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Glossary of Terms

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.01 Purpose. The purpose of this Manual Section is to describe the policy for the management of forest vegetation on the Public Lands administered by the Bureau of Land Management under the Federal Land Policy Management Act (FLPMA), hereafter referred to as BLM lands. Those lands include timberlands, woodlands, and other lands containing salable vegetation classified as “other vegetative material.” It does not apply to those lands in Western Oregon administered under the O&C Act of 1937. FLPMA directs that public lands be managed on the basis of multiple use and sustained yield without permanent impairment of the productivity of the environment.

.02 Objective. The objective of this Manual Section is to provide guidance for the maintenance, restoration, improvement, harvest, and replacement of forest vegetation and for management for desired plant communities in forms which maintain genetic, structural, and successional conditions which benefit the uses of those lands in the long run as set forth in the Public Domain Forest management Policy (See .06 Policy).

.03 Authority.

A. The National Environmental Policy Act of 1969 (42 U.S.C. 4321-47; 83 Stat. 852; P.L. 91-190):

1. Encourages productive and harmonious relationships between people and their environment and an enriched understanding of ecological systems and natural processes important to the Nation.
2. Requires preparation of detailed statements on environmental impacts of proposed major Federal actions that significantly impact the quality of the human environment.
3. Directs Federal agencies to initiate and use ecological information in the planning and development of resource oriented projects.

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B. Federal Land Policy and Management Act (FLPMA) of 1976 (43 U.S.C. 170 *et seq.*; 90 Stat. 2743; P.L. 94-579):

1. Directs that public lands be managed on the basis of multiple use and sustained yield without the permanent impairment of the productivity of the land and the quality of the environment.
2. Requires the development and maintenance of land use plans based on the inventory of all public lands and their resources.
3. Identifies fish and wildlife development and utilization, domestic livestock grazing, mineral exploration and production, rights-of-way, outdoor recreation, and timber production as principal or major land uses.
4. Directs that the United States receive fair market value of the use of the public lands and their resources unless otherwise provided for by statute.
5. Directs that the public lands be managed in a manner which recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber from the public lands.
6. Requires that "the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use."
7. Authorizes investigations, studies, and experiments involving the improvement, management, use and protection of the public lands and their resources.
8. Requires compliance with State and Federal water and air pollution standards.

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- C. Water quality Act of 1987, as amended from the Federal Water Pollution Control Act (Clean Water Act) of 1977 (33 U.S.C. 1251 et seq.; 91 Stat. 1566-1611; P.L. 95-217). The objective of this act is to restore and maintain "... the chemical, physical, and biological integrity of the Nation's water ..." at a level of quality which provides protection for fish, shellfish, wildlife, and recreational use. It also requires States to assess their rivers, streams, and lakes and to develop non-point source management programs to control and reduce specific nonpoint sources of pollution.
- D. Material Disposal Act, Public Law 80-291, July 31, 1947.
- E. Clean Air Act of 1990.
- F. Coastal Zone Management, 16 U.S.C. 809.
- G. Recreation and Public Purposes Act, 43 U.S.C. 809.
- H. Endangered Species Act of 1973, 16 U.S.C. 809.
- I. Act of September 15, 1960, 16 U.S.C. 670g (Sikes Act).
- J. Act of June 8, 1940, 16 U.S.C. 668, et. seq. (Protection of Bald and Golden Eagles).
- K. Anadromous Fish Conservation Act, 16 U.S.C., 757a et seq.
- L. Fish and Wildlife Coordination Act, 16 U.S.C., 757a et seq.
- M. Fishery Conservation and Management Act of 1976, 16 U.S.C. 1801-1802, 1811-1813, 1821-1825, 1851-1862, 1882.
- N. Migratory Bird Treaty Act of 1918, 16 U.S.C., 470 et seq.
- O. Wild and Scenic River Act, 16 U.S.C. 1271 et seq.
- P. Archaeological Resources Protection Act of 1979, 16 U.S.C., 470A-47011.

