CHAPTER 2. ALTERNATIVES, INCLUDING THE PROPOSED ACTION

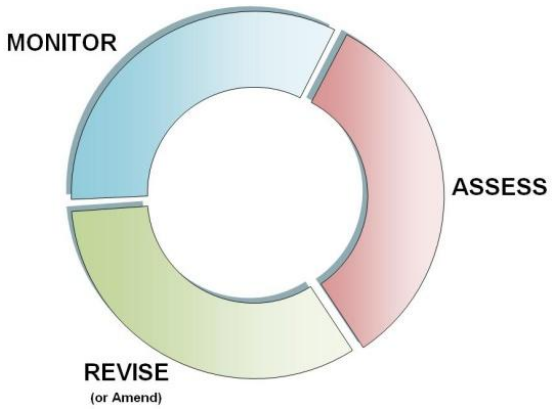
This chapter describes and compares the alternatives considered for the proposed planning rule. It includes a description of each alternative considered in detail although the full text of the alternatives, including the proposed action is found in the Appendices. This section also presents the alternatives 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.

ALTERNATIVES CONSIDERED IN DETAIL

The Forest Service developed five alternatives for detailed analysis, including the No Action and Proposed Action alternatives, in response to the significant issues that were identified during scoping.

Alternative A (Proposed Action and Preferred Alternative)

Adaptive management is recognized as a useful land management strategy to address uncertainty and has become increasingly important as managers realize that knowledge of ecological systems is incomplete. The proposed planning rule establishes an adaptive framework within which land managers and partners would work together to understand conditions on the land, develop land management plans to respond to existing and predicted conditions and needs, and monitor changing conditions and the effectiveness of projects and activities to provide a continuous feedback loop. The framework consists of a three-part learning and planning cycle:



1. Assess conditions and stressors on the NFS unit and in the context of the broader landscape and determine whether there is a need for change;
2. Revise or Amend land management plans based on the need for change; and
3. Monitor to detect changes on the unit and across the broader landscape and to evaluate whether progress is being made toward desired outcomes.

People have commented that empowering the line officer running the collaborative process to be the decisionmaker would strengthen the collaborative process. The proposed rule would make the supervisor of the national forest, grassland, prairie, or

other comparable administrative unit the responsible official for approving new plans, plan revisions, and amendments.

People note that science is evolving so fast that the rule should not be too prescriptive in what it requires and that there should be enough flexibility to accommodate new information over time. Rather than prescribe specific scientific techniques, the proposed rule would require the responsible official to take science into account in the planning process and requires documentation as to how science was considered.

People consistently express a desire to be involved in land management planning early and often, from helping craft the proposed plan revision or amendment to tracking whether the unit is making progress toward meeting the plan desired conditions, objectives, or other elements of plan content. The proposed rule would require the responsible official to provide opportunities for public participation throughout all stages of the planning process. In designing the public participation requirements of the proposed rule, the Forest Service used the Council on Environmental Quality's publication "Collaboration in NEPA – A Handbook for NEPA Practitioners" available at http://ceq.hss.doe.gov/ntf/Collaboration_in_NEPA_Oct_2007.pdf.

Many people have identified a need to better engage groups and communities that have traditionally been underrepresented in land management planning. People also have commented on the importance of engaging youth in land management planning, because of the unique perspective they bring and because they will visit NFS lands for the lifetime of the plan implementation. The proposed rule therefore requires the responsible official to encourage participation by youth, low-income, and minority populations so that land management planning accounts for the interests and needs of all affected individuals and communities.

The Agency heard from Tribes and Tribal organizations that discussed the obligation the Forest Service has to Tribes regarding treaty rights, protecting and honoring reserved rights, and fully recognizing the unique government-to-government relationship that exists between the United States and Tribes. Tribes also stressed the importance of considering Tribal traditional knowledge in the planning process. The proposed rule would require the responsible official to provide the opportunity to undertake consultation with federally recognized Indian Tribes and Alaska Native Corporations. In addition, the proposed rule would require the responsible official to encourage participation by interested or affected federally recognized Indian Tribes and Alaska Native Corporations. As part of Tribal participation and consultation, the responsible official would invite Tribes to share native knowledge during the planning process. Land management plans would be required to be consistent with Indian treaty rights.

The Agency has received comments from State, county, and other local governments that land management planning needs to be coordinated with all relevant government policies and plans. To address this need, the proposed rule would require that the responsible official coordinate planning with the equivalent and related planning efforts of other Federal agencies, State and local governments, and Indian Tribes.

Many people have asked that the proposed rule streamline planning, that it not include detailed processes and methods that rapidly become outdated, and that it allow for maximum flexibility at the unit level to develop plans that reflect the unique characteristics of the local unit. At the same time, many people want to see very specific requirements and national standards that apply to all units for a particular resource of interest.

Based on public comment and experience, the proposed rule would require assessments to identify and evaluate information needed to understand and assess existing and potential future conditions and stressors in order to inform and develop required plan components and other content in the plan. These assessments would include relevant information from other governmental or non-governmental assessments, plans, reports, and studies. Most notably, assessments would identify the distinctive roles and contributions of the unit within the context of the broader landscape, considering the roles of the unit in providing multiple uses, including ecosystem services, from the NFS lands to the local area, region, and Nation. The identification of the unit's roles and contributions within the larger landscape directly supports development of desired conditions and objectives. The requirement for assessments is intended to lead each unit to develop a plan that reflects its unique characteristics, while addressing issues of importance for the NFS and setting priorities for management. Assessments could range from narrow in scope to comprehensive, depending on the issue or set of issues to be evaluated.

The proposed rule would require plans to include five plan components—desired conditions, objectives, standards, guidelines, and suitability of areas for resource management. A sixth plan component (goals) may also be included to provide broad statements of intent usually to management process or interaction with the public. While existing plans include provisions that are labeled as goals, desired conditions, objectives, standards, guidelines, and suitability of areas, the proposed rule would not use these terms in the same way as plans developed under the 1982 provisions. For example, the term "guideline," is used but not defined in the existing planning rule. In the proposed rule it would be defined as a constraint on project and activity decisionmaking that allows for departure from its terms, so long as the intent of the guideline is met. The proposed rule would apply specific project and activity consistency requirements to each of these plan components.

A common theme heard throughout the collaborative effort is the importance of maintaining or regaining healthy, resilient ecosystems and about the benefits that resilient systems provide, such as reduced risk of large, high-intensity fires, connected habitats for wide ranging species, and both the short- and long-term economic benefits that healthy ecosystems provide. People have also said they want the planning rule to recognize the importance of multiple uses and the economic and social values provided by NFS lands while balancing those benefits among local, regional, and national interests and the long-term health and productivity of the land. The proposed rule would require all plans to include plan components to guide the maintenance or restoration of the structure, function, composition, and connectivity of healthy and resilient aquatic ecosystems and

watersheds in the plan area. In addition, the proposed rule would include plan components to guide the unit's contribution to social and economic sustainability.

The Forest Service has heard from many people that today, more than ever, water resources must be maintained, restored, and protected. Many have expressed a reminder that one of the original purposes for establishing the NFS was to secure favorable conditions of water flows. Under the proposed rule, plans would include plan components to maintain, protect, or restore aquatic elements, such as lakes, streams, public water supplies, source waters, shorelines, rare aquatic plant and animal communities, and riparian areas.

