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STANDARDS FOR JUDICIAL REVIEW OF FOREST PLANS: WILL THE COURTS NOT SEE THE FOREST FOR THE TREES

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THE PUBLIC LANDS DURING THE REMAINDER OF THE 20TH CENTURY: PLANNING, LAW, AND POLICY IN THE FEDERAL LAND AGENCIES

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* The views expressed are those of Mr. Burgess and not necessarily those of the Land and Natural Resources Division or the Department of Justice.
I. By enacting the National Forest Management Act (NFMA) Congress has restricted the Forest Service's historically broad forest planning discretion. See, generally, Wilkinson and Anderson, Land and Resource Planning in the National Forest, 64 Ore. L. Rev. 1 at pp. 69-75 (1985).

II. However, while the statute and the regulations impose a dizzying array of procedural and substantive, and inevitably conflicting, requirements on the Forest Service, see 16 U.S.C. 1604, 1611 and 36 CFR Part 219, the bottom line is that the plan decision-maker has to make a judgment apportioning the uses of the forest among competing concerns, and the standard against which that judgment is to be measured is stated in the broadest possible terms:

A. 36 CFR 219.1 Purpose and principles.
   (a) .... The ... plans shall provide for multiple use and sustained yield of goods and services from the National Forest System in a way that maximizes long term net public benefits in an environmentally sound manner.

B. 36 CFR 219.3 Definitions and terminology.
Multiple use: The management of all the various renewable surface resources of the National Forest System so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some lands will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.

Net Public Benefits: An expression used to signify the overall long-term value to the nation of all outputs and positive effects (benefits) less all associated inputs and negative effects (costs) whether they can be quantitatively valued or not. Net public benefits are measured by both quantitative and qualitative criteria rather than a single measure or index. The maximization of net public benefits to be derived from management of units of the National Forest System is consistent with the principles of multiple use and sustained yield.

Sustained-yield of products and services: The achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the National Forest System without impairment of the productivity of the land.

III. The question which will arise upon judicial review of a forest plan is whether the Court will focus on the forest, or the trees.
A. Focusing on the forest means looking at the plan as a whole, recognizing that planning is an imperfect and a finite process, and determining whether the professional has discharged a responsibility to make sense of conflicting and difficult-to-interpret-and-perform charges, and has made a practical good faith judgment consistent with the spirit of the statute, within the limitations of time and available resources.

B. Focusing on the trees means focusing on a particular provision or provisions of the statute or regulation which appear in isolation to impose absolute requirements on the forest service and to interpret the statute to impose substantive and/or analytical requirements on the agency which act to the detriment of the planning process as a whole.

IV. It is instructive to look at an instance where a Court has reviewed another comprehensive multiple use plan. One with which I am familiar is the D.C. Circuit Court’s affirmance of the 5 year Outer Continental Shelf Oil and Gas Leasing Program developed
under the Outer Continental Shelf Lands Act, as amended (OCSLA). (43 U.S.C. 1344). The opinion in California v. Watt is reported at 712 F.2d 584 (D.C. Cir. 1983), a copy is attached to this outline, and it will be referred to as "Watt II". Also attached is the opinion of the same Court in the review of the predecessor 5 year plan, California v. Watt, 668 F. 2d 1290 (D.C. Cir. 1981) ("Watt I"). (The issue in Watt I was whether the Secretary could defer the analysis required by the statute; the Court said he could not. This issue would not arise in review of a NFMA plan because the statute and regulations leave no room for any such doubt. The case provides necessary background for Watt II, however.)

A. There are similarities between OCSLA and NFMA.

1. As with NFMA, Congress's desire in OCSLA was to introduce controls into a resource management process that had been under the unlimited discretion of the agency. Watt I, 668 F.2d at 1295-97.

2. As with NFMA, OCSLA intended to formally interpose environmental and
competing resource concerns into a
management process where there was
intense demand for the development
of a single resource. 43 U.S.C.
1802; Watt I, op. cit. supra.

3. As with NFMA, the Secretary was
required to consider certain factors
and go through certain procedures in
an effort to reconcile competing
uses, see 43 U.S.C. 1344(a)(2), but
the ultimate decision as to this
reconciliation was to be judged
against a broad standard:

a. Under 43 U.S.C. 1344(a)(3), the
Secretary is required to:

select the timing and location
of leasing, to the maximum
extent practicable, so as to
obtain a proper balance between
the potential for environmental
damage, the potential for the
discovery of oil and gas, and
the potential impact on the
coastal zone.

i. In performing this
obligation the Secretary
did a cost benefit
analysis to arrive at the
"net social value" of
leasing within an area.
This analysis (which was validated by Watt I) measured potential economic benefits from oil recovery against environmental and social costs, both those which could be measured quantitatively and those which only a qualitative evaluation could be made of. See Watt I, 668 F.2d at 1315-1318; Watt II, 712 F.2d at 599-601 and compare the definition of Net Public Benefits in the NFMA regulations, quoted above.

V. The Watt II Court looked at "the forest". Notwithstanding that the schedule arrived at by the Secretary on remand was essentially the same as that which had been found wanting in Watt I and that the program was under heavy Congressional criticism by reason of an innovation by Secretary Watt which had the potential for greatly expanding the area under lease, and in spite of a significant
error in the financial calculations that were used in the cost-benefit analysis, the Court rejected plaintiffs' attempt to fault the program for inadequate analysis and neglect of environmental concerns.

A. In doing so, the Court made use of every aspect of the principle of judicial deference to agency expertise:

...[P]etitioners challenge the factual basis and the methodology used by the Secretary in various aspects of the cost benefit analysis. These are aspects of the analysis which fall within what the court in Watt I described as the "frontiers of scientific knowledge." The facts used by the Secretary in performing the analysis are largely predictive in nature, and the methodology utilized was necessarily novel because this type of analysis has not been performed extensively in the past. Thus, as the court in Watt I observed, great deference is afforded to the Secretary in these areas. "Where existing methodology or research in a new area of regulation is deficient, the agency necessarily enjoys broad discretion to attempt to formulate a solution to the best of its ability on the basis of available information." Therefore, although we are obligated to review the factual findings of the Secretary in order to determine that they are supported by substantial evidence in the record, we realize that these findings must be somewhat speculative. Further, we are required to sustain the methodology and assumptions made by the Secretary if they reasonable.

It is also important to realize that because the analysis is speculative and predictive in nature, it could go on forever. However, it is clear that Congress did want the Secretary to spend
years developing a five-year leasing program. Indeed, the Secretary was required to submit the first proposed program to Congress, the Attorney General, and the Governors of the affected states within nine months of the effective date of the 1978 amendments. Thus, "the final decision as to how much analysis is necessary in view of the available data must be the agency's subject to judicial review only for obviously incorrect results or methodology." In sum, the aspects of the Secretary's cost benefit analysis challenged are aspects with regard to which the Secretary is entitled to substantial deference. It is important to keep this in mind, as we evaluate the Secretary's performance under section 18(a)(3).

712 F.2d at 600 (footnotes omitted).

...[P]etitioners challenge the Secretary's cost benefit analysis on a variety of fronts. However, they fail to recognize the limited scope of our review. Too often they attempt to prove that the Secretary's decision is not supported by evidence in the record by citing evidence which conflicts with the Secretary's conclusion. They ignore the evidence which supports the Secretary's decision or claim that it is not as persuasive as the evidence to which they cite. However, as this court recently noted

Disagreement among the experts is inevitable when the issues involved are at the "very frontiers of scientific knowledge," and such disagreement does not preclude us from finding that the Administrator's decisions are adequately supported by the evidence in the record.... It is not our function to resolve disagreements among the experts or to judge the merits of competing expert views.... Our task is the very limited one of ascertaining that the choices made
by the Administrator were reasonable and supported by the record.... That the evidence in the record may also support other conclusions, even those that are inconsistent with the Administrator's, does not prevent us from concluding that his decisions were rational and supported by the record.

On the basis of all the evidence before him the Secretary's cost benefit analysis was reasonable. Even if we disagreed, with some of the conclusions he reached, we would be unable to remand the program on that basis.¹

712 F.2d at 606 (footnotes omitted).

B. Perhaps equally significant, the treatment of the Secretary's error in the financial part of the cost benefit analysis (failure to discount royalties) stressed that the cost benefit analysis was necessarily imprecise and suggested that in looking at the overall process, the petitioners would have the burden to demonstrate that the error had a material effect on the outcome. Watt II, 712 F.2d at 604-606. (See in this connection Vermont Yankee Nuclear Power Corp v. NRDC, 435 U.S. 519 at 553 (1978) (to provoke

¹ Other cases which express the principle of judicial deference to agency expertise which the reader is encouraged to consult are: Baltimore Gas & Electric v. NRDC, 462 U.S. 87 at 103 (1983); FCC v. National Citizens Committee for Broadcasting, 435 U.S. 775, 813-814 (1978); Watt II, 712 F.2d at 600; Lead Industries Ass'n v. EPA, 647 F.2d 1130, 1160 (D.C. Cir. 1980); Massachusetts v. Andrus, 594 F.2d 872, 886 (1st Cir. 1979); Ethyl Corp. v. EPA, 541 F.2d 1, 36 (D.C. Cir. 1975), cert. denied, 426 U.S. 941 (1976).
additional analysis comments must not only demonstrate mistake but also that it would have material result on decision).

C. Although the Court in justifying its wholesale rejection of petitioners' claims focused on the difference between the claims made in Watt I, which the Court characterized as challenges to the Secretary's interpretation of the statute, and the claims made in Watt II, which it characterized as challenges to the adequacy of the Secretary's analysis, see Watt II at pp. 591, 594, 600, this distinction was somewhat arbitrary. Plaintiffs' claims in both proceedings were the same: the Secretary's analysis was inadequate and he neglected environmental factors. What were the Court's concerns?

1. The Court is very explicit that judicial deference was motivated in part by a recognition that the planning process must be treated as finite, otherwise "it could go on forever". 712 F.2d at 600. Equally important, the time frame within which Congress expected the plan to be in operation had to be taken into account: "Congress did not want the Secretary to spend years developing a 5-year program." Ibid.
2. The Watt II Court is not alone in its concerns. The Supreme Court has also stressed that the time and resources available to the agency must be considered in determining whether a court should impose obligations to make additional analysis on the agency. Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 551 (1978). A District Court has stressed the lack of time and staff assistance available to it to undertake a supervisory role over agency planning activities. See NRDC v. Hodel, 624 F. Supp. 1045, 1062-63 (D. Nev. 1985). We may speculate that the Supreme Court’s recent reaffirmance of the principle of limited review was motivated in part by such concerns. See Baltimore Gas & Electric, supra, 462 U.S. at 97-98, 103.

VI. A word should be said on the principle of limiting review to the administrative record.

A. Although the District Courts, with their idiosyncratic attitudes toward record review, will be initially reviewing any challenge to the plan, it should be remembered that the Circuit Courts will have the matter on appeal. They generally are more attentive toward the principle of limiting review to the administrative record, and they are
not bound by the District Court's findings but may look at the matter afresh.

B. The opportunity for extensive public participation in the planning process, an open appeals process which affords the complaining party the right to introduce additional evidence, see 36 CFR 211.18, 211.68 (j), (n) and (p), and the existence of an articulated rationale for decision should have the effect of discouraging relitigation in the District Courts of matters raised before the agency under the guise of an "exception" to the rule. See Fishback v. United States, 519 F. Supp. 190 (D. N. Mex. 1981).
Responsibility of Department of Agriculture for coordination of all agricultural research with periodic renewable resources assessment and program, see section 3121 of Title 7, Agriculture.

§ 1603. National Forest System resource inventories; development, maintenance, and updating by Secretary of Agriculture as part of Assessment

As a part of the Assessment, the Secretary of Agriculture shall develop and maintain on a continuing basis a comprehensive and appropriately detailed inventory of all National Forest System lands and renewable resources. This inventory shall be kept current so as to reflect changes in conditions and identify new and emerging resources and values.


Historical Note


Cross References

Maintenance of public rangelands inventory, see section 1903 of Title 43, Public Lands.

§ 1604. National Forest System land and resource management plans

(a) Development, maintenance, and revision by Secretary of Agriculture as part of Program; coordination

As a part of the Program provided for by section 1602 of this title, the Secretary of Agriculture shall develop, maintain, and, as appropriate, revise land and resource management plans for units of the National Forest System, coordinated with the land and resource management planning processes of State and local governments and other Federal agencies.

(b) Criteria

In the development and maintenance of land management plans for use on units of the National Forest System, the Secretary shall use a systematic interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences.

(c) Incorporation of standards and guidelines by Secretary; time of completion; progress reports; existing management plans

The Secretary shall begin to incorporate the standards and guidelines required by this section in plans for units of the National Forest System as soon as practicable after October 22, 1976 and shall attempt to complete such incorporation for all such units by no later than September 30, 1985. The Secretary shall report to the Congress on the progress of such incorporation in the annual report required by section 1606(c) of this title. Until such time as a unit of the National Forest System is managed under plans...
developed in accordance with this subchapter, the management of such unit may continue under existing land and resource management plans.

(d) Public participation in management plans; availability of plans; public meetings

The Secretary shall provide for public participation in the development, review, and revision of land management plans including, but not limited to, making the plans or revisions available to the public at convenient locations in the vicinity of the affected unit for a period of at least three months before final adoption, during which period the Secretary shall publicize and hold public meetings or comparable processes at locations that foster public participation in the review of such plans or revisions.