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- Q. Executive Orders 11988 of 1977 (Floodplain Management as amended by Executive Order 12148). Directs each Federal agency is to take action to avoid, to the extent possible, the long and short term adverse impacts associated with the occupancy and modification of floodplains. Agencies are further required to avoid direct or indirect support of floodplain development whenever there is a practicable alternative. Each agency shall provide leadership and shall take action to restore and preserve the natural and beneficial values served by floodplains in carrying out its responsibilities for acquiring, managing and disposing of Federal lands and facilities.
- R. Executive Order 11990 of May 24, 1977 (Protection of Wetlands). Directs Federal agencies to take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial value of wetlands in carrying out programs affecting land use. All federally initiated, financed, or permitted construction projects in wetlands must include all practical measures to minimize adverse impacts. This requires that all leases, rights-of-way, easements, and disposals involving Federal wetlands must contain restrictions to uses by the grantee which are consistent with Federal, State and local wetland regulations.
- S. Executive Order 11514, Protection and Enhancement of Environmental Quality.

.04 Responsibility.

- A. The Director and the Deputy Director are responsible for all aspects of forest land protection, management, and improvement on public lands administered by the BLM.
- B. Assistant Director, Land and Renewable Resources is responsible for the development, implementation, coordination, and integration of forest management policies, procedures, and technical guidelines. The Assistant Director provides policy and program interpretations, direction, leadership, and line management to assure consistency of field implementation of policies and procedures to enhance, protect, maintain, or develop resources on public lands administered by the BLM and ensures that these procedures are incorporated into BLM programs. The Assistant Director is also responsible for:

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1. Evaluating the effectiveness of forest land management procedures and programs.
 2. Developing guidance for the preparation of activity plans with forest land management objectives to protect, maintain, and restore these areas to the desired condition.
 3. Systematically reviewing rules, regulations, procedures, and proposed legislation to establish and update the BLM's efforts to protect and manage forest land resources on public lands administered by the BLM.
- C. Chief, Division of Forestry is responsible for ensuring incorporation of other program policies and procedures into the forest management program, quality control, evaluations and reviews.
- D. Assistant Director, Energy and Mineral Resources; Chief, Division of Wildlife and Fisheries; Chief, Division of Rangeland Resources and Branch Chief, Soil, Water, and Air; Chief, Division of lands and Realty; Chief, Division of Recreation, Cultural, and Wilderness Resources; Chief, Division of Fire and Aviation, Chief, Division of Planning and Environmental Coordination are all responsible for ensuring the incorporation of forest land management policies and procedures into their program areas.
- E. The Service Center Director is responsible for providing technical support for development and coordination of forest land inventory, management techniques, and monitoring as well as other appropriate technical expertise, assistance, and/or support within the purview of Services Center operations and responsibilities.
- F. State Directors are responsible for formulating policy (within the limits delegated by the Director) and for developing, directing, coordinating, and implementing a Statewide forest land management strategy. They must ensure compliance with official procedures and provide technical assistance and guidance needed to implement inventory, classification, management, and monitoring procedures.

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- G. District Managers are responsible for implementing policy and for developing, directing, and coordinating District-wide forest land management according to BLM and State policies, programs and procedures.
- H. Resource Area Managers are responsible for implementing District, State, and BLM forest land management policies within their designated areas of jurisdiction.

.05 References. See BLM Manual Sections 1211, 1212, 1216, 1622. Some technical publications contributing information significant to the implementation of the program concept follow below:

A. Silviculture:

1. Silvicultural Systems for Forest Management, USDA Ag. Handbook No. 445, 1983.
2. Silviculture of Subalpine Forests in the Central and Southern Rocky Mountains: The Status of Our Knowledge, USDA Forest Service Res. Paper RM-121, 1974.
3. Silvicultural Systems and Cutting Methods for Old-Growth Lodgepole Pine Forests in the Central Rocky Mountains, USDA Forest Service Gen. Tech. Report RM-127, 1986.
4. Silviculture of Southwestern Ponderosa Pine: The Status of Our Knowledge, USDA Forest Service Res. Paper RM-123, 1974.

