

ACRONYMS AND GLOSSARY

ACRONYMS

AMP	Allotment Management Plan
AUM	Animal Unit Month
BLM	Bureau of Land Management
CEQ	Council of Environmental Quality
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CUA	Concentrated Use Areas
DEIS	Draft Environmental Impact Statement
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEIS	Final Environmental Impact Statement
FR	Federal Register
FSH	Forest Service Handbook
FSM	Forest Service Manual
GAWS	General Aquatic Wildlife Surveys
GPS	Global Positioning System
HM	Head Months
HUC	Hydrologic Unit Code
IDT	Interdisciplinary Team
LCT	Lahontan Cutthroat Trout
LRMP	Land and Resource Management Plan
MIM	Multiple Indicator Method
MIS	Management Indicator Species
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
NDOW	Nevada Division of Wildlife
NFMA	National Forest Management Act
NHPA	National Historic Preservation Act
NOA	Notice of Availability
NOI	Notice of Intent
NRCS	Natural Resources Conservation Service
NTMB	Neotropical Migrating Birds
NTU	Nepelometric Turbidity Units
NWCG	National Wildfire Coordinating Group
OHV	Off-highway Vehicles
PFC	Properly Functioning Condition
RSAC	Remote Sensing Applications Center
SHPO	State Historic Preservation Office
SU	Standard Unit
USDA	United States Department of Agriculture
VAM	Vesicular Arbuscular Mycorrhizae

GLOSSARY

(A)

Adit: A nearly horizontal passage from the surface in a mine.

"A" Horizon: Mineral horizons which formed at the surface or below a layer of undecomposed or partially decomposed litter, in which all or much of the original rock structure has been obliterated and is characterized by an accumulation of humified organic matter intimately mixed with the mineral fraction.

Actual Use: The Head Months actually grazed on a national forest.

Affected Environment: The natural environment that exists at the present time in an area being analyzed.

Allelopathic: Inhibition of one organism by another via the release of metabolic by-products into the environment (Barbour, M.G., J.H. Burk, and W.K. Pitts. 1987). *Terrestrial Plant Ecology*, 2nd Ed. Benjamin/Cummings Publishing Company, Inc. Menlo Park, California.

Allotment: Rangeland and/or forestland designated for the use of a prescribed number and kind of livestock under a plan of management.

Allotment Management Plan (AMP): Long-term operating plan for a grazing allotment on public land, prepared in collaboration with a permittee and the appropriate agency.

Allowable Use: The degree of vegetative use allowed on a particular site. As related to the standards in the matrices this is applied at the point in time it was observed.

Alternative: A combination of management prescriptions applied in specific amounts and locations to achieve a desired management emphasis as expressed in goals and objectives. One of several policies, plans, or projects proposed for decisionmaking. An alternative need not substitute for another in all respects.

Annual (Implementation) Monitoring: The monitoring of implementation of the Annual Operating Instructions and Term Grazing Permit. This includes monitoring of: pre-season range readiness; annual maintenance of range improvements; compliance with permitted livestock utilization; annual maintenance of range improvements; compliance with permitted livestock utilization standards, and timing and location of use.

Animal Unit Month (AUM): The amount of feed or forage required by an animal unit for one month.

(B)

Bank Alteration: Recent (1 or 2 years) physical alteration of the bank by livestock trampling. It is measured from the low water line to the top of the bank. Hoof prints or vertical bank shear that break the soil surface, exposing plant roots or soil to air or water, constitute measurable impact if it causes bank instability or retards bank recovery. Alteration from the previous season still constitutes measurable impact if it meets this same definition. Previous hoof prints and vertical

bank shear are not expected to be obvious into a third season due to freeze/thaw cycles, rain events, erosion by streamflow or vegetative regrowth. Simple impressions on heavy herbaceous ground cover do not constitute a measurable impact. Nearly all hoof prints or vertical bank shear that significantly break the soil surface and expose plant roots or soil to air or water will cause bank instability or retard bank recovery, or both. The overriding concept behind the measure is making sure that the integrity of the streambank remains.

