1. **Explanation of Material Transmitted:** This release has been updated to include additional policy on maintaining and restoring native plant community diversity, resiliency, and productivity. The purpose of this updated manual is for identifying objectives, policies and standards that are common and apply to planning, analyzing, constructing, maintaining, replacing and or modifying renewable resource improvements and treatments for the forestry, range management, riparian management, soil, water, air, fish, wildlife, threatened and endangered species, wild horse and burro, invasive species, hazardous fuels reduction, emergency stabilization, and burned area rehabilitation programs to achieve management objectives on BLM managed lands. Objectives, policies, and standards applicable to only one program can be found in program-specific Manual Sections and Handbooks.

2. **Reports Required:** None.


4. **Filing Instructions:** File as directed below.

   REMOVE

   1740 Manual in its entirety

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Assistant Director,
Renewable Resources and Planning
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Handbooks
H-1740-1 - Renewable Resource Improvement and Treatment Guidelines and Procedures (1987)
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H-1741-1 – Fencing (1989)

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H-1741-3 – Water Developments (1990)

H-1741-4 – Management Facilities (Reserved)

H-1741-5 – Prescribed Fire (Moved to Manual Section 9214)

H-1742-1 – Burned Area Stabilization and Rehabilitation (2007)


H-1744-1 – Data Management Handbook for Job Documentation Reports (Deleted)
.01 Purpose. Identify objectives, policies, and standards that are common and apply to planning, analyzing, constructing, maintaining, replacing, and/or modifying renewable resource improvements and treatments for the forestry, range management, riparian management, soil, water, air, fish, wildlife, threatened and endangered species, wild horse and burro, invasive species, hazardous fuels reduction, emergency stabilization, and burned area rehabilitation programs to achieve management objectives on BLM managed lands. Objectives, policies, and standards applicable to only one program can be found in program-specific Manual Sections and Handbooks.

.02 Objectives.

A. Restore or maintain the condition and productivity of renewable resources on public lands for multiple-use.

B. Ensure that funds appropriated or contributed for resource improvements and treatments are used in a manner consistent with the intent of applicable law and regulations.

C. Create realistic Bureau and public expectations regarding the flexibility, timing, and magnitude of investments in resource improvements and treatments.

D. Plan, install, and report improvement and treatment actions as efficiently and effectively as possible.

E. Improve program efficiency and effectiveness by integrating renewable resource program vegetation management goals, objectives and activities to the extent possible.

.03 Authority. The following sources provide direct authority to improve, treat, and/or protect renewable resources on lands managed by BLM and to identify practices and standards suited to accomplishing the stated objectives:

A. Sources:


14. The “Carlson-Foley Act” of 1968, Public Law 90-583 (providing for the control of noxious plants on lands under the control or jurisdiction of the Federal Government).


18. Executive Orders 11643 of February 1972; 11870 of July 1975; and 11917 of May 1976. These orders set forth Federal policies relative to the use of chemical toxicants in Animal Damage Control activities. (Executive Order 11917 authorizes the operational use of sodium cyanide on Federal lands in accordance with regulations and restrictions prescribed by the Environmental Protection Agency.)


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Supersedes Rel. 1-1427
Rel. 1-1713
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24. Executive Order 11988 of May 1977 (Floodplain Management). This directs Federal agencies to take actions to reduce the risk of flood loss, to minimize the impacts of floods, and to restore and preserve the natural and beneficial values of floodplains.


26. Executive Order 11990 of May 1977 (Wetlands). This directs Federal agencies to minimize the destruction, loss, and degradation of wetlands, and to preserve and enhance the beneficial values of wetlands.


28. Executive Order 13112. Invasive Species

29. Executive Order 13352. Facilitation of Cooperative Conservation

30. Executive Order 13443. Facilitation of Hunting Heritage and Wildlife Conservation


34. Cooperative Agreement. This is an agreement between the Department of Agriculture and the Department of the Interior “For the Conduct of Forest Insect and Disease Management on Land Administered by the U.S. Department of the Interior, dated March 16, 1983.