Species viability has been a topic of great concern throughout the collaborative process. There is broad agreement that viability is a critical part of the rule and a variety of approaches were recommended, but there was no consensus around one particular approach. Among wide-ranging opinions, some people want approaches based on: protecting and maintaining healthy habitats and sustainable ecosystems coupled with validation through monitoring; promoting biodiversity and measuring it with a biodiversity index; monitoring landscape characteristics as proxies for a suite of species; or reducing stressors in the environment that can impact species diversity. The proposed rule would require plan components for the conservation of all native aquatic and terrestrial species with the aim of providing the ecological conditions to contribute to the recovery of federally listed threatened and endangered species and maintain viable populations of species of conservation concern. The proposed rule would also require identification of select watershed conditions, select ecological conditions, and a set of focal species to monitor and assess the degree to which ecological conditions are supporting diversity of plant and animal communities and ecological sustainability.

The high value placed on recreation has been a common theme throughout the collaborative process to develop the planning rule. Many people have said they felt recreation was being ignored as a stand-alone issue area, and they wanted to see it treated separately. Others express a belief that recreation must be considered along with and equal to all other multiple uses. The proposed rule would integrate recreation concerns in plans and recognize the importance of recreation and the value of recreation for connecting people to the land. The proposed rule would require plan components for sustainable recreation, considering opportunities and access for a range of uses. These components would be informed by assessments and monitoring. The proposed rule would define sustainable recreation as the set of recreational opportunities, uses and access that, individually and combined, are ecologically, economically, and socially sustainable, allowing the responsible official to offer recreation opportunities now and into the future. Recreational opportunities can include non-motorized, motorized, developed, and dispersed recreation on land, water, and air. In addition, plans should identify recreational settings and desired conditions for scenic landscape character.

The proposed rule also contains specific requirements based on the NFMA for management of timber. These requirements include:

- identifying lands not suitable for timber production,

- identifying lands suitable for timber production,
- reviewing of lands not suitable for timber production,
- harvesting of trees on land not suitable for timber production,
- harvesting for salvage, sanitation, or public health or safety,
- developing plan components for timber harvest projects, to ensure harvest is consistent with the protection of soil, watershed, fish, wildlife, recreation, aesthetic resources, and the requirements of the NFMA,
- developing plan components required for maximum size openings,
- determining limits on the quantity of timber that can be removed annually, and
- specifying requirements related to the culmination of mean annual increment.

These requirements are not substantially different in this rule from previous rules. However, these requirements should be read in the context of other requirements in this alternative, including sustainability requirements.

Throughout the collaborative process, scientists and other stakeholders have emphasized the importance of monitoring requirements in the planning rule. Some say that the Forest Service has not done enough monitoring in the past, monitoring is sometimes an after-thought, the data is sometimes not very helpful, and the data that are collected sometimes go unused. Many say that monitoring deserves more attention and funding than it currently receives so that it becomes a standard part of land management. The proposed rule provides guidance for plans to require meaningful and accountable monitoring through a structured public process that evaluates changes on the unit and across the broader landscape. Monitoring would be used to assess progress toward achieving desired conditions in plans and for evaluating whether there is a need for plan revision or amendment. The proposed rule would also require monitoring and evaluation of the status of a small set of focal species selected to assess the degree to which ecological conditions are supporting diversity of plant and animal communities within each plan area.

People indicate a desire for water resources to be monitored on national forests and grasslands both within NFS lands as well as upstream and downstream. As a result of this suggestion, questions and indicators for select watershed conditions would be addressed in the unit monitoring plans. Agency directives would include additional requirements for monitoring protocols.

Public comment about plans emphasizes the need to be able to change plans quickly. The proposed rule includes requirements for a monitoring program envisioned to facilitate rapid evaluation and amendment of plans, as needed. The proposed rule also provides for administrative changes of plans — an expedited process for making changes to parts of the plan other than the plan components.

People express a consistent desire for greater transparency and information sharing in the development, revision, and amendment of plans. Toward that end, many people say new

plans and plan revisions should continue to be accompanied by an environmental impact statement and record of decision. The proposed rule would require an environmental impact statement and a record of decision for new plans and plan revisions. Documentation for plan amendments would be determined by the significance of effects pursuant to Agency NEPA procedures and could, therefore, be categorically excluded from documentation or documented in an environmental assessment or environmental impact statement. Decision documents would be required to include rationale for the decision and how the decision meets requirements of various provisions in the rule. The proposed rule would also require that planning records be readily available to the public.

The NFMA requires that "resource plans and permits, contracts and other instruments for the use and occupancy of National Forest System lands shall be consistent with the land management plans" (16 USC 1604 (i)). The proposed rule would require the approval document for the plan, plan amendment, or plan revision to clarify what existing uses or project decisions are consistent with the plan and would be allowed to continue, and thus be deemed consistent with the plan. Those not deemed consistent would have to be modified to be consistent or terminated as soon as practicable.

There is general public consensus that people want to be informed early and often on the various stages of the planning process, with clear parameters for when and how they could be involved. Discussion at several of the public meetings centered on the importance of doing outreach through various methods so that a diversity of people and communities would know about the opportunities to be involved during the planning process. The proposed rule would require responsible officials to provide formal public notification when:

- an assessment begins;
- development begins on the proposed plan, plan amendment or plan revision;
- the proposed plan, plan revision, or plan amendment and the associated environmental documentation are made available for comment;
- the start of the objection period begins; and
- the plan, plan amendment, or revision is approved.

The responsible official would also be required to be proactive and use contemporary tools such as the internet to provide broad access and meet the unique needs of the local community as well as requiring that notices concerning a new plan or plan revision be published in the Federal Register and the planning unit's newspaper of record.

Responsible officials initiating a plan revision or development of a new plan before the proposed rule goes into effect would have the option to complete their plans under the current rule or conform to the requirements of this rule after providing notice to the public. All plan revisions or new plans initiated after this rule goes into effect would have to conform to the new planning requirements. There would be a 3-year transition window, during which time plans could be amended using either the current rule or this rule.

The proposed rule includes a severability provision, stating if parts of the proposed rule are separately challenged in litigation, individual provisions of the rule could be severed and the other parts of the rule could continue to be implemented.

The proposed rule includes definitions of special terms used in the rule.

The proposed rule provides a pre-decisional administrative review process for proposed plans, plan amendments, and plan revisions. The proposed objection process is based on the objection regulations for certain proposed hazardous fuel reduction projects, found at 36 CFR Part 218, and is intended to foster continued collaboration in the administrative review process.

The complete text of the proposed rule is provided in Appendix A.

Alternative B (No Action)

The "no action" alternative, as stated by the Council on Environmental Quality, "may be thought of in terms of continuing with the present course of action until that action is changed" (Council on Environmental Quality 1981a). For this programmatic environmental impact statement, the "No Action" alternative is the 2000 planning rule, which, since the 2008 rule was set aside by the court, is the current rule (See 74 FR 67059 December 18, 2009). If the Department chooses to take no action, the 2000 rule would remain in effect. However, the "present course of action" under the 2000 Rule is not the use of the 2000 Rule in its entirety but the use of its transition provisions at 36 CFR 219.35, which allow use of the 1982 rule provisions to develop, revise, and amend land management plans until a new planning rule is in place. Since identifying a host of issues with the 2000 rule provisions, as explained in Chapter 1 and at the discussion of Alternative F in this Chapter, the Forest Service has been relying upon the transition language at § 219.35 in the 2000 rule to develop, revise, and amend land management plans. It is expected that the Agency will continue to rely on the 2000 Rule's transition provision until a new rule is issued.

The 1982 rule provisions require integration of planning for national forests and grasslands, by including specific planning for requirements 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 in Appendix B. However, only the provisions of this rule that apply to the development, revision, and amendment of land management plans are available for use pursuant to 36 CFR 219.35 of the current rule.