Bare Ground: Exposed ground not covered by vegetation, litter, or pavement.

Beneficial Uses: Different ways in which natural waters are used by humans and nature. Human uses include drinking water, bathing, recreation, agricultural, and industrial water supplies. Natural uses include growth and propagation of fish and associated aquatic life, wildlife, and furbearers.

Best Management Practices (BMPs): Strategies for managing the use of a resource in a manner that protects the resource and promotes ecological and economic sustainability.

Biological Assessment: An assessment or study required by the Endangered Species Act of 1973 to determine the potential effects of a proposed management action on threatened and endangered species or their habitats. The U.S. Fish and Wildlife Service review Biological Assessments and requests that all threatened, endangered, proposed threatened or endangered, and Category 1 “candidate species” be addressed.

Biological Evaluation: The legal record of finding for U.S. Forest Service Region Four sensitive species.

Browse Utilization (%): A measure of the amount of browse (woody) vegetation consumed by livestock at a particular site as a percent of the current year’s growth.

(C)

Canopy: (1) The vertical projection downward of the aerial portion of vegetation, usually expressed as a percent of the ground so occupied. (2) The aerial portion of the overstory vegetation.

Canopy Cover: The percentage of ground cover by a vertical projection of the outermost perimeter of the natural spread of foliage of plants. Small openings within the canopy are included. It may exceed 100%.

Class A Waters: Waters or portions of waters located in areas of little human habitation, no industrial development or intensive agriculture and where the watershed is relatively undisturbed by man’s activity.

Class of Animal: Description of age and/or sex group for a particular kind of animal. Examples: cow, calf, yearling, ewe, horse, etc.

Climax: (1) The final or stable biotic community in a successional series, which is self-perpetuating, and in dynamic equilibrium with the physical habitat. (2) The assured end point in succession.

Community: An assemblage of populations of plants and/or animals in a common spatial arrangement.

Compaction: Occurs when moist or wet soil aggregates are pressed together by the application of mechanical forces and the pore space between them is reduced. Compaction changes soil structure, reduces the size and continuity of pores, and increases soil density.

Competition: The interaction between organisms as a result of the removal of a common required resource from the environment. Resources may include water, nutrients, light, oxygen, carbon dioxide, food, and shelter.

Cryptogamic Crust: A thin, biotically-dominated surface layer or mat formed most commonly by cyanobacteria (blue-green algae), green and brown algae, mosses, and/or lichens that forms in or on the soil surface.

Cultural Resource: The physical remains of human activity (artifacts, ruins, burial mounds, petroglyphs, etc.) and conceptual content or context (as a setting for legendary, historic, or prehistoric events, such as a sacred area of native people) of an area.

Cumulative Effect: The effect on the environment which results from an incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

(D)

Deferment: Delay of livestock grazing on an area for an adequate period of time, to provide for plant reproduction, establishment of new plants, or the restoration of vigor in existing plants.

Deferred-Rotation: Any grazing system that provides for a systematic rotation of deferment among pastures.

Density: (1) The number of individuals per unit area. It is not a measure of cover.

Developed Recreation: Recreation that occurs where improvements have been made that (1) enhance recreation opportunities, and (2) accommodate intensive recreation activities in a defined area.

Direct Effect: Effects on the environment that occur at the same time and place as the initial cause or action.

Dispersed Recreation: The portion of outdoor recreation use that occurs outside of recreation developed sites in the unroaded and roaded National Forest environment (for example, hunting, backpacking, and berry-picking).

Distinct Population Segment (DPS): A population isolated and separable by physiological, ecological, behavioral, or genetic factors.

Disturbance: Any event, either natural or human induced, that alters the structure, composition, or function of an ecosystem.

Diversity: The distribution and abundance of different plant and animal communities and species within the area covered by a land and resource management plan (National Forest Management Act Planning Regulation).

Downcutting: Stream erosion in which the cutting action is directed in a downward direction. Incision of a stream channel.