B. Ecology:

1. Aspen: Ecology and Management in the Western United States, USDA Forest Service Gen. Tech. Report RM-119, 1985.
2. Kimmins, J.P., Forest Ecology, MacMilland and Sons, New York, NY 1987.
3. Perspectives on Ecosystem Management, Video, Oregon State University, School of Forestry, 1989.

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4. From the Forest to the Sea: A Story of Fallen Trees, USDA Forest Service, Pacific Northwest Research Station, General Technical Report PNW-GTR-229, 1988.
5. Hunter, Malcolm L. Jr., Wildlife, Forests, and Forestry: Principles of Managing Forests for Biological Diversity, Prentice Hall, Englewood Cliffs, NJ, 1991.
6. Biological Diversity in Forest Ecosystems, Society of American Foresters. Task FORCE report, 1991.

C. Timber Management:

1. Below-Cost Timber Sales: Analysis of a Forest Policy Issue, USDA Forest Service, Intermountain Res. Sta., Gen. Tech. Report INT-183, 1985.
2. Harvesting and Utilization Opportunities for Forest Residues in the Northern Rocky Mountains: Symposium Proceedings, November 28-30, 1979, Missoula, MT., USDA Forest Service Intermountain Res. Sta., Gen. Tech. Report INT-110, 1981.
3. Gregory, G. R., Resource Economics of Foresters, John Wiley and Sons, Inc., New York, New York 1987.

D. Wildlife Management:

1. Elk Movements and Habitat Use on a Managed Forest In North Central Idaho, Idaho Dept. of Fish and Game, Wildlife Bulletin No. 10. 1982.
2. Guidelines for Evaluating and Managing Summer Elk Habitat in Northern Idaho, Idaho Dept. of Fish and Game, W. L., Bul. No. 11, 1984.
3. Managing Forested Lands for Wildlife, Colorado Division of Wildlife, 1984.
4. Management of Wildlife and Fish Habitats in Forests of Western Oregon and Washington, USDA Forest Service Pub. No. R6-F&WL-192-1985, 1985.
5. Coordinating Elk and Timber Management, Report of the Montana Cooperative Elk-Logging Study, 1971-1985.

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6. National Old-Growth Forest Values, (specific as to FS Region).
7. Wildlife Habitats in Managed Forests in the Blue Mountains of Oregon and Washington, USA Ag. Handbook No. 553, 1979.

.06 Policy. The Bureau of Land Management manages 48 million acres of forest lands: 26 million acres in Western United States and 22 million in Alaska. Of these totals, 5 million and 7 million acres, respectively, are considered timberlands and 21 million and 15 million acres are woodlands. The basic policy for the management of both timberlands and woodlands is set forth in the Federal Land Policy and Management Act of 1976 (FLPMA). (See .03B above.) In regards to these forest lands it is the BLM's policy to:

- A. Use the Bureau of Land Management planning process to determine forest land management objectives. Planning Process.
- B. Manage to maintain desired forest ecosystems. Ecosystems Management.
- C. Plan current-harvest reforestation by natural or artificial means. Planning and funding for this reforestation shall be scheduled to avoid future backlog. Future harvest levels depend on successful accomplishment of this process. Reforestation Scheduling.
- D. Conduct an efficient forestry program which provides public service, manages forest lands, and increases the output of forest products, when appropriate, to help satisfy local and national needs. Efficiency and Public Service.
- E. Implement practices and investments which reflect the long term cycle of forest management. Long-Term Investments.
- F. Maintain the forest resources inventory for the purpose of determining land use planning objectives and appropriate harvest levels. Inventory.
- G. Meet public needs for commodity and non-commodity benefits and uses to the extent possible. Public Demand.