(e) Required assurances

In developing, maintaining, and revising plans for units of the National Forest System pursuant to this section, the Secretary shall assure that such plans—

1. provide for multiple use and sustained yield of the products and services obtained therefrom in accordance with the Multiple-Use Sustained-Yield Act of 1960 [16 U.S.C.A. §§ 528–531], and, in particular, include coordination of outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness; and

2. determine forest management systems, harvesting levels, and procedures in the light of all of the uses set forth in subsection (c) (1) of this section, the definition of the terms “multiple use” and “sustained yield” as provided in the Multiple-Use Sustained-Yield Act of 1960, and the availability of lands and their suitability for resource management.

(f) Required provisions

Plans developed in accordance with this section shall—

1. form one integrated plan for each unit of the National Forest System, incorporating in one document or one set of documents, available to the public at convenient locations, all of the features required by this section;

2. be embodied in appropriate written material, including maps and other descriptive documents, reflecting proposed and possible actions, including the planned timber sale program and the proportion of probable methods of timber harvest within the unit necessary to fulfill the plan;

3. be prepared by an interdisciplinary team. Each team shall prepare its plan based on inventories of the applicable resources of the forest;

4. be amended in any manner whatsoever after final adoption after public notice, and, if such amendment would result in a significant change in such plan, in accordance with the provisions of subsections (e) and (f) of this section and public involvement comparable to that required by subsection (d) of this section; and

5. be revised (A) from time to time when the Secretary finds conditions in a unit have significantly changed, but at least every fifteen

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(g) Promulgation of regulations for development and revision of plans; environmental considerations; resource management guidelines; guidelines for land management plans

As soon as practicable, but not later than two years after October 22, 1976, the Secretary shall in accordance with the procedures set forth in section 553 of Title 5 promulgate regulations, under the principles of the Multiple-Use Sustained-Yield Act of 1960 [16 U.S.C.A. §§ 528–531], that set out the process for the development and revision of the land management plans, and the guidelines and standards prescribed by this subsection. The regulations shall include, but not be limited to—

(1) specifying procedures to insure that land management plans are prepared in accordance with the National Environmental Policy Act of 1969 [42 U.S.C.A. § 4321 et seq.], including, but not limited to, direction on when and for what plans an environmental impact statement required under section 102(2)(C) of that Act [42 U.S.C.A. § 4332(2)(C)] shall be prepared;

(2) specifying guidelines which—

(A) require the identification of the suitability of lands for resource management;

(B) provide for obtaining inventory data on the various renewable resources, and soil and water, including pertinent maps, graphic material, and explanatory aids; and

(C) provide for methods to identify special conditions or situations involving hazards to the various resources and their relationship to alternative activities;

(3) specifying guidelines for land management plans developed to achieve the goals of the Program which—

(A) insure consideration of the economic and environmental aspects of various systems of renewable resource management, including the related systems of silviculture and protection of forest resources, to provide for outdoor recreation (including wilderness), range, timber, watershed, wildlife, and fish;

(B) provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives, and within the multiple-use objectives of a land management plan adopted pursuant to this section, provide, where appropriate, to the degree practicable, for steps to be taken to preserve the diversity of tree species similar to that existing in the region controlled by the plan;

(C) insure research on and (based on continuous monitoring and assessment in the field) evaluation of the effects of each management system to the end that it will not produce substantial and permanent impairment of the productivity of the land;

(D) permit increases in harvest levels based on intensified management practices, such as reforestation, thinning, and tree
improvement if (i) such practices justify increasing the harvests in accordance with the Multiple-Use Sustained-Yield Act of 1960, and (ii) such harvest levels are decreased at the end of each planning period if such practices cannot be successfully implemented or funds are not received to permit such practices to continue substantially as planned;

(E) insure that timber will be harvested from National Forest System lands only where—

(i) soil, slope, or other watershed conditions will not be irreversibly damaged;

(ii) there is assurance that such lands can be adequately restocked within five years after harvest;

(iii) protection is provided for streams, streambanks, shorelines, lakes, wetlands, and other bodies of water from detrimental changes in water temperatures, blockages of water courses, and deposits of sediment, where harvests are likely to seriously and adversely affect water conditions or fish habitat; and

(iv) the harvesting system to be used is not selected primarily because it will give the greatest dollar return or the greatest unit output of timber; and

(F) insure that clearcutting, seed tree cutting, shelterwood cutting, and other cuts designed to regenerate an even-aged stand of timber will be used as a cutting method on National Forest System lands only where—

(i) for clearcutting, it is determined to be the optimum method, and for other such cuts it is determined to be appropriate, to meet the objectives and requirements of the relevant land management plan;

(ii) the interdisciplinary review as determined by the Secretary has been completed and the potential environmental, biological, esthetic, engineering, and economic impacts on each advertised sale area have been assessed, as well as the consistency of the sale with the multiple use of the general area;

(iii) cut blocks, patches, or strips are shaped and blended to the extent practicable with the natural terrain;

(iv) there are established according to geographic areas, forest types, or other suitable classifications the maximum size limits for areas to be cut in one harvest operation, including provision to exceed the established limits after appropriate public notice and review by the responsible Forest Service officer one level above the Forest Service officer who normally would approve the harvest proposal: Provided, That such limits shall not apply to the size of areas harvested as a result of natural catastrophic conditions such as fire, insect and disease attack, or windstorm; and

(v) such cuts are carried out in a manner consistent with the protection of soil, watershed, fish, wildlife, recreation, and
esthetic resources, and the regeneration of the timber re-
source.

(h) Scientific committee to aid in promulgation of regulations; termination; revi-
sion committees; clerical and technical assistance; compensation
of committee members

(1) In carrying out the purposes of subsection (g) of this section, the
Secretary of Agriculture shall appoint a committee of scientists who are not
officers or employees of the Forest Service. The committee shall provide
scientific and technical advice and counsel on proposed guidelines and
procedures to assure that an effective interdisciplinary approach is proposed
and adopted. The committee shall terminate upon promulgation of the
regulations, but the Secretary may, from time to time, appoint similar
committees when considering revisions of the regulations. The views of the
committees shall be included in the public information supplied when the
regulations are proposed for adoption.

(2) Clerical and technical assistance, as may be necessary to discharge the
duties of the committee, shall be provided from the personnel of the
Department of Agriculture.

(3) While attending meetings of the committee, the members shall be
entitled to receive compensation at a rate of $100 per diem, including
traveltime, and while away from their homes or regular places of business
they may be allowed travel expenses, including per diem in lieu of subsist-
ence, as authorized by section 5703 of Title 5 for persons in the Government
service employed intermittently.

(i) Consistency of resource plans, permits, contracts, and other instruments with
land management plans; revision

Resource plans and permits, contracts, and other instruments for the use
and occupancy of National Forest System lands shall be consistent with the
land management plans. Those resource plans and permits, contracts, and
other such instruments currently in existence shall be revised as soon as
practicable to be made consistent with such plans. When land management
plans are revised, resource plans and permits, contracts, and other instru-
ments, when necessary, shall be revised as soon as practicable. Any
revision in present or future permits, contracts, and other instruments made
pursuant to this section shall be subject to valid existing rights.

(j) Effective date of land management plans and revisions

Land management plans and revisions shall become effective thirty days
after completion of public participation and publication of notification by
the Secretary as required under subsection (d) of this section.

(k) Development of land management plans

In developing land management plans pursuant to this subchapter, the
Secretary shall identify lands within the management area which are not
suited for timber production, considering physical, economic, and other
pertinent factors to the extent feasible, as determined by the Secretary, and
shall assure that, except for salvage sales or sales necessitated to protect
other multiple-use values, no timber harvesting shall occur on such lands for
a period of 10 years. Lands once identified as unsuitable for timber
production shall continue to be treated for reforestation purposes, particularly with regard to the protection of other multiple-use values. The Secretary shall review his decision to classify these lands as not suited for timber production at least every 10 years and shall return these lands to timber production whenever he determines that conditions have changed so that they have become suitable for timber production.

(i) Program evaluation; process for estimating long-term costs and benefits; summary of data included in annual report

The Secretary shall—

(1) formulate and implement, as soon as practicable, a process for estimating long-term costs and benefits to support the program evaluation requirements of this subchapter. This process shall include requirements to provide information on a representative sample basis of estimated expenditures associated with the reforestation, timber stand improvement, and sale of timber from the National Forest System, and shall provide a comparison of these expenditures to the return to the Government resulting from the sale of timber; and

(2) include a summary of data and findings resulting from these estimates as a part of the annual report required pursuant to section 1606(c) of this title, including an identification on a representative sample basis of those advertised timber sales made below the estimated expenditures for such timber as determined by the above cost process; and

(m) Establishment of standards to ensure culmination of mean annual increment of growth; silvicultural practices; salvage harvesting; exceptions

The Secretary shall establish—

(1) standards to insure that, prior to harvest, stands of trees throughout the National Forest System shall generally have reached the culmination of mean annual increment of growth (calculated on the basis of cubic measurement or other methods of calculation at the discretion of the Secretary): Provided, That these standards shall not preclude the use of sound silvicultural practices, such as thinning or other stand improvement measures: Provided further, That these standards shall not preclude the Secretary from salvage or sanitation harvesting of timber stands which are substantially damaged by fire, windthrow or other catastrophe, or which are in imminent danger from insect or disease attack; and

(2) exceptions to these standards for the harvest of particular species of trees in management units after consideration has been given to the multiple uses of the forest including, but not limited to, recreation, wildlife habitat, and range and after completion of public participation processes utilizing the procedures of subsection (d) of this section.


1 So in original. Probably should be “long-term”.

2 So in original. Probably should be “process.”.
References in Text. The Multiple-Use Sustained-Yield Act of 1960, referred to in subsecs. (e) and (g), is Pub.L. 86-517, June 12, 1960, 74 Stat. 215, as amended, which is classified to sections 528 to 531 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 528 of this title and Tables volume.

The National Environmental Policy Act of 1969, referred to in subsec. (g)(1), is Pub.L. 91-190, Jan. 1, 1970, 83 Stat. 852, as amended, which is classified generally to chapter 55 (section 4321 et seq.) of Title 42, the Public Health and Welfare. For complete classification of this Act to the Code, see Short Title note set out under section 4321 of Title 42 and Tables volume.

1976 Amendment. Subsec. (a). Pub.L. 94-588, § 12(a), substituted “section 4” for “section 3” in the original, which, because of the translation as “section 1602 of this title” required no change in text.

Subsecs. (c) to (m). Pub.L. 94–588, § 6, added subsecs. (c) to (m).

Transfer of Functions. For transfer of certain enforcement functions of Secretary or other official in Department of Agriculture under this subchapter to Federal Inspector, Office of Federal Inspector for the Alaska Natural Gas Transportation System, see Transfer of Functions note set out under section 1601 of this title.


Cross References
Applicability of provisions of National Forest timber utilization program notwithstanding this section, see section 539d of this title.

Comprehensive management plan consistent with requirements of this section, see section 542d of this title.

Forest Service leases and permits, see section 8855 of Title 42, Public Health and Welfare.

Grazing leases and permits, see section 1752 of Title 43, Public Lands.

Plans for variations in allowable sale quantity of timber, see section 1611 of this title.

Code of Federal Regulations
Planning, applicability, and procedures, see 36 CFR 219.1 et seq.

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1. Construction with other laws

The final guidelines for land management plans which this chapter requires the Forest Service to develop over a two-year period were not exempt from compliance with the National Environmental Policy Act, section 4321 et seq. of Title 42, and compliance might, in certain cases, require production of an environmental impact statement. Texas Committee on Natural Resources v. Bergland, C.A.Tex.1978, 573 F.2d 201, rehearing denied 576 F.2d 931, certiorari denied 99 S.Ct. 455, 439 U.S. 966, 58 L.Ed.2d 425.

2. Balance of competing values

Balance of competing values struck by United States Forest Service, in deciding to complete construction of paved road through national forest unit and to adopt forest management plan providing for harvesting of timber in that unit was not so insensitive to environmental concerns as to violate this section. Northwest Indian Cemetery Protective Ass'n v. Peterson, D.C.Cal.1983, 565 F.Supp. 586.

3. Environmental impact statement—Generally

Clearcutting in the East Texas national forests under interim Forest Service guidelines did not require an environmental impact statement; however, any move toward implementation of a land management program under this chapter might require such a statement. Texas Committee on Natural Re-
Note 3


4. — Exemption

Exception from compliance with the National Environmental Policy Act, section 4321 et seq. of Title 42, that is permitted when an agency's organic legislation mandates specific procedures for considering the environment that are the functional equivalent of an environmental impact statement did not exempt the Forest Service from preparing environmental impact statements in connection with new management guidelines the Forest Service was developing. Texas Committee on Natural Resources v. Bergland, C.A.Tex.1978, 573 F.2d 201, rehearing denied 576 F.2d 931, certiorari denied 99 S.Ct. 455, 439 U.S. 966, 58 L.Ed.2d 425.

5. Permanent resource management guidelines

The Forest Service was not excepted from compliance with the National Environmental Policy Act, section 4321 et seq. of Title 42, in connection with promulgation of permanent resource management guidelines pursuant to this chapter nor was it exempted from compliance in the interim period when the adopted interim management guidelines differed significantly from then current guidelines. Texas Committee on Natural Resources v. Bergland, C.A.Tex.1978, 573 F.2d 201, rehearing denied 576 F.2d 931, certiorari denied 99 S.Ct. 455, 439 U.S. 966, 58 L.Ed.2d 425.

