CREATING THE NEXT GENERATION OF NATIONAL FOREST PLANS

OBSERVATIONS FROM A FORMER U.S. FOREST SERVICE PLANNING SPECIALIST

UNIVERSITY OF MONTANA COLLEGE OF FORESTRY & CONSERVATION MISSOULA, MT

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Throughout the United States, national forests are beginning the process of revising national forest plans. These plans must be written in accordance with the National Forest Management Act (NFMA) and the agency's 2012 planning regulations. Many citizens will be new to this process, and those experienced in forest planning will find several differences in how plans were written under the old regulations compared to the new planning rule.

Forest plans play a significant role in shaping how our national forests are managed, from the types of uses and activities that are permitted to the environmental protections afforded to water and wildlife. There is a lot at stake and forest planning is a complicated process. To help sort things out, I asked Jonathan Haber, a former Forest Service planning specialist, to write a policy paper focused on what people should know about and pay attention to in the revision of national forest plans. Haber's analysis, based on years of experience in forest planning, will help guide citizens though this important process.

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CREATING THE NEXT GENERATION OF NATIONAL FOREST PLANS

BY

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INTRODUCTION

The National Forest Management Act (NFMA)¹ requires land and resource management plans (forest plans) for each of the national forests, grasslands and prairies managed by the U. S. Forest Service (collectively referred to as forests).² It also requires regulations that govern the planning process. After a 30-year reign, the regulations developed in 1982 for this purpose were replaced by new regulations issued in 2012 (hereinafter the Planning Rule).³

Suggestions for improving the planning process began almost immediately after the 1982 regulations were written.⁴ Even before all national forests had completed their first plans, the Forest Service had conducted workshops and interviews, and in 1990 prepared a formal "Critique of Land Management Planning."⁵ It consisted of 11 documents and led to 232 recommendations for aspects of the process that "needed adjustment."

In 1995 the Forest Service proposed the first revision of the 1982 planning regulations.⁶ These regulations were never finalized, but final regulations were adopted in 2000,⁷ 2005,⁸ and 2008.⁹ However, these regulations were quickly abandoned as a result of litigation (and perhaps politics).¹⁰ Consequently, all plans currently in effect are based on the 1982 regulations.

This will change in the next few years. The Forest Service has established an aggressive schedule to replace outdated plans using the new 2012 Planning Rule.¹¹ This plan revision process has begun for at least 19 national forests, and the first revised plans are expected to

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be completed in 2016. (Some of these units have progressed far enough to reveal glimpses of what the next generation of Forest Service plans is going to look like, but this discussion is not intended to focus on that limited set of examples of draft material.)

The Forest Service has taken the lessons learned from over thirty years of planning, and nearly twenty years of writing planning regulations, and drafted a new set of instructions for how to design a management plan that "provides a framework for integrated resource management and for guiding project and activity decision-making."¹² What has all that learning led to?

This paper will highlight what I believe are the most important provisions of the 2012 Planning Rule.¹³ In most cases, that is because they represent something that is different from the 1982 regulations, which creates both opportunities for creativity and the risks associated with being creative.

My perspective is based on a career spent writing forest plans (Helena and Mt. Hood national forests), assisting with many other planning efforts as a regional planner in the Northern Region of the Forest Service, writing Forest Service planning regulations (1995, 2000 and 2012) and associated policy directives, and helping defend forest plans (and planning regulations) in court.

My introductory observation is that changes in forest planning have been reactive and evolutionary. The new Planning Rule, to a large degree, codifies newer practices that have already been applied under the authority of the old regulations. Also, plans recently revised under the old planning regulations have already incorporated concepts that were being developed for the new Planning Rule. It may be that the first plans developed under the new Rule will look very much like the last plans developed under the old regulations.

It may be difficult to tell when "newness" occurs, and whether a particular change can be attributed to the 2012 Planning Rule or not. In any case, what follows are aspects of the new planning process that should draw the attention of its participants.

THE PLANNING PROCESS

One of the biggest concerns about the planning process, from its earliest days, was the amount of time and resources it took to complete a plan.¹⁴ Plan revisions have on average taken between five and seven years to complete.¹⁵ The concern for planning expediency has become more acute as more attention has been paid to federal budgets, and as the ability of the Forest Service to devote resources to long-term needs has declined. It probably underlies many of the procedural changes adopted by the new Rule. Here are some of the key changes in the planning process.