37. Wyden amendment (Sec. 124 of PL 104-208)
.03A38

38. The Department of the Interior and Related Agencies Appropriations Act, 2001 (P.L.106-291) (Wildfire Management)


40. Tribal Forest Protection Act (P.L.108-278)

41. Omnibus Appropriations Act of 2003 (P.L.108-7) (Section 323 - Stewardship Contracting Authority)

42. Other Public Land Orders. Executive Orders, or agreements which authorize the Secretary of the Interior to administer livestock grazing on lands under the Taylor Grazing Act or other authority as specified.

B. Delegations:


2. For specific delegations of authority from the Director to other BLM officials pertaining to Renewable Resource Programs, Administration and Technical Services, see Manual Section 1203 – Delegation of Authority, Appendix 1.

.04 Responsibility. (See Manual Section 1203.)

.05 References. General and specific program direction (policy, required procedures, and standards) concerning use of renewable resource improvements is contained in several Manual Sections and Handbooks. The following list of references provides a general index to information that Bureau managerial and staff personnel should be aware of; additional specific information is contained in the material referenced below:


B. Handbook H-1740-2 – Integrated Vegetation Management (Proposed)


G. Manual Section 1745 - Introduction, Transplant, Augmentation and Reestablishment of Fish, Wildlife and Plants

H. Manual Section 1112 – Safety.

I. Manual Section 1510 – Procurement.

J. Manual Section 1601 – Land Use Planning.

K. Handbook H-1601-1 - Land Use Planning


M. Manual Section 1619 – Activity Plan Coordination.

N. Manual Section 1620-1625 - Supplemental Program Guidance.

15. Manual Section 2920 – Leases, Permits, and Easements

O. Manual Section 4100 – Grazing Administration

P. Manual Section 4180 – Rangeland Health Standards

Q. Handbook H-4180-1 – Rangeland Health Standards

R. Manual Section 5000 – Forest Management

S. Manual Section 5400 – Sales of Forest Products

T. Manual Section 6500 – Wildlife Management

U. Manual Section 6720 – Aquatic Resources Management

V. Manual Section 6780 – Habitat Management Plans

W. Manual Section 6840 – Threatened and Endangered Wildlife

X. Manual Section 7000 – Soil, Water, and Air Management

Y. Manual Section 9100 – Engineering

Z. Manual Section 9101 – Facility Planning

AA. Manual Section 9102 – Facility Design
.05BB

BB. Manual Section 9103 – Facility Construction
CC. Manual Section 9104 – Facility Maintenance
DD. Manual Section 9114 – Trails
EE. Manual Section 9132 – Operational Signs
FF. Manual Section 9172 – Water Control Structures
II. Manual Section 9177 – Maintenance and Safety of Dams
JJ. Handbook H-9177-1 – Performing Condition Surveys for Earth Embankment Dams
MM. Manual Section 9182 – Wastewater Treatment.
NN. Manual Section 9183 – Municipal/Community Related Solid Waste.
PP. Manual Section 9214 – Prescribed Fire
QQ. Handbook H-9214-1 – Prescribed Fire
SS. Manual Section 9222 – Chemical Pest Control.

.06 Policy. It is the policy of the Bureau to manage public lands in a manner that will conserve, protect, and improve the condition and productivity of renewable resources. Bureau managers will consider for use, all improvement and treatment practices that research data or prior experience indicate, will efficiently and effectively achieve identified management objectives, and will maintain resource values at a level sufficient to meet expected multiple-use and commodity production needs.
It is also the policy of the Bureau to manage for biologically diverse, resilient, and productive native plant communities to sustain the health and productivity of the public lands. This policy recognizes that, for a variety of reasons, not all public lands will contain native plant communities and that, in certain circumstances to prevent further site degradation and improve functionality, non-native plants may be used during stabilization, rehabilitation or restoration activities to achieve land management objectives. However, where practical, uses and activities will be conducted to favor the health and persistence of native plant communities where they currently exist and stabilization, rehabilitation or restoration actions will be undertaken to improve their diversity, resiliency and productivity as directed by local land use plans.