Some people express a preference for an administrative appeal process for challenging land management plan approval decisions. The appeal process has been used throughout the life of the 1982 planning rule and people are familiar with it. Under § 219.35 of the current (2000) rule, responsible officials have the option to use either a post-decisional appeal process of a pre-decisional objection process for challenging plan approval decisions. Both procedures are evaluated and disclosed in the effects analysis for this no-action alternative.

Some people express the opinion that regional foresters are better qualified to be the responsible official to approve new or revised land management plans. Regional foresters have historically been the responsible official for land management plan approval. The current rule requires regional foresters to be the responsible official for approval of new plans and plan revisions.

This alternative would continue to require an environmental impact statement and a record of decision for new plans and plan revisions. Documentation for plan amendments would continue to be determined by the significance of effects pursuant to Agency NEPA procedures and could, therefore, range from categorical exclusions to environmental impact statements.

Rule text for this alternative is provided in Appendix B, C, and D, which contain planning provisions, transition provisions, and administrative review provisions respectively.

Alternative C

Some respondents to the NOI and some roundtable participants suggest the planning rule should only include the minimum requirements of NFMA. They argue that land management planning has greatly exceeded the scope and intent of NFMA and in so doing taken an excessive toll in cost and time invested, by both Forest Service employees and the public.

An alternative requiring the land management planning process and resulting plans to be limited to the minimum requirements of NFMA was considered. After a preliminary analysis, that alternative was eliminated from detailed study because it would not meet the purpose and need (see Alternative H). Another alternative was then developed, with provisions designed to meet the purpose and need along with the minimum requirements of NFMA. The purpose and need is described in the NOI and in Chapter 1 of this statement.

Provisions to meet the purpose and need, but not otherwise required by NFMA, were included to ensure that plans would be responsive to the challenges of climate change, the need for forest restoration, and to ensure the sustainable use of NFS lands to support vibrant communities. Specifically, the provision in this alternative at § 219.10 requires plan components to include guidance to identify and consider climate, forest restoration and conservation, and social and economic elements of sustainability to support vibrant rural communities. Provisions were also added to ensure that plans would be developed in a collaborative manner. Specifically, the provision in this alternative at § 219.4 requires the responsible official to use a collaborative and participatory approach to land management planning. The same provisions for pre-decisional objections found in the proposed rule (Alternative A) are also included in this alternative.

Unlike the other alternatives considered in detail, this alternative would not explicitly require preparation of an environmental impact statement for development of a new plan or for a plan revision. Instead, this alternative rule would rely on Agency NEPA implementing procedures at 36 CFR part 220 to determine the level of environmental analysis and documentation. Similar to other alternatives considered in detail,

documentation for plan amendments would be determined by the significance of effects pursuant to Agency NEPA procedures and could, therefore, range from categorical exclusions to environmental impact statements. To facilitate comparison, rule text for this alternative was drafted following the same outline as the proposed rule (Alternative A). The text of this alternative is in Appendix E.

Alternative D

This alternative consists of the proposed rule (Alternative A) with additional and substitute direction focused on coordination requirements at § 219.4, assessment requirements at § 219.6, sustainability requirements at § 219.8, species requirements at § 219.9, monitoring requirements at § 219.12, and some additional and alternative definitions at § 219.19.

This alternative was designed to evaluate additional protections for watersheds and an alternative approach to diversity of plant and animal communities. These approaches were addressed together because they both involve requirements for plan content for resource protection, as opposed to other issues that are concerned with procedural requirements.

Some people assert that riparian condition is the primary determinant of the ecological integrity of the aquatic ecosystem and largely dictates the resilience of the aquatic environment to natural and human-induced change. These people agree that properly managed riparian areas will be more resilient to climate change than other areas due to their proximity to water. Others request that the planning rule prescribe a requirement for a climate change risk assessment for these and other resources most vulnerable to climate change. People also say a network of watersheds across the landscape can serve as near-term anchor points for restoration of broad scale processes and recovery of broadly-distributed species. They state a belief that protection of key watersheds and the values they provide is likely the most important contribution the Forest Service can make to its neighbors in an all-lands approach. Some people are proponents for stronger, more specific rule requirements for assessing, maintaining, and monitoring species viability within the plan area.

Unlike the proposed action (Alternative A), this alternative would require specific standards and guidelines, to establish conservation areas and key watersheds, prescribe standard buffer areas for riparian conservation, and place the highest restoration priority on road removal in watersheds. Watershed assessments would be required to provide information for defining conservation area boundaries and developing watershed monitoring programs. The alternative would require the identification of key watersheds to serve as anchor points for the protection, maintenance and restoration of habitat for species dependent on aquatic habitat, and to provide spatial connectivity among aquatic and upland habitats.

This alternative would take a different approach from Alternative A for maintaining viable populations of all species within the plan area. It would require an assessment prior to plan development or revision that identifies: current and historic ecological conditions and trends, including the effects of global climate change; ecological

conditions required to support viable populations of native species and desired non-native species within the planning area; and current expected future viability of focal species within the planning area. It would also require that the unit monitoring program establish critical values for ecological conditions and focal species that trigger reviews of planning and management decisions to achieve compliance with the provision for maintaining viable populations within the plan area.

See Appendix F for Alternative D text in a side-by-side comparison with Alternative A.

Alternative E

This alternative consists of the proposed rule (Alternative A) with additional and substitute direction focused on prescriptive requirements for public notification at § 219.4, assessment requirements at § 219.6, and monitoring requirements at § 219.12.

Many people express a strong desire to see more and better monitoring than they have observed on NFS units. Respondents to the NOI and participants at all forums suggest many different components to monitor, and/or assess including: plant and animal diversity, watershed health, water resources, timber resources, recreation uses, economic and social benefits, and ecosystem resilience. Some people suggest that the planning rule should designate certain categories that all NFS units need to conduct monitoring within. Additional suggestions would have the rule require every plan to specify the triggers or signals that would be used in monitoring to prompt responsible officials to react to monitoring data in a timely manner. In response to these concerns and suggestions, this alternative prescribes an extensive list of monitoring and assessment questions and requires monitoring program descriptions to identify signals for action for each question and its associated indicator.

People note that monitoring must be designed to be effective and they express a desire for more accountability for Forest Service actions. They suggest that regular monitoring reports at one-, two-, or five-year increments would greatly increase accountability. Regular reporting would also help the Forest Service understand whether and how its standards or benchmarks are or are not being met. Some people suggest that the rule provide clear performance measures to ensure the Agency fulfills monitoring commitments. In response, this alternative specifies performance accountability for line officers' management of unit monitoring and adds responsibility to the Chief to conduct periodic evaluations of unit monitoring programs and the regional monitoring strategies.

People also consistently express a desire to be involved in land management planning early and often, from helping to craft the proposed plan revision or amendment to tracking whether the unit is making progress toward meeting the plan desired conditions, objectives, or other elements of plan content. Some express a further desire to see prescriptive requirements for collaboration in the planning rule in order to ensure consistency and accountability across NFS units. In response, this alternative adds more prescriptive requirements for public participation to the language in the proposed rule. To help connect people to the outdoors, this alternative also includes requirements for plans to provide for conservation education and volunteer programs.

See Appendix G for Alternative E text in a side-by-side comparison with Alternative A.

ALTERNATIVES ELIMINATED FROM DETAILED STUDY

Several alternatives were considered and eliminated from detailed study because they do not meet the purpose and need for action as described in Chapter 1. One alternative consists of the entirety of the 2000 planning rule, which applies to development, revision, and amendment of land management plans and project analysis. Other alternatives include some that were suggested by respondents to the notice of intent to prepare this draft programmatic environmental impact statement and by roundtable participants. These alternatives were eliminated from further study because they do not meet the stated purpose and need for action as discussed below.