Decision Making Structure

One of the fundamental changes made by the 2012 Planning Rule is the designation of forest supervisors as the "responsible official" for plan approval.¹⁶ Current plans were approved by regional foresters. The difference is perhaps more subtle than it sounds because even under the 1982 regulations individual national forest staffs prepared the plans and forest supervisors had an important role to play; however, it does potentially provide more autonomy for individual units. This autonomy may allow expedited planning. It may also contribute to the tendency of individual planning teams to "reinvent the wheel" for various aspects of the process and thereby slow it down. Such decentralization also runs counter to the idea that more centralized planning teams for use on multiple forests, and by promoting consistent approaches among units.

One of the aspects of the old planning process that the Forest Service wanted to change was the role of the national headquarters in resolving administrative appeals of plan decisions made by regional foresters. In the new objection process, the reviewing officer for a plan revision decision made by a forest supervisor would be a regional forester.¹⁷ This would keep the decision process closer to home for most participants. However, the decision level was a point of controversy in the development of the new Rule that led to a requirement that there be a national oversight process.¹⁸

Adaptive Management

The 2012 Planning Rule includes a goal of having "a responsive planning process that informs integrated resource management and allows the Forest Service to adapt to changing conditions, including climate change, and improve management based on new information and monitoring."¹⁹ If this goal were met, it would lessen the burden on the plan revision process to create a more perfect plan, which would likely speed up that process.

It is difficult to identify provisions of the Planning Rule that would actually make the overall process more responsive. There is encouragement of continuous monitoring, new assessments when appropriate, and amendments when needed. The Rule provides discretion to limit the scope of all of these. The Planning Rule recognizes²⁰ that there is now a categorical exclusion from NEPA

procedures that may be used for plan amendments,²¹ which may be helpful for non-controversial amendments or those that impose new protective measures that have only beneficial environmental effects.²²

However, neither the Planning Rule nor a plan can assure that any of these actions would be funded.²³ In addition, in recent years the Forest Service has asserted in court that it is not required by NEPA or the Endangered Species Act to consider new information that might lead it to change the plan.²⁴ It might not be reasonable to expect that future plan amendments would occur at a frequency that would reduce plan revision efforts.

Public Participation and NEPA

The new Planning Rule, like the old regulations, requires an environmental impact statement (EIS) for plan revisions.²⁵ The Forest Service optimistically estimates that the new planning process will take an average of three to four years,²⁶ and the EIS process should be expected to take the majority of that time. To accomplish this, the Forest Service has recognized a need to streamline the NEPA process for programmatic decisions like forest plans, but chose to not address NEPA procedures as part of the Planning Rule.²⁷

What the new Rule has done is beef-up the process that occurs prior to NEPA. The 2012 Rule requires that the Forest Service provide opportunities to the public for participating in the assessment of existing information and developing the proposed action.²⁸ While the 1982 regulations required public participation activities "early and often," this was qualified by "as appropriate," and this requirement could be met by beginning formal public involvement after the development of a proposed action.²⁹

The responsible official is now required to engage the public "using collaborative processes where feasible and appropriate."³⁰ However, the forest supervisor "has the discretion to determine the scope, methods, forum and timing of those opportunities"—and collaboration takes time.³¹

On paper at least, there is an opportunity for the interested public to be proactive in developing a plan instead of reacting to a Forest Service proposal. The Rule provides a potential for public involvement that is more meaningful and productive, especially if it begins with some agreement about what the best available scientific information is and how it will be used to inform the assessment. ³² Maybe this will also lead to a process that is more efficient. Perversely, an effort by the Forest Service to dictate timeframes could truncate the early stages of the planning process in a way that prolongs the latter stages. The tension between effective public participation and meeting deadlines will likely produce dissatisfaction with how well both of these goals are met.

Analytical Requirements and Tools

One of the core parts of the 1982 regulations was the first to be criticized (and essentially abandoned), and that was the analytical requirements. Original plans were built around a policy of "maximizing net public benefits"³³ and used outcomes from a computer model (FORPLAN) that recommended land allocations that would optimize economic efficiency. Model results often became the basis for management areas in the forest plan. Construction and use of these models to provide specific required analyses for each unit were time-consuming, and the "black box" approach was a barrier to effective public involvement.