Dry Meadow: A meadow dominated by grasses, which become moderately dry by mid-summer.

(E)

Ecoplots: Vegetation and soil sampling areas used to organize data collection for riparian scorecards.

Ecosystem: Organisms together with their abiotic environment, forming an interacting system, inhabiting an identifiable space.

Effects: Physical, biological, social, and economic results (expected or experiences) resulting from natural events or management activities. Effects can be direct, indirect, and cumulative and may be beneficial or detrimental.

Endangered Species: Any species which is in danger of extinction throughout all or a significant portion of its range and listed as such by the Secretary of the Interior in accordance with the Endangered Species Act of 1973. The policy for the management of federally listed endangered species is contained in FSM 2670.31, 6/23/95 (<http://fsweb.wo.fs.fed.us/directives/fsm/2600/>).

Environment: The aggregate of physical, biological, economic, and social factors affecting organisms in an area.

Environmental Analysis: An analysis of alternative actions and their predictable long and short-term environmental effects. Environmental analyses include physical, biological, economic, social, and environmental design factors and their interrelations.

Erosion: The wearing away of the land surface by rain or irrigation water, wind, ice, or other natural or anthropogenic agents that abrade, detach and remove geologic parent material or soil from one point on the earth's surface and deposit it elsewhere, including such processes as gravitational creep and so-called tillage erosion.

Exclosure: An area where livestock or other animals are denied access.

Exotic: An organism or species that is not native to the region in which it is found.

(F)

Fire Cycle: The average time between fires in a given area.

Floodplain: The area adjacent to the active stream channel which is inundated during flows that exceed bankfull level. The floodplain acts as an energy dispersion zone during flood flows, and functions as an area of deposition.

Foliage: The green or live leaves of plants.

Forage: Browse and herbage that are available for food for grazing animals or to be harvested for feeding.

Forage Production: The weight of forage that is produced within a designated period of time on a given area (usually expressed as pounds per acre). The weight may be expressed as green, air-dry, or oven-dry.

Forb: Any broad-leafed, herbaceous plant other than those in the *Poaceae* (grass), *Cyperaceae* (sedge), and *Juncaceae* (rush) families.

Forest Plan Standards: Resource management standards designed to facilitate meeting of National Forest goals and objectives.

Forest Service Sensitive: See Sensitive Species

Fuels: Herbaceous and woody vegetation, both living and dead, that are capable of burning.

Fuels Treatment: The rearrangement or disposal of natural or activity fuels to reduce fire hazard.

Functioning - Proper Functioning Condition: Riparian-wetland areas are functioning properly when adequate vegetation, landforms, or large woody debris is present to (1) dissipate stream energy associated with high waterflows, thereby reducing erosion and improving water quality; (2) filter sediment, capture bedload, and aid floodplain development; (3) improve flood-water retention and ground-water recharge; (4) develop root masses that stabilize streambank against cutting action; (5) develop diverse ponding and channel characteristics to provide the habitat and water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses, and (6) support greater biodiversity (USDI Bureau of Land Management 1995).

Functioning-at-Risk: Riparian-wetland areas that are in a functional condition but an existing soil, water, or vegetation attribute makes them susceptible to degradation (USDI Bureau of Land Management 1995).

Functions as Desired: As used in the “Matrices” section, functions as desired describes what a rangeland ecosystem type should look like as management direction is implemented. The two points in time chosen for the description are now and after 10 years of management implementations.

(G)

Global Positioning Satellites (GPS): A system of satellites, computers, and receivers that is able to determine the latitude and longitude of a receiver on Earth by calculating the time difference for signals from different satellites to reach the receiver.

Grazing Season: (1) On public land, an established period for which grazing permits is issued. (2) The time interval when animals are allowed to utilize a certain area.

Grazing System: A specialization of grazing management, which defines the periods of grazing and non-grazing. Grazing system should consist of at least the following: the number of pastures,

number of herds, and length of non-grazing periods for any given unit in the system. Examples are Deferred Rotation and Rest Rotation.

