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Draft Environmental Impact Statement

National Forest System Land Management Planning

United States Department of Agriculture, Forest Service

National Forest System Land Management Planning
Draft
Environmental Impact Statement

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Abstract: The Agency proposes to publish a rule at 36 CFR part 219 to finish rulemaking on the land management planning rule issued on January 5, 2005 (2005 rule). The 2005 rule guides development, revision, and amendment of land management plans for units of the National Forest System. The Agency is considering five alternatives in detail, including the proposed action. The proposed action and preferred alternative is the planning rule published on January 5, 2005 and amended on March 3, 2006 (Alternative A). Other alternatives are: the 2000 rule as it existed before promulgation of the 2005 rule (Alternative B); the 1982 rule as it existed before promulgation of the 2000 rule (Alternative C); a modified version of the 2005 rule, which does not include the requirements for an environmental management system (EMS) (Alternative D); and a modified version of the 2005 rule, which does not include the requirements for an EMS and includes timber requirements placed in Agency directives under the 2005 rule (Alternative E). The effects analysis concludes that there are no direct, indirect, or cumulative effects from any of the alternatives. The draft environmental impact statement is available online at http://www.fs.fed.us/emc/nfma/2007_planning_rule.html. The final environmental impact statement, when completed, will be available on the same website.

Reviewers should provide the Forest Service with their comments during the review period of the draft environmental impact statement. Doing so will enable the Agency to analyze and respond to the comments at one time and to use information acquired in the preparation of the final environmental impact statement, thus avoiding undue delay in the decisionmaking process. Reviewers have an obligation to structure their participation in the National Environmental Policy Act process so that it is meaningful and alerts the Agency to their position and concerns. Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 553 (1978). Environmental objections that could have been raised at the draft stage may be waived if not raised until after completion of the final environmental impact statement. City of Angoon v. Hodel (9th Circuit, l986) and Wisconsin Heritages, Inc. v. Harris, 490 F. Supp. 1334, 1338 (E.D. Wis. 1980). Comments on the draft environmental impact statement should be specific and should address the adequacy of the statement and the merits of the alternatives discussed (40 CFR 1503.3).

Send Comments to:	**planningrule@fscomments.org or to Planning Rule Comments P.O. Box 162969 Sacramento, CA 95816–2969 or via facsimile to (916) 456–6724**
Date By Which Comments Must Be Received:	**October 22, 2007**

SUMMARY

The Agency is seeking public comment on a proposed land management planning rule at 36 CFR part 219 to finish rulemaking on the National Forest System land management planning rule issued on January 5, 2005 (2005 rule) and amended on March 3, 2006. The proposed planning rule and alternative planning rules would establish administrative procedures whereby National Forest System land management plans are developed, revised, and amended.

This action is needed because the Forest and Rangeland Renewable Resources Planning Act of 1974 (88 Stat. 476 *et seq.*), as amended by the National Forest Management Act of 1976 (NFMA) (90 Stat. 2949 *et seq.*; 16 U.S.C. 1601–1614), requires the Secretary to promulgate regulations under the principles of the Multiple-Use Sustained-Yield Act of 1960, which established the process for the development and revision of land and resource management plans (16 U.S.C. 1604(g)).

The 2005 rule at 36 CFR part 219 (70 FR 1022) resulted from a review of the National Forest System Land Management Planning Rule issued on November 9, 2000 (2000 rule). The review found (1) the 2000 rule has definitions and analytical requirements that are complex, unclear, and, therefore, subject to inconsistent implementation across the Agency; (2) compliance with the regulatory direction in the 2000 rule regarding ecological sustainability and science consistency checks would be difficult to accomplish; and (3) the complexity of the 2000 rule makes it difficult and expensive to conduct.

This proposal to publish a land management planning rule improves on the 2000 rule with a planning process that is easier to understand, is in the Agency's capability to accomplish, is consistent with the capabilities of National Forest System lands, and recognizes the strategically programmatic nature of planning.

This rulemaking is the result of a U.S. district court order dated March 30, 2007, which enjoined the United States Department of Agriculture from implementing and utilizing the 2005 planning rule (70 FR1022) until it complies with the court’s order regarding compliance with the National Environmental Policy Act, the Endangered Species Act, and the Administrative Procedure Act (APA) (*Citizens for Better Forestry et al. v. USDA*, C.A. C05-1144 (N. D. Cal.)).

The Agency published a Notice of Intent in the Federal Register on May 11, 2007 (72 FR 26775), to start the public involvement process. Also, the Agency sent a letter on May 14, 2007, to more than 500 stakeholders giving notice of its intent to prepare an environmental impact statement to analyze and disclose potential environmental consequences associated with a National Forest System land management planning rule.

The Forest Service reviewed documents filed in *Citizens for Better Forestry et al. v. USDA* (N.D. Calif.), comments in response to the notice of intent, comments previously collected during promulgation of the 2005 rule (70 FR 1022), Agency planning directives (72 FR 4478, 71 FR 10956, 71 FR 5124), and the Agency categorical exclusion for land management planning (71 FR 75481). An interdisciplinary team developed a list of issues for discussion:

Diversity of Plant and Animal Communities

Some respondents are concerned the 2005 rule procedures for diversity weaken protection for fish and wildlife species because the 2005 rule does not include the requirements for managing habitat to maintain viable populations, the requirement to select management indicator species (MIS), and the requirement to either establish habitat objectives for MIS or monitor population trends of MIS.

Timber Management Requirements of 16 U.S.C. 1604(g)

Some respondents are concerned the 2005 rule guidance for timber resource management (36 CFR 219.12(b)(2)) is inadequate because it does not include the level of specificity of the 1982 rule. Further, some respondents contend the timber management requirements from NFMA are legally required to be in the regulations. Although the 2005 rule states that these requirements will be found in internal Forest Service directives, courts have frequently found that internal Agency directives are not judicially enforceable.

Identification of lands not suited for timber production (16 U.S.C. 1604(k))

Some respondents are concerned the 2005 rule guidance for identification of lands not suited for timber production (36 CFR 219.12(a)(2) (2005)) is insufficient because it does not include the level of detail that was included in earlier rules. They are concerned this level of detail represents an elimination of resource protection standards.

Standards and Prohibitions

Some respondents are concerned that the 2005 rule limits land management plans to strategic plan components rather than being a conventional plan. A conventional plan would include plan components that prohibit uses or activities in management areas or prohibit activities near specific ecological features, such as within 100 feet of streams. Some respondents are concerned with guidelines because the 2005 planning rule allows the responsible official discretion (36 CFR 219.12(b)(2)).

Environmental Impact Statement

There is concern that by not requiring an environmental impact statement for plan revisions, the proposed action (2005 rule) does not require consideration of a full range of planning alternatives, reduces public involvement in land management planning, and leaves consideration of cumulative effects to project-level analyses.

Best Available Science and Land Management Plans

Some respondents are concerned because the 2005 rule requires the responsible official to take into account the best available science, while the 2000 rule requires the responsible official to ensure the plan is consistent with the best available science (36 CFR 219.24 (2005)).

Management requirements

Some respondents are concerned the proposed planning rule does not include minimum specific management requirements as the 1982 rule did at §219.27(1982). They contend that the lack of management requirements in the planning rule will reduce environmental protections and result in significant environmental impacts. They further contend that lower environmental requirements in a planning rule will likely result in less environmental protection at the unit and site-specific levels.

These issues led the Agency to develop alternatives to the proposed action. The Forest Service developed five alternatives for detailed study, including the No Action and Proposed Action alternatives, in response to the significant issues.

Alternative A (Proposed Action)

The 2005 rule, as originally published on January 5, 2005, and amended on March 3, 2006, and with updated effective date and transition period date at §219.14 is the proposed action and preferred alternative. This rule is Appendix A of this environmental impact statement.

The proposed rule describes the National Forest System land management planning framework; establishes requirements for sustaining social, economic, and ecological systems and developing, amending, revising, and monitoring land management plans; and clarifies that land management plans under this rule, absent extraordinary circumstances, are strategic and are one stage in an adaptive management cycle of planning for management of National Forest System lands. The intended effects of the rule are to streamline and improve the planning process by increasing the adaptability to changes in social, economic, and environmental conditions; by strengthening the role of science in planning; by strengthening collaborative relationships with the public and other governmental entities; and to reaffirm the principle of sustainable management consistent with the Multiple-Use Sustained-Yield Act and other authorities.

Alternative B (No Action)

Under the No Action alternative, the 2000 rule at 36 CFR part 219, as it existed before promulgation of the 2005 rule, would guide development, revision, and amendment of land management plans for the National Forest System. This rule describes the framework for National Forest System land and natural resource planning; reaffirms sustainability as the goal for National Forest System planning and management; sets up requirements for the implementation, monitoring, evaluation, amendment, and revision of land and resource management plans; and guides the selection and implementation of site-specific actions. The intended effects of the rule are to simplify, clarify, and otherwise improve the planning process; to reduce burdensome and costly procedural requirements; to strengthen and clarify the role of science in planning; and to strengthen collaborative relationships with the public and other government entities. The 2000 rule, as amended, is Appendix B of this environmental impact statement.

Alternative C (1982 planning rule)

Under this alternative, the 1982 rule at 36 CFR part 219, as it existed before promulgation of the 2000 rule, would guide development, revision, and amendment of land management plans for the National Forest System.

This rule requires integration of planning for national forests and grasslands, including the planning for timber, range, fish and wildlife, water, wilderness, and recreation resources, with resource protection activities such as fire management, and the use of other resources such as minerals. The 1982 rule, as amended, is Appendix C of this environmental impact statement.

Alternative D (Proposed Action Modified)

This alternative is the same as the proposed action (Alternative A) but without either environmental management system (EMS) requirements or references to EMS. The EMS section at §219.5 in the proposed action is not in this alternative. EMS would not be part of the plan set of documents. EMS establishment would not be required before plan approval and it would not mark the end of the transition period.

Alternative E (Proposed Action Modified)

This alternative is the same as the proposed action (Alternative A) as modified by: 1) removing environmental management systems (EMS) requirements and various references to EMS, 2) adding standards as a plan component, 3) adding more direction about identifying lands suitable for timber production and timber harvest, and 4) adding various timber management requirements from the National Forest Management Act (NFMA). This direction for various timber management requirements is currently specified in Forest Service directives (FSM 1921.12, FSH 1909.12, chapter 40).

This alternative maintains the provision at §219.4, which defers to Agency NEPA procedures for the environmental analysis level and documentation needed. Under this alternative, the NEPA analysis level and documentation would be based on how a unit applies the six plan components. It would be possible for one unit to approve a plan with a categorical exclusion, a second unit to use an environmental assessment, and a third unit might use an environmental impact statement.

Four additional alternatives were considered and eliminated from detailed study because they did not meet the purpose and need for action.

Major conclusions of the environmental analysis are as follows:

In the end, regardless of the planning rule used, land management plans for each unit of the National Forest System show social and economic values placed on National Forest System lands and environmental laws, regulations, and requirements for protection of the environment. The proposed planning rule and alternative planning rules merely set forth processes to recognize and document these values and environmental protections.

The proposed planning rule and alternative planning rules have no direct, indirect, or cumulative effect on the human environment. None of the alternatives would result in unavoidable adverse effects or any diminution of productivity of NFS lands. Finally, these rules do not call for any irreversible or irretrievable commitments of resources.

The draft environmental impact statement for the proposed planning rule is available online at http://www.fs.fed.us/emc/nfma/2007_planning_rule.html. The final environmental impact statement, when completed, will be available on the same website.

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CHAPTER 1. PURPOSE OF AND NEED FOR ACTION

Document Structure

The Forest Service has prepared this environmental impact statement in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This environmental impact statement discloses the direct, indirect, and cumulative environmental impacts that could result from the proposed action and alternatives. This environmental impact statement is available online at http://www.fs.fed.us/emc/nfma/2007_planning_rule.html. The final environmental impact statement, when completed, will be available on the same website.

The document is organized into four chapters:

Chapter 1. Purpose and Need for Action: This chapter includes information on the history of the proposal, the purpose of and need for action, and the Agency's proposal for achieving the purpose and need. This chapter also details how the Forest Service informed the public of the proposal and how the public responded. Finally this chapter summarizes issues with the proposed action identified from internal and external scoping.

Chapter 2. Alternatives, including the Proposed Action: This chapter provides a more detailed description of the Agency's proposed action as well as alternative methods for achieving the stated purpose. These alternatives were developed based on significant issues identified during scoping.

Chapter 3. Affected Environment and Environmental Consequences: This chapter describes the environmental effects of implementing the proposed action and other alternatives.

Chapter 4. Consultation and Coordination: This chapter provides a list of preparers and agencies consulted during the development of the environmental impact statement.

Appendices: The appendices provide more detailed information to support the analyses presented in the environmental impact statement.

Index: The index provides page numbers by document topic.

Additional documentation, including more detailed analyses, is in the project planning record.

Background

The Forest Service is responsible for managing the lands and resources of the National Forest System (NFS), which include 193 million acres in 44 states, Puerto Rico, and the Virgin Islands. The NFS is composed of 155 national forests, 20 national grasslands, one national prairie, and other miscellaneous lands under the jurisdiction of the Secretary of Agriculture (the Secretary).

The Forest and Rangeland Renewable Resources Planning Act of 1974 (88 Stat. 476 *et seq*.), as amended by the National Forest Management Act of 1976 (NFMA) (90 Stat.

2949 *et seq*.; 16 U.S.C. 1601-1614), requires the Secretary to promulgate regulations under the principles of the Multiple-Use Sustained-Yield Act of 1960 that establish the process for the development and revision of land and resource management plans (16 U.S.C. 1604(g)).

The first planning rule, adopted in 1979, was substantially amended on September 30, 1982 (47 FR 43026), and was amended, in part, on June 24, 1983, (48 FR 29122), and on September 7, 1983 (48 FR 40383). It is the 1982 rule, as amended, that has guided the development, amendment, and revision of the land and resource management plans (plans) on all national forests and grasslands.

The Forest Service has undertaken several reviews of the planning process implemented under the 1982 rule. The first review took place in 1989 when the Forest Service, with the assistance of the Conservation Foundation, conducted a comprehensive review of the planning process and published the results in a summary report, "Synthesis of the Critique of Land Management Planning" (1990). The critique concluded that the Agency spent too much time on planning, that planning costs too much; and, therefore, that the Forest Service needed a more efficient planning process.

Subsequently, the Forest Service published an Advance Notice of Proposed Rulemaking on February 15, 1991, (56 FR 6508) regarding possible revisions to the 1982 Rule. A proposed rule was published in 1995 (60 FR 18886), however, the Secretary elected not to proceed with that proposal.

In response to comments on the 1995 proposed rule, the Secretary convened a 13-member Committee of Scientists in late 1997 to evaluate the Forest Service's planning process and recommend changes. In 1998, the Committee of Scientists held meetings across the country and invited public participation in the discussions. The Committee's findings were issued in a final report, "Sustaining the People's Lands" (March 1999). The Agency learned that it can improve planning by relying on the concepts and principles of social, economic, and ecological sustainability; by applying the best available scientific knowledge; and by effectively collaborating with a broad array of citizens, other public servants, and governmental and private entities. In response to many of the findings in the 1990 *Synthesis of the Critique of Land Management Planning* and the 1999 Committee of Scientists report, the Forest Service attempted to prepare a planning rule that would provide a more efficient planning process. A proposed rule was published on October 5, 1999 (64 FR 54074), and a final rule was adopted on November 9, 2000 (65 FR 67514).

In the environmental assessment for the 2000 rule the Agency stated, "The current regulation requires many detailed analyses that often are not responsive to evolving social, economic, and natural environments. Further, the existing regulation imposes now obsolete and sometimes unnecessary requirements. Finally, the Forest Service has found that these requirements often do not lead to the development of reliable or useful information regarding the condition of the environment on National Forest System lands or the production of products and services from those lands." The environmental assessment also stated, "Practical results from the first generation of plans for National Forests and Grasslands reveal a clear and pressing need to reduce the technical and administrative burdens of costly procedural requirements, improve coordination with the public and other governmental entities, and improve the application of the best available scientific understanding of sustainable ecological, social, and economic environments." (USDA Forest Service 2001)

The purpose of the 2000 rule was to simplify, clarify, and otherwise improve the planning process; to reduce burdensome and costly procedural requirements; and to strengthen collaborative relationships with the public and other government entities.

The 2000 rule changed the Forest Service planning process by: (1) establishing ecological, social, and economic sustainability as the overall stewardship goal for managing the National Forest System; (2) identifying maintenance and restoration of ecological sustainability as the first priority for management of National Forest System lands; (3) requiring collaboration with the general public, interested organizations, Tribal, State and local governments, and Federal agencies in all phases of the planning process; (4) expanding monitoring and evaluation requirements; (5) specifying the involvement of scientists and establishing detailed requirements for the application of science in the planning process; and (6) providing a dynamic planning framework for solving problems and addressing issues at the appropriate scale. The 2000 rule applied to plan amendments and revisions and to project-level planning and decisionmaking.

The 2000 planning rule emphasized sustainability, which assists the Forest Service in providing for multiple uses through time. The 2000 rule also focused on updating existing plans and it removed some analytical requirements of the 1982 rule, such as the requirements for developing benchmarks, which are no longer considered helpful. The 2000 rule also emphasized public involvement more than the 1982 rule. The 2000 rule gave explicit direction on the use of science in the planning process, while the 1982 rule relied on knowledge shared through an interdisciplinary team approach without procedural requirements for the use of science. The 2000 rule replaced the post-decisional administrative appeal process for challenging plans with a pre-decisional objection process. The 2000 rule also delegated the authority for plan decisions to the forest or grassland supervisor, rather than to the regional forester. The 2000 rule recognized the plan as a dynamic document.

After adoption of the 2000 rule, the Secretary received a number of comments from individuals, groups, and organizations expressing concerns regarding the implementation of the 2000 rule. In addition, lawsuits challenging promulgation of the rule were brought by a coalition of 12 environmental groups from seven states and by a coalition of industry groups (*Citizens for Better Forestry* v. *USDA*, No. C-01-0728-BZ- (N.D. Calif., filed February 16, 2001)) and (*American Forest and Paper Ass'n* v. *Veneman*, No. 01-CV-00871 (TPJ) (D.D.C., filed April 23, 2001)). As a result of these lawsuits and concerns raised in comments to the Secretary, the Department of Agriculture initiated a review of the 2000 rule focusing on implementation. The NFMA Planning Rule Review, completed in April 2001, concluded that many of the concerns regarding implementation of the rule were serious and required immediate attention. (USDA Forest Service 2001)

The Forest Service developed a business analysis model of the 2000 rule and then conducted a workshop with field-level planners to determine how to implement the 2000 rule based on the business model. The business model provided the basis for a systematic evaluation of the rule. The facilitated workshop centered on answering two questions: (1) Are the business requirements clearly understood? (2) What is the Agency's perceived ability to execute the requirements? An important consideration is that the evaluation of the 2000 rule was conducted by planning practitioners with current field-level experience. The practitioners were Agency experts in a variety of resource areas that could assess

what can reasonably be accomplished, considering existing knowledge and information, the issues relevant to planning areas, and local staffing and funding situations. The business model review determined that implementation of the 2000 rule would require significantly more time and budget than the Agency had previously committed to updating and maintaining unit plans. (USDA Forest Service 2002)

Having considered the reports of the review teams, the Acting Deputy Under Secretary for Natural Resources and Environment requested that the Chief of the Forest Service develop a proposed rule to revise the 2000 rule. A new planning rule was proposed on December 6, 2002 (67 FR 72770).