6. Summary judgment

Questions whether timber assets were deteriorating and whether United States had duty to maintain deteriorating timber assets prior to conveyance under Alaska Native Claims Settlement Act, section 1601 et seq. of Title 43, were factual questions for which evidentiary hearing was required, and summary judgment was inappropriate. Cape Fox Corp. v. U.S., D.C. Alaska 1978, 456 F.Supp. 784, reversed in part on other grounds 466 F.2d 399.

7. Issues reviewable

The congressional decision to permit clearcutting in national forests under certain guidelines was not subject to judicial review during the period in which permanent guidelines were being established by the Forest Service; therefore, decision to permit clearcutting was not subject to indirect review through requiring an environmental impact statement. Texas Committee on Natural Resources v. Bergland, C.A.Tex.1978, 573 F.2d 201, rehearing denied 576 F.2d 931, certiorari denied 99 S.Ct. 455, 439 U.S. 966, 58 L.Ed.2d 425.

8. Scope of review—Generally

Where congressional committee had clearly recognized the significant impact of clearcutting in national forests and where the Senate-House conference had nevertheless agreed that the Forest Service should be permitted to continue clearcutting under certain guidelines pending development of management plans required by this chapter, that congressional determination precluded further inquiry by the Court of Appeals into whether clearcutting should be permitted in national forests. Texas Committee on Natural Resources v. Bergland, C.A.Tex.1978, 573 F.2d 201, rehearing denied 576 F.2d 931, certiorari denied 99 S.Ct. 455, 439 U.S. 966, 58 L.Ed.2d 425.

9. — Arbitrary and capricious standard

A Forest Service decision to pursue “even-aged” management as the overall management plan under this chapter is subject to the arbitrary and capricious standard of review. Texas Committee on Natural Resources v. Bergland, C.A.Tex.1978, 573 F.2d 201, rehearing denied 576 F.2d 931, certiorari denied 99 S.Ct. 455, 439 U.S. 966, 58 L.Ed.2d 425.

Decision of the United States Forest Service in putting out for bid and affirming and approving, and proposing to enter into, timber contract in the Ryan Timber Sale Area of the Kettle Range Planning Unit of the Colville National Forest, particularly that portion within the Profanity Roadless Area, was not arbitrary and capricious, was not unreasonable, and was not an abuse of discretion by any of the government officials involved, or by any of the government agencies involved; the environmental documents conclusively showed that the Forest Service gave much more sufficient weight to all environmental values in reaching its programmatic decisions resulting in the sale. Kettle Range Conservation Group v. Berglund, D.C.Wash. 1979, 480 F.Supp. 1199.
§ 1610. Implementation of provisions by Secretary of Agriculture; utilization of information and data of other organizations; avoidance of duplication of planning, etc.; “renewable resources” defined

In carrying out this subchapter, the Secretary of Agriculture shall utilize information and data available from other Federal, State, and private organizations and shall avoid duplication and overlap of resource assessment and program planning efforts of other Federal agencies. The term “renewable resources” shall be construed to involve those matters within the scope of responsibilities and authorities of the Forest Service on August 17, 1974 and on the date of enactment of any legislation amendatory or supplementary to this subchapter.


Historical Note

1976 Amendment. Pub.L. 94–588, § 10, added “and on the date of enactment of any legislation amendatory or supplementary thereto”.

Transfer of Functions. For transfer of certain enforcement functions of Secretary or other official in Department of Agriculture under this subchapter to Federal Inspector, Office of Federal Inspector for the Alaska Natural Gas Transportation System, see Transfer of Functions note set out under section 1601 of this title.


§ 1611. Timber

(a) Limitations on removal; variations in allowable sale quantity; public participation

The Secretary of Agriculture shall limit the sale of timber from each national forest to a quantity equal to or less than a quantity which can be removed from such forest annually in perpetuity on a sustained-yield basis: Provided, That, in order to meet overall multiple-use objectives, the Secretary may establish an allowable sale quantity for any decade which departs from the projected long-term average sale quantity that would otherwise be established: Provided further, That any such planned departure must be consistent with the multiple-use management objectives of the land management plan. Plans for variations in the allowable sale quantity must be made with public participation as required by section 1604(d) of this title. In addition, within any decade, the Secretary may sell a quantity in excess of the annual allowable sale quantity established pursuant to this section in the case of any national forest so long as the average sale quantities of timber from such national forest over the decade covered by the plan do not exceed such quantity limitation. In those cases where a forest has less than two hundred thousand acres of commercial forest land, the Secretary may use two or more forests for purposes of determining the sustained yield.

(b) Salvage harvesting

Nothing in subsection (a) of this section shall prohibit the Secretary from salvage or sanitation harvesting of timber stands which are substantially
damaged by fire, windthrow, or other catastrophe, or which are in imminent danger from insect or disease attack. The Secretary may either substitute such timber for timber that would otherwise be sold under the plan or, if not feasible, sell such timber over and above the plan volume.


Historical Note

Transfer of Functions. For transfer of certain enforcement functions of Secretary or other official in Department of Agriculture under this subchapter to Federal Inspector, Office of Federal Inspector for the Alaska Natural Gas Transportation System, see 16 U.S. Code Cong. and Adm.News, p. 6662.

§ 1612. Public participation

(a) Adequate notice and opportunity to comment

In exercising his authorities under this subchapter and other laws applicable to the Forest Service, the Secretary, by regulation, shall establish procedures, including public hearings where appropriate, to give the Federal, State, and local governments and the public adequate notice and an opportunity to comment upon the formulation of standards, criteria, and guidelines applicable to Forest Service programs.

(b) Advisory boards

In providing for public participation in the planning for and management of the National Forest System, the Secretary, pursuant to the Federal Advisory Committee Act (86 Stat. 770) and other applicable law, shall establish and consult such advisory boards as he deems necessary to secure full information and advice on the execution of his responsibilities. The membership of such boards shall be representative of a cross section of groups interested in the planning for and management of the National Forest System and the various types of use and enjoyment of the lands thereof.


Historical Note


Transfer of Functions. For transfer of certain enforcement functions of Secretary or other official in Department of Agriculture under this subchapter to Federal Inspector, Office of Federal Inspector for the Alaska Natural Gas Transportation System, see 16 U.S. Code Cong. and Adm.News, p. 6662.


Code of Federal Regulations

Procedures for public involvement, see 36 CFR 216.1 et seq.
described in § 216.6. In making the Manual directive available, the responsible official shall state why the interim directive was issued prior to obtaining public comments.

§ 216.8 Availability of proposed Manual directives identified for formal public review.

As a minimum, review copies of proposed Manual directives determined to be of substantial public interest or expected controversy shall be available in the Forest Supervisor's Office and District Rangers' Offices when National Forest proposals are involved; in the Regional Office and Forest Supervisors' Offices when regional proposals are involved; and in Regional Offices and National Headquarters when national proposals are involved. When Manual directives involve Forest Service Research or State and Private Forestry programs, review copies shall be available at comparable administrative offices.

PART 219—PLANNING

Subpart A—National Forest System Land and Resource Management Planning

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Subpart A—National Forest System Land and Resource Management Planning


Source 47 FR 43037, Sept. 30, 1982, unless otherwise noted.

§ 219.1 Purpose and principles.

(a) The regulations in this subpart set forth a process for developing, adopting, and revising land and resource management plans for the National Forest System as required by the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended (hereafter, "RPA"). These regulations prescribe how land and resource management planning is to be conducted on National Forest System lands. The resulting plans shall provide for multiple use and sustained yield of goods and services from the National Forest System in a way that maximizes long term net public benefits in an environmentally sound manner.

(b) Plans guide all natural resource management activities and establish management standards and guidelines for the National Forest System. They determine resource management practices, levels of resource production and management, and the availability and suitability of lands for resource management. Regional and forest planning will be based on the following principles:

(1) Establishment of goals and objectives for multiple-use and sustained-yield management of renewable resources without impairment of the productivity of the land;

(2) Consideration of the relative values of all renewable resources, including the relationship of nonrenewable resources, such as minerals, to renewable resources;

(3) Recognition that the National Forests are ecosystems and their management for goods and services requires an awareness and consideration
of the interrelationships among plants, animals, soil, water, air, and other environmental factors within such ecosystems;
(4) Protection and, where appropriate, improvement of the quality of renewable resources;
(5) Preservation of important historic, cultural, and natural aspects of our national heritage;
(6) Protection and preservation of the inherent right of freedom of American Indians to believe, express, and exercise their traditional religions;
(7) Provision for the safe use and enjoyment of the forest resources by the public;
(8) Protection, through ecologically compatible means, of all forest and rangeland resources from depredations by forest and rangeland pests;
(9) Coordination with the land and resource planning efforts of other Federal agencies, State and local governments, and Indian tribes;
(10) Use of a systematic, interdisciplinary approach to ensure coordination and integration of planning activities for multiple-use management;
(11) Early and frequent public participation;
(12) Establishment of quantitative and qualitative standards and guidelines for land and resource planning and management;
(13) Management of National Forest System lands in a manner that is sensitive to economic efficiency; and
(14) Responsiveness to changing conditions of land and other resources and to changing social and economic demands of the American people.

§ 219.2 Scope and applicability.

The regulations in this subpart apply to the National Forest System, which includes special areas, such as wilderness, wild and scenic rivers, national recreation areas, and national trails. Whenever the special area authorities require additional planning, the planning process under this subpart shall be subject to those authorities.

(a) Unless inconsistent with special area authorities, requirements for additional planning for special areas shall be met through plans required under this subpart.

(b) If, in a particular case, special area authorities require the preparation of a separate special area plan, the direction in any such plan may be incorporated without modification in plans prepared under this subpart.

§ 219.3 Definitions and terminology.

For purposes of this subpart the following terms, respectively, shall mean:
- **Allowable sale quantity**: The quantity of timber that may be sold from the area of suitable land covered by the forest plan for a time period specified by the plan. This quantity is usually expressed on an annual basis as the “average annual allowable sale quantity.”
- **Base sale schedule**: A timber sale schedule formulated on the basis that the quantity of timber planned for sale and harvest for any future decade is equal to or greater than the planned sale and harvest for the preceding decade, and this planned sale and harvest for any decade is not greater than the long-term sustained yield capacity.
- **Biological growth potential**: The average net growth attainable in a fully stocked natural forest stand.
- **Capability**: The potential of an area of land to produce resources, supply goods and services, and allow resource uses under an assumed set of management practices and at a given level of management intensity. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology, as well as the application of management practices, such as silviculture or protection from fire, insects, and disease.
- **Corridor**: A linear strip of land identified for the present or future location of transportation or utility rights-of-way within its boundaries.
- **Cost efficiency**: The usefulness of specified inputs (costs) to produce specified outputs (benefits). In measuring cost efficiency, some outputs, including environmental, economic, or social impacts, are not assigned monetary values but are achieved at specified levels in the least cost manner. Cost efficiency is usually measured using present net value, although use of benefit-cost ratios and rates-of-return may be appropriate.
Diversity: The distribution and abundance of different plant and animal communities and species within the area covered by a land and resource management plan.

Even-aged management: The application of a combination of actions that results in the creation of stands in which trees of essentially the same age grow together. Managed even-aged forests are characterized by a distribution of stands of varying ages (and, therefore, tree sizes) throughout the forest area. The difference in age between trees forming the main canopy level of a stand usually does not exceed 20 percent of the age of the stand at harvest rotation age. Regeneration in a particular stand is obtained during a short period at or near the time that a stand has reached the desired age or size for regeneration and is harvested. Clearcut, shelterwood, or seed tree cutting methods produce even-aged stands.

Forest land: Land at least 10 percent occupied by forest trees of any size or formerly having had such tree cover and not currently developed for non-forest use. Lands developed for non-forest use include areas for crops, improved pasture, residential, or administrative areas, improved roads of any width, and adjoining road clearing and powerline clearing of any width.

Goal: A concise statement that describes a desired condition to be achieved sometime in the future. It is normally expressed in broad, general terms and is timeless in that it has no specific date by which it is to be completed. Goal statements form the principal basis from which objectives are developed.

Goods and services: The various outputs, including on-site uses, produced from forest and rangeland resources.

Integrated pest management: A process for selecting strategies to regulate forest pests in which all aspects of a pest-host system are studied and weighed. The information considered in selecting appropriate strategies includes the impact of the unregulated pest population on various resources values, alternative regulatory tactics and strategies, and benefit/cost estimates for these alternative strategies. Regulatory strategies are based on sound silvicultural practices and ecology of the pest-host system and consist of a combination of tactics such as timber stand improvement plus selective use of pesticides. A basic principle in the choice of strategy is that it be ecologically compatible or acceptable.

Long-term sustained-yield timber capacity: The highest uniform wood yield from lands being managed for timber production that may be sustained under a specified management intensity consistent with multiple-use objectives.

Management concern: An issue, problem, or a condition which constrains the range of management practices identified by the Forest Service in the planning process.

Management direction: A statement of multiple-use and other goals and objectives, the associated management prescriptions, and standards and guidelines for attaining them.

Management intensity: A management practice or combination of management practices and associated costs designed to obtain different levels of goods and services.

Management practice: A specific activity, measure, course of action, or treatment.

Management prescription: Management practices and intensity selected and scheduled for application on a specific area to attain multiple-use and other goals and objectives.