Alternative F

The complete set of provisions of the 2000 planning rule were considered but eliminated from detailed study because the provisions do not meet the purpose and need for action. Specifically, the 2000 rule is not within the Agency's capability to implement on all NFS units.

After adoption of the 2000 rule, the Secretary received a number of comments from individuals, groups, and organizations expressing concerns whether the 2000 implementation of the 2000 rule was feasible. 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. Cal., 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 the concerns raised about feasibility of implementation. The NFMA Planning Rule Review, completed in April 2001, concluded that many of the concerns were serious and required immediate attention (USDA Forest Service 2001).

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 methods, frequency of sampling, and sampling protocols.

In addition, 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 2002a).

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 does not clearly relate use of science to the scope of issues in the planning process;
4. The 2000 rule also does 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; and
3. The complexity of the 2000 rule makes it difficult and expensive to implement.

Alternative G

Some respondents to the NOI and some roundtable participants suggest the planning rule should only include the minimum requirement from NFMA. They argue that land management planning has greatly exceeded the scope and intent of NFMA and in so doing taken an excessive toll in cost and time invested, by both Forest Service employees and the public.

An alternative requiring the land management planning process and resulting plans to be limited to the minimum requirements of NFMA was considered. Rule language for this alternative is in Appendix H. After a preliminary analysis, this alternative was eliminated from detailed study because it does not meet the purpose and need in that such a rule would not ensure that plans would be responsive to the challenges of climate change, the need for forest restoration, the sustainable use of NFS lands to support vibrant communities, or that plans would be developed in a collaborative manner. There are no requirements in NFMA to respond to climate change or needs for forest restoration and, therefore, no such requirements are in this alternative. While this alternative includes the NFMA requirement to "insure consideration of the economic and environmental aspects of various systems of renewable resource management," at 16 U.S.C. 1604(g)(3)(A), this requirement falls short of managing multiple uses to support vibrant communities. This alternative would provide for public participation by making plans and related environmental documents available to the public at convenient locations near the planning unit for a review period of at least three months. These plans would be publicized and available before final decision. Public meetings or other comparable processes to foster public participation during this review period (16 U.S.C. 1604(d))

would be conducted, but this minimal approach would not satisfy the intention of ensuring greater public involvement through a collaborative process.

While any resulting land management plan prepared under this bare minimum rule could be collaboratively developed or revised to respond to climate change and restoration needs, and provide sustainable uses to support vibrant communities, this alternative would provide no assurance that these needs would be addressed.

This suggested alternative was modified so that it would meet the purpose and need and is considered in detail as Alternative C.

Alternative H

Some people express a belief that public input from local communities – those in or adjacent to a particular NFS unit – should be given more consideration than comments provided by individuals or special interest groups who are not part of the local community. These people argue that local communities have greater knowledge of local resource conditions and have a greater stake in the planning process because some or all of their economy is dependent on the NFS unit.

This alternative would consist of the proposed action, along with additional requirements for the responsible official, to give greater consideration to comments from individuals or groups within communities in or adjacent to the NFS unit than comments originating from outside of these communities. This alternative was considered and eliminated from detailed study because it does not meet the purpose and need to meet obligations under the MUSYA and other legal requirements. First, the Organic Administration Act of 1897 (16 U.S.C. 475) states, "No national forest shall be established, except to improve and protect the forest within the boundaries, or for the purpose of securing favorable conditions of water flows and to furnish a continuous supply of timber for the use and necessities of citizens of the United States" (emphasis added). Second, MUSYA directs the Secretary of Agriculture to administer the renewable surface resources of the National Forests for multiple use, which is defined as "management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people" (emphasis added). Finally, the Forest and Rangeland Renewable Resources Planning Act, as amended by the National Forest Management Act states the following:

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

The above citations contemplate citizens, Americans, and the public at large and not any subset thereof.

While disproportionate consideration of local input was eliminated from detailed study, such input would be given due consideration under alternatives A, D, and E. The proposed rule and alternatives D and E would underscore the importance of considering the source of information, such as local sources, in requiring the responsible official to take into account the discrete and diverse roles, jurisdictions, responsibilities, and skills of interested and affected parties. These alternatives would also require responsible officials to encourage participation by private landowners whose lands are in, adjacent to, or otherwise affected by, or whose actions might impact, future management actions in the plan area. Finally, these alternatives would require the responsible official to engage local government agencies in the planning process and to coordinate with local plans.

Alternative I

Some people urge the Forest Service to develop a highly prescriptive planning rule that set national standards for all aspects of land management plans, including establishing a road density standard for the entire NFS. This alternative would essentially constitute a national land management plan in as much as it would stipulate the substance of all plan components to be included in each land management plan. This alternative was considered but eliminated from detailed study because it does not meet the purpose and need to be responsive to the challenges of climate change and the need for forest restoration and conservation. The effects of climate change are expected to be felt differently across the geographic range of NFS lands. For example, annual mean precipitation is projected to decrease in the Southwest but increase over the rest of North America. Projected changes in temperature and precipitation will likely lower forest productivity in Alaska, the Southwest, the Interior West, and eastern parts of the Southeast; and increase forest productivity in the Lake States, the Northeast, and western parts of the Southeast. See Climate Change Quick Facts at http://www.fs.fed.us/emphasis/products/cc-facts.pdf.

Setting a national road density standard would not be responsive to issues such as the need for watershed protection, and wildlife conservation, and the sustainable use of public lands to support vibrant communities. NFS units with large numbers of private in-holdings have necessarily high road densities to accommodate legal access. Setting a high enough national road density standard to accommodate such situations on one NFS unit would not protect mountainous watersheds with erodible soils or important wildlife habitat on another NFS unit. Conversely, a national standard for lower road densities might not be implementable where private landowners are entitled to access across NFS lands.

Similarly, forest restoration and conservations needs differ across the geographic range of NFS lands. For example, many forests in the Forest Service's Eastern Region have already been restored from over harvesting before they became NFS lands whereas many forests in the Forest Service's Southern Region are working to restore long-leaf pine ecosystems. In the Rocky Mountain Region, vast outbreaks of mountain pine beetle could lead to as yet undetermined restoration needs. Creating extensive national standards

forgoes each unit's ability to be responsive to its respective challenges of climate change and restoration needs.

This alternative would also not meet the purpose and need to meet the requirements of NFMA. The NFMA provision at (16 U.S.C. 1604(g)) requires the Secretary of Agriculture to "promulgate regulations, under the principles of the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 528–531) that sets out the process for the development and revision of the land management plans…." This alternative would essentially be a land management plan instead of setting out a process for developing plans.

Alternative J

Some comments received by the Forest Service suggest that the planning rule should only allow timber harvest for restoration purposes. This alternative would consist of the proposed rule language with the exception of the timber suitability requirements at § 219.11. The timber suitability requirement at § 219.11(a)(1) would be replaced with a requirement to identify all lands within the plan area as not suitable for timber production. In addition, the provision at § 219.11(b)(2) would be changed to stipulate that timber harvest only for restoration purposes may occur on lands not suitable for timber production.

This alternative was considered but eliminated from detailed study because it does not meet the purpose and need to meet the requirements under the NFMA and meet obligations under MUSYA. The MUSYA directs the Secretary of Agriculture "to develop and administer the renewable surface resources of the national forests for multiple use and sustained yield of the several products and services obtained therefrom." The Act defines sustained yield of the several products and services as, "the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land." The Act includes timber as one of the renewable surfaces resources subject to the multiple use and sustain yield mandate. For a rule to restrict timber harvest on all NFS units for the sole purpose of achieving restoration would be contrary to the letter and intent of MUSYA. Furthermore, NFMA's requirement to identify lands suitable for timber production, and to review and reclassify lands to return lands to timber production when appropriate, indicates clear congressional intent to produce timber from NFS lands that are suitable for that purpose, whether such lands are in need of restoration or not. See 16 U.S.C. 1604(k). Imposing a restriction to harvest only for restoration purposes at the national level would effectively eliminate all timber harvest from any NFS unit that did not need restoration activities. On the other hand, the alternatives considered in detail in this document would not preclude a responsible official from identifying all lands on a NFS unit as unsuitable for timber production where appropriate.