(H)

Habitat: A specific set of physical conditions that surround a single species, a group of species, or a large community. In wildlife management, the major components of habitat are considered to be food, water, cover, and living space.

Habitat Type: The collective area that one plant association occupies or will come to occupy as succession advances. The habitat type is defined and described as succession advances. The habitat type is defined and described based on the vegetation and its associated environment.

Head Cutting: The upstream movement of a waterfall or a locally steep channel bottom due to the erosion caused by rapidly flowing water.

Head Month: Tenure of one herbivore on National Forest for a period of one month.

Herbaceous: Vegetation growth with little or no woody components, such as graminoids and forbs.

Herbaceous Utilization (%): A measure of the amount of herbaceous vegetation consumed by livestock at a particular site.

Herbivory: Feeding on plants or plant material.

Herding: The practice of a person causing livestock to move from one location to another in order to meet livestock management objectives. Herding can be utilized in association with, or as a substitute for, fence construction.

Heritage Resource: The embodiment of a culture's identity, human experiences, and all that entails a culture's everyday life, including but not limited to objects and documents, structures, buildings, landscapers, archaeological sites, and ethnographic information.

Hydrologic Function: The ability of a stream to transport water and sediment in a balanced condition. The degree and rate of transport is the result of the natural watershed characteristics, including precipitation, geology, landforms, and vegetation. These characteristics have defined over time average conditions of streamflow, quantity, and character of sediment moving through the system, and composition of the materials forming the bed and banks of the channels. Stream systems that are in a balanced condition exhibit a relatively stable channel structure with only minor annual changes.

Hydrologic Unit Code (HUC): A unique two to eight digit number used to identify a drainage basin in a hierarchical classification system developed by the Water Resources Council.

(I)

Indicator Species: Species that indicate the presence of certain environmental conditions, seral stages, or previous treatment. One or more plant species selected to indicate a certain level of grazing use.

Indirect Effects: Secondary effects which occur in locations other than the initial action or significantly later in time.

Infiltration: The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Interdisciplinary Team (IDT): A team of individuals with skills from different disciplines that focuses on the same task or project.

Issue: A subject, question, or widespread public interest relating to management of National Forest System lands (Forest Plan). A problem or subject of concern raised by the public or by agency employees during scoping. Issues important to the decision at hand area analyzed in an environmental assessment or an environmental impact statement.

(K)

Key Area: A portion of range, which, because of its location, grazing, or browsing value, and or use serves as an indicative sample of range conditions, trend, or degree of use seasonally. A key area guides the general management of the entire area of which it is a part.

Key Species: Forage species whose use serves as an indicator to the degree of use of associated species. Those species that must, because of their importance, be considered in the management program.

(L)

Landtype: An area of land classified on the basis of geomorphic attributes. This classification system is based on an understanding of geologic processes (as reflected in land surface form and features), individual kinds of soil, and the factors which determine the behavior of ecosystems (for example; climate, vegetation, relief, parent materials, and time).

Lek: A site where grouse traditionally gather for sexual display and courtship.

Lithic Scatters: Archaeological sites resulting from aboriginal use, that consisting of culturally modified lithic (stone) material. Lithics may be in the form of flakes (debris from stone-tool production), the tools themselves, or any stone material that has been modified by original human use.

Litter: The surface layer of the rangeland floor which is not in an advanced stage of decomposition, usually consisting of freshly fallen leaves, needles, twigs, stems, bark, and fruits.

Livestock Trail: To facilitate herd movement, certain non-recreation trails may be designated as livestock trails. Permittees are authorized to remove encroaching vegetation on these trails to facilitate herd movement.

Long-term Effects: Those effects that generally occur after the maximum fifteen-year life of the Forest Plan. In reference to hydrologic recovery and flood impacts, 40 years or more is the corresponding time frame.

Long-term (Effectiveness) Monitoring: Long-term monitoring is the repeated measurement of specified ecological indicators, in specified locations, over time, to determine whether the livestock management practices being implemented are, in fact, moving toward desired rangeland and riparian conditions.