Multiple use: The management of all the various renewable surface resources of the National Forest System so that they are utilized in the combination that will best meet the needs of the American people: making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some lands will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the great-
Net public benefits: An expression used to signify the overall long-term value to the nation of all outputs and positive effects (benefits) less all associated inputs and negative effects (costs) whether they can be quantitatively valued or not. Net public benefits are measured by both quantitative and qualitative criteria rather than a single measure or index. The maximization of net public benefits to be derived from management of units of the National Forest System is consistent with the principles of multiple use and sustained yield.

Objective: A concise, time-specific statement of measurable planned results that respond 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 in achieving identified goals.

Planning area: The area of the National Forest System covered by a regional guide or forest plan.

Planning period: One decade. The time interval within the planning horizon that is used to show incremental changes in yields, costs, effects, and benefits.

Planning horizon: The overall time period considered in the planning process that spans all activities covered in the analysis or plan and all future conditions and effects of proposed actions which would influence the planning decisions.

Present net value: The difference between the discounted value (benefits) of all outputs to which monetary values or established market prices are assigned and the total discounted costs of managing the planning area.

Public issue: A subject or question of widespread public interest relating to management of the National Forest System.

Real dollar value: A monetary value which compensates for the effects of inflation.

Receipt shares: The portion of receipts derived from Forest Service resource management that is distributed to State and county governments, such as the Forest Service 25 percent fund payments.

Sustained-yield of products and services: The achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the National Forest System without impairment of the productivity of the land.

Timber production: The purposeful growing, tending, harvesting, and regeneration of regulated crops of trees to be cut into logs, bolts, or other round sections for industrial or consumer use. For purposes of this subpart, the term "timber production" does not include production of fuelwood.

Uneven-aged management: The application of a combination of actions needed to simultaneously maintain continuous high-forest cover, recurring regeneration of desirable species, and the orderly growth and development of trees through a range of diameter or age classes to provide a sustained yield of forest products. Cutting is usually regulated by specifying the number or proportion of trees of
§ 219.4 Planning levels.

(a) General guideline. Planning requires a continuous flow of information and management direction among the three Forest Service administrative levels: national, regional, and forest. Management direction shall:

1. Include requirements for analysis to determine programs that maximize net public benefits, consistent with locally derived information about production capabilities;
2. Reflect production capabilities, conditions and circumstances observed at all levels; and
3. Become increasingly specific as planning progresses from the national to the forest level. In this structure, regional planning is a principal process for conveying management direction from the national level to the forest level and for conveying information from forest level to the national level.

The planning process is essentially iterative in that the information from the forest level flows up to the national level where in turn information in the RPA Program flows back to the forest level.

(b) Planning levels and relationships—(1) National. The Chief of the Forest Service shall develop the Renewable Resources Assessment and Program (hereafter, "RPA Assessment and RPA Program") according to Sections 3 and 4 of the RPA.

(i) RPA Assessment. The RPA Assessment shall include analysis of present and anticipated uses, demand for, and supply of the renewable resources of forest, range, and other associated lands with consideration of, and an emphasis on, pertinent supply, demand, and price relationship trends; an inventory of present and potential renewable resources and an evaluation of opportunities for improving their yield of tangible and intangible goods and services, together with estimates of investment costs and direct and indirect returns to the Federal Government; a description of Forest Service programs and responsibilities in research, cooperative programs, and management of the National Forest System; and analysis of important policy issues and consideration of laws, regulations, and other factors expected to influence and affect significantly the use, ownership, and management of forest, range, and other associated lands. The RPA Assessment shall be based on the future capabilities of forest and rangelands and shall include information generated during the regional, forest, and other planning processes.

(ii) RPA Program. The RPA Program shall consider the costs of supply and the relative values of both market and nonmarket outputs. The alternatives considered shall include national renewable resource goals and quantified objectives for resource outputs and other benefits and shall be designed to represent a range of expenditure levels sufficient to demonstrate full opportunities for management. A portion of each national objective developed in the RPA Program shall be distributed to each region and be incorporated into each regional guide. Resource objectives shall be tentatively selected for each forest planning area. In formulating the objectives for each region and forest planning area, local supply capabilities and market conditions will be considered.

(2) Regional. Each Regional Forester shall develop a regional guide. Regional guides shall establish regional standards and guidelines as required by § 219.9(a). Consistent with resource capabilities, regional guides shall reflect goals and objectives of the RPA Program. For planning purposes, the regional guides shall display tentative resource objectives for each Forest from the RPA Program. Regional guides shall also provide for general coordination of National Forest System, State and Private Forestry (S&PF), and Research programs. The Chief shall approve the regional guide. The Regional Forester may request adjustment of assigned regional objectives. Any adjustment shall require the approval of the Chief, Forest Service.

(3) Forest. Each Forest Supervisor shall develop a forest plan for administrative units of the National Forest
System. One forest plan may be prepared for all lands for which a Forest Supervisor has responsibility; or separate forest plans may be prepared for each National Forest, or combination of National Forests, within the jurisdiction of a single Forest Supervisor. A single forest plan may be prepared for the entire Tongass National Forest. These forest plans shall constitute the land and resource management plans as required under Sections 6 and 13 of the RPA. A range of resource objectives shall be formulated as alternatives and evaluated, including at least one alternative which responds to and incorporates the tentative RPA Program objectives displayed in the regional guide. Based on this evaluation, the Forest Supervisor shall recommend objectives for incorporation into the forest plan to the Regional Forester. The Regional Forester shall approve the forest plan. This approval may incorporate adjustment of the tentative RPA Program resource objectives displayed in the regional guide.

§ 219.5 Interdisciplinary approach.

(a) A team representing several disciplines shall be used for regional and forest planning to insure coordinated planning of the various resources. Through interactions among its members, the team shall integrate knowledge of the physical, biological, economic and social sciences, and the environmental design arts in the planning process. The team shall consider problems collectively, rather than separating them along disciplinary lines. Team functions include, but are not limited to—

1. Assessing the problems and resource use and development opportunities associated with providing goods and services;
2. Obtaining the public’s views about possible decisions;
3. Implementing the planning coordination activities within the Forest Service and with local, State and other Federal agencies;
4. Developing a broad range of alternatives which identify the benefits and costs of land and resource management according to the planning process described in this subpart.

(b) In appointing team members, the responsible line officer shall determine and consider the qualifications of each team member on the basis of the complexity of the issues and concerns to be addressed through the plan. The team shall collectively represent diverse specialized areas of professional and technical knowledge applicable to the planning area, and the team members shall have recognized relevant expertise and experience in professional, investigative, scientific, or other responsible work in specialty areas which they collectively represent. The team may consist of whatever combination of Forest Service staff and other Federal government personnel is necessary to achieve an interdisciplinary approach. The team is encouraged to consult other persons when required specialized knowledge does not exist within the team itself. In addition to technical knowledge in one or more resource specialties, members should possess other attributes which enhance the interdisciplinary process. As a minimum, these attributes should include—

1. An ability to solve complex problems;
2. Skills in communication and group interaction;
3. Basic understanding of land and natural resource planning concepts, processes, and analysis techniques; and
4. The ability to conceptualize planning problems and feasible solutions.

§ 219.6 Public participation.

(a) Because the land and resource management planning process determines how the lands of the National Forest System are to be managed, the public is encouraged to participate
The intent of public participation is to—

1. Broaden the information base upon which land and resource management planning decisions are made;
2. Ensure that the Forest Service understands the needs, concerns, and values of the public;
3. Inform the public of Forest Service land and resource planning activities; and
4. Provide the public with an understanding of Forest Service programs and proposed actions.

(b) Public participation in the preparation of environmental impact statements for planning begins with the publication of a notice of Intent in the Federal Register. Public involvement in the preparation of draft and final environmental impact statements shall conform to the requirements of the National Environmental Policy Act and associated implementing regulations and Forest Service Manual and Handbook guidance (hereafter, "NEPA procedures"). Public comments shall be analyzed according to NEPA procedures.

(c) Public participation activities, as deemed appropriate by the responsible line officer, shall be used early and often throughout the development of plans. Formal public participation activities will begin with a notice to the news media and other sources which includes, as appropriate, the following information:

1. A description of the proposed planning action;
2. A description and map of the geographic area affected;
3. The issues expected to be discussed;
4. The kind, extent, and method(s) of public participation to be used;
5. The times, dates, and locations scheduled or anticipated, for public meetings;
6. The name, title, address, and telephone number of the Forest Service official who may be contacted for further information; and
7. The location and availability of documents relevant to planning process.

(d) Public participation activities should be appropriate to the area and people involved. Means of notification should be appropriate to the level of planning. Public participation activities may include, but are not limited to, requests for written comments, meetings, conferences, seminars, workshops, tours, and similar events designed to foster public review and comment. The Forest Service shall state the objectives of each participation activity to assure that the public understands what type of information is needed and how this information relates to the planning process.

(e) Public comments shall be considered individually and by type of group and organization to determine common areas of concern and geographic distribution. The result of this analysis should be evaluated to determine the variety and intensity of viewpoints about ongoing and proposed planning and management standards and guidelines.

(f) All scheduled public participation activities shall be documented by a summary of the principal issues discussed, comments made, and a register of participants.

(g) At least 30 days' public notice shall be given for public participation activities associated with the development of regional guides and forest plans. Any notice requesting written comments on regional planning shall allow at least 60 calendar days for response. A similar request on forest planning shall allow at least 30 calendar days for response. Draft regional guides and forest plans and environmental impact statements shall be available for public comment for a least 3 months. See also §§ 219.8(c) and 219.10(b).

(h) The responsible line officer shall attend, or provide for adequate representation at, public participation activities.

(i) Copies of approved guides and plans shall be available for public review as follows:

1. The RPA Assessment and the RPA Program shall be available at national headquarters, The Northeastern Area State and Private Forestry Office, and all Regional offices, Research Stations, Forest Supervisors' offices, and District Rangers' offices.
2. The regional guides shall be available at national headquarters, the
issuing regional office and regional offices of contiguous regions, each Forest Supervisor's office of forests within and contiguous to the issuing region, and each District Ranger's office in the region;

(3) The forest plan shall be available at the regional office for the forest, the Forest Supervisor's office, Forest Supervisors' offices contiguous to the forest, District Rangers' offices within the forest, and at least one additional location, to be determined by the Forest Supervisor, which shall offer convenient access to the public.

These documents may be made available at other locations convenient to the public.

(l) Documents considered in the development of plans shall be available at the office where the plans were developed.

(k) Forest planning activities should be coordinated to the extent practicable with owners of lands that are intermingled with, or dependent for access upon, National Forest System lands. The results of this coordination shall be included in the environmental impact statement for the plan as part of the review required in §219.7(c).

The responsible line officer may individually notify these owners of forest planning activities where it is determined that notice provided for the general public is not likely to reach the affected landowners.

(l) Fees for reproducing requested documents shall be charged according to the Secretary of Agriculture's Fee Schedule (7 CFR Part 1, Subpart A, Appendix A).

§219.7 Coordination with other public planning efforts.

(a) The responsible line officer shall coordinate regional and forest planning with the equivalent and related planning efforts of other Federal agencies, State and local governments, and Indian tribes.

(b) The responsible line officer shall give notice of the preparation of a land and resource management plan, along with a general schedule of anticipated planning actions, to the official or agency so designated by the affected State (including the Commonwealth of Puerto Rico). The same notice shall be mailed to all Tribal or Alaska Native leaders whose tribal lands or treaty rights are expected to be impacted and to the heads of units of government for the counties involved. These notices shall be issued simultaneously with the publication of the notice of intent to prepare an environmental impact statement required by NEPA procedures (40 CFR 1501.7).

(c) The responsible line officer shall review the planning and land use policies of other Federal agencies, State and local governments, and Indian tribes. The results of this review shall be displayed in the environmental impact statement for the plan (40 CFR 1502.16(c), 1508.2). The review shall include—

(1) Consideration of the objectives of other Federal, State and local governments, and Indians tribes, as expressed in their plans and policies;

(2) An assessment of the interrelated impacts of these plans and policies;

(3) A determination of how each Forest Service plan should deal with the impacts identified; and,

(4) Where conflicts with Forest Service planning are identified, consideration of alternatives for their resolution.

(d) In developing land and resource management plans, the responsible line officer shall meet with the designated State official (or designee) and representatives of other Federal agencies, local governments, and Indian tribal governments at the beginning of the planning process to develop procedures for coordination. As a minimum, such conferences shall also be held after public issues and management concerns have been identified and prior to recommending the preferred alternative. Such conferences may be held in conjunction with other public participation activities, if the opportunity for government officials to participate in the planning process is not thereby reduced.

(e) In developing the forest plan, the responsible line officer shall seek input from other Federal, State and local governments, and universities to help resolve management concerns in the planning process and to identify areas where additional research is needed. This input should be included
in the discussion of the research needs of the designated forest planning area.

(f) A program of monitoring and evaluation shall be conducted that includes consideration of the effects of National Forest management on land, resources, and communities adjacent to or near the National Forest being planned and the effects upon National Forest management of activities on nearby lands managed by other Federal or other government agencies or under the jurisdiction of local governments.


§ 219.8 Regional planning procedure.

(a) Regional guide. A regional guide shall be developed for each administratively designated Forest Service region. Regional guides shall reflect general coordination of National Forest System, State and Private Forestry, and Research programs. Regional guides shall provide standards and guidelines for addressing major issues and management concerns which need to be considered at the regional level to facilitate forest planning. Public participation and coordination, the current RPA Program and Assessment, and the existing forest and resource plans shall be used as sources of information in meeting this requirement. Data and information requirements established nationally will be followed in structuring and maintaining required data.