Also, interim final rules extending the transition from the 1982 planning rule to the 2000 planning rule were published in 2001 (66 FR 27552) and 2002 (67 FR 35431), the latter rule allowed Forest Service managers to elect to continue preparing plan amendments and revisions under the 1982 planning rule until a new final rule was adopted. An interim rule was published in 2003 (68 FR 53294) extending the date by which site-specific project decisions must conform with provisions of the 2000 planning rule until a new rule is promulgated. Finally, an interpretive rule was published in 2004 (69 FR 58055) to clarify the intent of the transition section of the 2000 rule regarding the consideration and use of the best available science to inform project decision making.

The final 2005 rule was published January 5, 2005 (70 FR 1022), and amended March 3, 2006 (71 FR 10837). It was subsequently the subject of litigation (*Citizens for Better Forestry et al. v. USDA* (N.D. Calif.)). In an order dated March 30, 2007, the United States District Court enjoined the USDA from implementing and utilizing of the 2005 rule until it takes additional steps to comply with the court's opinion regarding the Administrative Procedure Act (APA), the Endangered Species Act (ESA), and the National Environmental Policy Act (NEPA). The Court stated, "In particular, the agency must provide notice and comment on the 2005 Rule as required by the APA since the court concludes that the rule was not a "logical outgrowth" of the 2002 Proposed Rule. Additionally, because the 2005 Rule may significantly affect the quality of the human environment under NEPA, and because it may affect listed species and their habitat under ESA, the agency must conduct further analysis and evaluation of the impact of the 2005 Rule in accordance with those statutes."

Without conceding the correctness of the Court's ruling, which is being addressed through the judicial process, the Agency has decided to undertake this process, thus expediting much needed plan revisions and improving the Agency's stewardship of National Forest System lands.

Purpose and Need for Action

The purpose and need for action was described in the notice of intent to prepare an environmental impact statement published in the Federal Register on May 11, 2007. (72 FR 26775) While the notice only stated the summary conclusions from the two planning rule reviews described below, the following discussion provides a complete list of findings from the two reviews.

The purpose of the proposed rule is two fold. The primary purpose is to improve upon the 2000 rule by providing a planning process that is readily understood, is within the Agency's capability to implement, is consistent with the capabilities of National Forest

System lands, recognizes the strategic programmatic nature of planning, and meets the intent of the National Forest Management Act (NFMA) while making cost effective and efficient use of resources allocated to the Agency for land management planning.

The second purpose of this action is a partial response to the court order of March 30, 2007, (*Citizens for Better Forestry et al. v. USDA* (N.D. Calif.) described above. This environmental impact statement was prepared to document analysis and evaluation of the impact of the 2005 rule in accordance with NEPA.

This proposed rule is needed to address the limitations of the 2000 rule as identified in the April 2001 NFMA Planning Rule Review and the May 2002 business model analysis workshop discussed above.

The NFMA Planning Rule Review found the following:

(1) In the 2000 rule, ecological sustainability is a new management standard and economic and social sustainability has secondary focus, which contravenes multiple use and sustained yield principles;

(2) There are three problems identified regarding the viability provisions in the 2000 rule. First is the level of precision implied for measurement of viability; second is that the viability requirement in the rule extends beyond what is required in statute; and third, a coarse-filter approach has been offered as being more consistent with scientific feasibility and more consistent with management of ecosystems than hundreds of individual species assessments.

(3) The rule injects scientists directly into the planning process. While it might be appropriate to consider the best available science, it is the science that is relevant, not the person bringing it. The rule requirement to consult scientists could lead to confusion about what role the scientists play in the decision.

(4) Increasing dependence on research and development scientists alone would effectively overwhelm the research mission of the Forest Service.

(5) The rule requires considerable analysis of ecological, economic, and social components of sustainability, all of which must be accomplished using the best available science. Those analysis requirements are substantially greater than anything accomplished in even the most intense planning efforts and they are likely beyond the Agency's capability.

(6) The rule calls for a science advisory board to provide scientific advice on issues identified by the Chief, and Federal Advisory Committee Act (FACA)-compliant regional advisory boards to advise regional foresters regarding the application of science. The processes to establish FACA-compliant science advisory boards are difficult. Their costs could be substantial.

(7) The rule describes a level and specificity of monitoring that might not be feasible. The rule includes requirements establishing monitoring methodologies, methods frequency of sampling and sampling protocols, i.e., population monitoring, in the plan, resulting in unnecessary delay of decisions and investments in information that are not warranted or necessary to make a reasoned decision.

The business model analysis workshop raised the following issues, which are similar to those noted by the NFMA Planning Rule Review:

(1) The ability to achieve the ecological, social, and economic sustainability standards in the 2000 rule and the viability provisions for the diversity of plant and animal communities is questionable;

(2) The 2000 rule includes unnecessarily detailed procedural requirements for scientific peer reviews, broad-scale assessments, monitoring, and science advisory boards.

(3) The rule requirements do not recognize the limits of budgets for use of science and it did not clearly relate use of science to the scope of issues in the planning process;

(4) The 2000 rule also did not recognize limitations on the availability of scientists. It is unwise to place such detailed requirements on the use of scientists in the rule given the ambiguities of the rule text and the limited availability of scientists. Although science is needed to inform the responsible official, the reviewers concluded that the 2000 rule anticipated a level of involvement by scientists that might not be needed considering the planning issues or the anticipated amount of project activities in the plan area;

(5) The unnecessarily detailed requirements for monitoring and evaluation in the 2000 rule are likely beyond the capacity of many units to perform;

(6) Mixing programmatic and project-level planning direction throughout the rule is confusing; and

(7) The monitoring requirements in the 2000 rule are overly prescriptive and do not provide the responsible official sufficient discretion to decide how much information is needed.

The business model analysis workshop conclusions are a suitable summary of both reviews:

(1) The 2000 rule has both definitions and analytical requirements that are very complex, unclear, and, therefore, subject to inconsistent implementation across the Agency;

(2) Compliance with the regulatory direction on such matters as ecological sustainability and science consistency checks would be difficult, if not impossible, to accomplish;

(3) The complexity of the 2000 rule makes it difficult and expensive to implement;

Moreover, in 2002, public comment on the proposed rule identified the following principles and practical considerations for plans and planning:

- *Plans should be strategic in nature.* The purpose of plans should be to establish goals for forests, grasslands, and prairies and establish the guidance to follow in pursuit of those goals. Such goals can be expressed by describing desired conditions, objectives, guidelines, suitability of areas, and special areas. Typically, a plan does not include final decisions approving projects or activities.
- *Plans must be adaptive and based on current information and science.* During the 15-year life expectancy of a plan, information, science, and unforeseen circumstances evolve. Adjusting plans and the plan-monitoring program using adaptive management principles and reaction to new information and science swiftly and efficiently must be possible.
- *Land management planning must involve the public.* Plans are prepared for the public's lands. Public participation and collaboration should be welcomed and

encouraged as a part of planning. To the extent possible, responsible officials should work collaboratively with the public to help balance conflicting needs, to evaluate management under the plans, and to consider the need to adjust plans.

- *Plans must guide sustainable management of NFS lands.* The Multiple-Use Sustained-Yield Act (MUSYA) of 1960 (16 U.S.C. 528–531) requires that NFS lands be managed to provide a continuous flow of goods and services to the nation. To meet this requirement, plans must focus on providing a sustainable framework – based on social, economic, and ecological systems – that guides on-the-ground management of projects and activities and provides these goods and services.
- *Planning must comply with all applicable laws, regulations, and policies.* Planning must comply with all applicable laws, regulations, and policies, although all these requirements do not need to be restated in a plan. For example, the Clean Water Act includes requirements for non-point source management programs, to be administered by the States. The States or the Forest Service then develops Best Management Practices (BMPs) for use in design of projects or activities on NFS lands. BMPs are designed to meet State water quality standards and are intended to result in the prevention of adverse consequences. Specific BMPs do not have to be repeated in the plan to be in effect and applicable to NFS projects and activities.

Based on the results of the aforementioned reviews and principles and practical considerations, there is a need for a planning rule that

- Contains clear and readily understood requirements;
- Makes efficient use of Agency staff resources and collaborative efforts;
- Establishes a planning process that can be conducted within Agency planning budgets;
- Provides for diversity of plan and animal species, consistent with capabilities of National Forest System lands;
- Requires analyses that are within the Agency's capability to conduct;
- Recognizes the strategic nature of land management plans;
- Considers best available science;
- Requires public involvement in development of a monitoring strategy, taking into account key social, economic, and ecological performance measures and provides the responsible official sufficient discretion to decide how much information is needed;
- Promotes the use of adaptive management;
- Involves the public;
- Guides sustainable management; and
- Complies with applicable laws, regulations, and policies.

Proposed Action

The Agency is proposing adoption of a planning rule that is essentially identical to the 2005 rule as published in the Federal Register on January 5, 2005 (70 FR 1022) and amended on March 3, 2006 (71 FR 10837). The proposed rule only differs from the 2005 final rule for the effective date and for the end of the transition period date in §219.14. The proposed planning rule is the culmination of the Agency's response to issues with the previous planning rules: 1979 rule, 1982 rule, 1995 proposed rule, 1999 proposed rule, 2000 rule, and 2002 proposed rule. The complete rule is provided in Appendix A.

Decision Framework

The Under Secretary for Natural Resources and Environment, USDA, will decide whether or not to promulgate the planning rule, as proposed, or some alternative thereto that meets the stated purpose and need.

Public Involvement

A notice of intent was published in the Federal Register on May 11, 2007. The notice of intent asked for public comment on the proposal until June 11, 2007. Because of the extensive amount of public comment already received on the 2005 rule, planning directives, and the Agency categorical exclusion for land management planning, no public meetings were held for the scoping effort.

In addition to considering comments received during the scoping period, the Forest Service reviewed the court's opinion in *Citizens for Better Forestry et al. v. USDA* (N.D. Calif.) and comments previously collected during promulgation of the 2005 rule (70 FR 1022), Agency planning directives (72 FR 4478, 71 FR 5124), and the Agency categorical exclusion for land management planning (71 FR 75481). Based on comments and the aforementioned review, an interdisciplinary team developed a list of issues to address.

The Agency received a little over 800 responses regarding the notice of intent to prepare an environmental impact statement. The responses ranged in length from one sentence to sixty-two pages. Comments contained within the responses included advocacy for a particular planning rule, suggested analyses to conduct, issues to consider, compliance with laws and regulations, and alternatives to the proposed action.

The comments represent a wide range of viewpoints. On one end of the range, responses applaud the proposed action and encourage the agency to move forward as quickly as possible. On the other end, respondents seem to have fundamentally different viewpoints from the Agency regarding the proposed action, the nature of a planning rule, and the potential environmental impacts of the proposed action. Those alternative viewpoints were very helpful in preparation of the issues, alternatives, and environmental consequences sections of this environmental impact statement.

Some responses raised specific issues with the proposed action while others raised broader points of debate with overall management of the National Forest System. Some respondents also suggested alternatives to the proposed action while others suggested alternative processes for promulgating a planning rule or alternative purposes for the National Forest System.

One response recommended creating a formal advisory group to generate alternative planning rules. Such a process is not without merit. However, the Agency has already invested considerable resources in developing the 2005 rule. The proposed planning rule (2005 rule) is the result of 28 years of learning about land management planning rules through experience with application, collaboration, and various forms of public and scientific review. The Agency has chosen the current rulemaking process to afford the public an opportunity to comment on and suggest alternatives to the proposed planning rule. Several alternative planning rules were suggested, but none met the stated purpose and need for action. The suggested alternatives are discussed in Chapter 2.

A number of respondents offered advice about what analysis should be completed or what procedures were most appropriate. The agency also received many comments regarding the purpose and need, the nature of planning, and what should be accomplished through the planning regulation. The agency considered all comments, including those determined to be outside the scope of the environmental impact statement. Scoping comments are included in the project record.

Issues

The Council on Environmental Quality (CEQ) regulations at 40 CFR 1501.7 direct agencies to "Determine the scope (§1508.25) and the significant issues to be analyzed in depth in the environmental impact statement" and to "identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (§1506.3)." Scope consists of the range of actions, alternatives, and impacts to be considered in an environmental impact statement. (40 CFR 1508.24) The scope of this environmental impact statement is defined by the proposed action, alternatives developed to address significant issues while meeting the purpose and need for action, and the potential impacts identified in the significant issues.

The Forest Service identified as significant those issues that could directly or indirectly result from implementing the proposed action. Issues identified as not being significant were those, 1) outside the scope of the proposed action; 2) already decided by law or other regulation; 3) unrelated to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence. A list of non-significant issues and reasons regarding their categorization as non-significant is in the record.

The Forest Service identified the following significant issues during scoping. The issues represent alternative viewpoints concerning possible effects of implementing the proposed planning rule.

Diversity of Plant and Animal Communities

Some respondents are concerned the proposed action's (2005 rule) ecosystem diversity and species diversity provisions weaken the protections for fish and wildlife species because they do not include the requirements for managing habitat to maintain viable populations or the requirement to select management indicator species (MIS), establish habitat objectives for MIS, or monitor population trends of MIS that were included in the 1982 rule. Some respondents have the concern that the 2005 rule eliminates or relaxes substantive environmental protections for wildlife habitat because it doesn't establish provisions to "ensure" habitat for viable populations.

Some respondents are concerned that the 2005 rule supplies too much discretion to the responsible official and therefore delegates decision-making authority that will not be subject to stringent review by the courts. Even though the 2005 rule requires guidance to be placed in the Agency directive system, some respondents believe agency directives are unenforceable by the courts. The 2005 rule is viewed as giving the most discretion to responsible officials.

Timber Management Requirements of 16 U.S.C. 1604(g)

Some respondents are concerned the 2005 rule guidance for timber resource management (36 CFR 219.12(b)(2)) is inadequate because it does not include the level of specificity of the 1982 rule. Further, some respondents contend that NFMA requires its timber management provisions to be in the regulations instead of Agency directives as proposed by the 2005 rule.

Identification of Lands Not Suited for Timber Production (16 U.S.C. 1604(k))

Some respondents are concerned the 2005 rule guidance for identification of lands not suited for timber production (36 CFR 219.12(a)(2)(2005)) is insufficient because it does not include the level of detail that was included in earlier rules. They are concerned this level of detail represents an elimination of resource protection standards.

Standards and Prohibitions

Some respondents are concerned that the 2005 rule limits plan content to strategic plan components rather than a traditional package of standards and guidelines as was adopted by the 1982 planning rule.

Some respondents are concerned that the 2005 rule allows responsible official discretion in complying with guidelines (36 CFR 219.12(b)(2)). The 2005 rule preamble says the responsible official has “the latitude to depart from guidelines when circumstances warrant it” (70 FR 1026).

Some respondents believe that only measurable mandatory standards allow the public to hold the Forest Service accountable.

Environmental Impact Statement

Some respondents are concerned the proposed action’s (2005 rule) procedures related to NEPA are inadequate because an environmental impact statement would not be required for land management plans. Under the proposed action, a responsible official may categorically exclude approval of a plan, plan amendment, or plan revision from NEPA documentation. There is concern that by not requiring an environmental impact statement, the proposed action does not require consideration of a full range of planning alternatives, reduces public involvement in land management planning, and leaves consideration of cumulative effects to project-level analyses.

Best Available Science and Land Management Plans

Some respondents advocate that the 2000 rule is better than the 2005 rule because the 2000 rule requires the responsible official to ensure that plan amendments and revisions are consistent with the best available science (36 CFR 219.24 (2000)). Respondents are concerned the 2005 rule only requires that the responsible official “take into account” the best available science. They commented that a responsible official should not make a decision without the input of science and scientists. They contend the responsible

official's discretion under the 2005 rule might conflict with provisions for the use of scientific and collaborative input.

Management Requirements

Some respondents are concerned the proposed planning rule does not include minimum specific management requirements as the 1982 rule did at §219.27(1982). They contend the lack of management requirements in the planning rule will reduce environmental protections and result in significant environmental impacts. They further contend that lower environmental requirements in a planning rule will result in less environmental protection at the unit and site-specific levels.

CHAPTER 2. ALTERNATIVES, INCLUDING THE PROPOSED ACTION

Introduction

This chapter describes and compares the alternatives considered for the proposed planning rule. It includes a description of each alternative considered. This section also presents the alternatives in comparative form, sharply defining the differences between each alternative and providing a clear basis for choice among options by the decision maker and the public. The information used to compare the alternatives is based upon the design of the alternative and its responsiveness to the issues and purpose and need for action.

Alternatives Considered in Detail

The Forest Service developed five alternatives, including the No Action and Proposed Action alternatives, in response to the significant issues.

Alternative A (Proposed Action)

Alternative A is the preferred alternative.

The proposed action is the 2005 rule as originally published on January 5, 2005 (70 FR 1022), and amended on March 3, 2006 (71 FR 10837), and with updated effective date and transition period date at §219.14. This rule is provided in Appendix A. This alternative includes guidance in the Agency's planning directives, consisting of detailed planning procedures and analysis processes that would be used if this alternative is selected. These directives are available at http://www.fs.fed.us/emc/nfma/index5.html.

The proposed rule describes the National Forest System (NFS) land management planning framework; requires plans to address sustainability of social, economic, and ecological systems; and clarifies that land management plans under this rule, absent extraordinary circumstances, are strategic in nature and are one stage in an adaptive cycle of planning for management of NFS lands. The intended effects of the rule are to streamline and improve the planning process by making plans easier to develop, amend, and revise; to allow for planning to be more adaptable to changes in social, economic, and environmental conditions by using adaptive management principles; to strengthen the role of science in planning; to strengthen collaborative relationships with the public and other governmental entities; and to reaffirm the principle of sustainable management consistent with the Multiple-Use Sustained-Yield Act and other authorities.

On January 31, 2006, the Forest Service adopted directives for the 2005 rule that set forth the legal authorities, objectives, policy, responsibilities, direction, and overall guidance that Forest Service line officers, Agency employees, and others would need to use along with the rule for plan development, amendment, and revision (71 FR 5124). If the United States Department of Agriculture (Department) promulgates the proposed rule as final, the Agency would carry out this rule using the current directives, modified, as necessary, to account for any changes because of this rulemaking. If additional changes to the directives are necessary, the Agency will provide an opportunity to the public to

comment on future changes to the directives where there is substantial public interest or controversy concerning the future changes.

