potential use area where the view of human activities would be most revealing. KOPs in the GMCA are located along Hwy 287, BLM roads such as the Hudson-Atlantic City Road, county roads, and the National Trails. (BLM Manual 8400 1984)

Key Species - (1) Forage species of sufficient abundance and palatability to justify its use as an indicator to the *degree of use* of associated species. (2) Those species which must, because of their importance, be considered in the management program. (Society for Range Management 1989)

Lacustrine - Any wetland or deepwater habitat with the following characteristics: 1) situated in a topographic depression or dammed river channel, 2) lacking trees, shrubs, persistent emergents, emergent mosses or lichens with greater than 30 percent aerial coverage, and 3) total area exceeds eight ha (20 acres). (Cowardin et. al. 1979)

Lentic Wetland - These wetlands occur in basins and lack a defined channel and floodplain. Included are perennial or intermittent bodies of water such as lakes, reservoirs, potholes, marshes, ponds, and stockponds. Other examples include bogs, wet meadows, and seeps not associated with a defined channel. (Hansen et.al. 1995)

Lotic Wetlands - These wetlands are associated with running water systems found along rivers, streams, and drainageways. Such wetlands contain a defined channel which periodically, or continuously, carries flowing water, dissolved and suspended material. (Hansen et. al. 1995)

Minimum Ecological Standard - The minimum standard for rangeland management is to prevent human-induced loss of rangeland health. (National Research Council 1994)

Nonfunctional-Riparian-Wetland Areas - Are those riparian/wetland areas that clearly are not providing adequate vegetation, landform, or large woody debris to dissipate stream energy associated with high flows and thus are not reducing erosion, improving water quality, etc., as listed above. The absence of certain physical attributes, such as a floodplain where one should be, are indicators of nonfunctioning conditions. (USDI, BLM 1993)

Nutrient Cycling and Energy Flow - The movement through nature of elements, or, compounds, essential as raw materials for organism growth and development, such as carbon, oxygen, nitrogen, phosphorus, etc.

Palustrine - Any non-tidal wetland of a class dominated by trees, shrubs, persistent emergents, or emergent mosses or lichens. (Cowardin et. al. 1979)

Pasture - An area devoted to the production of forage, introduced or native, and harvested by grazing. (Soil and Water Conservation Society 2006)

Phenology - The study of periodic biological phenomena which are recurrent such as flowering, seeding, etc., especially as related to climate. (Society for Range Management 1989)

Potential Natural Community (PNC) - The biotic community that would become established on an ecological site if all successional sequences were completed without interferences by man under the present environmental conditions. Natural disturbances are inherent in its development. The PNC may include acclimatized or naturalized non-native species. (Society for Range Management 1989)

Proper Functioning Condition-Riparian-Wetland Areas - Riparian/wetland areas are [defined to be] functioning properly when adequate vegetation, landform, or large woody debris is present to dissipate stream energy associated with high waterflows, thereby reducing erosion and improving water quality; filter sediment, capture bedload, and aid floodplain development; improve flood-water retention and ground-water recharge; develop root masses that stabilize streambanks against cutting action; develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and support greater biodiversity. The functioning condition of riparian-wetland areas is a result of interaction among geology, soil, water, and vegetation. (USDI, BLM 1993)

Range Condition - (a) A generic term relating to present status of a unit range in terms of specific values or potentials. Specific values or potentials must be stated. (b) The present state of vegetation of a range site in relation to the climax (natural potential) plant community for that site. It is an expression of the relative degree to which the kinds, proportions, and amounts of plants in a plant community resemble that of the climax plant community for the site. (Society for Range Management 1989) (c) The present state of the plant community on a range (ecological) site in relation to the potential natural plant community for that site. (Soil and Water Conservation Society 2006)

Range Condition Class - Confusion has existed regarding both definition and use of this term. (1) The following definition fits the thinking expressed in the definition Range Condition (a) above: One of a series of arbitrary categories used to either classify ecological status of a specific range site in relation to its potential (early, mid, late seral or PNC) or classify management-oriented value categories for specific potentials, e.g., good condition spring cattle range. (2) Some agencies consider range condition class in the context of Range Condition (b) above as follows:

Range Condition Class	Percent of Climax for the Range Site
Excellent	76-100
Good	51-75
Fair	26-50
Poor	0-25

(Society for Range Management 1989)

Range Improvement - An authorized physical modification or treatment which is designed to improve production of forage; change vegetation composition; control patterns of use; provide water; stabilize soil and water conditions; restore, protect and improve the condition of rangeland ecosystems to benefit livestock, wild horses and burros, and fish and wildlife. The term includes, but is not limited to, structures, treatment projects, and use of mechanical devices or modifications achieved through mechanical means. (43 CFR 4100.0-5)

Also, according to the Public Rangelands Improvement Act of 1978, 43 USC 1902(f): “The term “range improvement” means any activity or program on or relating to rangelands which is designed to improve production of forage; change vegetative composition; control patterns of use; provide water; stabilize soil and water conditions; and provide habitat for livestock and wildlife. The term includes, but is not limited to, structures, treatment projects, and the use of mechanical means to accomplish the desired results.