Alternative K

Some people suggest that the recreational uses of NFS lands are in high and ever increasing demand and that NFS lands should be primarily managed for that purpose.

This alternative would require plans to give recreation the greatest value among the various multiple uses of NFS lands.

This alternative was considered and eliminated from detailed study because it does not meet the purpose and need to meet the requirements of the Multiple-Use Sustained-Yield Act. The Act defines multiple use as,

> [T]he management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.

The Act (16 USC 531 (a)) clearly acknowledges that not all uses would occur on every acre and that "some land will be used for less than all of the resources." The Act also states that resources should be managed in "the combination that will best meet the needs of the American people." However, the Act directs the Secretary of Agriculture to give due consideration to the relative values of the various resources in particular areas (16 U.S.C. 529). Congress clearly expected that the specific uses, and the intensity of each use, must vary across the immensely varied lands that make up the NFS. While it might best meet the needs of the American people for one NFS unit to emphasize recreation over other uses, such might not be the case on another NFS unit. Establishing a specific combination of uses in a planning rule would apply that one combination across all NFS lands and foreclose the ability of individual units to prescribe a more appropriate combination based upon local resources.

Alternative L

Some people suggest the Forest Service undertake planning at a regional scale, in addition to planning at the national and unit scales. An alternative consisting of the proposed rule (Alternative A) with the additional requirements for regional planning from the 1982 rule was considered and eliminated from detailed study because it does not meet the purpose and need to be efficient and effective. The Agency has experience with regional level planning since the 1982 rule required the preparation of a regional guide and a planning process for the development of that guide. After many years of developing and using regional guides, the Agency found that they added an additional and time-consuming level of planning that often delayed progress of unit planning. Regional plans also tended to remain static and did not change as new information or science became available. Furthermore, most major issues that emerged regionally, such as issues regarding lynx or grizzly bears, were ultimately dealt with directly in the individual unit plans, usually through simultaneous amendment of multiple unit plans.

ALTERNATIVE COMPARISON

The alternatives are compared below in terms of how each meets the purpose and need for action and the significant issues described in Chapter 1. These are summary conclusions based upon detailed effects discussions for each alternative found in Chapter 3.

Ecosystem Restoration

Alternative A

Plan assessments would determine what plan components and management activities would be appropriate to maintain and restore composition structure, function, and connectivity (ecological integrity) of terrestrial and aquatic ecosystems and watersheds. Plans would include components related to restoration activities. As plans are implemented over time, restoration activities that improve composition, structure, function, and connectivity would increase or maintain ecological integrity of terrestrial and aquatic ecosystems. Ecosystems with higher ecological integrity are expected to have increased resilience and resistance to stressors on and off of NFS lands. Monitoring at the unit and the broad scale would provide more complete information on the implementation and effectiveness of restoration activities that would allow managers to assess the effects of management in the context of the larger landscape.

Alternative B

Plans would continue to include components to restore habitat conditions to support the viability requirements for vertebrate species. Implementation of the plans developed under this alternative would seek to restore conditions for the purpose of maintaining multiple uses and ecosystem services of interest to the public. The trends of increased restoration at both the site and larger landscape scales would likely continue. Absent specific requirements, there is greater uncertainty on what would be included in plans related to restoration, resilience, and connectivity and a greater range of potential outcomes under this alternative than under Alternatives A, C, D and E. Restoration would be driven by policy and direction other than the planning rule (Endangered Species Act, Clean Water Act, Agency policy, social pressure). Degraded ecosystems on NFS lands are expected to be restored, but the rate and extent of restoration is more uncertain under this alternative than under other alternatives.

Alternative C

The flexibility provided by this alternative could increase efficiency and allow opportunities for units to tailor assessment, revision, or amendment and monitoring to address only the critical or unique needs of the unit. Inherently, there would also be greater uncertainty as to whether restoration of ecosystem components not specifically required by the alternative would be considered and included in plan revision or amendment. Plans would include components that lead to restoration of terrestrial and aquatic systems. As plans are implemented over time, restoration activities would vary across the NFS in their ability to maintain or improve ecological integrity.

Alternative D

The effects of Alternative D would be similar in most respects to those of Alternative A except that: landscape-level restoration strategies developed with multiple partners would be further informed by coordination with adjacent planning units, other land owners, and land managers engaged in species conservation. Also, watershed assessments and/or landscape assessments would be prepared for all NFS units. (On some units it is possible that assessments at the watershed scale would provide the information necessary to meet requirements for maintaining or restoring ecological integrity and species viability. On most units, assessments at multiple ecological unit boundaries would be necessary.) Plans would contain plan components to maintain or restore watersheds including a number of additional standard and guidelines for watershed and aquatic resource protection. Road removal and remediation in riparian conservation areas and key watersheds would be the highest restoration priority for all units.

Alternative E

The effects of Alternative E would be similar in most respects to those of Alternative A. Additionally, under this alternative, there would be more evaluation of ecological conditions and possible scenarios during assessment for plan revisions and more monitoring of specific conditions and responses to restoration. The use of signal points could potentially make management more aware and responsive when monitoring results are outside of expected levels. The difficulty of establishing statistically and temporally significant signal points related to restoration, especially where there is insufficient data and where conditions are changing, will increase the complexity of planning. The prescriptive nature of the monitoring requirements could increase the ability to aggregate and compare data between units or at higher scales but could also result in collection of data that is not necessarily relevant to the management of individual units or ecological conditions.

Watershed Protection

Alternative A

Assessment of existing and potential stressors on and off NFS lands could provide information related to water quality and quantity that could be used to develop plan components to ameliorate the impacts generated by stressors beyond NFS boundaries. New or revised plans would consistently include more direction for maintenance and restoration of watershed composition, structure, and function and protection for aquatic resources than is provided by existing plans. As plans developed to meet the requirements of Alternative A are implemented, watershed conditions would be expected to improve and resilience in the face of changing conditions would be increased. Healthy, resilient watersheds would provide a sustained flow of ecosystem services. Plans would be expected to include direction for managing road systems where roads are adversely impacting watershed condition. The trend toward a reduced road system is expected to continue. Fewer and better maintained roads would be expected to reduce the potential

for sedimentation and other adverse effects to aquatic resources. Prioritization for where to decommission roads could be based on impacts to priority watersheds, habitat, or other resources or on road density standards or other factors. Plans created or revised under this alternative would more consistently include plan components for riparian protection and restoration (§ 219.8) than is currently required. As plans are implemented, riparian area values, such as temperature regulation, large woody debris recruitment, bank stabilization, sediment retention, and other values would be expected to be maintained or restored. Plans would be expected to reflect a broader spectrum of public values concerning watershed condition, riparian areas, and water quality than under current requirements.

Alternative B

Under Alternative B, there would be less certainty in how or to what extent plans would provide guidance for restoring or protecting watershed conditions, riparian areas, and water quality than there would be under Alternatives A, D, and E, though all plans are expected to include guidance related to these resources. Plans under Alternative B would be highly variable in what guidance they include related to management of the road system. Alternative B allows plans to take a strictly mitigative approach rather than an active restoration approach to riparian area management. In times of changing climate, fire suppression, and increasing stressors both on and off NFS lands; riparian area function could deteriorate under a strictly mitigation management approach. Current trends for decommissioning roads under Alternative B are expected to continue.