The proposed action is intended to address the shortcomings of the 2000 rule and to incorporate the five principles and practical considerations previously described. Specifically, the proposed planning rule meets the purpose and need for action through the following features:

- Includes requirements that are clear and readily understood;
- Makes efficient use of Agency staff resources and collaborative efforts;
- Is within Agency planning budgets;
- Provides for diversity of plan and animal species, consistent with capabilities of NFS lands;
- Requires analyses that are within the Agency's capability to conduct;
- Recognizes the strategic nature of land management plans;
- Considers best available science;
- Requires public involvement in development of a monitoring strategy, taking into account key social, economic, and ecological performance measures and provides the responsible official sufficient discretion to decide how much information is needed;
- Promotes the use of adaptive management;
- Involves the public;
- Guides sustainable management; and
- Complies with applicable laws, regulations, and policies.

Alternative B (No Action)

Under the No Action alternative, the 2000 rule at 36 CFR 219, as it existed before promulgation of the 2005 rule, would guide development, revision, and amendment of land management plans for the NFS. For purposes of analysis, the Agency assumes the transition language at §219.35 in the 2000 rule would not remain in perpetuity. Thus, the option to revise or amend land management plans under the provisions of the 1982 rule is not contemplated in the analysis of this alternative.

The 2000 rule describes the framework for NFS land and natural resource planning; establishes sustainability as the first priority for NFS planning and management; establishes requirements for the implementation, monitoring, evaluation, amendment, and revision of land and resource management plans; and guides the selection and implementation of site-specific actions. The rule is intended to simplify, clarify, and otherwise improve the planning process; to reduce burdensome and costly procedural requirements; to strengthen and clarify the role of science in planning; and to strengthen collaborative relationships with the public and other government entities. The 2000 rule, as amended, is in Appendix B. There are no directives specified for plan development, plan amendment, or plan revisions under the 2000 rule.

For all the reasons stated in the purpose and need discussion, Alternative B does not meet the purpose and need for action. It does, however, address a number of issues:

- The diversity of plant and animal communities issue by requiring management for a high likelihood of viable native and desired non-native species in the plan area;
- The timber management requirements issue by including the timber management requirements of NFMA section 6(g);
- The identification of lands not suited for timber harvest issue by including the suitability requirement of NFMA section 6(g);
- The standards and prohibitions issue by including standards;
- The environmental impact statement issue by requiring preparation of an environmental impact statement for plan revision; and
- The best available science issue by requiring land management plans to be consistent with best available science.

Alternative C (1982 Planning Rule)

This alternative consists of the 1982 rule at 36 CFR 219 as it existed before promulgation of the 2000 rule. This rule requires an integration of planning for National Forests and Grasslands, including the planning for timber, range, fish and wildlife, water, wilderness, and recreation resources; together with resource protection activities, such as fire management; and the use of other resources, such as minerals. The 1982 rule, as amended, is in Appendix C. This alternative includes guidance in the Agency's planning directives, consisting of planning procedures and analysis processes that would be used if this alternative is selected. Directives for plan development, plan amendment, or plan revisions under the 1982 rule are specified at FSM 1926. Directives are available at http://www.fs.fed.us/emc/nfma/index5.html.

This alternative addresses the following issues:

- The diversity of plant and animal communities issue by including a requirement to manage habitat to maintain viable populations of existing native and desired non-native vertebrate species in the planning area;
- The timber management requirements issue by including the timber management requirements of NFMA section 6(g);
- The identification of lands not suited for timber harvest issue by including the suitability requirement of NFMA section 6(g);
- The standards and prohibitions issue by including standards and guidelines;
- The environmental impact statement issue by requiring preparation of an environmental impact statement for plan development, revision, and significant amendment; and
- The management requirements issue by including minimum specific management requirements.

Alternative C meets the purpose and need for action through the following features:

- Includes requirements that are clear and readily understood;
- Makes efficient use of Agency staff resources and collaborative efforts;
- Is within Agency planning budgets;
- Provides for diversity of plan and animal species. Requirements for diversity (viable populations), are more stringent than the requirements of NFMA;
- Requires analyses that are within the Agency's capability to conduct;
- Recognizes the strategic nature of land management plans;
- Considers best available science;
- Requires public involvement in development of a monitoring strategy, taking into account key social, economic, and ecological performance measures;
- Is silent about adaptive management;
- Involves the public;
- Guides sustainable management; and
- Complies with applicable laws, regulations, and policies.

Alternative D (Proposed Action Modified)

This alternative is the same as the proposed action (Alternative A) but without environmental management system (EMS) requirements and without any references to EMS. The EMS section at §219.5 in the proposed action is not included in this alternative. EMS would not be part of the plan set of documents. Establishment of an EMS would not mark the end of the transition period and EMS establishment would not be required before plan approval. This alternative includes the same guidance in the Agency's planning directives as the proposed action (2005 rule), consisting of detailed planning procedures and analysis processes that would be used if this alternative is selected. These directives are available at http://www.fs.fed.us/emc/nfma/index5.html.

Due to its similarity to the proposed planning rule, this alternative is described in terms of its differences. To facilitate comparison with the proposed planning rule detailed in Appendix A, section 219.5 is reserved to preserve subsequent paragraph numbering. The following paragraphs would differ from those of the proposed action:

219.5 Reserved

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[Asterisks Indicate Text Not Reprinted.]

219.7 Developing, amending, or revising a plan

(a)(1) plan documents or set of documents. The Responsible Official must maintain a plan document or set of documents for the plan. A plan document or set of documents includes, but is not limited to, evaluation reports; documentation of public involvement; the plan, including applicable maps; applicable plan approval documents; applicable NEPA documents, if any; and the monitoring program for the plan area.

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[Asterisks Indicate Text Not Reprinted]

219.14 Effective dates and transition

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(b) Transition period. For each unit of the National Forest System, the transition period begins on the effective date of this subpart and ends one year after the effective date of this subpart.

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(d)(2) Plan amendments initiated during the transition period may continue using the provisions of the planning regulations in effect before November 9, 2000 (See 36 CFR parts 200 to 299, Revised as of July 1, 2000) or may conform to the requirements of this subpart.

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(e)(1) The responsible official is not required to halt the process and start over. The responsible official may apply this subpart as appropriate to complete the plan development, plan amendment, or plan revision process.

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Alternative D meets the purpose and need for action through the following features:

- Includes requirements that are clear and readily understood;
- Makes efficient use of Agency staff resources and collaborative efforts;
- Is within Agency planning budgets;
- Provides for diversity of plan and animal species, consistent with capabilities of NFS lands;
- Requires analyses that are within the Agency's capability to conduct;
- Recognizes the strategic nature of land management plans;
- Considers best available science;
- Requires public involvement in development of a monitoring strategy, taking into account key social, economic, and ecological performance measures and provides the responsible official sufficient discretion to decide how much information is needed;
- Promotes the use of adaptive management;
- Involves the public;
- Guides sustainable management; and
- Complies with applicable laws, regulations, and policies.

Since Alternative D only differs from the proposed action by the absence of EMS requirements, it does not address any of the issues. The responsible official, in his discretion, requested an analysis of a modification of the proposed action that did not include EMS.

Alternative E (Proposed Action Modified)

This alternative is the same as the proposed action (Alternative. A) as modified by 1) removing EMS requirements and various references to EMS; 2) adding standards as a plan component to address the standards and prohibitions issue; 3) adding additional direction regarding the identification of lands suitable for timber production and timber harvest to address the identification of lands not suited for timber production issue; and 4) adding various timber management requirements from NFMA to address the standards and prohibitions issue.

The EMS section at §219.5 in the proposed action is not included in this alternative. EMS would not be part of the plan set of documents. Establishment of an EMS would not mark the end of the transition period and EMS establishment would not be a requirement before plan approval.

Standards would be added as a sixth plan component to section 219.7. Standards would be requirements, limitations, or prohibitions to land uses and management actions. Changes to standards would require a plan amendment.

Direction would be added at section 219.12(a) for suitable uses. Direction would include provisions for identification of lands not suited for timber production; lands suitable for timber production; and lands where trees may be harvested for multiple use values, other than timber production.

Direction would be added at section 219.12 (b) for timber management requirements established in NFMA at 16 U.S.C. 1604(g) (3). The direction would require a plan to include 1) limitations on even-aged timber harvest methods; 2) a maximum size for openings created by timber harvest; 3) requirements for timber management to achieve aesthetic objectives; 4) requirements for timber management to maintain or restore soil and water resources; 5) requirements that timber harvest projects be considered through interdisciplinary review; and 6) requirements to insure that even-aged stands of trees scheduled for harvest during the planning period have generally reached culmination of mean annual increment of growth.

Section 219.12 of the planning rule would also be modified to require that plans include a limitation on timber harvest based on an estimate of the long-term sustained-yield capacity. The plans would limit the average annual quantity of timber sold during a decade from the lands identified as suitable for timber production to a quantity equal to or less than the estimated long-term sustained-yield capacity. However, plans could allow for exceptions based on adverse events, such as fire or wind, or based on an imminent threat from insects or disease.

This alternative maintains the provision at §219.4, which defers to Agency NEPA procedures for the level of environmental analysis and documentation required in plan development, plan amendment, or plan revisions. Under this alternative, the level of NEPA analysis and documentation would be based on how a unit applies the six plan components. It would be possible for one unit to rely on a categorical exclusion to approve a plan, a second unit to prepare an environmental assessment for its plan, and a third unit to prepare an environmental impact statement for its plan.

This alternative includes the same guidance in the Agency's planning directives as the proposed action (2005 rule), consisting of detailed planning procedures and analysis

processes that would be used if this alternative is selected. These directives are available at http://www.fs.fed.us/emc/nfma/index5.html.

Due to its similarity to the proposed planning rule (Alternative A), this alternative is described in terms of its differences. If this alternative is selected, the rule's sections may not be numbered the same as the proposed action. To facilitate comparison with the proposed planning rule as detailed in Appendix A, section 219.5 is reserved to preserve subsequent paragraph numbering. The following paragraphs differ from those of the proposed action:

219.5 Reserved

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[Asterisks Indicate Text Not Reprinted.]

219.7 Developing, amending, or revising a plan

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(a)(1) plan documents or set of documents. The responsible official must maintain a plan document or set of documents for the plan. A plan document or set of documents includes, but is not limited to, evaluation reports; documentation of public involvement; the plan, including applicable maps; applicable plan approval documents; applicable NEPA documents, if any; and the monitoring program for the plan area.

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(a)(2)(vi) Standards. Standards are requirements, limitations, or prohibitions applicable to land uses and management actions within the plan area. Standards are explicitly identified in a plan as "standards." Standards are established to achieve the desired conditions and objectives of a plan and to comply with applicable laws, regulations, Executive orders, and Agency directives.

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219.12 Suitable uses and provisions required by NFMA

(i) The Responsible Official must identify lands within the plan area as not suitable for timber production (§219.16) if:

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(a) (2)(i)(E) The technology is not available for conducting timber harvest without causing irreversible damage to soil, slope, or other watershed conditions or substantial and permanent impairment of the productivity of the land;

(a) (2)(i)(F) There is no reasonable assurance that such lands can be adequately restocked within 5 years after final regeneration harvest;

(a) (2)(i)(G) Lands not suited for timber production may be available for timber harvest pursuant to paragraph (c) of this section.

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(a)(3)(*Lands suitable for timber production*. After considering physical, ecological, social, economic, and other pertinent factors to the extent feasible, a Responsible Official may establish timber production as an objective in a plan for any lands not identified in paragraph (a) of this section. The Responsible Official must review lands not suited for timber production at least once every 10 years, or as otherwise prescribed by law, to determine their suitability for timber production. As a result of this

10-year review, timber production may be established as a plan objective for any lands found to be suitable for such purpose through amendment or revision of the plan.

(a)(4) *Lands where trees may be harvested for multiple use values other than timber production*. Designation of lands as not suitable for timber production does not preclude the harvest of trees for other multiple use values. Except for lands described at (a)(2)(i)(E) of this section, trees may be harvested to create temporary or permanent openings for wildlife habitat improvement; to establish fuel breaks or reduce fuels; to create vistas; to enhance recreation use; to manage cultural/heritage sites; to salvage dead or dying trees; or to achieve other multiple use purposes not related to timber production.

(b) NFMA requirements. A plan must include plan components to ensure that the following requirements related to timber management are met:

(1) Limitations on even-aged timber harvest methods, including provisions to require harvest in a manner consistent with the protection of soil, watershed, fish, wildlife, recreation, and aesthetic resources and the regeneration of the timber resource, including requirements that even-aged harvest may occur only upon a finding that it is appropriate and that clearcutting may occur only upon a finding that it is the optimum method to meet the objectives and requirements of the plan;

(2) Maximum size openings created by timber harvest according to geographic areas, forest types, or other suitable classifications for areas to be cut in one regeneration harvest operation. 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-Sitka spruce forest type of coastal Alaska; and 40 acres for all other forest types. The plan must allow for exceeding its limitations on maximum size openings after appropriate public notice and review by the supervisor of the responsible official who normally would approve the harvest proposal. The plan maximum size openings must not apply to the size of areas harvested as a result of natural catastrophic conditions such as fire, insect and disease attack, or windstorm;

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

(4) Requirements for maintaining or restoring soil and water resources, including protection 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, when management activities are likely to seriously and adversely affect water conditions on fish habitat;

(5) Requirements that timber harvest projects be considered through interdisciplinary review, assessing the potential environmental, biological, aesthetic, engineering, and economic impacts on the sale area, as well as the consistency of the sale with the multiple use of the general area, and that the harvesting system used is not selected primarily because it will give the greatest dollar return or the greatest unit output of timber; and

(6) Requirements for assuring that even-aged stands of trees scheduled for harvest during the planning period have generally reached culmination of mean annual increment of growth. This requirement applies only to regeneration harvest of even-aged stands on lands identified as suitable for timber production and where timber production is a management objective for the harvest.

(i) The culmination of mean annual increment of growth requirement does not apply to cutting for experimental or research purposes; to non-regeneration harvests, such as thinning or other stand improvement measures; to management of uneven-aged stands or to stands under uneven-aged silvicultural systems; and to 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.

(ii) A plan may identify categories of activities that are exceptions to the culmination of mean annual increment if necessary to meet resource objectives, such as wildlife habitat enhancement, visual enhancement, or riparian area improvement. Exceptions to the culmination of mean annual increment requirement and the reasons for these exceptions must be specifically disclosed during the public participation process for a plan.

(c) Limitation on timber harvest—(1) Estimate of the long-term sustained-yield capacity. The responsible official must estimate the amount of timber that could be harvested annually in perpetuity on a sustained-yield basis from National Forest System lands identified as suitable for timber harvest (§219.16). This estimate must be based on the yield of timber that could be harvested consistent with achievement of objectives or desired conditions in the applicable plan and a specified management intensity consistent with these multiple use objectives. Increased harvest levels may be based on intensified management practices, such as reforestation, thinning, and tree improvement if such practices justify increasing the harvests in accordance with the Multiple-Use Sustained-Yield Act. Such estimates of yield must be adjusted downward if anticipated practices are not successfully implemented to achieve objectives or desired conditions. The responsible official may combine one or more administrative units, or parts of administrative units, for the purpose of estimating the amount of timber that could be harvested annually on a sustained-yield basis.

(2) *Limitation on timber sold.* Within any decade, the responsible official must limit the quantity of timber sold during that decade from the lands identified as suitable for timber harvest to a quantity equal to or less than that estimated in paragraph (c)(1) of this section.

(3) *Exceptions to limitations of timber sold.* The responsible official may sell timber from areas that are substantially and adversely affected by fire, wind, or other events, or for which there is an imminent threat from insects or disease, and may either substitute such timber for timber that would otherwise be sold or, if not feasible, sell such timber over and above the limit established in paragraph (c)(1) of this section. If departure from the quantity of timber established in paragraph (c)(2) of this section is necessary to meet overall multiple use objectives of the plan, the requirements in 16 U.S.C. 1611 must be followed.

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219.14 Effective dates and transition

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(b) Transition period. For each unit of the National Forest System, the transition period begins on the effective date of this subpart and ends one year after the effective date of this subpart.

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(d)(2) Plan amendments initiated during the transition period may continue using the provisions of the planning regulations in effect before November 9, 2000 (See 36 CFR parts 200 to 299, Revised as of July 1, 2000) or may conform to the requirements of this subpart.

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(e)(1) The responsible official is not required to halt the process and start over. The responsible official may apply this subpart as appropriate to complete the plan development, plan amendment, or plan revision process.

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§ 219.16 Definitions.

Timber harvest: The removal of trees for wood fiber use and other multiple-use purposes.

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Alternative E meets the purpose and need for action through the following features:

- Includes requirements that are clear and readily understood;
- Makes efficient use of Agency staff resources and collaborative efforts;
- Is within Agency planning budgets;
- Provides for diversity of plan and animal species, consistent with capabilities of NFS lands;
- Requires analyses that are within the Agency's capability to conduct;
- Recognizes the strategic nature of land management plans;
- Considers best available science;
- Requires public involvement in development of a monitoring strategy, taking into account key social, economic, and ecological performance measures and provides the responsible official sufficient discretion to decide how much information is needed;
- Promotes the use of adaptive management;
- Involves the public;
- Guides sustainable management; and
- Complies with applicable laws, regulations, and policies.

This alternative addresses the following issues:

- The timber management requirements issue by including the timber management requirements of NFMA section 6(g);
- The identification of lands not suited for timber harvest issue by including the suitability requirement of NFMA section 6(g);
- The standards and prohibitions issue by explicitly allowing standards and guidelines; and
- The environmental impact statement issue by requiring that plan development, revision, and amendment comply with Agency NEPA procedures, which would involve an environmental assessment or environmental impact statement for prohibitions or final decisions concerning projects or activities.

Alternatives Eliminated from Detailed Study

Several additional alternatives were suggested by respondents to the notice of intent to prepare this environmental impact statement; however, none meet the stated purpose and need for action as discussed below.

Alternative F

This suggested alternative consists of a modification of the proposed action with the following features:

- Declares that ecological sustainability is the prime directive for national forest management;
- Requires land management plans to contain an annual monitoring and evaluation process specifying the resources to be monitored, monitoring frequency, data to be collected, how data is to be collected, and trigger points that require immediate attention;
- Requires land management plans to contain must-achieve natural resource standards, and;
- Requires that land management plans and amendments comply with NFMA and be documented in an environmental impact statement and record of decision.

This alternative does not meet the purpose and need for action in that it places ecological sustainability above all other multiple-use sustained-yield principles. The 2001 NFMA Planning Rule Review found this concept "at odds with the reality that the three components of sustainability (ecological, economic, and social) are inextricably linked and cannot be separated", "conflicts with Congressional direction", and "establishes the key requirement for forest planning, a criterion that is impossible to measure with clarity and any degree of scientific consensus." Accordingly, the modification to declare that ecological sustainability is the prime directive does not meet the purpose and need to comply with NFMA, or to require analyses that are within the Agency's capability to conduct.