The 2012 Planning Rule has no comparable requirements. In some ways, land management planning has returned to the "old days" of drawing lines on a map, which is much easier for most people to understand and contribute to. Of course, this line drawing is now assisted by powerful computer mapping tools, but unlike optimization models, much of the public understands these tools. In fact, it should be possible for public participants to create their own maps and conduct their own analysis in conjunction with, or even in coordination with, the Forest Service. This would require early coordination of data types and formats.

Documentation and Science

It should go without saying that all of the analysis and rationale related to plan development must be documented in an administrative record. The new Rule is explicit, however. The decision document must explain "how" a plan meets the requirements set out for it in the Rule. ³⁴ It also must explain "how" the best available scientific information was used to inform the planning process. ³⁵ These requirements should not be read to allow the Forest Service to delay such explanations until the decision is made. In any collaborative planning effort, such rationale should be part of the ongoing discussion among participants. Documentation requirements may also provide an incentive to improve the quality of the science and the rigor of the analysis, though perhaps at a cost to the pace of the process.

PLAN STRUCTURE

To be most effective, participants in the planning process need to understand how plans are built and how the pieces work. Proposals from the public for "pegs" will be most useful if they fit into the "holes" built for them by the new Planning Rule. In comparison to the 1982 regulations, some of the pieces are different and they will work differently.

Current plans were built around "zoning" maps. Within the different zones, known as "management areas," certain uses were prohibited or regulated for particular purposes. The Forest Service found that such plans became a list of proscriptions, or, "thou shalt nots" (primarily standards and guidelines) rather than a roadmap of desired outcomes to guide future management proposals.³⁶ In short, zoning had been done without planning. Under the new Rule, there is more attention focused on planning and perhaps less on zoning.

Plan Components

Under the 2012 Rule, "plan components" are the decisions made in a forest plan that are enforceable. They are enforceable because the Planning Rule requires all future management actions to be "consistent with the applicable plan components."³⁷ While courts have largely found "consistency" to mean that projects implementing plans must comply with standards and guidelines (the zoning components),³⁸ the new Rule extends that requirement to all plan components.

The 1982 regulations required that plans include "a desired future condition of the forest or grassland."³⁹ However, that was often treated as an afterthought, and in existing plans is typically a very general description that provides little useful guidance. It is also not an enforceable part of the plan.

Under the 2012 Rule, "desired conditions" are a plan component. Unlike the desired future conditions in existing plans, desired conditions that are plan components in revised plans "must be described in terms that are specific enough to allow progress toward their achievement to be determined."⁴⁰ The Forest Service has sometimes stated that it is now more important to manage for these outcomes (what we leave on the land) than outputs (what we take from it).⁴¹

Unlike zoning restrictions that may stop actions from occurring, having desired conditions in a plan does not ensure that they will be achieved. A plan can encourage them by establishing objectives or by making achievement of those conditions a prerequisite for other kinds of projects. (A plan can also prevent actions that might foreclose the opportunity to achieve desired conditions over the long term).⁴²

The agency appears to be a little uncomfortable with including specific desired conditions in forest plans, especially outside of the familiar environment of tree data. There is both reticence among resource specialists about taking a public position on a particular number when the science is uncertain, and concern from managers about making a commitment to particular numbers that they may later be held accountable for.

Desired conditions are definitely worthy of considerable attention in the planning process. Desired conditions are the basis for the rest of the plan components; objectives, standards, guidelines and suitability determinations must be developed to help achieve the desired conditions.⁴³ In addition, from a public involvement standpoint, they can provide a focal point for discussion of different management outcomes that may facilitate agreement in a collaborative setting. If forest plans contain specific, measurable desired conditions, this should also focus the process of identifying locations where projects are needed, and thereby increase the efficiency of project planning.

The Forest Service has learned from the first set of NFMA plans that mandatory forest plan standards can infringe on its traditional management flexibility, and the Planning Rule was written under an assumption that if plans incorporated more specific desired conditions fewer standards would be needed.⁴⁴ However, if desired conditions fall short on specificity, then standards will remain important. Moreover, the more long-term and aspirational desired conditions are not a substitute for mandatory requirements when regulatory certainty is important.⁴⁵ This has been the case in the past for species listed under the Endangered Species Act, and may be equally true where conditions must be provided for viable populations of species of conservation concern (see further discussion below).