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- H. Adjust annual sale offerings to correspondence with public demand and local market conditions to be consistent with even flow over time. Allowable Sale Quantity Offering.
- I. Receive fair market value for the sale of forest products while also recognizing the validity of free use on a limited basis. Fair Market Value.
- J. Prevent unauthorized use of public lands and resources occurs, investigate, pursue, and terminate such use occurs. Unauthorized Use.

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.1 Program Guidance for the Forest Management Program.

.11 General. In 1989, the Director approved a policy for guidance and management of forest vegetation on Public Lands administered under FLPMA. This guidance applies to those “forested” lands containing, what was traditionally referred to as “timber lands,” capable of producing in excess of 20 cubic feet/acre/year; as well as “woodlands,” including those forested lands producing less than 20 cubic feet/acre/year; and “other vegetative material” or those lands containing cactus and other salable vegetation which were not previously covered by management policy. This guidance is intended to assist managers, foresters, and other technical field people as a reference for use in determining what the program is, what it can do to provide commodity values to the public, its value as a tool to manage and enhance biological diversity, and how it can guide the use of, and protect those values when necessary.

.12 Policy Statement Interpretation. In developing and implementing forest management programs, States should be guided by the policy statements as contained in the approved Forest Management Policy document (.06 Policy) and as further defined in the following clarifications, goals, and objectives. (See A-J below).

- A. Planning Process. The Bureau Planning System Process (see Manual Section 1601) shall be used to determine forest land management objectives. The Supplemental Guidance (see BLM Manual Section 1622.2), shall be consulted to identify forest lands, determine which acres are to be considered available as part of the allowable sale quantity (ASQ) base; determine which forest lands will be managed as woodlands, for other vegetal material sales, or for other specified uses; and provide general management direction for use in activity plan preparation. In addition, the planning process can identify unique or special areas. Criteria used in identifying management categories for forest and vegetal-material-disposal lands should be based on both tangible and intangible values of those lands. These include such things as watershed values, recreational use, wildlife habitats, special status of life forms, forest product harvest, and special and unique areas and physical features. Linkages between these factors should be considered.

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1. Objectives:

- a. To ensure that managers, staff members, and the public understand the level of forestry activity planned and which areas are available for the different levels of activity.
- b. To emphasize the fact that forestry involves a multi-year, long term commitment of resources (funding and workmonths).
- c. To ensure full public participation in decisions concerning the Forestry Program.

2. Guidance:

- a. Assign forest lands having 10 percent of more tree canopy cover per acre (e.g., commercial, noncommercial, woodlands, and the Alaskan forest lands classifications), to one of the following four management categories:
 - 1) Lands available for intensive management of forest products.
Areas where forest management is the primary use and where other resource uses or values occur but are not emphasized.
 - 2) Lands available for restricted management of forest products.
Areas where multiple use and/or other resource values occur but are not emphasized.
 - 3) Lands where forest management is for the enhancement of other uses. Areas where forest management activities are specifically for the benefit of other identified resource uses or values.
 - 4) Forest lands not available for management of forest products.
Areas where no forest management is planned.
- b. Identify lands available for management of other forest products.
The management category criteria above may be modified to identify vegetation use for species not included with forests and woodlands.
This includes such things as cacti.

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- c. Identify unique or special areas including such areas as habitat for special status species, ACEC's, Wilderness Study Areas, rare or unique forest communities, etc.
- d. Establish general management objectives for each area containing identifiable commercial quantities of woody material and other vegetative products. Consider such things as sustainable harvest amounts, intensity of management, and a prescription for perpetuation of desired vegetation.
- e. Provide management direction for each identified planning area. Such direction may include, but is not limited to preferred or permitted harvest practices, restricted or excluded practices, priorities for activity planning, and identification of other resource uses. The factors employed to determine harvest levels must be clearly stated in the land use plan (LUP) considering present and long term land use, economics, technology, marketing and demand, and expected budget levels.

B. Ecosystems Management. Manage to create or maintain desired forest ecosystems: This statement supports use of the planning system. It provides the managers with a means of setting long term forest management objectives through activity plans which progress toward desired ecosystems.