The monitoring requirements in this alternative do not meet the purpose and need for a planning rule that recognizes the strategic nature of land management plans. The suggested monitoring requirements certainly have merit, but they are more operational than strategic in their detail. Details similar to those suggested can be found in Forest Service Manual (FSM) 1909.12, section 12, which requires that the strategic monitoring program be described in the plan while the operational components are described in several other documents associated with the plan's monitoring program: (1) annual evaluation report, (2) comprehensive evaluation report, (3) monitoring guide, and (4) annual monitoring work plan.

Absent the two modifications that do not meet the purpose and need, the second two modifications in the suggested alternative largely duplicate Alternative E. Alternative E includes the resource standards related to timber harvest from NFMA section 6(g) and explicitly allows for other standards. While Alternative E does not require an environmental impact statement, any plans that approve projects and activities, or that command anyone to refrain from undertaking projects and activities, or that grant, withhold or modify contracts, permits or other formal legal instruments would require an environmental assessment or an environmental impact statement. It should also be noted that the respondent contends that NFMA requires preparation of an environmental impact statement for development and revision of land management plans. In fact, NFMA only requires that a planning rule include direction on when and for what plans an environmental impact statement shall be prepared (16 U.S.C 1604(g)(1)).

Alternative G

One respondent suggested using the Wilderness Society's forest vision, America's National Forests in the 21st Century: The Wilderness Society's Vision (The Wilderness Society 1999) as a basis for developing an alternative that provides greater protection for forest resources than the 1982, 2000, or 2005 planning rules. The Wilderness Society's paper presents a number of ideas, positions, and suggestions concerning forest management and land management planning. The paper presents five principles to achieve the vision. Some of the suggestions would require Congressional action to redefine the purpose of the National Forest System and, therefore does not meet the purpose and need to comply with applicable laws. The Agency believes other suggestions related to public involvement, availability of information, and consideration of best available science are already addressed within the range of alternatives. However, the vision itself does not represent an alternative planning rule.

Alternative H

One respondent suggested crafting an alternative where restoration is the core purpose of Federal land management. This alternative would require Congressional action to redefine the purpose of the National Forest System and, therefore does not meet the purpose and need to comply with applicable laws.

Alternative I

One respondent suggested developing an alternative that "substantively increases protection of fish and wildlife" while another suggested an alternative should be crafted that ensures population security for plant and animals. The NFMA directs the Forest Service to "provide for diversity of plant and animals based on suitability and capability of the specific land area…" Substantive increases in protection and insurance of diversity or security of populations are beyond the capability of the National Forest System lands and, therefore, do not meet the purpose and need to provide for diversity of plan and animal species, consistent with capabilities of National Forest System lands.

Alternative Comparison

The proposed planning rule and the alternatives considered in this environmental impact statement would affect the *process* whereby NFS land management plans are developed, revised, and amended. They establish administrative procedures. None of these rules dictate how administrative units of the NFS are to be managed. The Agency does not expect that any of these rules would dictate the mix of uses that may occur on any or all units of the NFS. The proposed planning rule and the alternatives are all the same in that they would have no direct, indirect, or cumulative impact on the human environment.

The five alternatives are compared below in terms of how they address the significant issues identified in Chapter 1. Detailed responses to the issues are found in Chapter 3.

Diversity of Plant and Animal Communities Issue

The alternatives in this environmental impact statement provide for diversity in three different ways within the five alternatives considered. All three ways have provisions

designed to provide for sustaining the diversity of plant and animal communities as required by NFMA.

All three ways have provisions for monitoring that apply to species diversity. Alternative A (proposed action) and Alternatives D and E (modifications of the 2005 planning rule) require that the plan monitoring program consider key social, economic, and ecological performance measures. Species diversity is part of ecological performance. Alternative B (2000 planning rule) requires monitoring of ecological conditions known or suspected to support focal species and selected species-at-risk. Monitoring of species populations is optional. Alternative C (1982 planning rule) requires monitoring of population trends of MIS species. Alternative C supplies the least discretion to the responsible official.

All three alternative ways have analysis provisions for diversity criteria. Alternative A (proposed action) and Alternatives D and E (modifications of the 2005 planning rule) require that plans provide a framework to contribute to sustaining native developed ecological systems by providing conditions to support a diversity of native plant and animal species. The analysis provisions in Alternatives A, D, and E are in the in the Forest Service Directive System. Alternative B (2000 rule) requires a high likelihood of viability of native and desired non-native species. Alternative C requires responsible officials to maintain "viable populations of native and desired non-native species within the planning area." By comparison, NFMA requires only that managers "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." Alternative B (2000 rule) has the most intensive analysis requirements.

Timber Management Requirements of 16 U.S.C. 1604(g) Issue

All alternatives incorporate the requirements related to timber management from NFMA. With the exception of a few minor variations in phraseology, the alternatives use identical language. Alternatives A (2005 rule) and D (2005 rule modified) place most of the NFMA requirements in the Forest Service Directive system (see Forest Service Manual (FSM 1921.12 and Forest Service Handbook FSH 1909.12, chapter 60 online at http://www.fs.fed.us/emc/nfma/index5.html). Alternative B (No Action, 2000 rule) has some requirements in the directives and some in the rule. Alternative C (1982 rule) places most of the requirements within the rule. Only alternative E (2005 rule modified) includes all the requirements within the rule. Since Agency employees should not depart from the directive system without appropriate justification and supervisory concurrence[1], it is expected that the timber management requirements from NFMA would be met under all alternatives. The statutory language of NFMA continues to be the controlling legal authority under each of the alternatives.

If the Agency developed plans under the provisions of each of the five different alternatives, plans could have different tones and formats. For example, a plan produced following guidance from alternative C might state, "even-aged cut blocks should be shaped and blended with the natural terrain", and a plan following alternative A might not discuss even-aged cut blocks. Under Alterative A, Forest Service directives require responsible officials to shape such cut blocks to be shaped and blended with the natural terrain. Therefore, when the guidance from the rule and the directive system are considered together, it is unlikely that timber management would be significantly

[1] OMB's "Final Bulletin for Agency Good Guidance Practices, 1/18/07

different under any of the alternatives. Under each alternative, the unit's timber management would be consistent with direction from NFMA.

Identification of lands not suited for timber production (16 U.S.C. 1604(k)) Issue

All alternatives provide guidance to identify lands not suited for timber production, as directed by NFMA. Alternatives A (2005 rule), B (No Action, 2000 rule), D (2005 rule modified), and E (2005 rule as modified) provide a brief description of the requirements with additional details in the Forest Service Directive system (see Forest Service Manual (FSM 1921.12 and Forest Service Handbook FSH 1909.12, chapter 60 online at http://www.fs.fed.us/emc/nfma/index5.html). Alternative C (1982 rule) provides extensive detail within the rule. Alternative C envisions the planning process using alternatives when plans are developed, amended, or revised to explore different management intensities for timber production on suited lands. Alternative C provisions include various required economic analysis when plans are developed, amended, or revised.

Standards and Prohibitions Issue

The differences between the alternatives with respect to standards are few.

Provisions in Alternatives A, D, and E include the use of guidelines in the 2005 planning rule. Alternative E explicitly allows responsible officials to include standards in plans. Under Alternative A and D, responsible officials may include standards. With guidelines under these three alternatives, responsible officials have the discretion to approve projects or activities when the project or activity design varies from the guideline but the design is an effective means of meeting the purpose of the guideline to maintain or contribute to the attainment of relevant desired conditions and objectives. If variance were appropriate, the responsible official's rationale would be fully explained in the project and activity decision document. Under these alternatives, managers have the flexibility to use appropriate direction based on the site-specific requirements of a project. The focus of environmental analysis is not at the plan level, but at the project level where proposals can be analyzed at the appropriate scope and scale. Collaboration is emphasized at all phases of land management planning.

Alternative B uses standards of the 2000 planning rule. Standards may be mandatory (shall) or discretionary (should). Some repetition of law, policy, or regulation is expected. Collaboration is emphasized at all phases of planning, including the project level.

Alternative C uses the standards and guidelines approach of the 1982 planning rule. Managers have the discretion to vary from forest plan standards and guidelines through site-specific plan amendment. Public involvement is emphasized at all phases of planning and project development.

Environmental Impact Statement Issue

The alternatives present an array of responses to the three parts of this issue (alternatives, public involvement, and cumulative effects). Alternatives B and C involve consideration of alternatives to the proposal traditionally found in an environmental impact statement, while Alternatives A, D, and E allow for an iterative approach to development of a proposed action in which various options are considered before a proposal is made. Public involvement opportunities do not differ dramatically between the alternatives. All

alternatives provide public involvement opportunities equal to or greater than public involvement opportunities required by Agency NEPA procedures for preparation of an environmental impact statement. Alternatives B, C, and plan components that approve or prohibit projects or activities under Alternatives A, D, and E would include a NEPA cumulative effects analysis. For plan components under Alternatives A, D, and E that do not approve or prohibit projects or activities, the traditional NEPA cumulative effects analysis would be conducted as projects and activities are proposed for approval. Additionally, Alternatives A, D, and E require preparation of comprehensive evaluation reports at the time of plan development and revision. Such reports describe current resource conditions and trends. For amendments, annual evaluations of monitoring information would reflect changing conditions, science, and other relevant information.

Best Available Science and Land Management Plans Issue

All of the alternatives address the role of science in the planning process. Starting with Alternative C, the Forest Service successively clarified and strengthened the role science has in the planning process. However, the alternatives that represent the more recently proposed rules (Alternatives A, B, D, and E) describe this role more explicitly than Alternative C (1982 rule).

Alternatives A, B, D, and E articulate that the responsible official has discretion on how to accomplish considering the best available science. However, Alternative B has more stated requirements, in particular, requiring responsible officials to ensure that plan amendments and revisions are consistent with best available science. This presents a significant challenge to responsible officials on how to accomplish this determination. Even though the responsible official may use a science advisory board under Alternative B to evaluate the use of science in planning, Alternative B does not establish the criteria to use in reviewing the consistency with the best available science. Alternative B allows the responsible official to establish that evaluation criteria in working with the reviewing participants, notably a science advisory board.

Alternatives A, D, and E explicitly allow responsible officials to also use science advisory boards as well as independent, scientific peer reviews to evaluate how the best available science is taken into account during the planning process. Documenting whether plan amendments or revisions are consistent with the best available science under Alternative B or documenting how the best available science is taken into account under Alternatives A, D, and E are greater Agency obligations than the “integrated consideration” of science requirement in NFMA (16 U.S.C. 1604(b)).

Management requirements Issue

Alternative C (1982 rule) uses the term “management requirements” as a category to include direction for unit planning and project implementation regarding compliance with a variety of laws and regulations. This direction falls under seven different headings: (a) Resource protection; (b) Vegetative manipulation; (c) Silvicultural practices; (d) Even-aged management; (e) Riparian Areas; (f) Soil and Water and; (g) Diversity. This direction generally reiterates laws, regulations, and Agency directives. Recognizing that planning must comply with all applicable laws, regulations, and policies, the rest of the alternatives (A, B, D, and E) do not contain minimum specific management requirements as a category section. When considered in conjunction with the applicable laws,

regulations, and Forest Service directives, all alternatives would result in similar guidance for resource protection.

How Each Alternative Meets the Purpose and Need for Action

With the exception of Alternative B, the "no-action" alternative, each alternative considered in detail meets the purpose and need for action. However, each action alternative addresses the purpose and need for action differently. To facilitate comparison, each alternative is displayed in the following table in terms of how it fulfills the purpose and need for action. Note that some of these topics are also included in the issues discussion.

Table 1—Comparison of Alternatives to Purpose and Need for Action

	Alt A, 2005 Planning Rule	Alt B – No Action, 2000 Planning Rule without transition	Alt C, 1982 Planning Rule	Alt D, no EMS	Alt E, 2005 modified
Readily understood	Requirements are clear, where detail is lacking Forest Service Directives provide clarity. No applicable case law has been developed	Analytical requirements for ecological sustainability and monitoring are very complex and unclear	Rule is understood based on experience and case law from the courts.	Same as Alternative A	Same as Alternative A
Efficient[2]	About 3 years to revise	About 6 years to revise	About 5 years to revise	Same as Alternative A	Same as Alternative A
Cost Effective[3] **–** (annual average Agency costs)	98 million	129 million	103 million	94 million	99 million
Consistent with capabilities of NFS lands for diversity of plant and animal communities	Rule requirements for diversity (self-sustaining populations) provide guidelines based on the suitability and capability of NFS lands.	Rule requirements for diversity (high likelihood of viability of species populations) provide guidelines based on the suitability and capability of NFS lands.	Rule requirements for diversity (viable populations), are more stringent than the requirements of NFMA	Same as Alternative A	Same as Alternative A

[2] U.S. Department of Agriculture, Forest Service. Cost-Benefit Analysis - The Proposed Rule (36 CFR 219) for National Forest Land Management Planning. (2007)

[3] *Ibid*

	Alt A, 2005 Planning Rule	Alt B – No Action, 2000 Planning Rule without transition	Alt C, 1982 Planning Rule	Alt D, no EMS	Alt E, 2005 modified
Within Agency's capability to implement	The alternative is within the Agency's capability. The analysis requirements of the planning rule do not apply to projects. Rule provides ability to customize process to meet need of staff and stakeholders.	Guidance about ecological sustainability would be difficult if not impossible to accomplish. The 2000 rule lacks recognition of the limits of Agency budget and personnel. Confusion about whether plan analysis requirements for ecological sustainability apply to projects or not. Requirements for national science advisory board, regional science advisory boards, and science consistency reviews require complexity in the review of the best available science.	Agency is capable: however, the 1982 rule requires many complex analysis requirements. The rule requires, alternatives, benchmarks, effects of hypothetical projects, management area direction, management indicator species (MIS), management prescriptions, minimum management requirements, and so on.. The plan analysis requirements of viability apply to projects,	Same as Alternative A	Same as Alternative A

	Alt A, 2005 Planning Rule	Alt B – No Action, 2000 Planning Rule without transition	Alt C, 1982 Planning Rule	Alt D, no EMS	Alt E, 2005 modified
Recognizes the strategic nature of planning	This rule recognizes the strategic nature of planning	The rule does not recognize the strategic nature of planning. The rule provides direction for project planning, confusion about which parts of the rule apply to project planning.	The rule mixes strategic, tactical, and operational procedures. The rule provides direction for project implementation. The rule gives the impression that plans make project and activity decisions, when plans seldom make such authorizations.	Same as Alternative A	Same as Alternative A

	Alt A, 2005 Planning Rule	Alt B – No Action, 2000 Planning Rule without transition	Alt C, 1982 Planning Rule	Alt D, no EMS	Alt E, 2005 modified
Use of science	The rule requires the responsible official to take into account the best available science.	The rule requires the responsible official to be consistent with best available science when amending or revising plans. However, doing project analysis the responsible official must consider science. In addition, the rule requires a national science advisory board, regional science advisory boards, and science consistency reviews. The 2000 rule does not recognize limitations on the availability of scientists in regional assessments, plan revisions, plan amendments, and project planning.	Research needs are identified during planning and periodically reviewed during monitoring and evaluation. Planning teams must integrate knowledge of the physical, biological, economic, and social sciences into the planning process.	Same as Alternative A	Same as Alternative A

	Alt A, 2005 Planning Rule	Alt B – No Action, 2000 Planning Rule without transition	Alt C, 1982 Planning Rule	Alt D, no EMS	Alt E, 2005 modified
Monitoring	The rule requires public involvement in development of the monitoring strategy. The rule provides the most discretion to responsible officials. It does not specify project monitoring requirements. Requires the plan monitoring program to take into account key social, economic, and ecological performance measures	1. Unnecessary detailed requirements, 2. Confusing mix of project and plan level monitoring direction, 3. Very prescriptive, lack of discretion 4. Requires monitoring of ecological conditions to support focal species and selected species-at-risk, but allows the responsible official discretion in the monitoring of species population trends.	The rule supplies discretion to responsible officials except for monitoring of MIS[4]. The rule requires monitoring of population trends of MIS. This alternative has the least discretion regarding monitoring of population trends. Often responsible officials monitor habitats (so long as the plan says we will monitor habitat), even though at some point the responsible official must make the linkage to populations.	Same as Alternative A	Same as Alternative A
Plans must be adaptive and based on current information and science	Strongly promotes the use of adaptive management principles to support continuous improvement of management.	Embraces adaptive management principles	Does not explicitly encourage adaptive management.	Similar to Alternative A, except does not require EMS	Similar to Alternative A, except does not require EMS.
Planning must involve the public	The rule emphasizes public involvement including collaboration.	The rule emphasizes public involvement including collaboration.	The rule requires public notice and comment.	Same as Alternative A	Same as Alternative A

[4] MIS – Management Indicator Species

	Alt A, 2005 Planning Rule	Alt B – No Action, 2000 Planning Rule without transition	Alt C, 1982 Planning Rule	Alt D, no EMS	Alt E, 2005 modified
Plans must guide sustainable management	This alternative is based on sustainability	Sustainability is a guiding principle of the 2000 planning rule.	The 1982 rule says that plans provide for multiple use and sustained yield of goods and services from the NFS lands in a way that maximizes long-term net public benefits in an environmentally sound manner. Therefore, the 1982 rule includes concepts similar to sustainability.	Same as Alternative A	Same as Alternative A

	Alt A, 2005 Planning Rule	Alt B – No Action, 2000 Planning Rule without transition	Alt C, 1982 Planning Rule	Alt D, no EMS	Alt E, 2005 modified
Planning must comply with all applicable laws, regulations, and policies	Same as Alternative B	This rule recognizes that planning must comply with all applicable laws, regulations, and policies. The rule does not include minimum management requirements. The rule creates a framework to comply with ESA[5], CAA[6], CWA[7], and so on. During planning, the responsible official develops guidance for protection of natural resources through the collaborative process and considering the best available science.	The 1982 rule is redundant with other resource requirements such as ESA, CAA, and CWA by specifying minimum management requirements to meet or exceed the requirements of other laws, rather that recognizing that planning must comply with all applicable laws, regulations, and policies.	Same as Alternative B	Same as Alternative B

[5] ESA – Endangered Species Act
[6] CAA – Clean Air Act
[7] CWA – Clean Water Act

Table 2—Comparison of Alternatives by Issue

Issues	Alternative A Proposed Action 2005 Rule	Alternative B No Action 2000 Rule	Alternative C 1982 Rule	Alternative D 2005 Rule Modified	Alternative E 2005 Rule Modified
Diversity	Rule requires a framework to contribute to ecological sustainability through ecosystem diversity, and where responsible official decides that additional provisions are needed to provide for species diversity then the plan must include additional provisions within the limits of Agency authorities, the capability of the plan area, and multiple use objectives. Responsible Official has discretion to design monitoring program.	Rule requires plan decisions must provide for ecological conditions that provide a high likelihood of viability of species. Responsible Official must monitor habitat of focal species and selected species-at-risk, but has discretion in monitoring of species populations.	Rule requires substantive plan requirements to manage habitat to maintain viable populations of native and desired species. Responsible Official must select MIS, and monitor MIS population trends.	Same as Alternative A	Same as Alternative A