(b) Responsibilities—(1) Chief, Forest Service. The Chief shall establish agency-wide policy for regional planning and approve all regional guides.

(2) Regional Forester. The Regional Forester has overall responsibility for preparing and implementing the regional guide and for preparing the environmental impact statement for proposed standards and guidelines in the regional guide. The Regional Forester appoints and supervises the Interdisciplinary team.

(3) Interdisciplinary Team. The team, under the direction of the Regional Forester, implements the public participation and coordination activities required by § 219.6 and § 219.7. The team shall continue to function even though membership may change and shall monitor and evaluate planning results and recommend amendments. The team shall develop a regional guide in compliance with NEPA procedures.

(c) Public review. A draft and final environmental impact statement shall be prepared for the proposed standards and guidelines in the regional guide according to NEPA procedures. To the extent feasible, a single process shall be used to meet planning and NEPA requirements. The draft statement shall identify a preferred alternative. Beginning on the date of publication of the notice of availability of the draft environmental impact statement in the Federal Register, the statement and the proposed guide shall be available for public comment for at least 3 months at convenient locations in the vicinity of the lands covered by the guide. During this period, and in accordance with the provisions in § 219.6, the Regional Forester or his designee shall publicize and hold public participation activities as deemed necessary for adequate public input.

(d) Guide approval. The Chief shall review the proposed guide and the final environmental impact statement and either approve or disapprove the guide.

(1) Approval. The Chief shall prepare a concise public record of decision which documents approval and accompanies the regional guide and the final environmental impact statement. The record or decision shall be prepared according to NEPA procedures (40 CFR 1505.2). The approved regional guide shall not become effective until at least 30 days after publication of the notice of availability of the final environmental impact statement in the Federal Register.

(2) Disapproval. The Chief shall return the regional guide and final environmental impact statement to the Regional Forester with a written statement of the reasons for disapproval. The Chief may also specify a course of action to be undertaken by the Regional Forester in order to remedy deficiencies, errors, or omissions in the regional guide or environmental impact statement.
(e) *Public appeal of approval decisions.* The provisions of 36 CFR Part 211, Subpart B apply to any administrative appeal of the Chief's decision to approve a regional guide. Decisions to disapprove a guide and other decisions made during the regional planning process prior to issuance of a record of decision approving the guide are not subject to administrative appeal.

(f) *Amendment.* The Regional Forester may amend the regional guide. The Regional Forester shall determine whether the proposed amendment would result in a significant change in the guide. If the change resulting from the proposed amendment is determined to be significant, the Regional Forester shall follow the same procedure for amendment as that required for development and approval of a regional guide. If the change resulting from the amendment is determined not to be significant for the purposes of the planning process, the Regional Forester may implement the amendment following appropriate public notification and satisfactory completion of NEPA procedures.

(g) *Planning records.* The Regional Forester shall develop and maintain planning records that document decisions and activities that result from the process of developing a regional guide and the accomplishment of legal and administrative planning requirements. These records include at least the draft environmental impact statement, final environmental impact statement, regional guide, record of decision, a work plan to guide and manage planning, the procedures used in completing each action, and the results of these actions.

§219.9 *Regional guide content.*

(a) The regional guide shall contain—

1. A summary of the analysis of the regional management situation, including a brief description of the existing management situation and the major issues and management concerns which need to be addressed at the regional level to facilitate forest planning;
2. A description of management direction including programs, goals, and objectives;
3. A display of tentative resource objectives for each forest planning area from the current RPA Program;
4. New or significantly changed regional management standards and guidelines necessary to address major regional issues and management concerns identified in paragraph (a)(1) of this section;
5. Specific standards and guidelines for the following—
   i. Prescribing appropriate harvest cutting methods to be used within the region according to geographic areas, forest types, or other suitable classifications;
   ii. Establishing the maximum size, dispersal, and size variation of tree openings created by even-aged management, and the state of vegetation that will be reached before a cut-over area is no longer considered an opening, using factors enumerated in §219.27(d);
   iii. Defining the management intensities and utilization standards to be used in determining harvest levels for the region;
   iv. Designating transportation corridors and associated direction for forest planning, such as management requirements for corridors, transmission lines, pipelines, and water canals. (The designation of corridors is not to preclude the granting of separate rights-of-way over, upon, under, or through the Federal lands where the authorized line officer determines that confinement to a corridor is not appropriate.) (43 U.S.C. 1763, 36 CFR 251.56); and
   v. Identifying in forest plans significant current and potential air pollution emissions from management activities and from other sources in and around the forest planning area and identifying measures needed to coordinate air quality control with appropriate air quality regulation agencies.
6. A description of the monitoring and evaluation necessary to determine and report achievements and effects of the guide.
7. A description of measures to achieve coordination of National
§ 219.10 Forest planning—general procedure.

(a) Responsibilities—

(1) Regional Forester. The Regional Forester shall establish regional policy for forest planning and approve all forest plans in the region.

(2) Forest Supervisor. The Forest Supervisor has overall responsibility for the preparation and implementation of the forest plan and preparation of the environmental impact statement for the forest plan. The Forest Supervisor appoints and supervises the interdisciplinary team.

(3) Interdisciplinary team. The team, under the direction of the Forest Supervisor, implements the public participation and coordination activities required by § 219.6 and § 219.7. The team shall continue to function even though membership may change and shall monitor and evaluate planning results and recommend revisions and amendments. The interdisciplinary team shall develop a forest plan and environmental impact statement using the process established in § 219.12 and paragraph (b) below.

(b) Public review of plan and environmental impact statement. A draft and final environmental impact statement shall be prepared for the proposed plan according to NEPA procedures. The draft environmental impact statement shall identify a preferred alternative. To comply with 16 U.S.C. 1604(d), the draft environmental impact statement and proposed plan shall be available for public comment for at least 3 months, at convenient locations in the vicinity of the lands covered by the plan, beginning on the date of the publication of the notice of availability in the Federal Register. During this period, and in accordance with the provisions in § 219.6, the Forest Supervisor shall publicize and hold public participation activities as deemed necessary to obtain adequate public input.

(c) Plan approval. The Regional Forester shall review the proposed plan and the final environmental impact statement and either approve or disapprove the plan.

(1) Approval. The Regional Forester shall prepare a concise public record of decision which documents approval and accompanies the plan and final environmental impact statement. The record of decision shall be prepared according to NEPA procedures (40 CFR 1505.2). The approved plan shall not become effective until at least 30 days after publication of the notice of availability of the final environmental impact statement in the Federal Register, to comply with 16 U.S.C. 1604(d) and 1604(j).

(2) Disapproval. The Regional Forester shall return the plan and final environmental impact statement to the Forest Supervisor with a written statement of the reasons for disapproval. The Regional Forester may also specify a course of action to be undertaken by the Forest Supervisor in order to remedy deficiencies, errors, or omissions in the plan or environmental impact statement.

(d) Public appeal of approval decision. The provisions of 36 CFR Part 211, Subpart B apply to any administrative appeal of the Regional Forester's decision to approve a forest plan. Decisions to disapprove a plan and other decisions made during the forest planning process prior to the issuance of a record of decision approving the plan are not subject to administrative appeal.

(e) Plan implementation. As soon as practicable after approval of the plan, the Forest Supervisor shall ensure that, subject to valid existing rights, all outstanding and future permits, contracts, cooperative agreements, and other instruments for occupancy and use of affected lands are consistent with the plan. Subsequent administrative activities affecting such lands, including budget proposals, shall be based on the plan. The Forest Supervisor may change proposed implementation schedules to reflect differences between proposed annual budgets and appropriated funds. Such scheduled
changes shall be considered an amendment to the forest plan, but shall not be considered a significant amendment, or require the preparation of an environmental impact statement, unless the changes significantly alter the long-term relationship between levels of multiple-use goods and services projected under planned budget proposals as compared to those projected under actual appropriations.

(f) Amendment. The Forest Supervisor may amend the forest plan. Based on an analysis of the objectives, guidelines, and other contents of the forest plan, the Forest Supervisor shall determine whether a proposed amendment would result in a significant change in the plan. If the change resulting from the proposed amendment is determined to be significant, the Forest Supervisor shall follow the same procedure as that required for development and approval of a forest plan. If the change resulting from the amendment is determined not to be significant for the purposes of the planning process, the Forest Supervisor may implement the amendment following appropriate public notification and satisfactory completion of NEPA procedures.

(g) Revision. A forest plan shall ordinarily be revised on a 10-year cycle or at least every 15 years. It also may be revised whenever the Forest Supervisor determines that conditions or demands in the area covered by the plan have changed significantly or when changes in RPA policies, goals, or objectives would have a significant effect on forest level programs. In the monitoring and evaluation process, the interdisciplinary team may recommend a revision of the forest plan at any time. Revisions are not effective until considered and approved in accordance with the requirements for the development and approval of a forest plan. The Forest Supervisor shall review the conditions on the land covered by the plan at least every 5 years to determine whether conditions or demands of the public have change significantly.

(h) Planning records. The Forest Supervisor and interdisciplinary team shall develop and maintain planning records that document the decisions and activities that result from the process of developing a forest plan. Records that support analytical conclusions made and alternatives considered by the team and approved by the Forest Supervisor throughout the planning process shall be maintained. Such supporting records provide the basis for the development of the forest plan and associated documents required by NEPA procedures.

§ 219.11 Forest plan content.

The forest plan shall contain the following:

(a) A brief summary of the analysis of the management situation, including demand and supply conditions for resource commodities and services, production potentials, and use and development opportunities;

(b) Forest multiple-use goals and objectives that include a description of the desired future condition of the forest or grassland and an identification of the quantities of goods and services that are expected to be produced or provided during the RPA planning periods;

(c) Multiple-use prescriptions and associated standards and guidelines for each management area including proposed and probable management practices such as the planned timber sale program; and

(d) Monitoring and evaluation requirements that will provide a basis for a periodic determination and evaluation of the effects of management practices.

§ 219.12 Forest planning—process.

(a) General requirements. The preparation, revision, or significant amendment of a forest plan shall comply with the requirements established in this section. The planning process includes at least those actions set forth in paragraphs (b) through (k) of the section. Some actions may occur simultaneously, and it may be necessary to repeat an action as additional information becomes available. The environmental impact statement for each forest plan shall be prepared according to NEPA procedures. To the extent feasible, a single process shall
be used to meet planning and NEPA requirements.

(b) Identification of purpose and need. The interdisciplinary team shall identify and evaluate public issues, management concerns, and resource use and development opportunities, including those identified throughout the planning process during public participation activities and coordination with other Federal agencies, State and local governments, and Indian tribes. The Forest Supervisor shall determine the major public issues, management concerns, and resource use and development opportunities to be addressed in the planning process.

(c) Planning criteria. Criteria shall be prepared to guide the planning process. Criteria apply to collection and use of inventory data and information, analysis of the management situation, and the design, formulation, and evaluation of alternatives. Criteria designed to achieve the objective of maximizing net public benefits shall be included. Specific criteria may be derived from—

(1) Laws, Executive Orders, regulations, and agency policy as set forth in the Forest Service Manual;
(2) Goals and objectives in the RPA Program and regional guides;
(3) Recommendations and assumptions developed from public issues, management concerns, and resource use and development opportunities;
(4) The plans and programs of other Federal agencies, State and local governments, and Indian tribes;
(5) Ecological, technical, and economic factors; and
(6) The resource integration and management requirements in §§ 219.13 through 219.27.

d) Inventory data and information collection. Each Forest Supervisor shall obtain and keep current inventory data appropriate for planning and managing the resources under his or her administrative jurisdiction. The Supervisor will assure that the interdisciplinary team has access to the best available data. This may require that special inventories or studies be prepared. The interdisciplinary team shall collect, assemble, and use data, maps, graphic material, and explanatory aids, of a kind, character, and quality, and to the detail appropriate for the management decisions to be made. Data and information needs may vary as planning problems develop from identification of public issues, management concerns, and resource use and development opportunities. Data shall be stored for ready retrieval and comparison and periodically shall be evaluated for accuracy and effectiveness. The interdisciplinary team will use common data definitions and standards established by the Chief of the Forest Service to assure uniformity of information between all planning levels. As information is recorded, it shall be applied in any subsequent planning process. Information developed according to common data definitions and standards shall be used in the preparation of the 1980, and subsequent RPA Assessments and RPA Programs.

e) Analysis of the management situation. The analysis of the management situation is a determination of the ability of the planning area covered by the forest plan to supply goods and services in response to society's demands. The primary purpose of this analysis is to provide a basis for formulating a broad range of reasonable alternatives. The analysis may examine the capability of the unit to supply outputs both with and without legal and other requirements. As a minimum, the analysis of the management situation shall include the following:

(1) Benchmark analyses to define the range within which alternatives can be constructed. Budgets shall not be a constraint. The following benchmark analyses shall be consistent with the minimum applicable management requirements of § 219.27 and shall define at least—

(i) The minimum level of management which would be needed to maintain and protect the unit as part of the National Forest System together with associated costs and benefits;
(ii) The maximum physical and biological production potentials of significant individual goods and services together with associated costs and benefits;
(iii) Monetary benchmarks which estimate the maximum present net
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value of those resources having an established market value or an assigned value;

(A) For forest planning areas with major resource outputs that have an established market price, monetary benchmarks shall include an estimate of the mix of resource uses, combined with a schedule of outputs and costs, which will maximize the present net value of those major outputs that have an established market price;

(B) For all forest planning areas, monetary benchmarks shall include an estimate of the mix of resource uses, combined with a schedule of outputs and costs, which will maximize the present net value of those major outputs that have an established market price or are assigned a monetary value;

(C) For forest planning areas with a significant timber resource, estimates for paragraphs (e)(1)(iii)(A) and (B) of this section shall be developed both with and without meeting the requirements for compliance with a base sale schedule of timber harvest, as described in § 219.16(a)(1), and with and without scheduling the harvest of even-aged stands generally at or beyond culmination of mean annual increment of growth, as described in § 219.16(a)(2)(iii).