(M)

Management Area: An aggregation of capability areas having common management direction. These areas may be non-contiguous and are used to allocate and schedule management practices.

Management Direction: A statement of multiple use and other goals and objectives, the associated management prescriptions, and the associated standards and guidelines for attaining (reaching) them.

Management Indicator Species (MIS): A wildlife species whose population will indicate the health of the ecosystem in which it lives and, consequently, the effects of forest management activities to that ecosystem, MIS species are selected by land management agencies.

Management Practice: A specific activity, measure, course of action, or treatment (Forest Plan). A technique or procedure commonly applied to forest resources, resulting in measurable outputs, activities, or other results.

Memorandum of Understanding (MOU): The instrument used for a written plan between the Forest Service and other parties for carrying out their separate activities in a coordinated and mutually beneficial manner and for documenting a framework for cooperation.

Mitigate: Avoid or minimize impacts by limiting the degree or magnitude of the action and its implementation; to rectify the impacts by repairing, rehabilitating, or restoring the affected environment; to reduce or eliminate the impact by preservation and maintenance operations during the life of the action plan.

Moderate Grazing: A comparative term that indicates that the stocking rate of a pasture is between the rates of other pastures. Often erroneously used to mean proper use.

Monitoring: Examination, on a sample basis, of management practices to determine how objectives have been met, and a determination of the effects of those management practices on the land and environment.

Multiple Uses: Use of range for more than one purpose, grazing livestock, wildlife production, recreation, watershed and timber production. Multiple uses are not necessarily the combination of uses that will yield the highest economic return or greatest unit output.

(N)

National Environmental Policy Act (NEPA): The Act which declared a National Policy to encourage productive and enjoyable harmony between humans and their environment, to promote efforts that will prevent or eliminate damage to the environment and biosphere, to stimulate the

health and welfare of humans, to enrich our understanding of the ecological systems and natural resources important to our Nation; and to establish a Council on Environmental Quality.

National Environmental Policy Act (NEPA) Process: An interdisciplinary process, mandated by the National Environmental Policy Act, which concentrates decision making around issues, concerns, and alternatives, and the effects of those alternatives on the environment.

National Forest Management Act (NFMA): A law passed in 1976 as amendments to the Forest and Rangeland Renewable Resources Planning Act, which requires the development of Regional and Forest plans and the preparation of regulations to guide that development.

National Forest System: All National Forest land reserved or withdrawn from the public domain of the United States; all National Forest lands acquired through purchase, exchange, donation, or other means; the National Grasslands and land utilization projects administered under Title III of the Bankhead-Jones Farm Tenant Act (50 Stat. 525, 7 U.S.C. 1010-1012); and other lands, waters or interests therein which are administered by the Forest Service or are designated for administration through the Forest Service as a part of the system.

National Register of Historic Places: A listing maintained by the National Park Service of areas which have been designated as being of historical value. The Register includes places of local and State significance, as well as those of value to the Nation as a whole.

Native Species: Species that are a part of the original fauna or flora of an area.

No Action Alternative: An alternative where no activity would occur, or where current management practices would continue unchanged. The development of a no action alternative is requested by regulations implementing the National Environmental Policy Act (NEPA) (40 CFR 1502.14). The no action provides a baseline for estimating the effects of other alternatives.

Non-functioning: 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 under properly functioning condition. The absence of certain physical attributes (where they should be located), such as floodplain, is an indicator of a nonfunctioning condition.

Nongame: Species of animals that are not managed as a sport hunting resource.

Nonpoint Source Pollution: Diffuse sources of water pollution that come from indefinable sources such as agricultural, timber harvest, and road construction activities.

Noxious Weed: A plant species declared noxious by laws concerned with plants that are invasive or weedy.

Nutrient Cycle: The circulation of chemical elements and compounds, such as carbon and nitrogen, in specific pathways from the non-living part of ecosystems into the organic substances of the living parts of ecosystems, and then back again to the non-living parts of the ecosystem. For instance, nitrogen in wood is returned to the soil as the dead tree decays; the nitrogen again becomes available to living organisms in the soil, and upon their death, the nitrogen is available to plants growing in that soil.