Issues	Alternative A Proposed Action 2005 Rule	Alternative B No Action 2000 Rule	Alternative C 1982 Rule	Alternative D 2005 Rule Modified	Alternative E 2005 Rule Modified
Timber Management Requirements of 16 U.S.C. 1604(g)	In the directives	In the rule	In the rule	In the directives	In the rule
Identification of lands which are not suited for timber production 16 U.S.C. 1604(k)	Rule provides brief direction, with substantive detail in directives.	Rule provides direction, with additional detail in directives.	Rule provides substantive direction.	Same as Alternative A.	Rule provides direction, with additional detail in directives.
Standards and Prohibitions	Not included explicitly	Explicitly includes standards	Explicitly includes standards	Not included explicitly	Explicitly allows standards and prohibitions
Environmental Impact Statement	CE[8] would be typical	EIS[9] for revision; EIS or EA[10] or CE for amendment	EIS for plan development, revision, or significant amendment; EA or EIS for amendment	CE would be typical	CE would be typical, however an EIS or EA would be required for plan components that approve or prohibit projects or activities

[8] CE – categorical exclusion
[9] EIS – environmental impact statement
[10] EA – environmental assessment

Issues	Alternative A Proposed Action 2005 Rule	Alternative B No Action 2000 Rule	Alternative C 1982 Rule	Alternative D 2005 Rule Modified	Alternative E 2005 Rule Modified
Alternatives	May have iterative development of options	Alternatives considered	Alternatives considered	Iterative development of options	Iterative development of options
Public Involvement in Planning	Collaborate/ participate in CER[11]; Early and frequent collaboration in establishing plan components, and designing monitoring program	Early and frequent opportunities for participation at responsible official's discretion plus NEPA requirements for public participation	NEPA requirements for public participation. Additional public involvement at responsible line officer discretion	Collaborate/ participate in CER; Early and frequent collaboration in establishing plan components, and designing monitoring program	Collaborate/ participate in CER; Early and frequent collaboration in establishing plan components, and designing monitoring program

[11] CER – comprehensive evaluation report

Issues	Alternative A Proposed Action 2005 Rule	Alternative B No Action 2000 Rule	Alternative C 1982 Rule	Alternative D 2005 Rule Modified	Alternative E 2005 Rule Modified
Cumulative Effects of Plans	Considered in scoping. Cumulative effects were also analyzed when planning CE promulgated.	Cumulative effects considered for revision and amendment.	Cumulative effects considered for plan development or revision	Considered in scoping. Cumulative effects were also analyzed when planning CE promulgated.	Considered in scoping. Cumulative effects were also analyzed when planning CE promulgated. If an EA or EIS is prepared, cumulative effects would be included
EMS	EMS in rule	Rule silent on EMS	Rule silent on EMS	Rule silent on EMS	Rule silent on EMS
Best Available Science	Must take into account	Must be consistent with	Silent	Must take into account	Must take into account
Management Requirements	Does not contain minimum specific management requirements as a category section.	Does not contain minimum specific management requirements as a category section.	Uses “management requirements” as a category to include direction for unit planning and project implementation regarding compliance with a variety of laws and regulations.	Does not contain minimum specific management requirements as a category section.	Does not contain minimum specific management requirements as a category section.

CHAPTER 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Affected Environment

The Forest Service is responsible for managing the lands and resources of the National Forest System, which include approximately 193 million acres in 44 states, Puerto Rico, and the Virgin Islands. The System is composed of 155 national forests, 20 national grasslands, 1 national prairie, and other miscellaneous lands under the jurisdiction of the Secretary of Agriculture (the Secretary).

The Forest and Rangeland Renewable Resources Planning Act of 1974 (88 Stat. 476 *et seq*.), as amended by the National Forest Management Act of 1976 (NFMA) (90 Stat. 2949 *et seq*.; 16 U.S.C. 1601-1614), requires the Secretary to promulgate regulations under the principles of the Multiple-Use Sustained-Yield Act of 1960 that establish the process for the development and revision of land and resource management plans for the aforementioned units in the National Forest System (16 U.S.C. 1604(g)).

The proposed planning rule and alternative planning rules would affect the *process* whereby National Forest System land management plans are developed, revised, and amended. They would establish administrative procedures to follow in developing, amending, and revising these plans. These rules do not dictate how administrative units of the National Forest System are to be managed. The Agency does not expect that any of these rules would dictate the uses that could occur on any or all units of the National Forest System.

It is important to note the distinction between the environment affected by land management plans and the environment affected by a planning rule. Land management plans guide all natural resource management activities on their respective National Forest System units. Plans will typically influence the choice and design of future projects and activities in a plan area and depending on the substance of particular plan components, could have an effect on the environment. In contrast, a rule prescribing a framework for such plans only affects the planning process – not the human environment.

Environmental Consequences

Nature of Rules and Land Management Plans

Section 31.12 of FSH 1909.15 excludes from documentation in an environmental assessment or environmental impact statement (absent extraordinary circumstances) "rules, regulations, or policies to establish Service-wide administrative procedures, program processes, or instruction." The proposed rule clearly falls within this category of actions and the Agency believes that no extraordinary circumstances exist that would require preparation of an environmental assessment or an environmental impact statement for a planning rule. However, the United States District Court in *Citizens for Better Forestry et al. v. USDA* (N.D. Calif.) held that "…the agency must conduct further analysis and evaluation of the impact of the 2005 Rule…" Without conceding the

correctness of the Court's ruling, which is being addressed through the judicial process, the Agency has decided to undertake this process, thus expediting much needed plan revisions.

Land management plans are strategic in nature. A plan establishes a long-term management framework for a National Forest System unit. Within a plan framework, specific projects and activities may be proposed, approved, and implemented depending on specific conditions and circumstances at the time of approval and implementation. The U.S. Supreme Court described the nature of land and resource management plans in *Ohio Forestry Ass'n* v. *Sierra Club,* (523 U.S. at 733 (1998)) explaining that plans are "tools for Agency planning and management." The Court recognized that the provisions of such plans "do not command anyone to do anything or to refrain from doing anything; they do not grant, withhold, or modify any formal legal license, power, or authority; they do not subject anyone to any civil or criminal liability; they create no legal rights or obligations" (523 U.S. 733 (1998)). The Supreme Court repeated its characterization of analogous plan decisions as strategic without any immediate on the ground impact in *Norton* v. *Southern Utah Wilderness Alliance,* 124 S. Ct. 2373, 2382 (2004). The Supreme Court again observed that "land use plans are a preliminary step in the overall process of managing public lands—'designed to guide and control future management actions and the development of subsequent, more detailed and limited scope plans for resources and uses.'" In addition, "a land use plan is not ordinarily the medium for affirmative decisions that implement the agency's 'project[ions].'" (542 U.S. 13 (2004))

Plans developed under the proposed rule and alternatives typically cannot be linked in a cause-effect relationship over time and within a geographic area to effects on the human environment without proposals for actions that approve or prohibit projects and activities. Rules that set out the process for the development, revision, and amendment of land management plans are even further removed from any foreseeable action from which environmental effects might arise. While this environmental impact statement is focused on the effects of the proposed and alternative planning rules rather than the effects of plans themselves, the foregoing discussion points out that the proposed planning rule and alternative planning rules are even further removed from any actions with environmental, social, or economic effects that can be meaningfully evaluated. (40 CFR 1508.23)

Environmental Review of Past Planning Rules

The Agency's first planning rule, promulgated under the Forest and Rangeland Renewable Resources Planning Act of 1974 as amended by the National Forest Management Act of 1976 (NFMA) was published in 1979 and accompanied by an environmental impact statement (44 FR 53927). The environmental impact statement concluded:

> "The specific effects of implementing any of the alternative regulation proposals are virtually impossible to quantify. Regulations developed to direct the process of preparation and revision of land management plans have no direct effect on the human environment. The regulations do not commit land or resources. They only establish procedures and standards and guidelines for planning future commitments."

The environmental impact statement also stated:

> "The effects on implementing alternative regulations on the physical and biological environment are not measurable except qualitatively. Each alternative set of regulations enhances plant and animal diversity, protects soil and water values and the visual resource, and ensures long-term productivity. The actual results will be known after the individual forest or regional plans are completed."
>
> "There is no reliable way to estimate quantitatively the effect on the economic environment of promulgating any of the alternative regulations. It is assumed that better management decisions will result from improved economic analysis, because those decisions will be based on cost effectiveness data. Overall management of the NFS should become more cost effective and efficient."
>
> "Effects upon the social environment are difficult to quantify. No significant impacts or differences between the alternatives are anticipated."

The Forest Service prepared an environmental assessment when it revised its planning rule in 1982 (47 FR 43026). The environmental assessment stated:

> "…the specific effects of implementing the regulations and their revisions in whatever form, are virtually impossible to quantify. These regulations are formulated to direct the *process* of preparing and revising land management plans. Consequently, they have no direct effect on the quality of the environment or the economy. They only establish procedures, and standards and guidelines for planning future commitments."
>
> "Some general qualified effects or impacts of alternatives to the current regulations were presented in the FEIS which accompanied the regulations published in the Federal Register."

In 2000, the Forest Service published an environmental assessment for another revision to its planning rule. Recognizing that the Forest Service now had a categorical exclusion in its National Environmental Policy Act implementing procedures, the environmental assessment stated:

> "Although not required under the Forest Service regulations implementing the National Environmental Policy Act (NEPA), the Forest Service has decided to prepare this environmental assessment…"

The environmental assessment described, qualitatively, a number of effects that "could" occur, but went on to say:

> "Thus the adoption of the proposed rule would not have a direct effect on the quality of the human environment. However, future implementation of the proposed rule on individual National Forests or Grasslands could affect decisions that are made for those lands."
>
> "Neither the Proposed Action nor the No Action Alternative requires any irreversible and irretrievable commitments of resources. Rather, the existing and proposed planning rules merely describe the process that the Forest Service currently uses and would use to make planning decisions for the National Forests and Grasslands. Any commitments of resources would take place at the forest level after the preparation and consideration of appropriate NEPA analysis and documentation."

Direct Effects

The foregoing excerpts from environmental reviews of past planning rules illustrate the speculative nature of linking rules that establish the process for the development and revision of land management plans to environmental effects that can be meaningfully evaluated. The environmental impact statement for the 1979 planning rule spoke to this lack of cause and effect when it said, "Actual effects on the production of goods and services will be determined and verified when the planning is completed." In 1979, the Forest Service believed planning would be completed when a land management plan was approved and that plan environmental impact statements also would generally be sufficient for the approval of future proposed projects and activities. The Forest Service now knows that at the point of plan approval, one can only speculate about the projects that might be proposed and budgeted and the natural events, such as fire, flood, insects, and disease that might occur that will make previously un-contemplated projects necessary or force changes in the projects and the effects of projects that were contemplated. Accordingly, planning is not completed until specific activities are authorized or prohibited and environmental effects meaningfully evaluated.

Ultimately, land management plans for each unit of the National Forest System reflect social and economic values placed on National Forest System lands and environmental laws, regulations, and requirements for protection of the environment. The proposed planning rule and alternative planning rules merely establish a process by which these values and environmental protections are recognized and documented. Consequently, the proposed planning rule and alternative planning rules have no direct effect on the human environment.

Some people disagree with the Agency's conclusions concerning the absence of environmental effects of planning rules and have offered alternative viewpoints of the effects of the proposed planning rule. These alternative viewpoints make up the issues identified in Chapter 1, which are discussed in Chapters 2 and 3.

The alternative viewpoints collectively assert that the proposed rule does indeed have environmental effects. Under this view, because subsequent actions with ground disturbing effects are foreseeable as a result of a new rule, the rule itself is believed to be a causative factor in those effects. For this to occur however, the following links in this

chain of causation must be connected: First, a planning rule would have to shape not only the framework for land management plans, but also influence their specific content. Second, the content of land management plans would influence the choice and design of future projects and activities in a plan area. Finally, certain projects and activities would have to be carried out or prohibited as a direct result of a land management plan. These events are not dominoes, certain to fall in line as the one before it topples. These events are separate and independent Agency decisions tailored to the legal, fiscal, resource, policy, and other constraints specific to each level of decision. Such decisions are also guided by the judgment of the official responsible for the decision at each level.

The various planning rules require plan components such as desired condition, goals, objectives, standards and/or guidelines, identification of land suitability for resource management, identification of special areas, and monitoring strategies. The individual units must identify their own respective desired conditions, goals and objectives, and the standards and/or guidelines to achieve them. The individual units must also identify which of their lands are suitable for resource management, and which lands should have or be recommended for special designation. Individual units must also develop their own monitoring strategies based on specific goals and objectives and local issues.

While land management plans would influence the choice and design of future projects and activities in a plan area, they do not compel or prohibit these actions. Just because a plan identifies certain lands as suitable for timber production does not dictate when, where, or how many acres, if any, of those lands will see a timber harvest. Conversely, lands not identified as suitable for timber production may still be harvested for other resource management purposes.

The factors attendant to each of these determinations are inherently unknowable in the context of a programmatic analysis. Any attempt to forecast them could be nothing more than speculation. The Council on Environmental Quality's Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, Question #18, states where there is total uncertainty about the future, the Agency is not required to speculate. (46 FR 18026) CEQ's regulations also account for uncertainty by defining the point where affects can be meaningfully evaluated as the appropriate time for analysis (40 CFR 1508.23), and by acknowledging that decisionmaking can occur in the face of incomplete or missing information. Moreover, the regulations state that analysis of reasonably foreseeable impacts should not be based on pure conjecture. (40 CFR 1502.22)

Some have suggested that by meeting the stated purpose and need for action, the Agency's land management planning would be more efficient and less costly. They contend the savings in time and dollars would benefit project planning, resulting in more projects and therefore affect the environment. The improvements to land management planning efficiency and cost are not shared with project planning. Project planning would still be subject to environmental laws, regulations, and other requirements for the protection of the environment as they always have been. It is possible that in future years, savings in the Agency's planning budget could find its way into other resource management budget line items, but it is speculative to predict how Congress would fund the Agency.

Even accepting the alternative viewpoint that the proposed planning rule and alternatives would have environmental effects, they are too speculative to analyze. The promulgation of a planning rule that establishes administrative procedures to follow in developing,

revising, and amending land management plans is not yet at a stage in the development of an action where the effects can be meaningfully evaluated. (40 CFR 1508.23) When the stage of planning is reached where there is a direct or even indirect cause and effect relationship between a proposed action and an environmental effect, the proposal will be analyzed and documented in the appropriate NEPA document and with appropriate public involvement.

Each of the alternatives includes the following land management plan requirements:

Table 3 Alternative Land Management Plan Requirements

Alternatives A and D (2005 rule and modified)	Alternative E (modified 2005 rule)	Alternative B (2000 rule)	Alternative C [1] (1982 rule)
Desired Condition	Desired Condition	Desired Condition	Goals
Objectives	Objectives	Objectives	Objectives
Guidelines	Standards	Standards	Standards and Guidelines
Suitability	Suitability	Suitability	Suitability
Special Areas	Special Areas	Special Designations	Wilderness Recommendation
Monitoring	Monitoring	Monitoring	Monitoring

[1] Plans developed under the 1982 rule are often characterized as making six decisions: forest-wide goals and objectives, forest-wide management requirements, management area direction, land suitability, wilderness recommendations, and monitoring. Since forest-wide management requirements and management area direction consist of standards and guidelines, that is what is reflected in this table for purposes of comparison.

Desired Condition

Forest plan goals (in Alternative C) and desired conditions (in all alternatives except C) are the social, economic, and ecological attributes toward which management of the land and resources of the plan area is to be directed. The goals/desired conditions illustrate how the desired landscape would look or function. Desired conditions will not describe the precise activities to be undertaken to bring a forest or grassland to those conditions.

This type of a description states a vision for the desired condition of the forest or grassland. Desired conditions provide a context for future proposed projects or activities. Projects and activities will be developed to help achieve or maintain one or more of the desired conditions of the plan. To be consistent with the plan, a future proposed project or activity can maintain or help achieve one or more desired future conditions, or be neutral to relevant desired conditions. The statement of desired conditions will typically influence the choice and design of future proposed projects and activities in the plan area but does not by itself have any effects on the environment. A planning rule requiring that desired conditions be identified in land management plans but not dictating what those desired conditions should be is even further removed from effects on the environment. Therefore, the desired condition requirement in the proposed action and alternatives has no direct effect on the human environment.

Objectives

Objectives are concise projections of measurable, time-specific intended outcomes. These outcomes typically result from approved projects or activities. Objectives state aspirations to guide the proposed projects and activities for the plan area to help maintain or achieve the desired conditions. Even though objectives identify outcomes aimed at achieving or maintaining desired conditions in the plan area and time frames based on current and past trends of Agency capacity (*i.e.*, budget and personnel), they still are aspirational in nature. Objectives do not approve projects and activities, or command anyone to refrain from undertaking projects and activities, or grant, withhold or modify contracts, permits or other formal legal instruments. A binding commitment to these objectives would be impossible since Agency budgets for any given year are unknown.

While objectives describe aspirations in the plan area to help achieve desired conditions, they will not create a binding commitment to undertake future proposed projects and activities. Objectives will not set the location, timing, or method of any future proposed project or activity. Rather, they provide strategic benchmarks that are helpful in evaluating progress toward desired conditions. Projects and activities are typically developed and designed to achieve one or more of the objectives of the plan. Objectives help guide the responsible official in setting priorities for future proposed projects to meet the desired conditions. To be consistent with the plan, a project or activity can either help make progress toward one or more objectives, or be neutral to relevant objectives. Objectives will typically influence the choice and design of projects or activities in the plan area but do not have any effects on the environment. A planning rule requiring that objectives be articulated in land management plans but not dictating what those objectives should be is even further removed from any effects on the environment. Therefore, the objective requirement in the proposed action and alternatives has no direct effect on the human environment.

Standards/Guidelines

Standards and/or guidelines under any of the alternatives are be used to design projects or activities to contribute to achieving a plan area's desired conditions. Standards and/or guidelines typically would not approve projects and activities, or command anyone to refrain from undertaking projects and activities, or grant, withhold or modify contracts, permits or other formal legal instruments. If a plan standard or guideline were to approve projects and activities, or command anyone to refrain from undertaking projects and activities, or grant, withhold or modify contracts, permits or other formal legal instruments, such a plan component would be subject to appropriate NEPA analysis and documentation.

Standards and/or guidelines describe parameters for activities in an area, recognizing that site-specific NEPA and other analyses conducted during future project and activity decision-making might support adjustment of a standard or guideline in certain circumstances. Thus, standards and/or guidelines will typically influence the development of an Agency proposal for future projects and activities in a plan area and could have an effect on the environment. However, the effects of a planning rule requiring that standards and/or guidelines be included in land management plans but not dictating what those standards and/or guidelines should be, cannot be meaningfully evaluated.