Forest planners may be tempted to take a "trust me" approach that would allow desired conditions to be fleshed out later. While the discussion surrounding the development of the 2012 Rule stressed the need for the planning process to be "adaptive" and "responsive," that is different from saying the plans themselves need to be inherently flexible with built-in discretion. It is clear in the Rule that it is the planning framework—the process of assessment, plan development, monitoring and identifying needed changes—that should make plans dynamic.⁴⁶

Management Areas

Revised plans will probably still be based on the concept of management areas, now defined as an area "that has the same set of plan components."⁴⁷ One of the criticisms of existing plans has been that management areas do not have to be contiguous, so parts of them may be scattered about the plan area. This has led to an interest in "geographic areas," which are "contiguous land areas identified within the plan area."⁴⁸ Most likely these include different management areas, so they will not be managed in their entirety with the same set of plan components. Their value is primarily in communicating how portions of a plan area will be managed.

There has been confusion about this labeling within the Forest Service, so it could confuse the public during the planning process. It is also possible that plan components will apply to land units that overlap other management areas (for example, "lynx habitat"), but may not be recognized in the plan as management areas themselves. Regardless of whether the Forest Service labels something as a management area, it is important that a plan is clear about where every plan component applies.⁴⁹ This is most clearly communicated with maps. If locations are to be determined later, the plan must provide objective criteria for determining those locations.⁵⁰

There is also a perception in the agency that there are too many different management areas in current plans. As a result, planners may discourage the creation of management areas in revised plans. It may be most efficient to start the early stages of the process with a simple working set of distinct management types. For example, lands suitable for timber production must be identified in the plan and these could be grouped with other lands managed for commodity production. Lands that will be lightly or passively managed would be at the other extreme. In between would be lands that would be actively managed for ecological purposes or other reasons besides production. The final plan could then include subdivisions of these categories based on other differences in management where appropriate.

WILDLIFE DIVERSITY

In addition to requiring a planning process, and plans for each national forest, NFMA also included some substantive provisions that were primarily designed to regulate Forest Service timber management activities. Compliance with these substantive requirements is necessary for any plan to be approved. The one that has probably received the most attention is the requirement that plans "provide for diversity of plant and animal communities."⁵¹ The 1982 regulations interpreted this to mean that habitat must be "managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area."⁵² The biggest problem posed by this requirement to the Forest Service was actually its extension by some courts to project decisions, which led to injunctions of those projects. Consequently the most important new provision in the 2012 Planning Rule could be the statement that, "none of the requirements of this part apply to projects or activities."⁵³

The diversity provisions in the 2012 Planning Rule now state that plan components must "maintain a viable population of each species of conservation concern in the plan area."⁵⁴ This is at least partly the result of a change in scientific understanding. Under the 1982 regulations, viability of all species could be accomplished by managing for selected "management indicator species." Under the 2012 Planning Rule, "ecosystem integrity" would provide what is needed for viable populations of most species (sometimes referred to as "keeping common species common"), ⁵⁵ and special attention would be paid to species whose viability is at risk. The Forest Service believes this will be a more effective approach to protection than the 1982 regulations.⁵⁶

This new ecosystem/species paradigm for meeting the NFMA diversity requirement should lead planning participants to focus on two key questions: what constitutes ecosystem integrity and what are the species of conservation concern (SCC).

Integrity/Natural Range of Variation (NRV)

The Planning Rule requires all forest plans to include plan components that maintain or restore ecological integrity.⁵⁷ Ecological (or ecosystem) integrity occurs when dominant ecosystem characteristics occur within the natural range of variation (NRV), and can recover from perturbations.⁵⁸

A key step then, and one that should be taken early in the assessment process, is the selection of the ecosystem characteristics that will be used to meet this requirement (and which will later be monitored). This should be done while keeping in mind that the purpose of this ecosystem approach is to provide habitat for viable populations of most species. It will meet this intended purpose only when there is a demonstrated strong relationship between the ecosystem characteristics and the habitat needs of a species.⁵⁹

Most of the readily available Forest Service data describes tree characteristics, but it does not necessarily follow that such characteristics are useful in addressing the needs of wildlife. The most scientifically defensible approach to planning for species viability may be to use less sophisticated data about more relevant ecosystem characteristics.