Alternative C

Plans would be written consistent with current agency policy and existing law but they would be expected to be highly variable in the degree to which they include guidance for water-related resources. The flexibility of Alternative C creates a wide range of potential outcomes and greater uncertainty in both what guidance plans would include and what resource effects would occur as plans are implemented. The effects of this alternative would otherwise be similar to Alternative B.

Alternative D

The effects of Alternative D would be similar to Alternative A in that the restoration emphasis of this alternative would be expected to lead to plans that result in improved watershed condition and protection of aquatic resources. All plans would include standards and guidelines that require management activities within riparian areas be primarily for restoration. Those that are not for restoration (construction of new facilities such as roads, trails, boat landings, etc.) would be designed so as not to impair riparian function. As plans developed under this alternative are implemented, the condition of riparian areas would be expected to improve, and the values and functions they provide in terms of habitat and water quality would be expected to increase. The prescriptive nature of this alternative might not allow the flexibility to develop plans that can best address resource concerns of a given unit and might not be efficient or effective across highly variable systems. Establishing national restoration priorities that must be included in every plan could lead to plans that are rapidly outdated and might focus staff resources on

amending plans rather than on meeting the restoration needs of the unit. Identification of climate change vulnerability would be expected to result in the development of plan components designed to protect areas especially sensitive to disturbance and changing conditions.

Alternative E

Monitoring plans, including signal points, developed under this alternative could provide a more effective mechanism for adaptive management than current monitoring plans, though the additional requirements might not be efficient or effective for all units. Resources shifted toward monitoring could be at the expense of other management activities. The process for public involvement would be more consistent across units and could result in plans that reflect a broader spectrum of public values concerning watershed condition, riparian areas, and water quality than currently occurs. The effects of Alternative E would otherwise be similar to Alternative A.

Diversity of Plant and Animal Communities

Alternative A

All plans would incorporate a complementary coarse-filter and fine-filter strategy to conserve biological diversity within the plan area. This approach is more scientifically credible and supportable in maintaining biological diversity than the approach provided under the 1982 planning rule and it considers all native species, rather than focusing on vertebrates only. As plans are implemented under these provisions, NFS lands would be expected to consistently provide the ecological conditions necessary to maintain the diversity of plant and animal communities. Planning would assess ecosystem diversity characteristics and incorporate specific plan components that focus management activities on maintaining and restoring ecological composition, structure, and function. Over time, as management activities are implemented to achieve the desired ecological conditions, habitat quantity would be expected to increase and habitat quality would be expected to improve for all native species within the plan area. Plans would emphasize ecosystem restoration and connectivity and, where necessary, provide species-specific plan components focused on species conservation. As these plans are implemented, habitat conditions for many federally listed species, candidates for listing, and species of conservation concern would be expected to improve within and among plan areas. Plans would include ecological monitoring elements (ecological conditions, ecosystem characteristics, and focal species) that would be more effective and efficient than those under the 1982 planning rule at assessing the diversity of plant and animal communities within the plan area. Reliable information from this monitoring would be expected to identify the need to change a plan in a more timely manner than monitoring under the 1982 planning rule. Planning would establish a two-tiered approach to monitoring, emphasize collaboration and coordination, and increase the role of science over that required under the 1982 planning rule. These procedures and processes allow for gathering, assessing, and incorporating information beyond national forest and grassland boundaries that should lead to more effective approaches to the conservation of all species within the region of a plan. Plans would include protection and restoration measures for riparian areas. The implementation of these measures would be expected to

result in improved streamside, wetland, lakeside, and aquatic habitats, especially for aquatic and riparian species. Planning would more actively engage in a collaborative, all lands approach to maintaining biological diversity. This approach could present the best opportunity for recovering threatened and endangered species, preventing the listing of candidates to federal listing, and conserving other species of conservation concern.

Alternative B

Plans would rely primarily on selected management indicator species (MIS) as a means to assess the effects of management activities on other species or habitats, would focus on managing for their habitat conditions and would monitor their population trends. Because this alternative's species viability requirement is explicit to vertebrates, plans might not fully address the life requirements of invertebrates and plants. As plans are developed and implemented under these provisions, NFS lands would be expected to vary in the extent to which they provide the ecological conditions necessary to maintain the diversity of plant and animal communities. Plans would continue to provide explicit fish and wildlife conservation language, even though the population viability requirement is explicit to vertebrates, which has benefitted these resources in the past. This would be expected to continue as plans are developed and revised under this rule. Plans would continue to provide management direction for habitat management based upon the needs of selected MIS. Many MIS are not biologically appropriate for representing other habitat associates and do not explicitly address key ecosystem characteristics (composition, structure, function, and landscape connectivity) needed to maintain ecological conditions for all native species. The concept of MIS is largely unsupported in scientific literature. As plans are developed and implemented under these provisions, NFS lands would be expected to continue to be variable in their approaches to overall habitat management among plan areas. Plans would rely primarily on Forest Service directives for guidance on maintaining the viability of all species of conservation concern, as this is not explicitly required in the 1982 rule language. Plans would continue to rely on establishing population trends of selected MIS as a means of assessing vertebrate species viability. This would be expected to continue the inconsistency in a forest or grassland’s ability to assess the viability of all native species within the plan area. Planning would allow more discretion to the responsible official with respect to collaborating and coordinating with other agencies and entities and to taking a broader approach to gathering, assessing, and utilizing other relevant information. This allows for inconsistency in the use of this information when addressing species viability issues that extend beyond national forest and grassland boundaries and could lead to less effective approaches to the conservation of all species within the region of a plan.

Alternative C

There would be considerable discretion for addressing species diversity, fish and wildlife habitat management, and monitoring in plans because there are no specific requirements for addressing the diversity of plant and animal communities. How this NFMA requirement is to be met would be relatively open to the discretion of the responsible official. Plans developed and implemented under these provisions would be expected to vary considerably in their approaches. Thus, the ability for plan areas to provide the

ecological conditions necessary to maintain the diversity of plant and animal communities would be expected to vary across the NFS. Plans would rely primarily on Forest Service directives and policy for guidance on how plans are to be developed or revised when it comes to providing diversity of plant and animal communities. This could lead to broader interpretations of what plans must contain and to inconsistencies from one unit to another as to how species diversity is to be maintained within a plan area. Planning would allow more discretion to the responsible official with respect to collaborating and coordinating with other agencies and entities and to taking a broader approach to gathering, assessing, and utilizing other relevant information. This might lead to inconsistent use of this information when addressing species viability issues that extend beyond national forest and grassland boundaries and could lead to less effective approaches to the conservation of all species within the region of a plan. Overall, plans would allow for considerable variability in approaches to providing for diversity of plant and animal communities, which could lead to greater uncertainty regarding species viability on all NFS lands.

Alternative D

Plans would incorporate a complementary coarse-filter and fine-filter strategy to conserve biological diversity within the plan area, emphasize ecosystem restoration and connectivity, and incorporate additional species-specific plan components focused on species viability. In terms of species diversity and viability, they would have similar effects to those disclosed under Alternative A. Planning would include specific assessments of ecosystem diversity characteristics that would be expected to result in greater assurances that an effective coarse-filter for maintaining biological diversity would be designed. Over time, as management activities are implemented to achieve the desired ecological conditions, habitat quantity would be expected to increase and habitat quality would be expected to improve for all native species within the plan area. Plans would include ecological monitoring elements (ecological conditions, ecosystem characteristics, and focal species) that would be more effective and efficient than those under the 1982 planning rule at assessing the diversity of plant and animal communities and species viability for all species within the plan area. Reliable information from this monitoring would be expected to identify the need to change a plan or management activity in a timely manner. Compared to Alternative A, plans would include added requirements specific to watershed and riparian protection and restoration that would be expected to result in greater emphasis being placed on ecosystem restoration within priority watersheds. Overtime, as plans are implemented, the resulting plan areas would be expected to yield habitat benefits, especially for aquatic and riparian species.