Planning rules requiring specific, mandatory standards and/or guidelines in land management plans might appear to influence the choice and design of future proposed projects and activities, but such influence is remote and speculative. For example, all of the alternatives include timber requirements from section 6(g) of NFMA, either in the rule or through reference to Agency directives. (16 U.S.C. 1604(g)) With one exception, the timber requirements merely repeat the statutory requirements. The exception is the requirement to identify the maximum size of even-aged regeneration harvests as required by NFMA. The acreage chosen by the Agency is a discretionary action. Pursuant to the Act however, a responsible official may exceed the maximum size after appropriate public notice and comment and higher level Agency review. (§1604(g)(3)(F)(iv)) In another example, Alternative C (1982 rule) includes a standard to give special attention to land and vegetation for approximately 100 feet from the edges of all perennial streams, lakes, and other bodies of water. (§219.27(e)(1982)) The standard requires 'special attention' but then repeats the NFMA requirement to provide protection 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. (§1604(g)(3)(E)(iii)) Accordingly, NFMA – not the planning rules – must be credited with this influence on the choice and design of future proposed projects and activities.

Therefore, the standard and/or guideline requirement in the proposed action and alternatives has no direct effect on the human environment.

Suitability

The Forest and Rangeland Renewable Resources Planning Act as amended by NFMA requires National Forest System planning rules to "require the identification of the suitability of lands for resource management."

Alternative C (1982 rule) defines suitability as the appropriateness of applying certain resource management activities to a given unit of land as determined by an analysis of the environmental and economic consequences and the alternative uses forgone. Alternative B (2000 rule) defines the converse, in stating that lands are not suited for a particular use if that use: is prohibited by law, regulation, or Executive Order; is incompatible with the mission or policies of the National Forest System; or would result in substantial and permanent impairment of the productivity of the land. Alternatives A, D, and E (2005 rule and variations) describe suitable uses as those that are compatible with desired conditions and objectives for a particular area.

Under Alternatives B (2000 rule) and C (1982 rule), lands would be identified as suitable for certain management practices such as recreation, timber production, livestock grazing, mineral development, or other uses. Alternatives A, D, and E (2005 rule and variations) would require identification of areas within a National Forest System as generally suitable for various uses.

The identification of an area as suitable or generally suitable for various uses does not approve projects or activities, command anyone to refrain from undertaking projects and activities, or grant, withhold or modify contracts, permits or other formal legal instruments. The identification of land suitability will typically influence future project or activity decision-making but will not have any environmental effects. Actual uses of

specific areas are approved through project and activity decisionmaking. A planning rule requiring the identification of the suitability of lands for resource management in land management plans but not dictating which lands are suitable for what type of management is even further removed from any effects on the human environment. Therefore, the suitability requirement in the proposed action and alternatives has no direct effect on the human environment.

Special Areas/Designations/Recommendations

Special areas are areas within the National Forest System designated because of their unique or special characteristics. Some of these areas are statutorily designated. Other areas may be designated through plan development, amendment, revision, or through a separate administrative process with an appropriate NEPA process.

Special areas that are statutorily designated by Congress include Wilderness and Wild and Scenic River corridors. The responsible official may make preliminary recommendations that ultimately could result in Congressional action, though these recommendations would require additional NEPA documentation before forwarding to Congress.

In some cases, the Forest Supervisor may make recommendations for special areas that would need action at other administrative levels to become final. These special areas include areas designated through a separate administrative process at a national or regional level, or areas designated by a different Agency. Such areas can include, but are not limited to, Research Natural Areas (designated by the Regional Forester with concurrence of the Research Station Director), Experimental Forests (designated by the Forest Service Chief), and National Scenic Byways (designated by the Federal Highway Administration). Appropriate NEPA analysis and documentation would be prepared when such designations are proposed.

The responsible official may designate or remove some special areas through approval of the land management plan, a plan amendment, or plan revision. Such special areas include geological; botanical; zoological; paleonotological; historical; and recreational areas.

Alternative C (1982 rule) requires evaluation of roadless areas for wilderness recommendation and provisions for designation of research natural areas. While not explicit in Alternative C (1982 rule) designation of special areas within a responsible official's authority is allowed. Alternative B (2000 rule) requires evaluation of undeveloped areas for wilderness recommendation and allows responsible officials to recommend administrative designations to higher authorities or to designate special areas within their authority through amendment or revision. Alternatives A, D, and E (2005 rule and variations) require lands possessing wilderness characteristics to be considered for recommendation as potential wilderness and allows responsible officials to designate special areas within their authority through amendment or revision.

The evaluation of lands for preliminary recommendation for wilderness, recommendation to other agencies or higher authority for certain special area designation, and designation of special areas within responsible officials' authority are essentially the same for all of the alternatives. Any designations that prohibit or approve projects or activities will be analyzed in appropriate NEPA documentation. However, a planning rule requiring or

allowing for designation of or recommendations for special areas but not dictating any specific designations will have no effect on the human environment.

Monitoring

All of the alternatives require that land management plans establish monitoring requirements. At a minimum, this would require that plans identify the actions, effects, and resources to be measured; the frequency of measurement; the method of monitoring; and the appropriate reporting intervals. Under all alternatives, monitoring and evaluation would be used to determine if actions are being implemented in accordance with applicable plan direction; if the aggregated outcomes and effects of actions are achieving desired conditions; and if key assumptions underlying management direction are valid.

While the results of monitoring and evaluation inform future proposals and decisions, the design of a monitoring program in a land management plan will not have any effects on the environment. Moreover, a planning rule requiring that a monitoring program be described in land management plans is even further removed from any effects on the human environment. Therefore, the monitoring requirement in the proposed action and alternatives has no direct effect on the human environment.

Indirect Effects

The Council on Environmental Quality regulations implementing the procedural provisions of NEPA define indirect effects as those, "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems." (40 CFR 1508.8)

The Forest and Rangeland Renewable Resources Planning Act as amended by NFMA, requires any National Forest System land management planning rule to be promulgated under the principles of the Multiple-Use Sustained-Yield Act of 1960. (16 U.S.C. 1604(g)) Accordingly, the proposed planning rule and alternatives all establish an administrative process for the development, revision, and amendment of land management plans based upon the principle of sustainability.

Alternatives A, D and E (2005 rule and modified versions) state, "…the goal of managing the National Forest System is to sustain the multiple uses of its renewable resources in perpetuity while maintaining the long-term productivity of the land." These alternatives further state, "Maintaining or restoring the health of the land enables the National Forest System to provide a sustainable flow of uses, benefits, products, services, and visitor opportunities."

Alternative B (2000 rule) states, "The first priority for planning to guide management of the National Forest System is to maintain or restore ecological sustainability of national forests and grasslands to provide for a wide variety of uses, values, products, and services.

Alternative C (1982 rule) states, "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." Additionally, this rule calls for "Establishment of goals and objectives for multiple-use

and sustained-yield management of renewable resources without impairment of the productivity of the land."

Although articulated differently, each alternative reiterates the statutory mandate to provide a sustainable flow of goods and services while maintaining the productivity of the land. As discussed above, the proposed action and alternatives do not dictate, prohibit, or approve any specific projects or activities that will have environmental effects. The proposed action and alternatives do not cause any environmental, social, or economic effects that are later in time or farther removed in distance. Therefore, there are no indirect effects from the proposed action or alternatives.

As previously discussed under the heading of Direct Effects, alternative viewpoints have been presented, in which some people disagree with the Agency's conclusions about the absence of environmental effects and have offered alternative viewpoints of the effects of the proposed planning rule and alternatives. As with direct effects under this viewpoint, any indirect effects are inherently unknowable. The uncertainties and contingencies inherent in assessing direct effects make any attempt to forecast indirect effects even more speculative and remote.

As previously discussed, the Council on Environmental Quality's Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, Question #18, states where there is total uncertainty about the future, the Agency is not required to speculate. (46 FR 18026) CEQ's regulations also account for uncertainty by defining the point where affects can be meaningfully evaluated as the appropriate time for analysis (40 CFR 1508.23), and by acknowledging that decisionmaking can occur in the face of incomplete or missing information. Moreover, the regulations state that analysis of reasonably foreseeable impacts should not be based on pure conjecture. (40 CFR 1502.22)

Cumulative Effects

The Council on Environmental Quality regulations implementing the procedural provisions of NEPA define a cumulative effect as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what Agency (Federal or non-Federal) or person undertakes such other actions" (40 CFR § 1508.7).

For cumulative impacts to accrue there must first be an impact from the action under review that can then be added to the impacts of other past, present, or reasonably foreseeable future actions. Neither the proposed planning rule nor any of the alternative planning rules dictate how administrative units of the National Forest System are to be managed. These alternative rules establish administrative procedures. The Agency does not expect that any of these rules would dictate the mix of uses on any or all units of the National Forest System., There are no direct or indirect effects to be added to the effects of any past, present, or reasonably foreseeable future actions. Consequently, there are no cumulative effects.

Short-term Uses and Long-term Productivity

NEPA requires consideration of "the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity" (40 CFR

1502.16). As declared by Congress, this includes using all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans (NEPA Section 101).

Pursuant to the Forest and Rangeland Renewable Resources Planning Act of 1974 as amended by NFMA, the proposed action and alternatives each ascribe to the principles of the Multiple-Use Sustained-Yield Act of 1960 in setting out a process for the development and revision of land and resource management plans. Accordingly, plans prepared under any of the alternatives would provide guidance for a sustainable flow of goods and services while maintaining the productivity of the land.

The proposed action and alternatives guide the development of land management plans by requiring those plans to include desired conditions, objectives, standards and/or guidelines, identification of special areas, and monitoring programs. However, these rules neither authorize nor prohibit short-term uses of National Forest System lands.

Unavoidable Adverse Effects

The proposed planning rule and alternative planning rules would affect the *process* whereby National Forest System land management plans are developed, revised, and amended. They establish administrative procedures. These rules do not dictate the activities that would occur or not occur on administrative units of the National Forest System. As previously discussed, neither the proposed rule nor any of the alternatives have a direct, indirect, or cumulative effect on the human environment and therefore, none would result in any unavoidable adverse effects.

Irreversible and Irretrievable Commitments of Resources

Irreversible commitments of resources are those that cannot be regained, such as the extinction of a species or the removal of mined ore. Irretrievable commitments are those that are lost for a period of time such as the temporary loss of timber productivity in forested areas that are kept clear for use as a power line rights-of-way or road.

Neither the proposed action nor any of the alternatives require any irreversible or irretrievable commitments of resources. Rather, the proposed planning rule and alternative planning rules merely describe the process the Forest Service would use to make planning decisions for the National Forests and Grasslands. Any commitments of resources would take place when projects or activities are proposed and after the preparation and consideration of appropriate NEPA analysis and documentation.

Other Required Disclosures

NEPA at 40 CFR 1502.25(a) directs “to the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with and integrated with …other environmental review laws and executive orders.”

The Agency plans to comply with the court’s order regarding the Endangered Species Act.

Alternatives' Response to the Issues

The five alternatives are discussed below in terms of how they address the significant issues identified in Chapter 1.

Diversity of Plant and Animal Communities Issue

Diversity Requirements of NFMA

All of the proposed alternatives must comply with NFMA, which requires regulations that establish the process for development, and revision of land management plans. "The regulations shall include… 3) specifying guidelines for land management plans developed to achieve the goals of the Program which… (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;" (16 U.S.C. 1604 (g)(3)(B))

The National Forest System includes 193 million acres, and individual planning units vary in size. For example, the Tongass National Forest in Alaska is 17 million acres and the Finger Lakes National Forest in New York is only 16,000 acres. The Finger Lakes National Forest does not have the same suitability and capability that the Tongass National Forest does to provide for diversity of plant and animal communities because it does not have the large unfragmented habitats required by some species. The guidelines of a planning rule apply to both national forest examples and diversity guidelines in a rule should be based on the suitability and capability of each forest to meet overall multiple-use objectives.

Because a planning rule must apply to such a wide range of species present in a wide range of environments, its guidance will fall into three areas: general guidance on goals and objectives related to diversity; guidance on how to achieve these goals; and guidance on how to measure success in the achievement of diversity goals and objectives.

Threatened, Endangered, or Proposed Species

The proposed planning rule and alternative planning rules would have no effect to threatened, endangered, or proposed species or to designated or proposed critical habitat.

The promulgation of either the proposed planning rule or any of the alternatives considered is not a "major construction activity", as defined in the implementing regulations for the Endangered Species Act (ESA) at 50 CFR 402.02. As such, preparation of a biological assessment is not required (50 CFR 402.12e). Although a biological assessment is not required, an analysis was conducted in order to examine whether the proposed rule or alternatives have effects on threatened, endangered, or proposed species or critical habitat, such that consultation or conferencing under Section 7 of the ESA would be necessary.

The proposed rule and alternative rules, in and of themselves, would not predetermine management activities for specific project areas or land management plan decisions, nor would they authorize, fund, or carry out any habitat or resource disturbing activities. They would not make any land use allocations, or establish specific standards or guidelines for management of resources. These rules, being strictly procedural, would not

directly result in changes in the management of any particular National Forest or Grassland or in the activities permitted or conducted on those lands. Moreover, because of their procedural nature, there is no reasonable basis for assessing or quantifying the specific effects of any subsequent actions, as such effects will depend upon decisions made during future programmatic and project planning and it is premature to speculate on the specific nature or effects of those decisions.

Other Species

All alternatives set up aspirations for National Forest System (NFS) lands to sustain biological diversity, to sustain populations of rare species, and to sustain habitat for over 3,000 species of birds, mammals, reptiles, fish, amphibians, and over 10,000 plant species. These aspirations might have influence on plans and subsequently, the design of future projects and activities on NFS lands. All alternatives contain provisions for sustaining biodiversity while providing for timber harvest, mineral development, recreational, and other uses.

Response to Issue

The key differences between the alternative rules are their diversity criteria, monitoring requirements and use of adaptive management principles. In other words, how they define successful achievement of species diversity, how they measure this success and how they provide for corrective action.

Diversity criteria

As displayed in the following Diversity Criteria Table, Alternative C (1982 planning rule) would require the Agency to ensure that viable populations of existing native and desired non-native vertebrate species will be maintained. Alternative B requires the Agency to provide for ecological conditions with a high-likelihood of supporting the viability of native and desired non-native species. Alternative A (proposed action) and Alternatives D and E (modifications of the 2005 planning rule) require plans to provide a framework to contribute to sustaining native ecological systems by providing ecological conditions to support diversity of native plant and animal species in the plan area. Plan components must establish a framework to provide the characteristics of ecosystem diversity in the plan area. If the responsible official determines that additional provisions beyond those for ecosystem diversity are required to provide appropriate ecological conditions for specific threatened and endangered species, species-of-concern, and species-of-interest, then the plan must include additional provisions for these species, consistent with the limits of Agency authorities, the capability of the plan area, and overall multiple use objectives. In addition, the directives for the 2005 rule provide guidance for providing self-sustaining populations.

Table 4 Diversity Criteria

Alternatives A, D, and E (2005 planning rule and modifications) **Self-sustaining Populations**	In Alternative A (proposed action) and Alternatives D and E (modifications of the 2005 planning rule) the rule text sets up an overall goal to provide a framework to provide ecological conditions to support diversity of native plant and animal species in the plan area (36 CFR 219.10. To sustain species diversity FSM 1921.76c says plan components for species-of-concern should provide appropriate ecological conditions to allow self-sustaining populations of the species to be well distributed and interactive, within the bounds of the life history, distribution, and natural population fluctuations of the species within the capability of the landscape and consistent with multiple-use objectives.
Alternative B, 2000 planning rule **High Likelihood of viability**	Alternative B (2000 planning rule) states "Plan decisions affecting species diversity must provide for ecological conditions that the responsible official determines provide a high likelihood that those conditions are capable of supporting over time the viability of native and desired non-native species well distributed throughout their ranges within the plan area, except as provided in paragraphs (b)(2)(ii)-(iv) of this section" (36 CFR 219.1920(b)(2)(i) (2000))
Alternative C, 1982 planning rule **Viable Populations**	Alternative C (1982 planning rule) states "Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species… 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" (36 CFR 219.19 (1982)). In addition, "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 (36 CFR 219.26 (1982)).

To provide for diversity of plant and animal communities the Agency designed Alternative A (proposed action), Alternatives D and E (modifications of the 2005 planning rule), and Alternative B (2000 planning rule) based on the principles of conservation biology to supply a reasonable level of assurance of diversity using a coarse filter (ecosystem diversity) and fine filter (species diversity). With Alternatives A, B, D, and E the Agency acknowledges the limits of the Agency's scientific understanding and financial and technical capabilities. In addition, with Alternatives A, B, D, and E the Agency concedes that the management of plant and animal communities must be done recognizing uncertainty, imperfect and incomplete information, and systemic environmental variation.

Diversity Criteria and Alternatives A, D, and E

Alternative A (proposed action) and Alternatives D and E (modifications of the 2005 planning rule) establish a goal of providing ecological conditions for plant and animal communities, require a framework for sustaining these conditions in plans, and give the responsible official discretion to decide what plan components should be included in the plan for species. Alternatives A, D, and E require the planning directives for sustaining ecological systems to be consistent with the concepts of ecosystem diversity and species diversity. In addition, guidance is included in the Forest Service Directive System for providing self-sustaining populations of species-of-concern for Alternatives A, D, and E.

A self-sustaining population is one that is sufficiently abundant and has appropriate population characteristics to provide for its persistence over many generations. Species-of-concern are "species for which the responsible official determines that management actions might be necessary to prevent listing under the Endangered Species Act" (36 CFR 219.16). The Agency defines the specific analysis processes in FSM 1921.7 and FSH 1909.12 chapter 40.

The characteristics of ecosystem diversity described in the directives include parameters that describe an ecosystem; composition (major vegetation types, rare communities, aquatic systems, and riparian systems), structure (successional stages, water quality, wetlands, and floodplains), principal ecological processes (stream flows and historical and current disturbance regimes), and soil, water, and air resources (FSM 1905).

The planning directives provide the appropriate procedural considerations to sustain species diversity based on the suitability and capability of the specific land area. FSM 1921.76c says:

> The following points describe appropriate considerations for plan components based on the portion of the range of a species-of-concern that overlaps a plan area. When a plan area encompasses:
>
> 1. The entire range of a species, the plan components should contribute appropriate ecological conditions for the species throughout that range.
>
> 2. One or more naturally disjunct populations of a species, the plan should contribute appropriate ecological conditions that contribute to supporting each population over time.
>
> 3. Only a part of a population, the plan should contribute appropriate ecological conditions to support that population" (FSM 1921.76c).