A. To implement these policies and achieve the program objectives identified above, the Bureau will, as a matter of policy, develop and require the use of:

1. Planning, assessment, and analysis procedures;
2. Criteria for establishing improvement and treatment priorities;
3. Construction and design standards;
4. Documentation and reporting requirements;
5. Investment incentives; and
6. Facility operation and maintenance standards.

B. To ensure that the concerns and needs of all segments of the public are considered equitably in resource improvement and treatment actions, it is the policy of the Bureau to apply these standards and procedures in a consistent manner.
.1 General Standards for Using Resource Improvements and Treatments. Proposals to design, construct, modify, abandon, and/or fund renewable resource improvements and treatments must be developed and analyzed in a coordinated manner, including coordination with Bureau program interests, agencies, and interested publics other than those who first proposed the action.

.11 Statutory Standards for Coordination.

A. Threatened and Endangered Plants and Animals. All proposed resource improvements and treatments must be reviewed to determine if the proposed action may affect a federally listed threatened or endangered plant or animal. If such a plant or animal may be affected, consultation with the U.S. Fish and Wildlife Service is required. (See Manual Section 6840.)

All Federally proposed species and proposed critical habitats shall be given the same level of review for listed species. If actions are likely to adversely affect a proposed species or proposed critical habitat, the BLM will confer with the appropriate regulatory agency prior to any action that would cause an irreversible or irretrievable commitment of resources.

Further, the BLM will implement management plans that conserve candidate species and their habitats and shall ensure that actions authorized, funded, or carried out by the BLM do not contribute to the need for the species to become listed.

Treatments and improvements will also be reviewed for consistency with approved recovery plans.

B. Cultural Resources. A Class III cultural resources inventory (see Manual Section 8111) may be required if consultation with the State Historic Preservation Officer (see 36 CFR 800.4), management direction, or other information indicates that surface disturbance, animal concentrations, or public use of the area might adversely affect a cultural property.

C. Wilderness Study Areas (WSA’s) and Designated Wilderness Areas. Renewable resource improvements and treatments in WSA’s must comply with the non-impairment criteria and other applicable provisions of the Interim Management Policy and Guidelines for Lands Under Wilderness Review. In designated wilderness areas, unless specifically exempted by the Wilderness Act, facility construction, treatment, and removal actions must be conducted by primitive means (i.e., without the use of mechanical equipment) unless no alternative means exists. If permitted, the use of mechanized equipment must be kept to a minimum and used in a manner which least impacts wilderness character. (See 43 CFR 8560, Designated Wilderness Areas; Procedures for Management. and Manual Section 8560.)
.11D

D. **Land-Use Planning and Environmental Analysis.** Proposed resource improvements and treatments must conform with the terms, conditions, and decisions of approved management framework plans, resource management plans, or plan amendments. (See Handbook H-1601-1, VI, G). Except for those resource improvements or treatments categorically excluded in 516 DM 2, Appendix 1, or 516 DM 11.5, the site-specific and cumulative impacts of improvements and treatments must be analyzed through preparation of an environmental assessment and/or environmental impact statement. Improvements and treatments which have undergone a site-specific analysis in a plan or other appropriately developed document need not be reanalyzed unless substantive changes are made in the proposal (See Handbook H-1790-1).

E. **Safety.** The Occupational Safety and Health Act, which requires the use of safety equipment, procedures, and personal protective equipment, etc., is applicable to BLM actions both where the Bureau and non-Bureau entities construct or apply treatments. (See Manual Section 1112 for specific guidance.)

F. **Resource Advisory Councils (RACs).** RACs shall be given an opportunity to offer advice and make recommendations to District or Field Office Managers, concerning the use of range betterment funds.

.12 **Standards For Internal Coordination and Planning.**

A. **Land-Use Planning.** Conformance with management direction that is a result of the interdisciplinary land-use planning process is required. Management direction may include identification of specific improvement or treatment practices that are required, preferred, or prohibited, and should identify required mitigation measures or standards. The Resource Management Plan (RMP) must identify goals and general program objectives that address resource management issues. See Handbook H-1601-1 Land Use Planning for additional information.