Nutrient, plant: Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

(O)

Objective: A specific statement of measurable results to be achieved within a stated time period. Objectives reflect alternative mixes of all desired outputs or desired achievements which can be attained at a given budget level. Objectives may be expressed as a range of desirable outputs.

Organic Matter: Plant and animal residue in the soil in various stages of decomposition.

Overgrazing: Historic, continued heavy grazing that exceeded the recovery capacity of the community and created a deteriorated range.

Overstory: The layer of foliage in a forest canopy.

(P)

Palatability: The enjoyment with which a particular species or plant part is consumed by an animal.

Permitted Grazing: Grazing on National Forest range allotments under the terms of a grazing permit.

Photo Point: A point from which photos are periodically taken to monitor long-term management responses.

Plant Community: An assemblage of plants living and interacting together in a specific location.

Plant Vigor: Plant health.

Potential Natural Community (PNC): The biotic community or composition of plant species that would naturally occur under minimally disturbed conditions.

Prescribed Fire: Fire that is intentionally ignited and managed under a series of carefully prescribed conditions, for the purpose of achieving specific vegetation restoration and management objectives.

Prescription: Management practices selected to accomplish specific land and resource management objectives.

Processes: A sequence of events or states, one following from and dependant on another, which leads to some outcome. For instance, ecosystems that have a ten-year fire cycle have narrower range of variation than ecosystems with a 200 to 300 year fire cycle. Past management should move such ecosystems back toward their natural, sustainable range of variation.

Productivity, plant: Forage available for livestock grazing in pounds per acre per year.

Productivity, soil: The capability of a soil for producing a specified plant or sequence of plants under specific management.

Project Record: More detailed documentation of an environmental analysis, usually located in the files in the Forest Service District Office or the Forest Supervisor's Office.

Proper Use: The degree of utilization of current year's growth which, if continued, will achieve management objectives and maintain or improve the long-term productivity of the site. Proper use varies with time and systems of grazing.

Proper Functioning Condition: Ecosystems at any temporal or spatial scale are in a properly functioning condition when they are dynamic and resilient to perturbations to structure, composition, and processes of their biological or physical components.

Proposed Action: In terms of the National Environmental Policy Act, the project, activity, or action a federal agency intends to implement or undertake and which is the subject of an environmental analysis.

Public Involvement: A Forest Service process designed to broaden the information base upon which agency decisions are made by (1) informing the public about Forest Service activities, plans and decisions, and (2) encouraging public understanding about and participation in the planning processes.

(R)

Range Analysis: Systematic acquisition and evaluation of rangeland resource data needed for planning allotment management and overall land management. It consists of two basic parts: (1) an inventory of the resource, and (2) a narrative evaluation of the resource data, range management alternatives, and other information key to management of the grazing area.

Range Improvement: (1) Any structure or excavation to facilitate management of range or livestock. (2) Any practice designed to improve range condition.

Range (Rangeland): Any land supporting grazable or browsable vegetation and managed as a natural ecosystem; can include grasslands, forestlands, shrub lands, and pasture. "Range" is not a land use.

Range Management: The art and science of planning and directing range use intended to yield the sustained maximum animal production and perpetuation of the natural resources.

Record of Decision: A document, separate from but associated with an environmental impact statement, that publicly and officially discloses the responsible (decision making) official's decision about the alternatives assessed in the environmental impact statement, and the alternative chosen to implement.

Responsible Official: The Forest Service employee who has been designated the authority to carry out specific planning action.

Rest: Leaving an area ungrazed, thereby foregoing grazing of a forage crop. Normally, rest implies absence of grazing for a full growing season.

Rest Rotation: A grazing-management scheme in which rest periods for individual pastures, paddocks, or grazing units, generally for the full growing season, are incorporated into a grazing rotation.

Restoration (of Ecosystems): Actions taken to modify an ecosystem to achieve a desired, healthy, and functioning condition.