Alternative E

Plans would incorporate a complementary coarse-filter and fine-filter strategy to conserve biological diversity within the plan area, emphasize ecosystem restoration and connectivity, and incorporate additional species-specific plan components focused on species viability. In terms of species diversity and viability, they would have similar effects to those disclosed under Alternative A. Planning would add specific requirements for collaboration and coordination that would be expected to result in greater assurances

that responsible officials would gather, assess, and incorporate information from beyond national forest and grassland boundaries into the development or revision of a plan. These procedures and processes specifically emphasize gathering, assessing, and incorporating information beyond national forest and grassland boundaries that should lead to more effective approaches to the conservation of all species within the region of a plan. Plans would add plan monitoring elements that would be expected to assess the overall effectiveness of plan components toward maintaining biological diversity within the plan area more accurately and timely than under the other alternatives. Reliable information from this monitoring would be expected to identify the need to change a plan in a more timely manner than under the other alternatives.

Climate Change

Alternative A

This alternative incorporates an adaptive framework designed to be responsive to climate change and other ecological, social, and economic changes. It includes requirements to consider climate change in assessments, revising or amending plans, and in monitoring. Plans components would be developed taking into account the best scientific information on where and how climate change would affect ecological conditions. Assessments and monitoring (unit level and broad scale) would provide information over time to detect changes to ecological conditions and potential shifts in location and timing of multiple uses and ecosystem services. This information is expected to provide opportunities to amend plans in response to changes influenced by climate change. Carbon stored in above-ground vegetation would be monitored during plan implementation. Uncertainties brought about by climate change would be addressed through a planning framework for adaptive management that includes 1) an iterative process of assessment, revising or amending plans, and monitoring, and 2) participation in all phases by managers, scientists, and the public.

Alternative B

The current trend of increased focus on climate change in planning would continue. There would be less certainty and consistency about inclusion of climate change in the planning process than in alternatives A, D, or E. Implementation of plans would be informed by an awareness and understanding of climate change, but there would be less information related to climate change for decisionmaking than in alternatives A, D, and E.

Alternative C

There is one specific reference to climate in this alternative. The effects of this alternative are similar to Alternative B. Climate change is expected to be considered in plans. However, the extent of that information and how it would be used in plan revisions or amendments would vary across the NFS. There are no requirements to use a planning framework with a systematic approach to assessment and monitoring. Therefore, less information and fewer opportunities to detect and respond to threats to ecological, social,

and economic conditions influenced by climate change would be available than in Alternative A.

Alternative D

The effects of this alterative are similar to Alternative A, except there are more requirements to address climate change in this alternative. The additional requirements include developing strategies to address impacts to global climate change on plant and animal communities, conducting watershed-scale assessments that include an assessment of climate change vulnerability, and interagency coordination at the landscape level. It is expected that more information would be available to develop plan components than Alternative A. With additional information about climate change, opportunities to detect and respond to threats to ecological, social and economic conditions through plan amendments would be more available than Alternative A.

Alternative E

The effects of this alternative are similar to Alternative A, except there are additional requirements for more formal public participation, monitoring, and assessment. Assessments would specifically address the risks and uncertainties associated with climate change. This information would be used to develop plan components. Additional questions and indicators associated with climate change would be addressed in unit and broad scale monitoring. Over time, there would be greater recognition of uncertainties, and more information and opportunities to detect and respond to threats to ecological, social, and economic conditions influenced by climate change than Alternative A.

Multiple Uses

Alternative A

Collaboration would assure consideration of a full spectrum of recreational values and an integrated mix of sustainable recreation opportunities relevant to each NFS unit. Through consideration of recreational values in a landscape context, NFS units would be expected to provide a mix of sustainable recreational opportunities that complement those of the surrounding area. Monitoring of recreation use trends would be more consistently implemented across NFS units than under current rule procedures due to requirements for plans to include questions concerning visitor use and progress toward meeting recreation objectives. Plans would include components to maintain or restore healthy rangeland conditions and allotment management plans would be expected to be modified, where needed, to achieve these objectives. Plans would include components to maintain or restore the structure, composition, processes, and connectivity of healthy ecosystems, which is consistent with the trend in forest management program objectives. Forest management program objectives currently include ecosystem restoration and protection, hazardous fuels reduction, and the maintenance of healthy forests – all of which contribute to a sustainable supply of forest products. With the focus on providing sustainable uses, a unit would be expected to contribute an element of stability to local economies.

Alternative B

Planning would continue to include identification of recreation opportunities on NFS lands and their ability to meet present and future recreation demands. Plan monitoring programs related to recreation would vary across NFS units, although the current National Visitor Use Monitoring system would be expected to be maintained. Planning would continue to identify the suitability of NFS lands for producing forage for grazing animals and restoration would be planned for lands identified as being in less than satisfactory condition. As in all alternatives, plans would identify lands suitable for timber production, identify expected timber harvest levels, outline the planned timber sale program, and describe the proportion of probable methods of forest vegetation management practices expected to be used, as required by NFMA. Units would continue to use their timber sale program and other forest management activities to enhance timber and other forest resource values and benefits over time.

Alternative C

Plans would include provisions for sustainable recreation, considering opportunities and access for a range of uses. Planning would vary widely from unit to unit in analysis of distinctive roles and contributions to recreation opportunities within the context of the broader landscape. Recreation would be expected to be monitored because of the current national visitor use monitoring system. There would be little assurance of consistency in the way plans respond to changes in recreation value and use trends. Where livestock grazing is currently authorized, lands would be expected to be identified as suitable for this use. Plans would acknowledge the unit's contribution to providing forage for livestock. However, there would be a low probability of consistency in assessment of the rangeland resources, plan components to guide its management, or monitoring across NFS units. Timber direction in plans would be expected to not exceed the minimum NFMA requirements to identify the suitability of lands for timber production, the expected timber harvest levels, the planned timber sale program, and the proportion of probable methods of forest vegetation management practices expected to be used, as required by NFMA. However, the trend in public and agency values toward restoring and maintaining healthy ecological conditions would be expected to supplant the absence of prescriptive plan direction.

Alternative D

Collaboration would assure consideration of a full spectrum of recreational uses and values relevant to each NFS unit and identification of the distinctive roles and contributions of the unit within the context of the broader landscape. However, the mix of recreation opportunities might be shifted away from developed and motorized use in some areas to more undeveloped and non-motorized forms of recreation. Plans would include components to maintain or restore healthy rangeland conditions, and allotment management plans would be expected to be modified to achieve these objectives. Plans would be expected to focus unit timber programs on restoration and protection of watersheds and riparian areas. The timber program level would be expected to remain near the current level with a probable shift toward smaller diameter material.

Alternative E

Collaboration would follow a prescribed process to assure consideration of a full spectrum of recreational uses and values relevant to each NFS unit and identification of the distinctive roles and contributions of the unit within the context of the broader landscape. Plans would include components to maintain or restore healthy rangeland conditions, and allotment management plans would be expected to be developed to achieve these objectives. Rangeland monitoring would be conducted and signal points would identify when and if plan amendments are needed. As in all alternatives, plans would identify lands suitable for timber production, the expected timber harvest levels, the planned timber sale program, and the proportion of probable methods of forest vegetation management practices expected to be used, as required by NFMA. As in Alternative A, plans would include components to maintain or restore the structure, composition, processes, and connectivity of healthy ecosystems, which is consistent with the trend in forest management program objectives.