B. **Activity Planning.** Specific resource management objectives and site-specific resource improvements and treatments must be identified and documented in activity plans. Such plans include, but are not limited to, allotment management plans, habitat management plans, recovery plans, herd management area plans, fire management plans, watershed management plans, forest management plans, 5-year Timber Sale Plans, Water Quality Plans, Coordinated Resource Management Plans that identify the relationship of proposed improvements to attainment of management objectives and commodity production targets.

The activity plan, including the proposed package of improvements and treatments constitutes the proposed action considered in required analyses. Separating the improvements and treatments into individual proposals will not permit an analysis of cumulative effects.
Approval of the plans by the appropriate parties represents a commitment to work together and implement the plan as fast as funding and scheduling considerations allow. This will help assure that the desired effect or result is realized in the most expeditious manner. The Bureau can then address other priority resource needs and concerns. (See Handbook H-1620-1, IV. Implementation).

The absence of an activity plan is not, by itself, a satisfactory basis for not authorizing installation of improvements, where resource conditions indicate that a priority need exists, or private funding is available. However, care should be taken to ensure that the improvement is in harmony with management direction.

C. Environmental Analysis. The package of improvements and/or treatments identified in an activity or action plan must be analyzed through preparation of an environmental assessment and/or environmental impact statement unless previously analyzed or excluded, as indicated in Section .11D.

D. Interdisciplinary Review. Improvements and treatments proposed by one Bureau program or discipline must receive an interdisciplinary review before they are installed or constructed. Including the appropriate scope of disciplines in plan development is an efficient means of accomplishing this. An interdisciplinary review is not required if it constitutes duplicating a prior analysis conducted during plan development or environmental assessment, or where the action is categorically excluded.

.13 External Coordination. Coordination, consultation, and cooperation with users, affected interests, and other entities must occur prior to installing resource improvements and treatments. This may include livestock operators, conservation organizations, other Federal and State agencies, Native Americans, and other authorized public land users and cooperators. External coordination should occur during the planning and environmental assessment processes or during activity plan development to make the most effective and efficient use of everyone’s time. (Handbook H-1601-1, Appendix A – Guide to Collaborative Planning, and Handbook H-1790-1)

.14 Construction Standards. Renewable resource improvements, treatments, and related facilities must be constructed to Bureau standards, unless a specific analysis indicates that modifications or exceptions are justified (see Section .3). (See Manual Sections 9102, 9103, 9220, and the Engineering Guide Specifications and Standard Drawings, etc.)
.2 Constraints on Using Resource Improvements and Treatments.

.21 Energy and Mineral Development Areas. Proposed improvements and treatments are not to be installed or applied in areas where the land is or will be leased for energy and mineral development unless: (1) The improvement will not be affected by that development; (2) the principal features of the improvement or treatment can be economically salvaged and used again; or (3) benefits yielded will exceed the costs of installation and maintenance before the improvement is destroyed or abandoned.

.22 Public Land Disposal or Exchange. Improvements and treatments are not to be installed on lands identified for sale or transfer to another owner unless one of the conditions identified in .21 above is met.

.23 Access and Authorization Standards. Resource improvements shall not be proposed and installed where the lack of access prevents realizing identified objectives. Except for improvements placed on public lands exclusively by BLM, all improvements and treatments must be authorized by either a Cooperative Agreement (Form 4120-6) or by a Range Improvement Permit (Form 4120-7). BLM-owned improvements and treatments shall not be placed on private lands unless an easement or right-of-way has been obtained. (See Handbook H-4120-l.)

.24 Removal and Abandonment. When land-use planning, activity planning, and the related environmental and/or investment analyses indicate that an existing improvement is no longer consistent with management direction or needed to meet management objectives, it should be removed or abandoned. (See 43 CFR 4120.3-6(a).) When a project inspection indicates that an improvement or treatment has reached the end of its useful life, due either to deterioration or a change in resource objectives, it should be removed or abandoned and the site rehabilitated.
.3 Standards for Modifications and Exemption from Bureau Standards.

.31 Emergencies. Where emergency circumstances exist and immediate action is necessary to prevent undue degradation of renewable resources, improvements and treatments may be installed to minimize or reverse the effects of the emergency. (See 43 CFR 1506.11 and 516 DM 6 for guidance on modification of environmental assessment standards.) Compliance with the goals, objectives, and related management direction developed during land-use planning must be maintained, unless the emergency is of such magnitude that the management direction is no longer relevant. Identified means of achieving established goals and objectives may be changed following emergency situations.