The natural range of variation must then be determined for the key ecosystem characteristics. NRV is not defined in the Rule.⁶⁰ The concept derives from the natural, historic variability of the landscape, but with recognition that historic conditions may not be ecologically achievable or desirable. Because it is a range over time and space, the scale selected for each ecosystem characteristic will be important.

In fact, there are few ecosystem characteristics with historical records capable of defining a range of variation (and again, most are for trees). NRV will therefore likely be defined in practice as a reference condition that is expected to support viable populations, based on the best available scientific information. In essence, the second part of definition of integrity (resilient to perturbations) may become as important as NRV. Ecological integrity is mandatory, but ambiguous. This situation presents opportunities for public (especially scientific) contributions, but also provides the Forest Service with considerable discretion.

Since plan components must provide ecological conditions for viable populations of SCC, it would facilitate efficient planning to identify SCC and the ecological conditions necessary for them prior to selecting the key ecosystem characteristics. Ecological conditions relevant to SCCs could then be selected and included as part of the integrity analysis. (In a rather circular definition, the dominant characteristics of ecosystem integrity specifically include "species composition and diversity".⁶¹) Though the Rule suggests that ecosystem and species analyses are sequential, information about species is needed to design a useful ecosystem analysis.

Species of Conservation Concern

This relationship highlights the critical question of how to identify the species of conservation concern for which viability must be evaluated and provided. A species must be classified as a SCC if it meets two criteria: It must be known to occur in the plan area and "the best available scientific information indicates substantial concern about the species' capability to persist over the long-term in the plan area."⁶²

The Rule introduces the term "potential" SCC for use during the assessment phase of the planning process.⁶³ This should be understood to encompass the species that are being considered as

possibly meeting these criteria. The designation of SCC must be made by the regional forester, and therefore the responsible official does not have the authority to eliminate species from consideration.⁶⁴ SCC will not become final until the plan is approved (the classification may change during the planning process, but only based on new information relevant to the two criteria).

At the foundation of all of this diversity analysis is the notion of "substantial concern" about a species' persistence in the plan area. While these terms seem subjective, it's important to recognize that this concern is to be based on the best available scientific information.⁶⁵ There are two main approaches to reaching this conclusion. One is to use existing science-based classifications of the entire species by reputable sources such as federal agencies (including the Forest Service Sensitive Species Program⁶⁶), state or tribal governments and independent sources (like NatureServe⁶⁷). If a species is at risk range-wide, it should be presumed to be at risk in the national forest plan areas in which it occurs. If there is no range-wide concern, selection as a SCC could be based on an analysis of data and research applicable to a specific plan area.

The 2012 Rule makes some specific changes in the species that must be considered in forest planning. Diversity is now defined only in terms of native species (not also "desired non-natives"). Viability (addressed by SCC) can now apply to non-vertebrate animals and plants.

It remains to be seen how lack of scientific information will affect the determination of "substantial concern" about persistence. It could be seen as a reason that concern exists. Alternatively, it could be seen as a basis for not including such species, thus removing any requirement to address them with plan components, and eliminating the need to look for and accommodate such species in future project planning.⁶⁸ If there were many species excluded for this reason, it would weaken the argument that this approach adequately provides for diversity of plant and animal communities.

Plan components must provide ecological conditions for viable populations. Ecosystem plan components should include desired conditions for key ecosystem characteristics that are relevant to SCC. Species-specific plan components should be written to address finer scale ecological conditions or specific kinds of management activities that could affect the species. Most importantly, since these plan components must provide a conservation strategy for viability of these species, ecosystem and species-specific plan components should be developed early in the planning process, and used to evaluate the feasibility of other potential plan components.⁶⁹

The Forest Service has never provided any formal guidance for how to determine the effects of forest plan components on species viability, or more specifically, whether the viability requirement has been met. For current plans, viability was sometimes determined by professional judgments regarding the probability of a species' persistence. The only clear guidance for revising plans is that the responsible official must use the best available scientific information to inform all parts of the planning process.⁷⁰

The Rule also provides an exception from the viability requirements when a viable population cannot be maintained in the plan area.⁷¹ Since the ranges of most species are not contained within a plan area, this exception may actually be the rule. The exception applies when it is not within the authority of the Forest Service or the inherent capability of the plan area to provide necessary ecological conditions for a viable population. It requires plan components to provide conditions in the plan area that contribute to maintaining a viable population within its range. This language should be interpreted to require the plan area to contribute what the authority of the Forest Service and the capability of the land allow.