Rill Erosion: An erosion process on sloping fields in which numerous and randomly occurring small channels of only several centimeters in depth are formed; occurs mainly on recently cultivated soils.

Riparian/ Riparian Area/ Riparian Zone: The banks and adjacent areas of water bodies, water courses, seeps and springs whose waters provide soil moisture sufficiently in excess of that otherwise available locally, so as to provide a more moist habitat than that of contiguous flood plains and uplands.

Riparian Vegetation: Plant communities dependent upon the presence of free water near the ground surface (high water table).

Rooting Depth: Depth to which roots have been observed to penetrate. For measuring root depth in this study, it is the depth where fine and very fine roots (<2mm) are many (>5 per square cm).

Rubble Land: Areas that have more than 90 percent of the surface covered by stones or boulders. Voids contain no soil material and virtually no vegetation other than lichens. The areas commonly are at the base of mountain slopes as deposits of cobbles, stones, and boulders left by Pleistocene glaciation or by periglacial phenomena.

(S)

Salting: (1) Providing salt as a mineral supplement for animals. (2) Placing salt on the range in such a manner as to improve distribution of livestock grazing.

Scale: In ecosystem management, it refers to the degree of resolution at which ecosystems are observed or measured.

Scoping: The ongoing process to receive comments and suggestions, and determine issues during the environmental analysis process. It may involve public meetings, telephone conversations, or letters.

Season of Use: The season of the year when livestock, wildlife, or humans use a resource.

Season-Long Grazing: Grazing takes place through out the growing season. Under a season-long grazing system permitted livestock are authorized to be anywhere on the allotment from the permitted turn-out date until the permitted off-date, as long as other management standards are not exceeded.

Sediment: Solid material, both mineral and organic, that is in suspension, being transported, or has been moved from its site or origin by air, water, gravity, or ice.

Sensitive Species: Those plant or animal species that are susceptible or vulnerable to activity impacts or habitat alterations and will be managed similar to threatened or endangered species. The Forest Service policy is to ensure that species would not be affected in such a manner as to have them listed or proposed for listing as threatened or endangered. The policy for the management of Forest Service sensitive species is contained in FSM 2670.32, 6/23/95 (<http://fswweb.wo.fs.fed.us/directives/fsm/2600/>).

Seral Stages: The developmental stages of an ecological succession.

Sheet Erosion: The removal of a relatively uniform thin layer of soil from the land surface by rainfall and largely unchanneled surface runoff.

Soil: The unconsolidated mineral or organic material on the immediate surface of the earth that serves as a natural medium for the growth of land plants. This unconsolidated mineral or organic matter has been subjected to and shows effects of genetic and environmental factors of climate (including water and temperature effects), and macro- and microorganisms, conditioned by relief, acting on parent material over a period of time. A product-soil differs from the material from which it is derived in many physical, chemical, biological, and morphological properties and characteristics.

Soil Structure: The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structures are: *platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. Structureless soils are either *single grain* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Stability: The ability of the channel banks and bottom to resist the erosive powers of flowing water. Inherent stability refers to the potential stability of a riparian system.

Stable: The condition of little or no perceived change in plant communities that are in relative equilibrium with existing environmental conditions; describes persistent but not necessarily culminating stages (climax) in plant succession. Implies a high degree of resilience to minor perturbations.

Standard: Standards specify the desired result in specific enough terms to provide meaningful direction and to permit compliance to be measured or verified. Standards can, however, be phrased to require different levels of compliance. In some cases, there will be a need to establish absolute limits. In other cases some discretion may be permitted; in these cases the standard can be written to build in the permissible discretion.

State Historic Preservation Officer (SHPO): The appointed State official charged with administration of the National Historic Preservation Act on State lands, and charged with consultation regarding cultural resources on Federal lands in Nevada.

Stocking/ Stocking Rate: The number of specific kinds and classes of livestock grazing or utilizing a unit of land for a specific time period.