- 1. Objective: To set long term forest management objectives through activity plans which progress toward desired ecosystems.
- 2. Guidance:
 - a. Forest ecosystems can be maintained or modified through management actions. Design silvicultural prescriptions to be consistent with land use plan goals without forgoing future options.
 - b. Decisions are encouraged which consider such things as:
 - 1) The role noncommercial species play in the desired ecosystem, and planning to include those considered to be important when revegetating an area.

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- 2) The changing of stand structure through time. Forests only appear stationary. They are constantly changing and, as they develop toward climax or revert to seral stages, their contributions to biodiversity in an area changes with them. A long range view of desired plan communities is required.
 - 3) Climatic Trends, Climatic conditions often determine success or failure of silvicultural treatments. Weather conditions influence such things as tree vigor, insect populations, animal influences and fire occurrences. A manager must consider what role these influences played in the establishment of existing vegetation and, what those influences, or a substitute for them, will play in the future.
 - 4) Impacts on biotic and abiotic stand components. We must not take more from the environment than it needs to renew itself and adapt to change. Material must be left on site following land treatment that will assist in the establishment of the next forest community.
 - 5) Linkages between the physical and biological components. We must ask ourselves if plans and animals from one habitat can reach an outlying patch of similar habitat.
 - 6) Impact of introduced plan species on native vegetation and biodiversity. This includes consideration for a weed management program in conjunction with cultural activities.
 - 7) Keeping management options open. We must conserve important levels of biological diversity. Considering managing biodiversity at the landscape level. For example, by keeping the area for resource use large enough, we retain more options over a larger area to balance biological needs with social needs.
- c. When considering vegetation type conversion projects, consider such things as:
- 1) Past history of the area, e.g., what role did fire play?

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- 2) Do the stands have values related to age and historical lack of disturbance that make them useful for scientific research?
- 3) Which methods of treatment would result in the least amount of environmental impact and be most cost effective?
- 4) What are the ecological ramifications of fragmentation?
- 5) What are the potential socioeconomic impacts of type conversion, including traditional uses of the area, e.g., nut gathering, firewood cutting, etc.?
- 6) Can objectives be met through reduction of tree canopy without conversion such as chainsaw thinning?

C. Reforestation Scheduling. Plan current harvest reforestation by natural or artificial means. Schedule planning and funding to avoid future backlog. Future harvest levels depend on successful accomplishment of this process: Reforestation is dependent upon the forest land management decisions made as part of the planning process. This statement allows for the recognition of the 5 and 15 year reforestation time periods and the use of natural or artificial regeneration methods. It provides the manager the option of delaying future timber sales to keep reforestation on existing sale areas on schedule (“current harvest reforestation”). This does not provide for the delay of current harvest due to backlog reforestation needs because funding of backlog reforestation separate from current harvest operations. Backlog lands include acres denuded by natural means as well as harvest.

1. Objective: The objective of the reforestation program is to maintain forest productivity while restoring, maintaining, or enhancing both commodity and noncommodity values.
2. Guidance:
 - a. Plan and Fund for reforestation of current harvest areas to avoid future backlog. Future harvest levels depend on successful accomplishment of this process.

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- b. The scheduling of future harvest is dependent on establishment of desired vegetation on harvested lands within silvicultural prescriptions. A regeneration lag of up to 15 years is permissible if the stand can be regenerated naturally and other prescription goals are met by the developing vegetation on this area.
 - c. Use locally accepted reforestation monitoring standards for determination of reforestation success or failure.
 - d. Consider other resource values when planning reforestation such as:
 - 1) Wildlife use.
 - 2) Rapid establishment of wildlife security cover.
 - 3) Watershed protection.
- D. Efficiency and Public Service: Conduct an efficient forestry program which provides public service, manages forest lands, and adjusts the output of forest products, when appropriate, to help satisfy local and national needs. The need for the BLM to meet public demand and satisfy local economies in areas where dependence upon forest products exists will be recognized, and funding priorities will be made accordingly. When possible, additional funding will be provided to efficient programs operating on the forest lands to increase value and quality of commodity and noncommodity forest products. Efficiency is to be measured by determining the costs of production and the multiple use benefits of the action.
- 1. Objectives:
 - a. Identify public demand for forest land products and uses. Public use of forests varies by geographic region, historical use, product availability and population pressures and noncommodity demands on those lands. The satisfaction and/or control of public use demands a working knowledge of these factors.
 - b. Increase efficiency in operation and innovate new methods to improve efficiency and service.