Endangered Species Act

Species classified as threatened, endangered, proposed or candidate species under the Endangered Species Act (ESA) cannot be SCC, and have a separate requirement that ties to the language of ESA. Plan components must contribute to recovery of threatened and endangered species and conserve proposed and candidate species.⁷² Operationally, there is no reason to treat these species different from SCC, since de-listing or not listing would probably mean that they would become SCC. Their habitat requirements should be considered as determinants of ecological integrity, and their conservation would require plan components that provide for viability in the plan area.

There is an opportunity for the consulting agencies to be more proactive by participating early in the planning process.⁷³ Plan components should address the identified factors contributing to listing or potential listing. Plan components can act as regulatory mechanisms that may be considered by the listing agencies to avoid listing or de-list a species—at least if the component is mandatory, like standards.⁷⁴ Where a recovery plan exists, forest plans should embrace its recovery strategy by incorporating the relevant parts into plan components.

Connectivity and Riparian Areas

The new Rule highlights two specific aspects of diversity that should play a prominent role in revised plans. In order to meet the ecological integrity requirement, plan components must maintain or restore the structure, function, composition and connectivity of terrestrial and aquatic ecosystems and watersheds⁷⁵ and riparian areas.⁷⁶ Both connectivity and riparian areas must receive greater attention than was required in the past.

Connectivity is an explicit component of the required ecological integrity. The definition of connectivity recognizes that it exists at multiple scales across large landscapes within home ranges and between populations, and also affects long distance range shifts.⁷⁷ This definition broadly encompasses connectivity within a plan area and also across the boundary of a plan area, and plan components must address both vegetation and human-constructed barriers. Other language in the Rule about coordinating planning with adjacent jurisdictions,⁷⁸ and considering opportunities to "link open space and take into account joint management opportunities" encourage Forest Service leadership of cross-boundary planning efforts for connectivity.⁷⁹

While many plans currently designate a management area for riparian areas, the 2012 Rule makes this a requirement of all plans. Plans must establish widths for "riparian management zones" around all lakes, perennial and intermittent streams, and open water wetlands.⁸⁰ Plan components in these management areas must provide for the integrity of riparian areas (including connectivity).

OTHER ISSUES

Timber

The elephant in the planning meeting rooms has traditionally been the timber "target" because logging is often perceived to conflict with many other uses of a forest. The term "target" is only properly applied to the annual program budgeting processes. There has never been a requirement that forest plans include a timber volume objective.

On the other hand, NFMA does impose upper limits on the amount of timber that may be sold. It must be "less than a quantity which can be removed from such forest annually in perpetuity on a sustained yield basis."⁸¹ NFMA thus imposes these limits in two steps: the long-term sustained-yield calculation determines what a forest plan may establish as an upper limit to the amount of timber sold, and then that limit is included in the plan and applied to the volume actually sold on a decadal basis.

Current plans include an "allowable sale quantity" (ASQ). This term was used in NFMA, and was defined in the 1982 regulations as "the quantity of timber that may be sold from the area of suitable timber land…"⁸² As such, it was defined as an upper limit, at or below the long-term sustained-yield capacity,⁸³ but it became a goal in the sense that national forest timber volume achievements were often compared to ASQ. These achievements seldom measured up. This was largely because ASQ was calculated as an optimum volume achievable if there were no unexpected changes (and if adequate funding were provided). There was pressure to produce the ASQ, or determine the "right" ASQ that would be achievable.

The USFS has addressed this problem in the 2012 Rule by getting rid of ASQ. At least the term does not appear in the Rule. Instead, the Rule requires that agency directives determine "procedures for estimating the quantity of timber that can be removed annually in perpetuity on a sustained-yield basis."⁸⁴ Though there has been little fanfare,⁸⁵ it is clear from these new directives that an entirely different approach is intended, in which timber volume calculations would be based on a much larger acreage, and there would not be limits in the plan on timber volume sold based on consideration of other resources.