Rangeland Health - The degree to which the integrity of the soil and the ecological processes of rangeland ecosystems are sustained. (National Research Council 1994)

Rangeland Health indicators - These are specific observable attributes, or features (such as soil erosion and deposition, vegetative cover and composition, bare ground and litter, noxious weeds, species diversity, population trends) applied as appropriate to the potential of an ecological site. Water chemistry and physical characteristics (such as temperature and turbidity), air chemistry and visibility are also considered in rangeland health evaluations.

Recovery Mechanisms - The natural recovery processes, both chemical and biological, involved in converting disturbed, or degraded lands, to their former uses or other productive uses. This commonly involves using strategies that capture organic matter to build topsoils to restore impaired, or lost, soil fertility to support desirable kinds and amounts of vegetation.

Resource Value Rating (RVR) - The value of vegetation present on an ecological site for a particular use or benefit (i.e. livestock forage). Resource value ratings may be established for each plant community capable of being produced on an ecological site, including exotic or cultivated species. (Society for Range Management 1989)

Rill - See the above definition of a gully.

Riparian Area - A geographically delineable area with distinctive functions and characteristics. Includes both the riparian ecosystem and the adjacent aquatic ecosystem. (Ehrhart and Hansen 1997)

Riparian areas are a form of wetland transitional between permanently saturated wetlands and upland areas. (USDI, BLM Technical Reference 1737-7 1992)

Riverine - Any wetland or deepwater habitat contained within a channel, with exception of wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens. (Cowardin et. al. 1979).

Seed Ripe - The developmental stage of grass growth when a viable seed is produced. A viable seed is one that is capable of germinating to produce a seedling under favorable conditions [The seed ripe stage occurs after peak of flowering and before seed dissemination.] . (Association of Official Seed Analysts 1998)..

Seral Stages - The series of relatively transitory plant communities that develop during ecological succession from bare ground to the climax stage.

Semiarid-A term applied to regions or climates where moisture is normally greater than under arid conditions but still definitely limits the growth of most crops. Dryland farming methods or irrigation generally are required for crop production. The upper limit of average annual precipitation in the cool semiarid regions is as low as 15 inches (38.1cm), whereas in tropical regions it is as high as 45 or 50 inches (114-127 cm).

Service Area - The area that can be properly grazed by livestock watering at a certain water. In determining such area, natural and cultural barriers, recognized habitats of livestock, proper livestock practices, and range management factors will be considered. (43 Code of Federal Regulations 4100.0-5 1971)

Site Conservation Rating (SCR) - Site conservation rating is defined as an assessment of the protection afforded a site by the current vegetation against loss of potential. (Society for Range Management 1995)

Site Conservation Threshold (SCT) - Site conservation threshold is defined as the kind, amount, and/or pattern of vegetation needed as a minimum on a given site to prevent accelerated erosion. The threshold in this case is in the rate of soil erosion. Vegetation which provides protection equal to or in excess of that necessary to prevent accelerated erosion would be above the threshold and would be rated as "satisfactory" or "sustainable. Vegetation which does not provide adequate protection would be rated "unsatisfactory" or "unsustainable". (Society for Range Management 1995)

Soil Quality - Soil quality is the fitness of a specific kind of soil to function within its surroundings, support plant and animal productivity, maintain or enhance water and air quality, and support human health and habitation. (USDA-NRCS 1996)

Soil Stability - Soils that exhibit natural erosion where the rate of soil formation is not exceeded by the rate of erosion and soil fertility is maintained.

Supplemental Feed - A feed which supplements the forage available from the public lands and is provided to improve livestock nutrition or rangeland management. (42 Code of Federal Regulations 4100.0-5)

Suspended Sediment - The very fine soil particles that remain in suspension in water for a considerable period of time; maintained in suspension by the upward components of turbulent currents or may be fine enough to form a colloidal suspension. Abbr. SS. (Soil Conservation Society of America 1982)

Total Dissolved Solids -The total dissolved mineral constituents of water. Abbr. TDS. (Soil Conservation Society of America 1982)

Treatments - Vegetation manipulations (fire, herbicides, grazing, brush beating, etc) to achieve desired results.

Use - (1) The proportion of current year's forage production that is consumed and/or destroyed by grazing animals. May refer either to a single species or to the vegetation as a whole. Synonym-Degree of Use. (2) Utilization of range for purpose such as grazing, bedding, shelter, trailing, watering, watershed, recreation, forestry, etc. (Society for Range Management 1989)

Use Area - Synonymous with the word pasture in this document.

Vegetative Expression - (1) How the land reflects its management and use through the growth of vegetation. (2) The

manifestation of plant growth.

Watershed Function - The ability of a watershed to infiltrate, store, release, and make available water for plant and animal use.

Wetland - Areas that under normal circumstances have hydrophytic vegetation, hydric soils, and wetland hydrology. It includes landscape units such as bogs, fens, carrs, marches, and lowlands covered with shallow, and sometimes ephemeral or intermittent waters. Wetlands are also potholes, sloughs, wet meadows, riparian zones, overflow areas, and shallow lakes and ponds having submerged and emergent vegetation. (Cowardin et.al. 1979)

APPENDICES

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