(D) Estimates for paragraphs (e)(1)(iii)(A) and (B) of this section shall be developed both with and without other constraints when needed to address major public issues, management concerns, or resource opportunities identified during the planning process.

(2) The current level of goods and services provided by the unit and the most likely amount of goods and services expected to be provided in the future if current management direction continues; this will be the same analysis as that required by § 219.12(f)(5).

(3) Projections of demand using best available techniques, with both price and nonprice information. To the extent practical, demand will be assessed as price-quantity relationships.

(4) A determination of the potential to resolve public issues and management concerns.

(5) Based on consideration of data and findings developed in paragraphs (e)(1)–(4), a determination of the need to establish or change management direction.

(f) Formulation of alternatives. The interdisciplinary team shall formulate a broad range of reasonable alternatives according to NEPA procedures. The primary goal in formulating alternatives, besides complying with NEPA procedures, is to provide an adequate basis for identifying the alternative that comes nearest to maximizing net public benefits, consistent with the resource integration and management requirements of §§ 219.13 through 219.27.

(1) Alternatives shall be distributed between the minimum resource potential and the maximum resource potential to reflect to the extent practicable the full range of major commodity and environmental resource uses and values that could be produced from the forest. Alternatives shall reflect a range of resource outputs and expenditure levels.

(2) Alternatives shall be formulated to facilitate analysis of opportunity costs and of resource use and environmental trade-offs among alternatives and between benchmarks and alternatives.

(3) Alternatives shall be formulated to facilitate evaluation of the effects on present net value, benefits, and costs of achieving various outputs and values that are not assigned monetary values, but that are provided at specified levels.

(4) Alternatives shall provide different ways to address and respond to the major public issues, management concerns, and resource opportunities identified during the planning process.

(5) Reasonable alternatives which may require a change in existing law or policy to implement shall be formulated if necessary to address a major public issue, management concern, or resource opportunity identified during the planning process (40 CFR 1501.7, 1502.14(c)).

(6) At least one alternative shall be developed which responds to and incorporates the RPA Program tentative resource objectives for each forest displayed in the regional guide.

(7) At least one alternative shall reflect the current level of goods and services.
services provided by the unit and the most likely amount of goods and services expected to be provided in the future if current management direction continues. Pursuant to NEPA procedures, this alternative shall be deemed the "no action" alternative.

(8) Each alternative shall represent to the extent practicable the most cost efficient combination of management prescriptions examined that can meet the objectives established in the alternative.

(9) Each alternative shall state at least—

(i) The condition and uses that will result from long-term application of the alternative;

(ii) The goods and services to be produced, the timing and flow of these resource outputs together with associated costs and benefits;

(iii) Resource management standards and guidelines; and

(iv) The purposes of the management direction proposed.

(g) Estimated effects of alternatives. The physical, biological, economic, and social effects of implementing each alternative considered in detail shall be estimated and compared according to NEPA procedures. These effects include those described in NEPA procedures (40 CFR 1502.14 and 1502.10) and at least the following:

(1) The expected outputs for the planning periods, including appropriate marketable goods and services, as well as nonmarket items, such as recreation and wilderness use, wildlife and fish, protection and enhancement of soil, water, and air, and preservation of aesthetic and cultural resource values;

(2) The relationship of expected outputs to the RPA Program tentative resource objectives for the forest displayed in the current regional guide;

(3) Direct and indirect benefits and costs, analyzed in sufficient detail to estimate—

(i) the expected real-dollar costs (discounted when appropriate), including investment, administrative, and operating costs of the agency and all other public and private costs required to manage the forest up to the point where the outputs are valued and the environmental consequences are realized;

(ii) the expected real-dollar value (discounted when appropriate) of all outputs attributable to each alternative to the extent that monetary values can be assigned to nonmarket goods and services, using quantitative and qualitative criteria when monetary values may not reasonably be assigned;

(iii) the economic effects of alternatives, including impacts on present net value, total receipts to the Federal Government, direct benefits to users that are not measured in receipts to the Federal Government, receipt shares to State and local governments, income, and employment in affected areas; and

(iv) the monetary opportunity costs (changes in present net value) associated with those management standards and resource outputs in each alternative that were not assigned monetary values but were provided at specified levels, compared with the maximum present net value benchmarks developed in §219.12(e)(1)(iii).

(4) The significant resource tradeoffs and opportunity costs associated with achieving alternative resource objectives.

(h) Evaluation of alternatives: Using planning criteria, the interdisciplinary team shall evaluate the significant physical, biological, economic, and social effects of each management alternative that is considered in detail. The evaluation shall include a comparative analysis of the aggregate effects of the management alternatives and shall compare present net value, social and economic impacts, outputs of goods and services, and overall protection and enhancement of environmental resources.

(i) Preferred alternative recommendation. The Forest Supervisor shall review the interdisciplinary team's evaluation and shall recommend to the Regional Forester a preferred alternative to be identified in the draft environmental impact statement and displayed as the proposed plan.

(j) Plan approval. The Regional Forester shall review the proposed plan and final environmental impact statement and either approve or disapprove

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the plan in accordance with §219.10(c). The record of decision for approval of a plan shall include, in addition to the requirements of NEPA procedures (40 CFR 1505.2), a summarized comparison of the selected alternative with:

(1) Any other alternative considered which is environmentally preferable to the selected alternative; and

(2) Any other alternative considered which comes nearer to maximizing present net value.

(k) Monitoring and evaluation. At intervals established in the plan, implementation shall be evaluated on a sample basis to determine how well objectives have been met and how close to management standards and guidelines have been applied. Based upon this evaluation, the interdisciplinary team shall recommend to the Forest Supervisor such changes in management direction, revisions, or amendments to the forest plan as are deemed necessary. Monitoring requirements identified in the forest plan shall provide for—

(1) A quantitative estimate of performance comparing outputs and services with those projected by the forest plan;

(2) Documentation of the measured prescriptions and effects, including significant changes in productivity of the land; and

(3) Documentation of costs associated with carrying out the planned management prescriptions as compared with costs estimated in the forest plan.

(4) A description of the following monitoring activities:

(i) The actions, effects, or resources to be measured, and the frequency of measurements;

(ii) Expected precision and reliability of the monitoring process; and

(iii) The time when evaluation will be reported.

(5) A determination of compliance with the following standards:

(i) Lands are adequately restocked as specified in the forest plan;

(ii) Lands identified as not suited for timber production are examined at least every 10 years to determine if they have become suited; and that, if determined suited, such lands are returned to timber production;

(iii) Maximum size limits for harvest areas are evaluated to determine whether such size limits should be continued; and

(iv) Destructive insects and disease organisms do not increase to potentially damaging levels following management activities.

§219.13 Forest planning—resource integration requirements.

The minimum requirements for integrating individual forest resource planning into the forest plan are established in §§219.14 through 219.26 of this subpart. For the purposes of meeting the requirements of §219.12(c), additional planning criteria may be found in the guidelines for managing specific resources set forth in the Forest Service Manual and Handbooks.

§219.14 Timber resource land suitability.

During the forest planning process, lands which are not suited for timber production shall be identified in accordance with the criteria in paragraphs (a) through (d) of this section.

(a) During the analysis of the management situation, data on all National Forest System lands within the planning area shall be reviewed, and those lands within any one of the categories described in paragraphs (a)(1) through (d) of this section shall be identified as not suited for timber production—

(1) The land is not forest land as defined in §218.3.

(2) Technology is not available to ensure timber production from the land without irreversible resource damage to soils productivity, or watershed conditions.

(3) There is not reasonable assurance that such lands can be adequately restocked as provided in §219.27(c)(3).

(4) The land has been withdrawn from timber production by an Act of Congress, the Secretary of Agriculture or the Chief of the Forest Service.

(b) Forest lands other than those that have been identified as not suited for timber production in paragraph (a) of this section shall be further reviewed and assessed prior to formul-
tion of alternatives to determine the costs and benefits for a range of management intensities for timber production. For the purpose of analysis, the planning area shall be stratified into categories of land with similar management costs and returns. The stratification should consider appropriate factors that influence the costs and returns such as physical and biological conditions of the site and transportation requirements. This analysis shall identify the management intensity for timber production for each category of land which results in the largest excess of discounted benefits less discounted costs and shall compare the direct costs of growing and harvesting trees, including capital expenditures required for timber production, to the anticipated receipts to the government, in accordance with §219.12 and paragraphs (b)(1) through (b)(3) of this section.

(1) Direct benefits are expressed as expected gross receipts to the government. Such receipts shall be based upon expected stumpage prices and payments-in-kind from timber harvest considering future supply and demand situation for timber and upon timber production goals of the regional guide.

(2) Direct costs include the anticipated investments, maintenance, operating, management, and planning costs attributable to timber production activities, including mitigation measures necessitated by the impacts of timber production.

(3) In addition to long-term yield, the financial analysis must consider costs and returns of managing the existing timber inventory.

(c) During formulation and evaluation of each alternative as required in §219.12 (f) and (g), combinations of resource management prescriptions shall be defined to meet management objectives for the various multiple uses including outdoor recreation, timber, watershed, range, wildlife and fish, and wilderness. The formulation and evaluation of each alternative shall consider the costs and benefits of alternative management intensities for timber production as identified pursuant to paragraph (b) of this section in accordance with §219.12(f). Lands shall be tentatively identified as not appropriate for timber production to meet objectives of the alternative being considered if—

(1) Based upon a consideration of multiple-use objectives for the alternative, the land is proposed for resource uses that preclude timber production, such as wilderness;

(2) Other management objectives for the alternative limit timber production activities to the point where management requirements set forth in §219.27 cannot be met; or

(3) The lands are not cost-efficient, over the planning horizon, in meeting forest objectives, which include timber production.

(d) Lands identified as not suited for timber production in paragraph (a) of this section and lands tentatively identified as not appropriate for timber production in paragraph (c) of this section shall be designated as not suited for timber production in the preferred alternative. Designation in the plan of lands not suited for timber production shall be reviewed at least every 10 years. Such lands may be reviewed and redesignated as suited for timber production due to changed conditions at any time, according to the criteria in paragraphs (a) and (c) of this section, and according to the procedures for amendment or revision of the forest plan in §219.10 (f) and (g).

§219.15 Vegetation management practices.

When vegetation is altered by management, the methods, timing, and intensity of the practices determine the level of benefits that can be obtained from the affected resources. The vegetation management practices chosen for each vegetation type and circumstance shall be defined in the forest plan with applicable standards and guidelines and the reasons for the choices. Where more than one vegetation management practice will be used in a vegetation type, the conditions under which each will be used shall be based upon thorough reviews of technical and scientific literature and practical experience, with appropriate evaluation of this knowledge for relevance to the specific vegetation and site conditions. On National Forest
System land, the vegetation management practice chosen shall comply with the management requirements in § 219.27(b).

§ 219.16 Timber resource sale schedule.

In a forest plan, the selected forest management alternative includes a sale schedule which provides the allowable sale quantity. The sale schedule of each alternative, including those which depart from base sale schedules, shall be formulated in compliance with § 219.12(f) and paragraphs (a) and (b) of this section.

(a) Alternatives shall be formulated that include determinations of the quantity of the timber that may be sold during each decade. These quantity determinations shall be based on the principle of sustained yield and shall meet the management requirements in § 219.27. For each alternative, the determination shall include a calculation of the long-term sustained-yield capacity and the base sale schedule and, when appropriate, a calculation of timber sale alternatives that may depart from the base sale schedule as provided in paragraphs (a)(1) through (a)(3) of this section.

(1) For the base sale schedules, the planned sale for any future decade shall be equal to, or greater than, the planned sale for the preceding decade, provided that the planned sale is not greater than the long-term sustained-yield capacity consistent with the management objectives of the alternative.

(2) The determinations of the appropriate long-term sustained-yield capacities, base sale schedules, and departure alternatives to the base sale schedules shall be made on the basis of the guidelines which follow:

(i) For the long-term sustained-yield capacities and the base sale schedules, assume intensities of management and degree of timber utilization consistent with the goals, assumptions, and requirements contained in, or used in, the preparation of the current RPA Program and regional guide. For the base sale schedule, the management and utilization assumptions shall reflect the projected changes in practices for the four decades contained in, or used in, the preparation of the current RPA Program and regional guide. Beyond the fourth decade, the assumptions shall reflect those projected for the fourth decade of the current RPA Program, unless there is a basis for a different assumption;

(ii) For alternatives with sale schedules which depart from the corresponding base sale schedule, assume an appropriate management intensity;

(iii) In accordance with the established standards, assume that salvage or managed stands scheduled to be harvested during the planning period will generally have reached the culmination of mean annual increment of growth. Mean annual increment shall be based on expected growth, according to management intensities and utilization standards assumed in paragraphs (a)(2)(i) and (ii) of this section and on forest type and site quality. Mean annual increment shall be expressed in cubic measure. Alternatives which incorporate exceptions to these standards shall be evaluated if it is reasonable to expect that overall multiple use objectives would be better attained. Alternatives which incorporate exceptions to these standards are permitted for the use of sound silvicultural practices, such as thinning or other stand improvement measures; for salvage or sanitation harvesting of timber stands which are substantially damaged by fire, windthrow, or other catastrophe, or which are in imminent danger from insect or disease attack; for cutting for experimental and research purposes; or for removing particular species of trees, after consideration has been given to the multiple uses of the area being planned and after completion of the public participation process applicable to the preparation of a forest plan; and

(iv) Each sale schedule shall provide for a forest structure that will enable perpetual timber harvest which meets the principle of sustained-yield and multiple-use objectives of the alternative.