The long-term sustained-yield calculation would be based on the amount of timber that could be produced on all lands that *may be suitable* for timber production, assuming all of these lands were managed to produce timber without considering other multiple uses or fiscal or organizational capability.⁸⁶ Lands that "may" be suitable include those that are actually designated in a plan as not suitable for timber production because that is not consistent with the desired conditions for those lands.⁸⁷ This would lead to greater sustained-yield calculations based on a larger acreage than in current plans (where only lands *suitable* for timber production were included).

The new PWSQ (projected wood sale quantity) "is an estimate of the volume of all timber and other wood products that is expected to be sold during the plan period from expected harvests for any purpose (except salvage harvest or sanitation harvest) *on all lands in the plan area.*"⁸⁸ All other factors being equal, the new PWSQ would therefore be greater than the current ASQ. (It would also not actually be constrained by the long-term sustained yield calculation because PWSQ must consider other multiple uses and fiscal capability while the sustained yield calculation does not.)

Unlike ASQ, the "projected" PWSQ is not a limit on timber volume. This projection is not necessarily an objective either (unless made so in a particular plan).⁸⁹ Nevertheless it will probably be used as a basis for funding timber harvesting. Since there are no longer any meaningful enforceable volume limits, it will be extremely important to ensure that a plan includes realistic estimates of the timber that may be harvested, especially from lands not suitable for timber production. On some such lands the most reasonable projection may be zero (even where logging is not prohibited).

On the other hand, timber management activities are directly driven by Congressional appropriations. The 1982 regulations required that agency budget proposals be based on the plan.⁹⁰ The new Planning Rule has no such requirement. In any case, the Planning Rule does not control how Congress chooses to fund national forest management.

Motorized Recreation Access

The 2012 Rule does not explicitly address motorized access, yet decisions in a plan to allow or restrict it are likely to be highly controversial in many places.⁹¹ The risk of controversy is heightened as a result of some complexity in the Rule.

The one clear statement the Rule makes is that any "resource plans" that apply within the plan area must be consistent with plan components, and it uses "travel management plans" as an example. ⁹² Travel management plans designate specific roads and trails that will be open to motorized use.⁹³ Forest plans should identify areas that are not suitable for such designation where motorized use is not compatible with the desired condition.⁹⁴

A plan may constrain the Forest Service from authorizing motorized use; however, a plan may not directly regulate uses by the public.⁹⁵ This results in a three-step process to close a motorized travel route set in motion by the forest plan: a suitability determination in the plan, not designating the route as open to motorized use in the travel management plan, and an order to close the route under 36 CFR Part 261, Subpart B.

However, travel management plans already exist for many plan areas. In this situation, such travel plans "must be evaluated for consistency with the plan and amended if necessary."⁹⁶ Given the frequent contentiousness of travel management planning, the Forest Service may be more inclined to make a forest plan consistent with an existing travel management plan.

Fire

In the realm of vegetation management on national forest lands, there is now greater emphasis on the condition of the landscape.⁹⁷ This approach is embodied in the concept of "restoration" (a term used 25 times in the Planning Rule).⁹⁸ The conditions of the landscape drawing the most attention for restoration now in most places are those related to the effects of fire exclusion.

One of the most important questions that a strategic and programmatic plan should answer is what sort of fire regime and associated fuel conditions are desired in different parts of a national forest. The requirement for ecological integrity, developed with an understanding of historic conditions, should form the foundation of an overall fire management strategy. Wildland fire is an explicit consideration to be addressed in evaluating ecological sustainability and ecological integrity.⁹⁹

It is also important to identify management areas in the plan where there is a need to manage fuels and fire differently, such as modifying naturally dense understory conditions or harvesting burned trees. It is especially important to recognize in the plan where human communities will influence fuel reduction projects through their Community Wildfire Protection Plans authorized by the Healthy Forests Restoration Act,¹⁰⁰ and recognized by the Rule's assessment requirements.¹⁰¹ The implications of being in the Wildland Urban Interface (WUI) should be considered in the forest plan's management area classifications.