Diversity Criteria and Alternative B

Alternative B (2000 planning rule) procedures establish a diversity criterion of high likelihood of viability. The procedures provide considerations based on the suitability and capability of the specific land area. Alternative B says at 36 CFR 219.20 (b)(2):

> "When a plan area occupies the entire range of a species, these decisions must provide for ecological conditions capable of supporting viability of the species and its component populations throughout that range. When a plan area encompasses one or more naturally disjunct and self-sustaining populations of a species, these decisions must provide ecological conditions capable of supporting over time viability of each population. When a plan area encompasses only a part of a population, these decisions must provide ecological conditions capable of supporting viability of that population well distributed throughout its range within the plan area.
>
> (ii) When conditions outside the authority of the agency prevent the agency from providing ecological conditions that provide a high likelihood of supporting over time the viability of native and desired non-native species well distributed throughout their ranges within the plan area, plan decisions must provide for ecological conditions well distributed throughout the species range within the plan area to contribute to viability of that species.
>
> (iii) Where species are inherently rare or not naturally well distributed in the plan area, plan decisions should not contribute to the extirpation

> of the species from the plan area and must provide for ecological conditions to maintain these species considering their natural distribution and abundance.
>
> (iv) Where environmental conditions needed to support a species have been so degraded that it is technically infeasible to restore ecological conditions that would provide a high likelihood of supporting viability, plan decisions must provide for ecological conditions to contribute to supporting over time viability to the degree practicable" (36 CFR 219.20(b)(2)(iv)).

In addition, Alternative B (2000 planning rule) would establish the most intensive analysis requirements of any of the alternatives. Alternative B analysis requirements for ecosystem diversity and species diversity are estimated to be very costly, and neither straightforward nor easy to carry out. (See Cost-Benefit Analysis – The Proposed Rule (36 CFR 219) for National Forest Land Management Planning, available online at http://www.fs.fed.us/emc/nfma/2007_pr_eis_references.html).

Diversity Criteria and Alternative C

Alternative C (1982 planning rule) procedures require viability. The words of Alternative C (1982 planning rule) "shall be managed to maintain" and the stringent "ensure" have been interpreted by some people to be a 100 percent certainty that all species must remain viable at all times. These 1982 planning rule procedures for viability are not based on the suitability and capability of the specific land area as required by the NFMA.

The 100 percent certainty interpretation by some people is a technical impossibility given that the cause of some species decline is outside the limits of the Agency. For example, viability of some species on National Forest System lands might not be achievable because of species-specific distribution patterns (such as a species on the extreme and fluctuating edge of its natural range), or when the reasons for species decline are due to factors outside the control of the Agency (such as habitat alteration in South America causing decline of some Neotropical birds), or when the land lacks the capability to support species (such as a drought affecting fish habitat).

Monitoring

As shown in the following table the alternatives vary in the discretion the responsible official has in designing the monitoring program for species diversity in collaboration with stakeholders. Alternative A (proposed action) and Alternatives D and E (modifications of the 2005 planning rule) allow the most discretion in designing a monitoring program for diversity or plant and animal communities. Alternative B (no-action, 2000 planning rule) requires the responsible official to develop a monitoring strategy to monitor ecological conditions (habitat) for focal species and species-at-risk, but allows the responsible official discretion in the monitoring of species population trends.

Alternative C (1982 planning rule) requires monitoring of population trends of MIS. This alternative has the least discretion regarding monitoring of population trends. When the 1982 planning rule was written, the Agency believed that MIS populations indicated the effects of management activities. The MIS concept has not been very useful as a framework for understanding the relationship of changes in wildlife habitat and population trends, because of the lack of ability to predict future trends. Two key articles refute the idea of MIS as an indicator of other species (Landres 1988; Niemi 1997). There

are other relevant papers for MIS (Broberg 1999; Caro and O'Doherty 1999; Caro and others 2005; Landres and others 1988; Lindenmayer and others 2000: Ozaki and others 2006).

Table 5 Monitoring and Species Diversity

Alternatives A, D, and E (2005 planning rule and modifications)	Alternative A (proposed action) and Alternatives D and E (modifications of the 2005 planning rule) require the plan monitoring program to take into account key social, economic, and ecological performance measures relevant to the plan area (36 CFR 219.6(b)(1)(ii)(2005)). Alternatives A, D, and E empower responsible officials to use their discretion to tailor monitoring to local needs and conditions. In addition at 36 CFR 219.14 (2005) the alternatives A, D, and E allow existing plans developed under the 1982 planning rule to monitor the habitat of MIS instead of monitoring population trends of MIS unless the plans themselves require monitoring of population trends of MIS.
Alternative B (2000 planning rule)	Alternative B (2000 planning rule) requires monitoring to be used to evaluate focal species and species at risk (36 CFR 219.11(a)(1)(ii)(2000)) and requires monitoring of the effectiveness of monitoring (36 CFR 219.11(a)(1)(iii)(2000)). Alternative B requires monitoring of status and trends of ecological conditions (habitat) to support focal species and selected species-at-risk. Monitoring of species populations is optional. *Focal species*: Focal species are surrogate measures used in the evaluation of ecological sustainability, including species and ecosystem diversity. The key characteristic of a focal species is that its status and trend provide insights to the integrity of the larger ecological system to which it belongs. *Species-at-risk*: Federally listed endangered, threatened, candidate, and proposed species and other species for which loss of viability, including reduction in distribution or abundance, is a concern within the plan area. Other species-at-risk may include sensitive species and state listed species. A species-at-risk also may be selected as a focal species.
Alternative C (1982 planning rule)	Alternative C (1982 planning rule) requires that population trends of the management indicator species (MIS) will be monitored and relationships to habitat changes determined (36 CFR 219.19(a)(6)(1982)). Threatened and endangered species listed under ESA were sometimes are included as MIS species. The 1982 planning rule stated that MIS species shall be selected (36 CFR 219.19(a)(1) “because their population changes are believed to indicate the effects of management activities.”

Adaptive management

Monitoring by itself cannot ensure species diversity. A monitoring program that is tied to the assessment of management objectives intended to contribute to species diversity will facilitate achievement of the objectives. Alternative A (proposed action) and Alternatives D and E (modifications of the 2005 planning rule) strongly promote the use of adaptive management principles to support continuous improvement of management. Alternative B (2000 planning rule) also embraces adaptive management principles. Alternative C (1982 planning rule) does not explicitly encourage adaptive management, but adaptive management may be used. The MIS monitoring requirements in Alternative C are designed to determine the effects of management on species rather than the effectiveness

of management in providing species diversity. Alternative C presents a reactive approach where the other alternatives present a proactive approach in their guidance.

Timber Management Requirements of 16 U.S.C. 1604(g) Issue

The following section compares and contrasts how each of the alternatives address the requirements regarding timber harvesting from the NFMA. NFMA has four conditions related to timber harvest at 16 USC 1604 (g)(3)(E) and five conditions related to even-aged harvest at 16 USC 1604 (g)(3)(F).

National Forest Management Act Requirements

Related to timber management, NFMA requires the Secretary of Agriculture to "promulgate regulations … that establish the process for the development and revision of the land management plans. … The regulations shall include …specifying guidelines for land management plans developed to achieve the goals of the Program which – "

"(E) insure that timber harvesting will be harvested from National Forest System lands occur only where –

i. soil, slope and 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 stream, 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 to because it will give greatest dollar return or the greatest unit output of timber; and output and" (16 USC 1604 (g)(3)(E)).

"(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 where –

i. for clearcutting, it is determined to be the optimal 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 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 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 offices 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 resource" (16 USC 1604 (g)(3)(F)).

Guidance from the Forest Service Directive System

The Forest Service Manual (FSM) and the Forest Service Handbook (FSH) provide extensive guidance regarding the NFMA requirements outlined above. Guidance regarding irreversible damage to watershed conditions and assurance of restocking within five years is included in the FSH 1909.12, section 61 under Vegetation Management Requirements at the Project Level. Forest Service directive citations are from the most recent amendment.

Guidance about protection of riparian areas, water bodies, water quality, and fish habitat is included in the FSM 1920.12a and the FSH 1909.12, section 43.15(2)(g)). The requirement that a harvesting system used is not selected primarily to give greatest dollar return or timber output is included in FSM 1921.12(a)(4) as a project specific finding.

The requirements regarding use of even-aged regeneration harvests are all located in FSM 1921.12. Maximum size limits for even aged regeneration harvests have been established and can be found at FSM 1921.12e. Additional guidance to ensure clearcutting is optimal is provided in the FSH 1909.12, section 64.5.

The above referenced directives are available at http://www.fs.fed.us/im/directives.

Response to Issue

The method by which each alternative deals with the NFMA requirements quoted above is summarized in the following tables.

Table 6 Timber Harvest Only Where -

	Alt A & Alt D	Alt B	Alt C	Alt E
(i) Soil and watershed protected	Rule says must include in the directive system	Included in the rule	Included in the rule	Included in the rule
(ii) Lands restocked	Rule says must include in the directive system	Included in the rule	Included in the rule	Included in the rule

	Alt A & Alt D	Alt B	Alt C	Alt E
(iii) Riparian and fish protected	Rule says must include in the directive system	Not included in the rule	Included in the rule	Included in the rule
(iv) System not selected for dollars or output	Rule says must include in the directive system	Not included in the rule	Included in the rule	Included in the rule

Under alternatives A and D all NFMA requirements are included in the directive system.

Alternative B (No Action, 2000 rule) includes requirements regarding soil and watershed protection and restocking in 36 CFR part 219.28(2000). However, the rule ties this requirement to the requirement for identification of lands not suitable for timber harvest. The application of these provisions to an individual project is not clearly stated. Alternative B does not specifically mention riparian areas or water bodies in context related to timber harvesting. Water resources, riparian areas, and habitat are mentioned at §219.20(2000) and §219.36(2000) as important parts of ecosystem diversity and productive ecological systems. Additionally, Alternative B requires the responsible official to identify specific watersheds in need of protective or restoration measures (§219.9(b)(6)(2000)).

Alternative C (1982 rule) calls for protection of streams, streambanks, shorelines, lakes, wetlands, and other bodies of water at 36 CFR section 219.27(a)(4)(1982) with specific respect to openings created by even-aged management, at §219.27(d), and to riparian areas at §219.27(e). Section 219.27(e) requires “special attention be given to land and vegetation for approximately 100 feet from the edges of all perennial streams, lakes, and other bodies of water”, and “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.”

Table 7 Even-aged Methods are used only if -

	Alt A & Alt D	Alt B	Alt C	Alt E
(i) Clearcutting is optimal	Rule says must include in the directive system	Rule calls for standards to limit even-aged harvest	Not included in the rule	Included in the rule

	Alt A & Alt D	Alt B	Alt C	Alt E
(ii)Interdisciplinary review	Rule says must include in the directive system	Not included in the rule	Not included in the rule	Included in the rule
(iii) Cut blocks are shaped and blended	Rule says must include in the directive system	Included in the rule	Included in the rule	Included in the rule
(iv) Size limits	Rule says must include in the directive system	Included in the rule	Included in the rule	Included in the rule
(v) Protection of multiple resources	Rule says must include in the directive system	Obliquely included through provision for maintenance or restoration of ecosystems	Obliquely included through "management requirements" for all prescriptions	Included in the rule

Under alternatives A and D all NFMA requirements are included in the directive system.

Alternative B, at §219.7(c)(2000), requires that forest plans contain standards that include, "Limitations on even-aged timber harvest methods; Maximum size openings from timber harvest; Methods for achieving aesthetic objectives by blending the boundaries of vegetation treatments; and other requirements to achieve multiple-use of the national forests and grasslands."

Alternatives B and C do not explicitly state that clearcutting must be the optimal method, that even-aged cutting is reviewed by an interdisciplinary team, or that even-aged timber cutting must provide for protection of the resources listed in the NFMA requirement.

The actual maximum acre size limits for even-aged timber cutting by vegetation type are the same for all alternatives.

Identification of lands not suited for timber production 16 U.S.C. 1604(k) Issue

National Forest Management Act Requirements

The NFMA directs the Secretary to identify lands which are not suited for timber production, considering physical, economic and other pertinent factors. (16 USC 1604 (k))

Guidance from the Forest Service Directive System

The FSM 1921.12c requires that the responsible official identify lands not suited for timber production. The Forest Service Handbook (FSH, 1909.12, chapter 60) provides extensive detail about how to accomplish this requirement. The process is described in FSH 1909.12, section 62, under Identification of Lands Generally Not Suitable for Timber Harvest. The handbook combines elements of the previous issue (i.e. restocking and irreversible damage) and considers those issues at the forest scale. Those are combined with lands that have been withdrawn from timber harvest and lands where trees are unable to grow due to environmental conditions. The four considerations are combined to be "Lands generally not suited for timber harvest." The remaining lands are "generally suited for timber harvest". Lands generally suited for timber harvest consist of two types: (1) Lands where timber production is compatible with the achievement of desired conditions and objectives established by the plan, and (2) Other lands where harvest is necessary to achieve multiple-use objectives other than timber production.

Response to Issue

Alternatives A and D require at 36 CFR section 219.12(2005) that the responsible official identify lands as not suitable for timber production. The alternatives provide a framework for consideration of timber production. The Forest Service Directive system provides further detail to accomplish this requirement.

Alternative B, at §219.28(2000), requires that the plan identify lands where timber may not be harvested and provides a framework of what lands are included in that category. Alternative B describes identification of lands where timber may be harvested for timber production and lands where timber may be harvested for other multiple-use values.

Alternative C, at §219.14(1982), requires that lands not suited for timber production be identified during forest planning. The remaining lands are further reviewed and assessed before formulation of alternatives to determine the costs and benefits for a range of management intensities for timber production. Some of these lands might be categorized as "not appropriate for timber production" in various alternatives based on multiple use objectives, cost-benefit analysis, and various "management requirements" related to resource protection, vegetation manipulation, silvicultural practices, even-aged management, riparian areas, soil and water, and diversity, specified at §219.27(1982). Lands considered not suited for timber production and as not appropriate for timber production are collectively designated as "not suited for timber production".

Alternative E includes the same provisions for identification of lands not suited for timber production as Alternatives A and D do. The difference is that Alternatives A and D refer to FSM 1921.12c and FSH1909.12, section 60 guidance at §219.12.

Standards and Prohibitions Issue

National Forest Management Act Requirements

The NFMA requires "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" (16 U.S.C. 1604(c)). Additionally, the Act requires the Secretary to "promulgate regulations, under the principles of the Multiple-Use Sustained-Yield Act of 1960 [16 U.S.C. 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 in section 6(g) of the Act" (16 U.S.C. 1604(g)). In the NFMA, the terms "standards" and "guidelines" are both used, with no apparent distinction between them with respect to their force and effect.

Response to Issue

Based on the issues related to standards and guidelines that were raised during the scoping period, four approaches to the standards and guidelines are described and compared below. These include the guidelines employed in the 2005 planning rule (proposed action and Alternative D), standards and guidelines embodied in the 1982 planning rule (Alternative C), the mandatory/discretionary standards approach embodied in the 2000 rule (Alternative B), and a modified standards approach combined with the 2005 Planning Rule (Alternative E).

Alternatives A and D

Standards are not explicitly included in these alternatives. Alternatives A (proposed action) and D (2005 rule modified) feature the use of guidelines . Under these alternatives, the term "guideline" means information and guidance for the design of projects and activities. Guidelines are recommended technical and scientific specifications. Guidelines are designed to support or complement the achievement of the desired conditions. Under these alternatives, managers would have discretion when using guidelines. Managers would not have the discretion to ignore guidelines on a whim. A project or activity may be consistent with a guideline in one of two ways:

1. The project or activity is designed in accordance with the guideline, or

2. The project or activity design varies from the guideline but the design is an effective means of meeting the purpose of the guideline, which is to maintain or contribute to the attainment of relevant desired conditions and objectives.

The project documentation should either that the project or activity is designed in accordance with applicable guidelines or specifically explain that the project varies from a guideline, and how the variance is an effective means of meeting the purpose of the guideline.

Land management plan guidance may be supplemented at the project level using "other sources of information" or guidance as needed depending on the requirements of the project. Other guidance may be contained in documents, including but not limited to, Forest Service Manuals or Handbooks, scientific literature, and species recovery plans. Other guidance is brought to bear depending on site-specific circumstances for resource

protection at the project level. As with all alternatives, guidance becomes a binding Agency commitment when the decision document for a project is signed.

Under Alternatives A and D, land management plans are strategic and typically do not approve or prohibit projects or activities. The focus of environmental analysis is not at the plan level, but at the project level where the Forest Service knows the specific parameters of the action that is being proposed. This allows analysis (consistent with NEPA requirements) to be done at the appropriate scope and scale.

Guidelines as employed in these alternatives would:

- Be included in land management plans to provide information and guidance for projects and activities.
- Not repeat law, policy, or manual and handbook direction (FSH 1909.12, chapter 10).
- Provide managerial discretion to vary from land management plan guidelines. The rationale for variance must be documented in the environmental analysis and be available for public comment and objection.
- Allow the use of other information for resource protection that is specific to the requirements of the project

Alternative B

Alternative B (2000 rule) includes the use of ‘standards’ as described in the 2000 planning rule (65 FR 67513). Under this alternative, standards might be mandatory or discretionary depending on the wording of the standard. Mandatory standards include the use of the words “must or shall” and the standard must be used. However, a project could vary from a mandatory standard through a plan amendment. Discretionary standards use the word “should” and may or may not be used (with appropriate documentation) depending on the site-specific circumstances of individual projects. Standards as employed in these alternatives would:

- Include mandatory standards and standards with managerial discretion to vary from the standards. The rationale for variance from discretionary standards must be documented in the environmental analysis and be available for public review and comment. Managerial discretion to vary from mandatory standards is provided by site-specific plan amendments.
- Not repeat law, policy, or manual and handbook direction (FSH 1909.12, chapter 10).

Alternative C

Alternative C includes the use of standards and guidelines as described under the 1982 planning rule. In the 1982 planning rule and the first round of plans, the two terms were usually written together as “standards and guidelines.” Some plan revisions have designed mandatory provisions as “standards” and general direction with latitude for implementation as “guidelines.” Other plans do not make a distinction between standards and guidelines.

Many people are comfortable with the 1982 rule approach the Forest Service has used for land management planning. Line officer discretion may be allowed depending on how the land management plan describes the degree of compliance with standards and guidelines.

Many people feel that a conventional standards and guidelines package offers assurances for resource protection that other alternatives do not. Characteristics of the conventional approach include:

- Often including standards that repeat law, policy or guidance that is already described in Forest Service manuals or handbooks
- Often including procedural standards (stipulating analytical procedures or specialist involvement)
- Managerial discretion to vary from discretionary standards and guidelines
- Managerial discretion to change mandatory standards and guidelines by site-specific plan amendments.

Alternative E:

Alternative E is essentially the same as Alternatives A and D except that standards are explicitly allowed. The use of 'other sources of information' would be employed to assure resource protection based on site specific analysis. Managers have the discretion to vary from plan guidelines the same as other alternatives (for 1982 rule plans it would depend upon plan wording). The rationale for variance must be discussed in the project or activity environmental analysis and is subject to public review and comment. The characteristics of this alternative are similar to those described for Alternatives A and D and include:

- Guidelines, which do not repeat law, policy, or manual and handbook direction (FSH 1909.12, chapter 10).
- Managerial discretion to vary from land management plan guidelines. The rationale for variance must be documented in the environmental analysis and be available for public comment and objection.
- The use of other information for resource protection that is specific to the requirements of the project.