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- c. Community dependence on forest lands goes beyond harvest alone. Consider tangible and intangible values in assessing cost effectiveness of proposed forestry actions.

2. Guidance:

- a. Explore the use of funding sources other than appropriated money for reforestation and forest development such as:

- (1) Volunteers.
- (2) Contributions/partnerships.
- (3) Purchaser Involvement.

- b. Seek public participation and involvement through:

- (1) The planning process.
- (2) Outreach and inreach efforts.

- c. Consider all the contributions forested lands make to community stability.

E. Long Term Investment. Implement practices and investments which reflect the long-term cycle of forest management. Forest management is long-term, both from the economic and ecological point of view. Economically, investments in forest management must be considered as generating benefits over time. Investments in roads, forest productivity, or timber stand improvements are all long term. Biologically, forests are dynamic and what may be a negative impact in the short term can be positive in the long term and visa versa. This concept reinforces the need for stable funding and management direction.

1. Objectives:

- a. Strive to implement above-cost timber sales and forestry actions where cost effectiveness assessments are positive. The impact of the modification of forest vegetation goes far beyond a simple evaluation of stumpage value. It may have positive or negative impact on some portion of the ecosystem for varied periods of time.

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- b. Tie silvicultural practices to long term forest ecosystem objectives. Use appropriate practices which progress towards, and are consistent with, those long term objectives. Monitoring existing investments and maintain as required.
2. Guidance:
- a. Conduct below-cost timber sale analysis utilizing tangible benefits, including stumpage receipts, purchaser deposits and contributions, and long-term road benefits, and tangible costs including costs incurred in preparing, selling, administering, and monitoring timber sales, and any associated fixed costs.
 - b. Develop overall timber sale program benefit/cost assessments which assess forestry action efficiency, based upon both tangible and intangible costs and benefits. Intangible costs and benefits are those that are difficult to quantify for comparison purposes, such as, recreational values, wildlife habitat values, etc. These assessments should be developed at the State, District, or Resource Area program level, and should be included as part of the LUP process. They should be reviewed periodically to determine overall program efficiency and if adjustments are needed. Use accepted procedures for assessing intangible values.
 - c. Apply existing BLM economic analysis procedures and models. Seek state-of-the-art methods and models.
 - d. Utilize strong interdisciplinary guidance at the beginning of project design. Consider the possibility of forest harvest projects being initiated by noncommodity uses.
 - e. Consider appropriate means and costs of maintaining forestry investments over the long term in light of future funding predictions and workloads. Maintenance considerations include reforestation, stocking level control, insect and disease prevention, animal damage protection, and wildfire protection.

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F. Inventory. Maintain the forest resource inventory to be used in determining land use planning objectives and appropriate harvest levels. Keep existing inventories current with land use plans. When necessary, plan and undertake new inventories. The level of inventory should reflect the resource values being inventoried, including the overall forest management objectives, and provide information necessary for determining allowable sale quantities.

1. Objectives:

- a. Quantify forest resources within an inventory unit which is appropriate to meet land use planning needs. Describe the physical characteristics and location of the resources.
- b. Establish a basis for evaluating changes in the resources. Update inventories and maintain inventory data using procedures consistent with the BLM Information Resources Management program. Annually assess inventory needs and incorporate needs into the AWP process.
- c. Conduct inventories as required to support activity planning and other management needs. Utilize appropriate mapping science technology, through the BLM mapping science program.
- d. Safeguard inventory data to the extent future inventory shall not be impaired for lack of previously recorded information.