Efficiency and Effectiveness

Alternative A

Implementation of this rule would cost the Agency approximately $102.5 million annually ($1.5 million less than the current rule (Alternative B)). Considering and referencing existing assessments completed by States and other entities would improve planning efficiency by leveraging unit staff resources with those of other agencies. Compared with current rule procedures, more effort would be dedicated to collaboration, assessments, and monitoring. This shift in staff resources, along with requirements for specific monitoring questions and biennial evaluations, would contribute to the effectiveness of plans by helping plans remain current. As plans are implemented, their currency would ensure project and activity proposals are guided by the latest science, contemporary economic and social values, and current conditions on the landscape.

Alternative B

Implementation of this rule would continue to cost the Agency approximately $104 million annually. This alternative represents current plan development, revision, and amendment procedures that have been found to make for an unduly complex, costly, lengthy, and cumbersome planning process. Some recently revised plans incorporate concepts, if not actual requirements of the proposed rule even though not required. Under Alternative B, this trend is expected to continue albeit voluntarily. Consequently, there would be no assurance that plans would exhibit content beyond that which is required in the current rule procedures or that there would be consistency across NFS units.

Alternative C

Implementation of this rule would cost the Agency approximately $80.2 million annually ($23.8 million less than the current rule (Alternative B)). This alternative represents the minimum requirements of NFMA and would be expected to result in the widest variation

in plans across NFS units. Consequently, the efficiency and effectiveness of this alternative would be expected to range widely from one unit to the next. This alternative does not require a landscape perspective or as adaptive a framework as found in Alternative A that can facilitate adaptation to new information about risks and stressors. Consequently, planning efficiency would be expected to decrease because of the inability of management units to revise and maintain management plans that adequately address uncertainty and reflect current knowledge about social, economic, and ecological risks, stressors, and contingencies.

Alternative D

Implementation of this rule would cost the Agency approximately $116.0 million annually ($11.9 million more than the current rule (Alternative B)). This alternative's additional requirements for plan components to provide for maintenance and restoration of riparian and watershed health could bring consistency in maintenance and restoration of riparian and watershed health to some units while having little effect on other units where riparian and watershed health is already a priority. Unit expenditures on required species monitoring under this alternative could reduce a unit's flexibility to fund other monitoring priorities. The effects of this alternative would otherwise be similar to Alternative A.

Alternative E

Implementation of this rule would cost the Agency approximately $134.4 million annually ($30.3 million more than the current rule (Alternative B)). Requirements to identify possible scenarios in assessments would have short-term cost increases with possible long-term gains in efficiency. Additional requirements regarding coordination in the assessment and monitoring would increase initial costs. However, consistent coordination might also result in more cost-effective long-term planning efforts to meet viability objectives. Additional requirements for standardized collaboration methods might work well for some units, while other units might find that some required steps are not relevant to their local public involvement needs. A standardized process could also reduce the effectiveness of collaboration if people lose ownership in the process and its outcomes and reduce willingness to work collaboratively during subsequent planning efforts. The effects of this alternative would otherwise be similar to Alternative A.

Transparency and Collaboration

Alternative A

Responsible officials would continue to engage State and local governments, Tribes, private landowners, other federal agencies, and the public at large, but additionally would encourage participation by youth, low-income and minority populations, who have traditionally been underrepresented in the planning process so that it would be expected that the process would identify all the social, economic, or ecological factors of importance in the plan area. The forest or grassland supervisor would be the responsible official, thereby affording greater opportunity for people to interact directly with the decision maker than under current rule procedures. The current option to use either a

post-decisional administrative appeal process or pre-decisional objection would be replaced with a pre-decisional objection process as the sole means to administratively challenge a decision, resulting in more consistency than currently found in the administrative review process across all NFS units. Documents such as assessments, plans, monitoring reports, environmental analyses, and decision documents would be readily available to the public through posting on the Internet and other means.

Alternative B

The current trend of more transparent and collaborative public involvement in planning efforts would be expected to continue. Units would continue to engage private landowners, Federal agencies, State and local governments, and Tribes in the planning process. People not traditionally involved in the planning process might be overlooked, and it is possible that the process would not identify all the social, economic, or ecological factors of importance in the plan area. Responsible officials would have considerable flexibility to design a collaborative process. Increased flexibility would allow responsible officials to change processes as best practices evolve and design collaborative processes that address the unique constituency of the unit. However, greater flexibility provides less assurance that all units would follow best practices. The regional forester, as responsible official, would not be expected to have an understanding of local concerns but would be expected to be aware of regional and national issues.

Alternative C

The current trend of more transparent and collaborative public involvement efforts would be expected to continue. Units would continue to engage private landowners, Federal agencies, State and local governments, and Tribes in the planning process. Responsible officials would have considerable flexibility to design a collaborative process. Increased flexibility would allow responsible officials to change processes as best practices evolve and design collaborative processes that address the unique constituency of the unit. However, greater flexibility provides less assurance that all units would follow best practices. The forest or grassland supervisor would be the responsible official, thereby affording greater opportunity for people to interact directly with the decision maker than under current rule procedures. The current option to use either a post-decisional administrative appeal process or pre-decisional objection would be replaced with a pre-decisional objection process as the sole means to administratively challenge a decision. This would result in more consistency than currently found in the administrative review process across all NFS units.

Alternative D

Alternative D contains the same requirements for collaboration and transparency as Alternative A and would, therefore, have the same effects with respect to those requirements.

Alternative E

The public involvement process for plan development or revision would be standardized resulting in more stakeholders potentially being identified who could add additional value to the planning process. The process might work well for some units while other units might find that some required steps are not relevant to their local public involvement needs. A standardized process could reduce ownership in the process and its outcomes, disguise a lack of commitment in the process, and reduce willingness to work collaboratively during subsequent planning efforts. The effects of this alternative would otherwise be similar to Alternative A.

Coordination and Cooperation Beyond NFS Boundaries

Alternative A

The responsible official would consider all lands and look across boundaries throughout the assessment, plan development/revision, and monitoring phases of the planning process. The responsible official would engage other agencies, governments, and Tribes earlier in the process than currently practiced, inviting them to participate in the assessment process and the development of the proposed plan, plan amendment, or plan revision instead of waiting until the proposed plan is issued for comment. Units would be expected to leverage their resources and knowledge with those of other agencies to gain efficiency in planning and future implementation of their plans.

Alternative B

The responsible official would continue to coordinate planning activities with the planning efforts of other Federal agencies, State and local governments, and Tribes and coordinate with adjacent private land owners. The general trend in the planning process for more coordination across all lands would continue, but there would be considerable variation across units in the amount of coordination and what specific plan content would result.

Alternative C

The general trend for more interagency coordination in the planning process would be expected to continue, but inconsistently across the NFS because much of it would be voluntary. Formal assessment or monitoring of lands outside of NFS boundaries would not be expected.

Alternative D

There would be substantially more coordination with other agencies than would occur under Alternative A or current rule procedures for purposes such as restoring watershed connectivity, reducing road density, and maintaining viable populations across jurisdictional boundaries. Planning would follow a more prescriptive approach to interagency coordination than Alternative A concerning issues of ecological conditions and species viability across the landscape. The effects of this alternative would otherwise be similar to Alternative A.

Alternative E

Several items related to lands outside of NFS boundaries would be monitored; however, coordination and cooperation beyond NFS boundaries would be generally the same as in Alternative A.