(3) Alternatives with sale schedules which depart from the principles of paragraph (a)(1) of this section and which will lead to better attaining the overall objectives of multiple-use management shall be evaluated when any
of the following conditions are indicated:

(i) None of the other alternatives considered provides a sale schedule that achieves the assigned goals of the RPA Program as provided in §219.4(b);
(ii) High mortality losses from any cause can be significantly reduced or prevented or forest age-class distribution can be improved, thereby facilitating future sustained-yield management; or
(iii) Implementation of the corresponding base sale schedule would cause a substantial adverse impact upon a community in the economic area in which the forest is located.
(iv) It is reasonable to expect that overall multiple-use objectives would otherwise be better attained.

(b) The sale schedule of the management alternative selected in accordance with §219.12 provides the allowable sale quantity for the first plan period.

§219.17 Evaluation of roadless areas.

(a) Unless otherwise provided by law, roadless areas within the National Forest System shall be evaluated and considered for recommendation as potential wilderness areas during the forest planning process, as provided in paragraphs (a)(1) and (2) of this section.

(1) During analysis of the management situation, the following areas shall be subject to evaluation:

(i) Roadless areas including those previously inventoried in the second roadless area review and evaluation (RARE II), in a unit plan, or in a forest plan, which remain essentially roadless and undeveloped, and which have not yet been designated as wilderness or for nowilderness uses by law. In addition, other essentially roadless areas may be subject to evaluation at the discretion of the Forest Supervisor.
(ii) Areas contiguous to existing wilderness, primitive areas, or administratively proposed wildernesses, regardless of which agency has jurisdiction for the wilderness or proposed wilderness;
(iii) Areas that are contiguous to roadless and undeveloped areas in other Federal ownership that have identified wilderness potential and
(iv) Areas designated by Congress for wilderness study, administrative proposals pending before Congress, and other legislative proposals pending which have been endorsed by the President.

(2) For each area subject to evaluation under paragraph (a)(1) of this section, the determination of the significant resource issues, which in turn affect the detail and scope of evaluation required by the Forest Service, shall be developed with public participation. As a minimum, the evaluation shall include consideration of:

(i) The values of the area as wilderness;
(ii) The values foregone and effects on management of adjacent lands as a consequence of wilderness designation;
(iii) Feasibility of management as wilderness, in respect to size, nonconforming use, land ownership patterns, and existing contractual agreements or statutory rights;
(iv) Proximity to other designated wilderness and relative contribution to the National Wilderness Preservation System; and
(v) The anticipated long-term changes in plant and animal species diversity, including the diversity of natural plant and animal communities of the forest planning area and the effects of such changes on the values for which wilderness areas were created.


§219.18 Wilderness management.

Forest planning shall provide direction for the management of designated wilderness and primitive areas in accordance with the provisions of 36 CFR Part 293. In particular, plans shall—

(a) Provide for limiting and distributing visitor use of specific areas in accord with periodic estimates of the maximum levels of use that allow natural processes to operate freely and that do not impair the values for which wilderness areas were created; and
(b) Evaluate the extent to which wildfire, insect, and disease control
measures may be desirable for protection of either the wilderness or adjacent areas and provide for such measures when appropriate.

§ 219.19 Fish and wildlife resource.

Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area. For planning purposes, a viable population shall be regarded as one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area. In order to insure that viable populations will be maintained, habitat must be provided to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area.

(a) Each alternative shall establish objectives for the maintenance and improvement of habitat for management indicator species selected under paragraph (g)(1) of this section, to the degree consistent with overall multiple use objectives of the alternative. To meet this goal, management planning for the fish and wildlife resource shall meet the requirements set forth in paragraphs (a)(1) through (a)(7) of this section.

(1) In order to estimate the effects of each alternative on fish and wildlife populations, certain vertebrate and/or invertebrate species present in the area shall be identified and selected as management indicator species and the reasons for their selection will be stated. These species shall be selected because their population changes are believed to indicate the effects of management activities. In the selection of management indicator species, the following categories shall be represented where appropriate: Endangered and threatened plant and animal species identified on State and Federal lists for the planning area; species with special habitat needs that may be influenced significantly by planned management programs; species commonly hunted, fished, or trapped; non-game species of special interest; and additional plant or animal species selected because their population changes are believed to indicate the effects of management activities on other species of selected major biological communities or on water quality. On the basis of available scientific information, the interdisciplinary team shall estimate the effects of changes in vegetation type, timber age classes, community composition, rotation age, and year-long suitability of habitat related to mobility of management indicator species. Where appropriate, measures to mitigate adverse effects shall be prescribed.

(2) Planning alternatives shall be stated and evaluated in terms of both amount and quality of habitat and of animal population trends of the management indicator species.

(3) Biologists from State fish and wildlife agencies and other Federal agencies shall be consulted in order to coordinate planning for fish and wildlife, including opportunities for the re-introduction of extirpated species.

(4) Access and dispersal problems of hunting, fishing, and other visitor uses shall be considered.

(5) The effects of pest and fire management on fish and wildlife populations shall be considered.

(6) Population trends of the management indicator species will be monitored and relationships to habitat changes determined. This monitoring will be done in cooperation with State fish and wildlife agencies, to the extent practicable.

(7) Habitat determined to be critical for threatened and endangered species shall be identified, and measures shall be prescribed to prevent the destruction or adverse modification of such habitat. Objectives shall be determined for threatened and endangered species that shall provide for, where possible, their removal from listing as threatened and endangered species through appropriate conservation measures, including the designation of special areas to meet the protection and management needs of such species.

§ 219.20 Grazing resource.

In forest planning, the suitability and potential capability of National
Forest System lands for producing forage for grazing animals and for providing habitat for management indicator species shall be determined as provided in paragraphs (a) and (b) of this section. Lands so identified shall be managed in accordance with direction established in forest plans.

(a) Lands suitable for grazing and browsing shall be identified and their condition and trend shall be determined. The present and potential supply of forage for livestock, wild and free-roaming horses and burros, and the capability of these lands to produce suitable food and cover for selected wildlife species shall be estimated. The use of forage by grazing and browsing animals will be estimated. Lands in less than satisfactory condition shall be identified and appropriate action planned for their restoration.

(b) Alternative range management prescriptions shall consider grazing systems and the facilities necessary to implement them; land treatment and vegetation manipulation practices; and evaluation of pest problems; possible conflict or beneficial interactions among livestock, wild free-roaming horses and burros and wild animal populations, and methods of regulating these; direction for rehabilitation of ranges in unsatisfactory condition; and comparative cost efficiency of the prescriptions.

§ 219.21 Recreation resource.

To the degree consistent with needs and demands for all major resources, a broad spectrum of forest and range-land related outdoor recreation opportunities shall be provided for in each alternative. Planning activities to achieve this shall be in accordance with national and regional direction and procedural requirements of paragraphs (a) through (g) of this section.

(a) Forest planning shall identify—

(1) The physical and biological characteristics that make land suitable for recreation opportunities;

(2) The recreational preferences of user groups and the settings needed to provide quality recreation opportunities; and

(3) Recreation opportunities on the National Forest System lands.

(b) The supply of developed recreational facilities in the area of National Forest influence shall be appraised for adequacy to meet present and future demands.

(c) Planning alternatives shall include consideration of establishment of physical facilities, regulation of use, and recreation opportunities responsive to current and anticipated user demands.

(d) In formulation and analysis of alternatives as specified in § 219.12 (f) and (g), interactions among recreation opportunities and other multiple uses shall be examined. This examination shall consider the impacts of the proposed recreation activities on other uses and values and the impacts of other uses and activities associated with them on recreation opportunities, activities, and quality of experience.

(e) Formulation and evaluation of alternatives under paragraphs (c) and (d) of this section shall be coordinated to the extent feasible with present and proposed recreation activities of local and State land use or outdoor recreation plans, particularly the State Comprehensive Outdoor Recreation Plan, and recreation opportunities already present and available on other public and private lands, with the aim of reducing duplication in meeting recreation demands.

(f) The visual resource shall be inventoried and evaluated as an integrated part of evaluating alternatives in the forest planning process, addressing both the landscape's visual attractiveness and the public's visual expectation. Management prescriptions for definitive land areas of the forest shall include visual quality objectives.

(g) Off-road vehicle use shall be planned and implemented to protect land and other resources, promote public safety, and minimize conflicts with other uses of the National Forest System lands. Forest planning shall evaluate the potential effects of vehicle use off roads and, on the basis of the requirements of 36 CFR Part 295 of this chapter, classify areas and trails of National Forest System lands as to whether or not off-road vehicle use may be permitted.
§ 219.22 Mineral resource.

Mineral exploration and development in the planning area shall be considered in the management of renewable resources. The following shall be recognized to the extent practicable in forest planning:

(a) Active mines within the area of land covered by the forest plan;
(b) Outstanding or reserved mineral rights;
(c) The probable occurrence of various minerals, including locatable, leasable, and common variety;
(d) The potential for future mineral development and potential need for withdrawal of areas from development;
(e) Access requirements for mineral exploration and development; and
(f) The probable effect of renewable resource prescriptions and management direction on mineral resources and activities, including exploration and development.

§ 219.23 Water and soil resource.

Forest planning shall provide for—

(a) General estimates of current water uses, both consumptive and non-consumptive, including instream flow requirements within the area of land covered by the forest plan;
(b) Identification of significant existing impoundments, transmission facilities, wells, and other man-made developments on the area of land covered by the forest plan;
(c) Estimation of the probable occurrence of various levels of water volumes, including extreme events which would have a major impact on the planning area;
(d) Compliance with requirements of the Clean Water Act, the Safe Drinking Water Act, and all substantive and procedural requirements of Federal, State, and local governmental bodies with respect to the provision of public water systems and the disposal of waste water;
(e) Evaluation of existing or potential watershed conditions that will influence soil productivity, water yield, water pollution, or hazardous events; and
(f) Adoption of measures, as directed in applicable Executive orders, to minimize risk of flood loss, to restore and preserve floodplain values, and to protect wetlands.

§ 219.24 Cultural and historic resources.

Forest planning shall provide for the identification, protection, interpretation, and management of significant cultural resources on National Forest System lands. Planning of the resource shall be governed by the requirements of Federal laws pertaining to historic preservation, and guided by paragraphs (a)(1) through (a)(3) of this section.

(a) Forest planning shall—
(1) Provide an overview of known data relevant to history, ethnography, and prehistory of the area under consideration, including known cultural resource sites;
(2) Identify areas requiring more intensive inventory;
(3) Provide for evaluation and identification of appropriate sites for the National Register of Historic Places;
(4) Provide for establishing measures for the protection of significant cultural resources from vandalism and other human depredation, and natural destruction;
(5) Identify the need for maintenance of historic sites on, or eligible for inclusion in, the National Register of Historic Places; and
(6) Identify opportunities for interpretation of cultural resources for the education and enjoyment of the American public.

(b) In the formulation and analysis of alternatives, interactions among cultural resources and other multiple uses shall be examined. This examination shall consider impacts of the management of cultural resources on other uses and activities and impacts of other uses and activities on cultural resource management.

(c) Formulation and evaluation of alternatives shall be coordinated to the extent feasible with the State cultural resource plan and planning activities of the State Historic Preservation Office and State Archaeologist and with other State and Federal agencies.

§ 219.25 Research natural areas.

Forest planning shall provide for the establishment of Research Natural
Areas (RNA's). Planning shall make provision for the identification of examples of important forest, shrubland, grassland, alpine, aquatic, and geologic types that have special or unique characteristics of scientific interest and importance and that are needed to complete the national network of RNA's. Biotic, aquatic, and geologic types needed for the network shall be identified using a list provided by the Chief of the Forest Service. Authority to establish RNA's is delegated to the Chief at 7 CFR 2.60(a) and 36 CFR 2P1.23. Recommendations for establishment of areas shall be made to the Chief through the planning process.

§ 219.26 Diversity.

Forest planning shall provide for diversity of plant and animal communities and tree species consistent with the overall multiple-use objectives of the planning area. Such diversity shall be considered throughout the planning process. Inventories shall include quantitative data making possible the evaluation of diversity in terms of its prior and present condition. For each planning alternative, the interdisciplinary team shall consider how diversity will be affected by various mixes of resource outputs and uses, including proposed management practices. (Refer to § 219.27(g).)

§ 219.27 Management requirements.

The minimum specific management requirements to be met in accomplishing goals and objectives for the National Forest System are set forth in this section. These requirements guide the development, analysis, approval, implementation, monitoring and evaluation of forest plans.