Environmental Impact Statement Issue

National Forest Management Act Requirements

The NFMA requires planning regulations to specify procedures to insure that land management plans are prepared in accordance with the National Environmental Policy Act, including, but not limited to, direction on when and for what plans an environmental impact statement shall be prepared. (16 U.S.C. 1604(g)(1))

As this is a three-part issue, the alternatives are compared in terms of how each addresses alternatives, public participation, and cumulative effects analysis.

Response to the Alternatives Issue

Alternatives A, D, and E (2005 rule and modifications)

Alternative A (proposed action) and Alternatives D and E (modifications of the 2005 rule) stipulate that approval of a plan, plan revision, or plan amendment would be done in accordance with Agency NEPA procedures and may be categorically excluded from documentation in an environmental assessment or environmental impact statement. Agency NEPA procedures include a categorical exclusion for land management plans, plan amendments, and plan revisions developed in accordance with 36 CFR 219 *et seq*. that provide broad guidance and information for project and activity decision-making in a National Forest System unit. Proposals for actions that approve projects and activities, or that command anyone to refrain from undertaking projects and activities, or that grant, withhold or modify contracts, permits or other formal legal instruments, are outside the scope of the category and must be considered separately under Forest Service NEPA procedures. Since Alternative E explicitly allows standards that might include final decisions with prohibitions, the planning categorical exclusion would not be available for any plan component containing such standards. Since alternatives A and D do not explicitly prohibit standards, a plan could be developed or revised under these alternatives that included standards making final decisions with prohibitions. The planning categorical exclusion would likewise not be available for any plan component containing such standards.

Alternatives A, D, and E allow an iterative approach to development of a plan, plan amendment or plan revision. Iterative development occurs as various options for plan components are considered and discussed with interested members of the public. The options are modified through the collaborative process until a proposal is developed. The Forest Service then determines whether the planning categorical exclusion is available. If so, no NEPA alternatives are developed. If further NEPA analysis and documentation are required, appropriate alternatives would be developed. (§219.6(2005) and FSH 1909.12 sec.25.32b)

Alternatives B (2000 rule) and C (1982 rule)

Alternative B (no action) and Alternative C require an environmental impact statement for development or revision of a land management plan. However, an environmental assessment could be used to document the environmental analysis for a plan amendment under these alternatives. National Environmental Policy Act implementing regulations at 40 CFR 1500 *et seq* require consideration of alternatives in the analysis associated with either of these environmental documents. Alternative B (2000 rule) relies on Agency NEPA procedures for the formulation of alternatives. Alternative C explicitly requires formulation of alternatives for plan development, ranging from the minimum resource potential to the maximum resource potential on a unit. Furthermore, at least one alternative must incorporate the Rangeland Renewable Resources Planning Act Program, and one alternative must reflect the current level of goods and services provided by the unit. Alternative C relies on Agency NEPA procedures for developing alternatives for plan amendment.

Response to the Public Involvement Issue

While the alternatives range from requiring an environmental impact statement to allowing a categorical exclusion for plan development, revision, and amendment, public

involvement opportunities do not differ dramatically. Moreover, all alternatives provide public involvement opportunities equal to or greater than those required by Agency NEPA procedures and National Environmental Policy Act implementing regulations at 40 CFR 1500 *et seq* for preparation of an environmental impact statement.

Alternatives A, D, and E (2005 rule and modifications)

The public involvement requirements for Alternatives A, D, and E are the same. The responsible official must provide opportunities for the public, Federal, State, and local agencies, and Tribal governments to collaborate and participate openly and meaningfully in the planning process. Specifically, as part of plan development, plan amendment, and plan revision, the responsible official must involve the public in developing and updating a comprehensive evaluation report, establishing the components of the plan, and designing the monitoring program, but has the discretion to determine the methods and timing of public involvement opportunities. Public notice must also be provided at initiation of plan development, revision, or amendment. Plan development, revisions and amendments are subject to a 90-day comment period and a 30-day objection period. Public notice must also be provided at the point of approval. (§219.9 (2005)) These public involvement requirements would apply even if land management plan components are categorically excluded from further analysis and documentation in an environmental assessment or environmental impact statement.

Alternative B (2000 rule)

This alternative requires the responsible official to "actively engage the American public, interested organizations, private landowners, state, local, and Tribal governments, federal agencies and others". The responsible official must also "provide early and frequent opportunities for people to participate openly and meaningfully in planning", but the "responsible official has the discretion to determine how to provide these opportunities in the planning process." The responsible official is required to: (1) provide early and frequent coordination with appropriate Federal agencies, State and local governments, American Indian Tribes and Alaska Natives; (2) provide early and frequent opportunities for participation from interested individuals, and organizations; and (3) seek to collaborate with those who have control or authority over adjacent lands. The responsible official may could request establishment of an advisory committee. (§219.12-18 (2000))

Plan revision requires public notice of the proposed revision and information compiled for the revision and at least 45 calendar days for public comment. Plan revision also requires preparation of an environmental impact statement, and a 90-day public comment period for the draft environmental impact statement. (§219.9 (2000))

Plan amendments may be documented according to Agency NEPA procedures, which do not prescribe any specific public involvement requirements beyond inviting the participation of affected Federal, State, and local agencies, affected Tribes, and other interested persons. (§219.8 (2000))

Alternative C (1982 rule)

This alternative uses the NEPA requirements for public involvement dictated by CEQ's Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (CEQ regulations) at 40 CFR 1500 *et seq* and Agency NEPA procedures. For

plan development, revision, or amendment this means inviting the participation of affected Federal, State, and local agencies, affected Tribes, and other interested persons. Additionally, plan development or revision would require preparation of an environmental impact statement, which includes publishing a notice of intent to prepare an environmental impact statement in the Federal Register and at least a 3-month public comment period for draft plans and draft environmental impact statements. This alternative requires the responsible line officer to coordinate with other Federal, State, local, and Tribal planning efforts. Additional public involvement is left to the discretion of the responsible line officer. (§219.6(1982))

Response to the Cumulative Effects Issue

Throughout 28 years of land management planning, the Agency has learned that tiering to the cumulative effects analysis in a plan environmental impact statement did not provide nearly as much useful information at the project or activity level as the Agency had expected. The effects analyses in plan environmental impact statements were often too general to meet analytical needs for projects and activities. The effects analysis conclusions did not remain current over the life of a plan. In addition, typically because of public input and litigation, the Forest Service found that additional analysis and documentation was still necessary for projects and activities. Meaningful cumulative effects analysis for a project could not be done until the project design and location were known.

Alternatives A, D, and E (2005 rule and modifications)

Alternative A (proposed action) and Alternatives D and E (modifications of the 2005 rule) stipulate that approval of a plan, plan revision, or plan amendment would be done in accordance with Agency NEPA procedures. Agency NEPA procedures include a categorical exclusion for land management plans, plan amendments and plan revisions that provide broad guidance and information for project and activity decision-making in a National Forest System unit. Plans developed, revised or amended under Alternatives A, D, and E may be categorically excluded from documentation in an environmental assessment or environmental impact statement unless they include proposals for actions that approve projects and activities, or that command anyone to refrain from undertaking projects and activities, or that grant, withhold or modify contracts, permits or other formal legal instruments.

Agency NEPA procedures and CEQ regulations at 40 CFR 1500 *et seq* require consideration of cumulative effects in environmental assessments and environmental impact statements. Any plan components documented in an environmental assessment or environmental impact statement, would include an analysis of cumulative effects.

In promulgating the categorical exclusion for land management plan development, revision, or amendment, the Agency analyzed the potential for cumulative effects resulting from such administrative actions. The Agency determined that these administrative actions do not have cumulatively significant effects on the human environment. (71 FR 75481) Accordingly, no cumulative effects analysis would accompany a categorically excluded plan, plan revision, or plan amendment. Plan-level analysis would, however, evaluate existing conditions and broad trends at the geographic scale of the planning area. It should be noted that Agency NEPA procedures require scoping even for proposals that would appear to be categorically excluded. Scoping for

plan development, revision, or amendment would consider the potential for past, present, or reasonably foreseeable actions to contribute cumulatively to the effects of the proposal. While no cumulative effects analysis accompanies a categorical exclusion, these effects would actually be considered twice: once when the category was identified in Agency NEPA procedures and again when scoping occurs for a specific proposal.

There is further concern that cumulative effects would never be considered if a categorically excluded project is proposed under a categorically excluded plan. As previously noted, Agency NEPA procedures still require scoping for proposals that would appear to be categorically excluded. Scoping for a proposed project would consider the potential for past, present, or reasonably foreseeable actions to contribute cumulatively to the effects of the proposal. While no cumulative effects analysis accompanies a project categorical exclusion, these effects are also considered twice: once when the category was identified in Agency NEPA procedures and again when scoping occurs for a specific project proposal.

Alternatives B (2000 rule) and C (1982 rule)

Alternative B (no action) and Alternative C require an environmental impact statement for development or revision of a land management plan. However, an environmental assessment may be used to document the environmental analysis for a plan amendment under these alternatives. Agency NEPA procedures and CEQ regulations at 40 CFR 1500 *et seq* require consideration of cumulative effects for analyses associated with environmental assessments or environmental impact statements. Accordingly, plan development, revision, or amendment, documented in an environmental assessment or environmental impact statement would include an analysis of cumulative effects.

Best Available Science and Land Management Plans Issue

National Forest Management Act Requirements

Under NFMA, the responsible official “shall use a systematic, interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences.” (16 USC 1604(b)) All alternatives address this requirement to consider science through different means.

Response to Issue

Alternatives A, D, and E (2005 rule and modifications)

These alternatives strengthen the role of science in planning. In support of strategic and adaptive plans, the ability of the Forest Service to react swiftly and efficiently to new science is an essential planning principle. The alternatives clarify that science, while only one aspect of decision-making, is a significant source of information for the responsible official to evaluate. When making planning decisions, the responsible official also considers public input, competing use demands, budget projections, and many other factors as well as science.

In describing the overall role of science in planning, the alternatives require that the responsible official must *take into account* the best available science (36 CFR 219.11(a)(2005)). The alternatives also specifically require that a plan’s monitoring program take into account the best available science. The alternatives clarify that taking into account the best available science clearly lies with the responsible official, not the

plan itself. In Alternatives A, D, and E, "Taking into account the best available science" means:

1. Documenting how science was considered in the planning process,
2. Evaluating and disclosing substantial uncertainties in that science,
3. Evaluating and disclosing substantial risks associated with plan components based on that science, and
4. Documenting that the science was appropriately interpreted and applied. (§219.11(a)(1-4)(2005))

To evaluate the consideration of science in the planning process, the alternatives allow the Responsible Official to use independent peer review, a science advisory board, and other review methods (§219.11(b)(2005)).

Alternative B – No Action (2000 rule)

Alternative B strives to clarify the role of science in land management planning and integrate science more effectively for science-based decision-making in the planning, evaluation, and management of National Forests and Grasslands. The emphasis on independent scientific reviews of plans helps the Forest Service accomplish its stated sustainability goal. Yet, Alternative B is clear that science provides information, not decisions. The responsible official has final decision authority and discretion to accomplish how to consider the best available science.

In describing the overall role of science in planning, Alternative B requires the responsible official to *consider* the best available science (36 CFR 219.22(a)(2000)). This gives the Forest Service and people involved in the planning process sound information to make recommendations about resource conditions and desired outcomes. In addition to considering the best available science, the responsible official must also ensure that plan amendments and revisions are *consistent* with best available science (§219.24(a)(2000)). To accomplish this consistency review, the responsible official may use science advisory boards to improve access to current scientific information and analysis as well as evaluate whether information gathered, evaluations conducted, or analyses and conclusions reached in the planning process are consistent with the best available science. The science advisory board is responsible for organizing and conducting a scientific consistency evaluation to determine the following:

1. If relevant scientific information has been considered by the responsible official in a manner consistent with current scientific understanding at the appropriate scales;
2. If uncertainty of knowledge has been recognized, acknowledged, and adequately documented;
3. If the level of risk in achievement of sustainability is acknowledged and adequately documented by the responsible official (§219.24(b)(2000)).

Finally, during the transition period, Alternative B requires that the responsible official *consider* the best available science in implementing and amending the current plans (§219.35(2000)).

Alternative C (1982 rule)

This alternative specifically addresses science consideration under the topic of "research" (36 CFR 219.28(1982)). Research needs are identified during planning and periodically reviewed during evaluation of implemented plans, particularly during monitoring and evaluation. Research needed to support or improve management of the National Forest System is to be established and budgeted at the research station and national levels. Significant findings, and how this information is applied, are disclosed through an annual report.

Alternative C also references the use of science in several provisions associated with the planning process. Planning teams "shall integrate knowledge of the physical, biological, economic and social sciences, and the environmental design arts in the planning process." (§219.5(a)(1982)) In addition, "[t]he team is encouraged to consult other persons when required specialized knowledge does not exist within the team itself." (§219.5(b)(1982)) In regards to data, "[t]he Supervisor will assure that the interdisciplinary team has access to the best available data." (§219.12(d)(1982))

Finally, Alternative C specifies the consideration of science for some resource-related topics. For vegetation management practices (§219.15(1982)), thorough reviews of technical and scientific literature and practical experience are used to evaluate specific vegetation and site conditions where more than one vegetation management practice will be used in a vegetation type. For the fish and wildlife resource (§219.19(1982)), 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 (MIS) on the basis of available scientific information.

Management Requirements Issue

National Forest Management Act Requirements

The NFMA requires that planning regulations specify guidelines, which provide for diversity and specific requirements for timber management. These requirements have been discussed under the issues related to diversity and timber management requirements. The Act does not however, require that planning regulations address minimum specific management requirements as found in the 1982 planning rule (Alternative C).

Response to Issue

It is important to note that natural resource protection is typically embodied in layers. The first layer includes the relevant statutes. There is no discretion in the law; the requirements are mandatory and must be followed. Most natural resource related laws are very specific in their requirements for the protection of resources. The Endangered Species Act, for example, is very specific in its requirements for the species protected by the Act. Others, like the National Environmental Policy Act, might prescribe procedures for decisionmaking. The next layer is regulations. Rules can establish procedures to guide actions, such as the proposed and alternative planning rules, that set up procedures for plan development, plan amendment, and plan revision. They can also be prescriptive and establish standards. The next layer is Agency policy, which includes procedural guidance and guidance for resource protection such as best management practices. The next layer is land management plans that describe goals, objectives, and guidance for future

decisionmaking. The final layer is decisions approving or prohibiting projects or activities that have environmental effects that can be meaningfully evaluated. Such decisions apply appropriate law, regulation, and policy for environmental protections to site-specific circumstances.

There is a web of laws that responsible officials must consider when proposing projects and activities including, but not limited to: the Clean Air Act of 1955 as amended (CAA, 42 U.S.C. 7401 et. seq.) the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 528 et seq.); the Wilderness Act (16 U.S.C. 1121 et. seq.); the National Environmental Policy Act of 1969 (NEPA, 42 U.S.C. 4321 et seq.); the Endangered Species Act of 1973, as amended (ESA, 16 U.S.C. 1531 et seq.); the Forest and Rangeland Renewable Resource Act of 1974 (16 U.S.C. 1600 et seq.), as amended by the National Forest Management Act of 1976 (NFMA), and the Clean Water Act of 1948 (CWA), as amended by the Federal Water Pollution Control Act Amendments of 1977 and the Water Quality Act of 1987 and other laws (33 U.S.C. 1251 et seq., 1323 et seq.) This array of laws applies to all of the proposed planning rule alternatives.

Federal Agencies have adopted regulations to carry out many of these laws. Forest Service regulations are found at 36 CFR 200-299.

In addition to these laws and regulations, Agency policy is specified in the Forest Service Directive System. Forest Service directives are the primary basis for the Forest Service's internal management of all its programs and the primary source of administrative direction to Forest Service employees. The Forest Service Manual (FSM) contains legal authorities, objectives, policies, responsibilities, instructions, and guidance needed on a continuing basis by Forest Service line officers and primary staff to plan and execute programs and activities. While the alternatives vary in their distribution of guidance within the rule and Directives System, responsible officials are bound to follow the sum of all guidance. Responsible officials must ensure that all project and activity proposals are consistent with law, regulation, Agency policy, and the appropriate land management plan.

The position and significance of a planning rule relative to the layers of law, regulation, and policy for environmental protection is minor. Law, regulation, and policy combine to narrow a responsible official's discretion in proposing actions to those that do not impair productivity of the land, do not impair water or air quality, and do not threaten the existence of plant and animal species.

Alternative C (1982 rule)

Alternative C (1982 rule) includes a variety of guidance at §219.27. That guidance falls under seven different headings: (a) Resource protection; (b) Vegetative manipulation; (c) Silvicultural practices; (d) Even-aged management; (e) Riparian Areas; (f) Soil and Water and; (g) Diversity. Most of the provisions under vegetative manipulation, silvicultural practices, even-aged management, and diversity have already been discussed in this document in response to other issues. The remaining provisions, in the 1982 rule section, regard conservation of soil and water, management of disturbance and pests, protection of riparian areas, interdisciplinary assessment, threatened and endangered species habitat, transportation and utility corridors, road construction and rehabilitation, and air quality. This section of the 1982 rule generally reiterates requirements of laws, regulations, and Agency directives.

Alternatives A, B, D, and E

Recognizing that planning must comply with all applicable laws, regulations, and policies, the rest of the alternatives (A, B, D, and E) do not contain minimum specific management requirements as a category section. Provisions related to vegetation management, timber practices, and diversity are discussed elsewhere in this document under other issues.

When considered in conjunction with applicable laws, regulations, and Forest Service directives, all alternatives would result in similar resource protection.

CHAPTER 4. CONSULTATION AND COORDINATION

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Distribution of the Environmental Impact Statement

This environmental impact statement has been distributed to individuals who specifically requested a copy of the document. In addition, copies have been sent to the following Federal agencies, federally recognized tribes, State and local governments, and

organizations representing a wide range of views regarding National Forest System land management planning.

Agencies

Advisory Council on Historic Preservation
USDA APHIS
Natural Resources Conservation Service
USDA, National Agricultural Library
NOAA Office of Policy and Strategic Planning
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Susquehanna River Basins Commission
US Environmental Protection Agency
U.S. Department of the Interior
Northwest Power Planning Council
Ohio River Basins Commission
U.S. Coast Guard
Federal Aviation Administration
U.S. Department of Energy
Virginia Dept. of Environmental Quality
New Mexico Dept of Game & Fish
Wyoming Game & Fish Dept

Organizations & Businesses

Allegheny Defense Project
Allegheny Hardwood Utilization Group
American Forest & Paper Association
American Forest Resource Council
Appalachian Trail Conservancy
Associated Logging Contractors, Inc
Associated Oregon Loggers, Inc
Black Hills Forest Resources Association
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Colorado Wild
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Houston Regional Group of the Sierra Club
Idaho Conservation League
Idaho State Snowmobile Association
Intermountain Forest Association
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Montana Wood Products Association
National Outdoor Leadership School
North Carolina Forestry Association
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Oregon Wild
Sierra Pacific Industries
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