.32 Critical or Unique Values. When a critical or unique renewable resource value is subject to imminent destruction, to the extent that the resource may never recover or recover only with a substantial investment of human effort and funds, managers may authorize installing improvements and treatments without an activity plan or conducting an investment analysis. Such exceptions must be addressed on a case-by-case basis and the rationale documented. The rationale must briefly identify the purpose of the action.

.33 Existing Activity or Action Plans. Reconstruction, modification, or removal of existing improvements, needed to continue the operation of an existing activity or action plan, may take place without additional activity planning and investment analysis. The action must be consistent with established management objectives and be documented. Compliance with planning, environmental, and other standards must occur when a substantive modification or revision is made to an existing activity plan. (See .1 and .2.)

.34 Construction and Engineering Standards. Managers may modify, or depart from, Bureau standards, if an analysis of a specific situation indicates that the modification is needed to accomplish resource management objectives. This analysis and the accompanying conclusions must be documented in an environmental assessment, activity plan, or other document, and retained in project or activity plan files. Acceptable limits to such modifications or departures are identified in applicable manual or handbook sections.
4 Documentation Standards. Improvements and treatments that are constructed or applied to public lands must be reported and documented in the Rangeland Improvement Project System (RIPS). If an improvement or treatment is removed or abandoned, delete it from the inventory of existing projects in RIPS. Using RIPS is not required when improvement and treatment information is reported and documented in another operational data base, such as MicroSTORMS, the Forest Vegetation Information System (FORVIS), Stewardship Contracting Information Database (SCID), or the National Fire Plan Operations and Reporting System (NFPORS).
GLOSSARY OF TERMS

-A-


alternatives: different ways of addressing the planning issue(s) and management activities considered in the planning process. These serve to provide the decision maker and the public a clear basis for choices among options. Every planning effort involves the development of several complete. Reasonable alternatives for resolving the issue(s). One alternative will be for continuation of present management (no change), and others will provide a range of choices for resolution of the issues. One of the alternatives, a modification of one, or a combination of several alternatives is selected at the end of the planning process and approved as the plan.

allotment: an area of land designated and managed for grazing by livestock. An allotment may include land not suitable for livestock grazing.

Allotment Management Plan (AMP): a program document which prescribes the manner in, and extent to which, livestock grazing is to be conducted and managed to meet multiple-use, sustained-yield, economic and other human or resource objectives as determined through land-use planning. Existing and planned improvements, and the responsibility for their maintenance, must also be identified. Consultation, cooperation, and coordination with the permittee(s), lessee(s), and other affected interests are required.

assessment: the estimation or judgment of the status of ecosystem structures, functions, or processes, within a specified geographic area (preferably a watershed or group of contiguous watersheds) at a specific time. An assessment is conducted by gathering, synthesizing, and interpreting information, from observations or data from inventories and monitoring. An assessment characterizes the status of resource conditions so that the status can be evaluated relative to land health standards.

-B-

Burned Area Rehabilitation (BAR) program: the BAR program is both a planning process and activity resulting from an evaluation of potential and past wildfire impacts to mitigate undesirable effects. Measures are promptly initiated, which are compatible with land-use plan objectives to protect soil, water resources, life, and property.
biological control: utilization of existing mortality and suppressive factors in the environment. Classical biological control uses introduced parasites, predators, and diseases for insect and plant (weed) control. Other biological measures, such as use of domestic or wild animals to control weeds, are now being tested.

chemical control: the application of pesticides by spraying, injection, broadcast (spreading) etc., to control or eliminate target plant and insect species.

diverse plant community: a large assemblage of plants with adequate representation from all the species groups found in a non-degraded environment of that type.

emergency stabilization: planned actions to stabilize and prevent unacceptable degradation to natural and cultural resource, to minimize threats to life or property resulting from the effects of a fire, or to repair/replace/construct physical improvements necessary to prevent degradation of land or resources.