2. Guidance:

- a. Coordinate with other resource programs to develop and determine inventory objectives. The intensity of inventories varies with resource values, level of use, vegetation, geographic area, and user group sensitivities. Inventory expertise is available from the Service Center to assist in evaluating needs.
- b. Use standard forest cover types of North America, as defined by the Society of American Foresters, when conducting inventories. This will facilitate integration with other resource program databases, such as those used in the Wildlife Program.

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G. Public Demand. Meet public needs for commodity and noncommodity benefits and uses to the extent possible. Forest lands benefit society in many ways. They provide forest products such as lumber, posts and poles, paper and fuelwood as well as less tangible products such as wildlife habitat, many forms of recreation, and watersheds. One use should not take dominance over the other until careful thought is given to long range planning and activity direction. The Planning System will guide that process.

1. Objectives:

- a. Determine public demand for forest and other vegetal materials.
- b. Determine demand for noncommodity products on forest land.
- c. Develop management prescriptions which best balance public demands with land use planning guidance.
- d. Maximize utilization of wood fiber and other forest products when to do so is consistent with resource protection, forest productivity, and noncommodity uses.

2. Guidance:

- a. Use silvicultural techniques to meet noncommodity objectives.
- b. Develop opportunities for noncommodity resource enhancement by working closely with other specialists.
- c. Establish public demand with public scoping. Seek early involvement of interested publics. (LUP's, activity plans, sale plans).
- d. Foster and promote development of new markets for traditionally nonmerchantable renewable forest resources; such as stems below minimum sawlog diameter, tree tops, or cull logs. Consider the ecological effects of removing this type of material in terms of impacts on wildlife, nutrient cycling, and overall long term forest productivity.

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H. Allowable Sale Quantity Offering (ASO). Adjust annual sale offerings to correspond with public demand and local market conditions to be consistent with even flow over time: The Manager has the flexibility to adjust allowable sale quantity to take into consideration factors such as local market conditions or public dependency upon certain forest products. Although harvest levels are based upon the even flow of products over the decadal harvest period, market conditions often warrant varying even flow in the short term. This is encouraged as long as sustained yield is maintained.

1. Objectives:

- a. Allow management the flexibility to vary the annual sale volume offerings to correspond with demand.
- b. Assure that harvests are consistent with decadal ASQ's as specified in the land use plan.

2. Guidance:

- a. Analyze no-bid sales, historic trends, and other offerings.
- b. Examine potential for new markets.
- c. Identify adjustments in funding and sale levels at PAWP, PYBP, five-year timber sale plan, etc.

I. Fair Market Value: Receive fair market value for the sale of forest products. Free use is permissible if it is in the best interest of the Government, and is permitted by regulation. Appraisal methods often vary by locale. Good data is often lacking. Discretion must be to assure maximum return to the Government.

1. Objectives:

- a. Establish Fair market value for timber and other vegetative resources in accordance with accepted procedures.
- b. Permit free use in certain situations when in the Governments' interest and as permitted by regulation.

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2. Guidance:

- a. Use locally accepted methods and procedures in the establishment of fair market values. This may be determined from material provided by the BLM, other Federal agencies, and/or State or private resources.
- b. Price may be determined by one of the following accepted appraisal methods.
 - 1) Analytical appraisal.
 - 2) Transaction evidence appraisal.
 - 3) Comparable sales of Federal, State or private timber and vegetative resources.
- c. If wood fiber harvest is driven by resource disciplines other than forest management, fair market value should be determined based on the value to the benefitting resources. For example, receipts from a commercial sale of fuelwood may be less than the cost of its offering for sale. The sale is located in an important deer winter range and the opening of the stand is important for increasing forage production. Logging may be the most cost effective way to achieve wildlife objectives.
- d. States should develop product and minimum price standards for forest and vegetal material sales.

J. Unauthorized Use: Prevent unauthorized use of Public Lands and Resources. When unauthorized use occurs, investigate, pursue, prosecute when appropriate, and terminate such use.