Streambank Stability: The ability of the channel banks and bottom to resist the erosive powers of moving water. Inherent stability refers to the potential stability of a riparian system.

Stream Bed/Stream Bottom: The substrate plane, bounded by the streambanks, over which the stream water flows.

Structure: How parts of ecosystems are arranged, both horizontally and vertically. Structure might reveal a pattern, or mosaic, or total randomness of vegetation.

Substrate: Inorganic materials that comprises the bottom and banks of a watercourse.

Succession: The natural progressive replacement of plant communities on a site, which leads to the potential natural plant community.

Surface Soil: The uppermost part of the soil, ordinarily moved in tillage, or its equivalent in uncultivated soils and ranging in depth from 7 to 25 cm. Frequently designated as the plow layer, the *surface layer*, the *Ap layer*, or the *Ap horizon*. See also topsoil.

(T)

Topsoil: The layer of soil moved in cultivation. Frequently designated as the *Ap layer* or *Ap horizon*. See also surface soil.

Trampling: Treading under foot; the damage to plants or soil brought about by movements or congestion of animals.

Threatened and Endangered Species (TES and T&E): Threatened and endangered species of plants and animals listed by the US Fish and Wildlife Service and protected under the terms of the Endangered Species Act.

Threatened Species: Those plant or animal species likely to become endangered throughout all or a specific portion of their ranges within the foreseeable future as designated by the U.S. Fish and Wildlife Service under the Endangered Species Act of 1973. The policy for the management of federally listed threatened species is contained in FSM 2670.31, 6/23/95 (<http://fsweb.wo.fs.fed.us/directives/fsm/2600/>).

Trailing: The practice among livestock producers of moving herds of livestock from one pasture to another by forcing the herd to follow a designated route used year after year, across public and private land, and along public roadways.

Trend: The direction of change in ecological status or resource value ratings observed over time.

(U)

Unauthorized Use: Livestock on the National Forest in violation of 36 CFR 261.7, a crime punishable by fine and/or imprisonment. Unauthorized use normally involves a non-permittee. Unauthorized use would apply to a grazing permittee only when a violation is clearly not related to use authorized by the grazing permit.

Understory: An underlying layer of low vegetation. The trees, shrubs, and grasses growing beneath the overstory in a stand of trees.

Uplands: Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the foot slope zone of the hill slope continuum.

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

Utilization: Use.

(V)

Vegetation: Plants in general, or the sum total of the plant life above and below ground in an area.

Vegetation Community Type: An aggregation of all plant communities distinguished by floristic and structural similarities in both overstory and undergrowth layers. A unit of vegetation within a classification.

Vegetation Management: Activities designed primarily to promote the health of forested and non-forested vegetation for multiple-use purposes.

Vegetation Type: A plant community with distinguishable characteristics.

Vegetative: Relating to nutritive and growth functions of plant life, in contrast to reproductive functions. Should not be confused with vegetation.

Vigor: Relates to the relative robustness of a plant in comparison to other individuals of the same species. It is reflected primarily by the size of a plant and its parts in relation to its age and the environment in which it is growing.

(W)

Water Developments: Structures installed to provide water for livestock where it does not naturally exist. Water developments may be constructed stock ponds, spring developments, and ditches or pipe systems bringing water from a water source to another location. Water developments are usually designed to accomplish one of three purposes: to provide water in areas where no natural surface water exists; to increase the availability of water to livestock where surface water naturally exists; and to provide alternative water locations near riparian areas and seeps needing particular protection from livestock.

Water Table: The upper surface of groundwater. Below it, soil is saturated with water.

Wet Meadow: A meadow where the surface remains wet or moist throughout the growing season, usually characterized by sedges and rushes.

Width to Depth Ratio (w/d): Is an index value that indicates the shape of the channel cross-section. It is a ratio of how wide the channel is at bankfull compared to the average depth of the channel at bankfull (in feet). This is a non-dimensional parameter (bankfull width/mean bankfull depth) describing whether a stream is wide and shallow vs. narrow and deep.

Winter Range: Range used by livestock or wildlife during the winter months.