Burned Area Rehabilitation Plan: a plan developed after a wildfire to mitigate the adverse effects on the soil and vegetative resources or to minimize the possibility of fire to reoccur on those sites.

fuels: combustible vegetation such as grass, leaves, ground litter, plants, shrubs, and trees that feed a fire.

fuels reduction: manipulation, including combustion or removal of fuels to reduce the likelihood of ignition and/or to lessen potential damage and resistance to control. Often includes thinning and/or prescribed burning.

habitat management area: a specific area which encompasses, as a minimum, the ecosystem determinants and biological requirements for those fish and wildlife species living within the area.

Habitat Management Plans (HMP’s): plans normally written for habitat management areas. (See Manual Section 6780.) The plan identifies resource management objectives and the planned means for achieving them.
herd management area: a herd area identified in an approved resource management plan where wild horses or burros will be maintained and managed.

Herd Management Area Plan (HMAP): an activity plan which addresses the management of wild horses or burros and their habitat in one or more herd management areas.

-improvement:- (1) any structure or excavation to facilitate management of range or livestock; (2) any practice designed to improve range condition or facilitate more efficient utilization of the range; (3) an increase in the grazing capacity of range, i.e., improvement in range condition.

-landscape:- all the natural features such as grasslands, hills, forest and water, which distinguish one part of the earth’s surface from another part; usually that portion of land which the eye can comprehend at a single view, including all its natural characteristics. A healthy landscape is one where plant communities, wildlife and other living creatures and ecological processes (including natural fire regimes) are functioning appropriately and on a biologically sustainable basis. Appropriate uses and activities can be supported on healthy land now and into the future.

Land-use Plan: a set of decisions that establishes management direction for land within an administrative area, as prescribed under the planning provisions of FLPMA; an assimilation of land-use-plan-level decisions developed through the planning process outlined in 43 CFR 1600, regardless of the scale at which the decisions were developed. The term includes both resource management plans (RMPs) and management framework plan (MFPs).

-maintenance:- timely repair of an improvement or treatment project to keep it in usable condition, for the purpose and timespan intended. Such repair is performed as needed and is less than half of the cost construction to replace the facility.

management direction: established coordinated management direction developed during land-use planning pursuant to the provisions of FLPMA. It encompasses all resource management goals, objectives, constraints, exclusions, guidelines, etc., contained in or affected by land-use planning decisions made by the authorized official for a particular Resource Area or other area encompassed by the land-use or resource management plan.

management plan: a program of action designed to reach a given set of objectives for a specific geographic area.
monitoring: The regular collection of data over time to evaluate: 1) whether objectives or land health standards are being achieved; 2) effectiveness of management actions.

modifications: alteration of an improvement or treatment project, to meet specific resource needs which may not have been considered during the original construction.

multiple-use: the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the needs of the American people taking into account the long-term needs of future generations for renewable and nonrenewable resources (including recreation; range; timber; minerals; watershed; wildlife; fish; and natural scenic, scientific, and historical values); and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment, with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output.

native plant community: a plant community having the proper mix of native species, structures, and landscape mosaic consistent with the natural disturbance regime.

native species: species that historically occurred or currently occur in a particular ecosystem and were not introduced.

objective: a concise, time-specific statement of measurable planned results that responds to pre-established goals. An objective forms the basis for further planning to define the precise steps to be taken and the resources to be used to achieve identified goals.

operation: routine use and function of an improvement, including those costs necessary to keep an improvement functioning. Operation usually refers to items such as energy costs, lubricants, and inspection costs commonly associated with pumps, wells, pipelines, etc.

output: a good, service, or onsite use produced from the public lands. Output is usually measured in terms such as board feet of timber, recreation visitor days, animal unit months of forage, acres of habitat, number of animals harvested, etc.

pest: an animal or plant existing in an area where it is unwanted.
plant community: a vegetation complex, unique in its combination of plants, which occurs in particular locations under particular influences. A plant community is a reflection of integrated environmental influences on the site, such as soils, temperature, elevation, solar radiation, slope, aspect and precipitation.

practice: a repeated or customary action (e.g., a customary type of action taken to modify or improve the land).

production: the measure of physical product, services, onsite use, or other outputs created from the resource.

productivity: the ability of a site to produce vegetation. This term can be used to describe plant vigor meaning total plant production, seed and seed stalk production, cover, etc. is adequate to enable reproduction and recruitment of plants. It usually relates to the above-ground growth of plants. It can be measured by weight for any species in a plant community.