1. Objective: Place priority on resource protection. Provide resource protection first by prevention, and secondly, by enforcement.
2. Guidance: (Refer to the 9320 Manual).
 - a. An emphasis on prevention may involve accelerated enforcement programs in the short term.
 - b. A public information program can be successful in deterring unauthorized use.

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GLOSSARY OF TERMS

-A-

Abiotic: The non-living components of the environment.

Above-Cost Timber Sale: A timber sale whose total revenue exceeds the total cost of preparing and administering the sale. (See below-cost timber sales).

-B-

Backlog: Commercial Forest land which does not meet minimum local stocking standards for more than: (1) 5 years after denudation for prescriptions which require planting; (2) 15 years after denudation for those lands on which natural reforestation systems are prescribed.

Below-Cost Timber Sale: A timber sale whose total cost of preparing, selling, administering, and monitoring the sale exceeds the total sale revenue, including stumpage receipts, purchaser deposits and contributions, and capitol improvements, such as roads which provide long-term benefits.

Benefit/Cost Assessment: An analysis which expresses total benefits (including tangible and intangible, commodity and noncommodity benefits) as a percentage of total costs (including tangible and intangible, commodity and noncommodity costs), whereby all benefits and costs are discounted to the same point in time.

Biological Diversity (biodiversity): The relative degree of abundance of flora and fauna on a given area.

Biotic: The living components of the environment.

-C-

Commercial Forest Land: Forest land that is now producing or is capable of producing at least 20 cubic feet per acre per year of commercially important tree species.

Current Harvest Reforestation: Reforestation of lands harvested under the current timber harvest program, as opposed to lands which have become backlog.

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-E-

Ecosystem: Any complex of living organisms with their environment that we isolate mentally for purposes of study (SAF).

Even-Flow: A system of forest management designed to keep the rate of timber harvested in a forest constant on a perpetual basis (Terms of the Trade).

-F-

Fair Market Value: The price which forest products will return when offered for competitive sales on an open market (TEA Handbook).

Forest Land: Land carrying forest growth, or if totally lacking, bearing evidence of former forest, which contains 10 percent or more crown cover (SAF).

Fragmentation: A breaking of the continuous natural forest into progressively smaller patches.

-I-

Inreach: The process of educating and informing those inside the immediate organization or agency concerning the goals and objectives of a program (less outreach).

Interdisciplinary: The early involvement of individuals or groups from several or all disciplines which have interest or concern in the design of a project or action.

-L-

Landscape: A portion of land or a collection of land forms which is considered an aggregate.

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-O-

Outreach: The process of educating and informing those outside the immediate organization or agency concerning the goals and objectives of a program. The BLM has defined the goals and objectives of the PD Forest Management Program under an initiative titled “Forests: Our Growing Legacy” which contains the following mission statement:

“The BLM will manage the public forests and woodlands to maintain and enhance the health, productivity, and biodiversity of these ecosystems. A balance of natural resources benefits will be provided to present and future generations. The management of forest and woodland resources will be consistent with the principles of multiple use and sustained yield.”

-T-

Timberland: Forest land bearing or capable of bearing trees of merchantable size and quality, and which produce or are capable of producing 20 cubic feet per acre per year or more of commercially important tree species.

Transaction Evidence Appraisal: A process of estimating timber value based on an average of bid prices and their relationship to associated variables. This method relies on results of actual timber sale transactions (TEA Handbook).

Type Conversion: The intentional changing of plant community types, such as from pinion pine-juniper to grasslands, for the purpose of providing some benefit.

-V-

Vegetal Material: All vegetative material that cannot be measured in board or cubic feet, or units convertible to board or cubic feet (TEA Handbook).

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-W-

Woodland: Forest land on which trees are present but form only an open canopy, the intervening areas being occupied by lower vegetation. Forest lands which produce or are capable of producing no more than 20 cubic feet per acre per year of commercially important tree species.