(a) Resource protection. All management prescriptions shall—

(1) Conserve soil and water resources and not allow significant or permanent impairment of the productivity of the land;

(2) Consistent with the relative resource values involved, minimize serious or long-lasting hazards from flood, wind, wildfire, erosion, or other natural physical forces unless these are specifically excepted, as in wilderness;

(3) Consistent with the relative resource values involved, prevent or reduce serious, long-lasting hazards and damage from pest organisms, utilizing principles of integrated pest management. Under this approach all aspects of a pest-host system should be weighed to determine situation-specific prescriptions which may utilize a combination of techniques including, as appropriate, natural controls, harvesting, use of resistant species, maintenance of diversity, removal of damaged trees, and judicious use of pesticides. The basic principle in the choice of strategy is that, in the long term, it be ecologically acceptable and compatible with the forest ecosystem and the multiple use objectives of the plan;

(4) Protect streams, streambanks, shorelines, lakes, wetlands, and other bodies of water as provided under paragraphs (d) and (e) of this section;

(5) Provide for and maintain diversity of plant and animal communities to meet overall multiple-use objectives, as provided in paragraph (g) of this section;

(6) Provide for adequate fish and wildlife habitat to maintain viable populations of existing native vertebrate species and provide that habitat for species chosen under § 219.19 is maintained and improved to the degree consistent with multiple-use objectives established in the plan;

(7) Be assessed prior to project implementation for potential physical, biological, aesthetic, cultural, engineering, and economic impacts and for consistency with multiple uses planned for the general area;

(8) Include measures for preventing the destruction or adverse modification of critical habitat for threatened and endangered species;

(9) Provide that existing significant transportation and utility corridors and other significant right-of-ways that are capable and likely to be needed to accommodate the facility or use from an additional compatible right-of-way be designated as a right-of-way corridor. Subsequent right-of-way grants will, to the extent practicable, and as determined by the responsible line officer, use designated corridors;

(10) Ensure that any roads constructed through contracts, permits, or leases are designed according to
standards appropriate to the planned uses, considering safety, cost of transportation, and effects upon lands and resources;

(11) Provide that all roads are planned and designed to re-establish vegetative cover on the disturbed area within a reasonable period of time, not to exceed 10 years after the termination of a contract, lease or permit, unless the road is determined necessary as a permanent addition to the National Forest Transportation System; and

(12) Be consistent with maintaining air quality at a level that is adequate for the protection and use of National Forest System resources and that meets or exceeds applicable Federal, State and/or local standards or regulations.

(b) Vegetative manipulation. Management prescriptions that involve vegetative manipulation of tree cover for any purpose shall—

(1) Be best suited to the multiple-use goals established for the area with potential environmental, biological, cultural, resource, aesthetic, engineering, and economic impacts, as stated in the regional guides and forest plans, being considered in this determination;

(2) Assure that lands can be adequately restocked as provided in paragraph (c)(3) of this section, except where permanent openings are created for wildlife habitat improvement, vistas, recreation uses and similar practices;

(3) Not be chosen primarily because they will give the greatest dollar return or the greatest output of timber, although these factors shall be considered;

(4) Be chosen after considering potential effects on residual trees and adjacent stands;

(5) Avoid permanent impairment of site productivity and ensure conservation of soil and water resources;

(6) Provide the desired effects on water quantity and quality, wildlife and fish habitat, regeneration of desired tree species, forage production, recreation uses, aesthetic values, and other resource yields; and

(7) Be practical in terms of transportation and harvesting requirements, and total costs of preparation, logging, and administration.

(c) Silvicultural practices. The following management requirements apply to timber harvest and cultural treatments:

(1) No timber harvesting shall occur on lands classified as not suited for timber production pursuant to §219.14 except for salvage sales, sales necessary to protect other multiple-use values or activities that meet other objectives on such lands if the forest plan establishes that such actions are appropriate. These lands shall continue to be treated for reforestation purposes if necessary to achieve the multiple-use objectives of the plan.

(2) The selected sale schedule provides the allowable sale quantity for the first planning period. Within the planning period, the volume of timber to be sold in any one year may exceed the average annual allowable sale quantity so long as the total amount sold for the planning period does not exceed the allowable sale quantity. Nothing in this paragraph prohibits salvage or sanitation harvesting of timber stands which are substantially damaged by fire, windthrow, or other causes to protect other are in imminent danger of insect or disease attack and where such harvests are consistent with silvicultural and environmental standards. Such timber may either substitute for timber that would otherwise be sold under the plan or, if not feasible, be sold over and above the planned volume.

(3) When trees are cut to achieve timber production objectives, the cuttings shall be made in such a way as to assure that the technology and knowledge exists to adequately restock the lands within 5 years after final harvest. Research and experience shall be the basis for determining whether the harvest and regeneration practices planned can be expected to result in adequate restocking. Adequate restocking means that the cut area will contain the minimum number, size, distribution, and species composition of regeneration as specified in regional silvicultural guides for each forest type. Five years after final harvest means 5 years after clearcutting, 5 years after final overstory removal in
shelterwood cutting, 5 years after the seed tree removal cut in seed tree cutting, or 5 years after selection cutting.

(4) Cultural treatments such as thinning, weeding, and other partial cutting may be included in the forest plan where they are intended to increase the rate of growth of remaining trees, favor commercially valuable tree species, favor species or age classes which are most valuable for wildlife, or achieve other multiple-use objectives.

(5) Harvest levels based on intensified management practices shall be decreased no later than the end of each planning period if such practices cannot be completed substantially as planned.

(6) Timber harvest cuts designed to regenerate an even-aged stand of timber shall be carried out in a manner consistent with the protection of soil, watershed, fish and wildlife, recreation, and aesthetic resources, and the regeneration of the timber resource.

(7) Timber harvest and other silvicultural treatments shall be used to prevent potentially damaging population increases of forest pest organisms. Silvicultural treatments shall not be applied where such treatments would make stands susceptible to pest-caused damage levels inconsistent with management objectives.

(d) Even-aged management. When openings are created in the forest by the application of even-aged silviculture, the following management requirements apply:

(1) Openings shall be located to achieve the desired combination of multiple-use objectives. The blocks or strips cut shall be shaped and blended with the natural terrain, to the extent practicable, to achieve aesthetic, wildlife habitat, or other objectives established in the plan. Regional guides shall provide guidance on dispersion of openings in relation to topography, climate, geography, local land use patterns, forest types or other factors. As a minimum, openings in forest stands are no longer considered openings once a new forest is established. Forest plans may set forth variations to this minimum based on site-specific requirements for achieving multiple-use objectives. Regional guides shall provide guidance for determining variations to this minimum in the forest plan, based on requirements for watershed, wildlife habitat, scenery or other resource protection needs, or other factors.

(2) Individual cut blocks, patches, or strips shall conform to the maximum size limits for areas to be cut in one harvest operation established by the regional guide according to geographic areas and forest types. This limit may be less than, but will not exceed, 60 acres for the Douglas-fir forest type of California, Oregon, and Washington; 80 acres for the southern yellow pine types of Alabama, Arkansas, Georgia, Florida, Louisiana, Mississippi, North Carolina, South Carolina, Oklahoma, and Texas; 100 acres for the hemlock-spruce forest type of coastal Alaska; and 40 acres for all other forest types except as provided in paragraphs (d)(2)(i) through (iii) of this section:

(i) Cut openings larger than those specified may be permitted where larger units will produce a more desirable combination of net public benefits. Such exceptions shall be provided for in regional guides. The following factors shall be considered in evaluating harvest cuts of various sizes and shapes to determine size limits by geographic areas and forest types: Topography; relationship of units to other natural or artificial openings and proximity of units; coordination and consistency with adjacent forests and regions; effect on water quality and quantity; visual absorption capability; effect on wildlife and fish habitat; regeneration requirements for desirable tree species based upon the latest research findings; transportation and harvesting system requirements; environmental and forest pest hazards to regeneration, residual trees, and surrounding stands; and the relative total costs of preparation and administration, transportation requirements, harvesting, site preparation, planting, stocking control, and future stand tending of harvest cuts of various sizes and shapes. Specification for exceptions shall include the particular conditions under which the larger size is permitted and shall set a new max-
(ii) Size limits exceeding those established in paragraphs (d)(2) and (d)(2)(i) of this section are permitted on an individual timber sale basis after 60 days' public notice and review by the Regional Forester.

(iii) The established limit shall not apply to the size of areas harvested as a result of natural catastrophic condition such as fire, insect and disease attack, or windstorm.

(e) Riparian areas. Special attention shall be given to land and vegetation for approximately 100 feet from the edges of all perennial streams, lakes, and other bodies of water. This area shall correspond to at least the recognizable area dominated by the riparian vegetation. No management practices causing detrimental changes in water temperature or chemical composition, blockages of water courses, or deposits of sediment shall be permitted within these areas which seriously and adversely affect water conditions or fish habitat. Topography, vegetation type, soil, climatic conditions, management objectives, and other factors shall be considered in determining what management practices may be performed within these areas or the constraints to be placed upon their performance.

(f) Soil and water. Conservation of soil and water resources involves the analysis, protection, enhancement, treatment, and evaluation of soil and water resources and their responses under management and shall be guided by instructions in official technical handbooks. These handbooks must show specific ways to avoid or mitigate damage, and maintain or enhance productivity on specific sites. These handbooks may be regional in scope or, where feasible, specific to physiographic or climatic provinces.

(g) Diversity. Management prescriptions, where appropriate and to the extent practicable, shall preserve and enhance the diversity of plant and animal communities, including endemic and desirable naturalized plant and animal species, so that it is at least as great as that which would be expected in a natural forest and the diversity of tree species similar to that existing in the planning area. Reductions in diversity of plant and animal communities and tree species from that which would be expected in a natural forest, or from that similar to the existing diversity in the planning area, may be prescribed only where needed to meet overall multiple-use objectives. Planned type conversion shall be justified by an analysis showing biological, economic, social, and environmental design consequences, and the relation of such conversions to the process of natural change.

§ 219.28 Research.

(a) Research needs for management of the National Forest System shall be identified during planning and periodically reviewed during evaluation of implemented plans. Particular attention should be given to research needs identified during the monitoring and evaluation described in §219.12(k). These identified needs shall be included in formulating overall research programs and plans which involve private as well as public forest and range-lands.

(b) Research needed to support or improve management of the National Forest System shall be established and budgeted at the research station and national levels. Priorities for this portion of the Forest Service Research Program shall be based upon the information gathered at all planning levels of the National Forest System.

(c) An annual report shall be prepared at the national level with assistance from Regions and Stations which shall include, but not be limited to, a description of the status of major research programs which address National Forest System needs for research, significant findings, and how this information is to be or has recently been applied.

§ 219.29 Transition period.

(a) Until a forest planning area of the National Forest System is managed under a forest plan developed pursuant to this subpart and approved by the Regional Forester, the land may continue to be managed under existing land use and resource plans. As soon as practicable, existing plans shall be amended or revised to incor-
porate standards and guidelines in this subpart. Pending approval of a forest plan, existing plans may be amended or revised to include management requirements not inconsistent with the provisions of the RPA and these regulations.

(b) Requirements of amendments to this subpart shall be incorporated in forest plans and regional guides through the ongoing planning process. Planning process steps already completed need not be repeated.

(1) If, prior to the effective date of an amendment to this subpart, a forest plan either has been approved in final form or released in draft form for public review, the plan need not be modified to incorporate requirements of such amendment, until the next scheduled revision of the forest plan;

(2) If, prior to the effective date of an amendment to this subpart, a regional guide either has been approved in final form or released in draft form for public review, the guide need not be modified to incorporate the requirements of such amendment, until a significant amendment to the guide is made for reasons other than incorporating requirements of amendments to this subpart.

(c) A forest plan may become effective prior to the development and approval of its related regional guide, provided that the forest plan is reviewed upon regional guide approval, and if necessary, amended to comply with regional management direction. If such an amendment is significant, it shall be accomplished pursuant to the requirements for the development of a forest plan as set forth in this subpart.

(d) As a result of the eruption of Mount St. Helens, a land management plan for the Mount St. Helens area shall be prepared substantially in accordance with the following procedures:

(1) Notwithstanding any other provisions in this subpart, the area included in the Mount St. Helens land management plan will not be subject to planning activities for the first generation Gifford Pinchot National Forest Plan unless the Regional Forester for the Pacific Northwest Region determines that additional planning activities are desirable.

(2) Lands which were inventoried as roadless and designated for nonwilderness uses in the Roadless Area Review and Evaluation (RARE II) shall be managed for uses other than wilderness. Except for a small part of the Mount Margaret roadless area (B 6071), the Mount St. Helens land management plan shall not consider wilderness designation for these lands.

(3) Lands which were inventoried as roadless and designated as further planning in the Roadless Area Review and Evaluation (RARE II) shall be evaluated in the Mount St. Helens land management plan and shall be managed in accordance with that plan.

PART 221—TIMBER MANAGEMENT PLANNING

§ 221.3 Disposal of national forest timber according to management plans.

(a) Management plans for national forest timber resources shall be prepared and revised, as needed, for working circles or other practicable units of national forest. Such plans shall:

(1) Be designed to aid in providing a continuous supply of national forest timber for the use and necessities of the citizens of the United States.

(2) Be based on the principle of sustained yield, with due consideration to the condition of the area and the timber stands covered by the plan.

(3) Be based on the principle of sustained yield, with due consideration to the condition of the area and the timber stands covered by the plan.

(4) Be based on the principle of sustained yield, with due consideration to the condition of the area and the timber stands covered by the plan.

(5) Establish the allowable cutting rate which is the maximum amount of timber which may be cut from the national forest lands within the unit by years or other periods.

(6) Be approved by the Chief, Forest Service, unless authority for such approval shall be delegated to subordinates by the Chief.

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