-R-

range: embraces rangelands and also many forest lands which support an understory or periodic cover of herbaceous or shrubby vegetation amenable to certain range management principles or practices.

rangeland: A kind of land on which the native vegetation, climax or natural potential consists predominantly of grasses, grass-like plants, forbs, or shrubs. The term includes lands revegetated naturally or artificially to provide a non-crop plant cover that is managed like native vegetation. Rangeland may consist of natural grasslands, savannahs, shrublands, most deserts, tundra, alpine communities, coastal marshes and wet meadows.

reconstruction: replacing or rebuilding an improvement facility or treatment (i.e., fence, spring development, cattleguard, and sometimes a vegetative manipulation) after the normal effects of climate, geologic action, use, design, or construction limitations lead to a determination that repairs will cost over 50 percent of a new facility or treatment. In most circumstances, reconstruction is the responsibility of the owner of the facility. However, if the reconstruction is the result of negligence or malice on the part of the party responsible for maintaining it, that party is responsible and may be assessed other penalties and/or costs.

recreation area: a land area reserved and managed for both developed and undeveloped recreation.

rehabilitation: the “repair” of a wildland fire area using native and or nonnative plant species to obtain a stable plant community that will protect the burned area from erosion and invasion by weeds.
Glossary, Page 6

resilience: the capacity of ecological processes to recover following a disturbance. Resilience can be defined in terms of the rate of recovery, the extent of recovery during a particular period of time, or both.

resource improvement: any activity or program on or relating to the public lands that is designed to improve production of forage, change vegetative composition, control patterns of use, provide water, stabilize soil and water conditions, or provide habitat for livestock and wildlife, etc. Resource improvements may be structural or nonstructural.

A. structural improvement: an improvement requiring placement or construction in order to facilitate management or control distribution and movement of animals. Such improvements may include fences; wells; troughs; reservoirs; pipelines; and cattleguards.

B. nonstructural improvement: a practice or treatment which improves resource condition and/or production for multiple use. Such improvements may include seedings; plant control through chemical; mechanical; biological means; prescribed burning; water spreaders; pitting; chiseling; contour furrowing; etc.

restoration: implementation of a set of actions that promotes plant community diversity and structure that allows plant communities to be more resilient to disturbance and invasive species over the long term.

revegetation: establishing or re-establishing desirable plants in areas where desirable plants are absent or of inadequate density, by management alone (natural revegetation) or by seeding or transplanting (artificial revegetation).

-S-

seasonal-use area: an identifiable use area which is normally used during only one or two seasons of the year, such as winter, or summer, etc., and can be separated according to this use.

structure (vegetative): the form or appearance of a stand; the arrangement of the canopy; the volume of vegetation in tiers or layers.

-T-

timber management activity plan: a detailed plan for the management of the timber resource in a specific area to achieve timber management goals as developed and identified in a Resource Management Plan. The plan, at a minimum, identifies resource management objectives such as the allowable cut level and silvicultural and other actions that are planned to assure that the objectives are achieved.
treatment: a technique or action customarily applied to rehabilitate or improve a damaged or deteriorated area through one or more of the following: (1) management (all types - livestock, people, wildlife, etc.); (2) vegetation management (seeding, planting, thinning, herbicide spraying) etc.; (3) watershed tillage (furrowing, trenching, ripping, etc.); (4) water control (detention dams, dikes, diversions, etc.); (5) restricted use (curtailment or temporary removal of specific uses).

-w-

watershed: the total area of land above a given point on a waterway that contributes runoff water to the flow at that point; a major subdivision of a drainage basin.

wildfire: an unplanned, unwanted wildland fire including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, and all other wildland fires where the objective is to put the fire out.

woodlands: a forest in which the trees are often small, characteristically short-barked relative to their crown depth, and forming only an open canopy with the intervening area being occupied by lower vegetation, commonly grass.