Since forest plans must provide the overall integrated policy and guidance required by NFMA, desired conditions related to fire must be integrated with other resource needs when plan components are developed. This will also facilitate development of annual fire management plans, which must be consistent with the forest plan.¹⁰² While Forest Service policy recognizes the need to integrate fire planning with forest planning, guidance for doing so has been in constant flux.¹⁰³ At a minimum, to integrate wildland fire management into LRMPs, fire managers should participate in the LRMP planning process,¹⁰⁴ but this may be a challenge during the fire season.

Roadless Areas

This management of these areas is a land allocation issue that has dogged the Forest Service for decades. The 1982 planning regulations included a section that required roadless areas to be evaluated and considered for potential wilderness designation.¹⁰⁵ The 2012 Planning

Rule requires the same for "lands" that may be suitable for wilderness recommendations, but says nothing about "roadless areas."¹⁰⁶

In the interim, the Roadless Area Conservation Rule was adopted in 2001, and lawsuits delaying its implementation were only recently resolved.¹⁰⁷ The 2001 Roadless Rule establishes (with some exceptions) prohibitions on road construction, road reconstruction, and timber harvesting on 58.5 million acres of inventoried roadless areas (IRAs) on National Forest System lands.¹⁰⁸ Such management direction would normally be considered plan components in a forest plan, but the Planning Rule provides no guidance for integrating IRAs designated by the Roadless Rule into the forest planning process.

The Roadless Rule is binding on all forest plans.¹⁰⁹ That clearly means that if an activity is restricted in the Roadless Rule, these restrictions can't be removed by a forest planning decision (without also completing a rulemaking process to change the Roadless Rule, which the Forest Service would certainly be reluctant to do). It's less clear whether the Roadless Rule also removed the authority of the Forest Service to further restrict road-building and timber harvest by modifying the exceptions provided in the Roadless Rule.

The Roadless Rule allows for changes in the "inventoried" areas to which it applies through subsequent updates or revisions of the official maps.¹¹⁰ The forest planning process would be expected to produce information that could be used to change the roadless area inventory, but the Planning Rule provides no guidance for doing so. This failure to provide a means to change the roadless inventory may be problematic for some participants in the planning process. Since the Roadless Rule only addresses inventoried roadless areas, the Forest Service is free to adopt plan components for other areas that provide the same protections as the Roadless Rule—just without the authority of regulations behind them.

Priority Watersheds

Providing high quality water for beneficial uses has always been a high priority for the Forest Service. The Planning Rule includes a requirement to identify watersheds that are a priority for maintenance or restoration.¹¹¹ The Preamble explains that an existing process, the Watershed Condition Framework (WCF), will be used to set priorities.¹¹² That process gives substantial weight to plan components,¹¹³ so it will be important for the two processes to be fully integrated. Existing watershed priorities based on existing plans may need to be changed when a plan is revised.

These priority watersheds will not be plan components¹¹⁴ because changed conditions may cause priorities to change (and therefore priority watersheds can be administratively changed without a plan amendment).¹¹⁵ However, what they lack in authority within the plan is offset by the ability to use these priorities more directly in the funding process than most other plan content. In addition, by linking the WCF process to the forest planning process it opens the prioritization process to public participation. This provides an early opportunity for the public to influence where management to implement the plan would occur first.

Energy

Energy development may be the new elephant in the room. With new sources of renewable (wind, solar and geothermal) and nonrenewable (hydrofractured gas, shale oil) energy becoming economically competitive, demand for energy developments is arising on National Forest System lands where it did not exist before. Careful planning could be critical to locating such uses in areas where they would least affect other values of the plan area.

The Planning Rule arguably allows a plan to make determinations that areas are not suitable for such uses. Wind and solar energy may be provided from national forests after obtaining a special use permit,¹¹⁶ and such permits would have to be consistent with plan components. However, the Preamble states that suitability determinations should not be made for leasable minerals (including oil and gas, coal and geothermal) because the Forest Service does not have the authority to make leasing decisions.¹¹⁷ It is not clear whether the Department of the Interior is subject to the NFMA consistency requirement when it makes leasing decisions, but if it is, energy development inconsistent with desired conditions or other plan components could still be limited.

The Preamble also states that decisions about availability for leasing (a step prior to actual leasing decisions) have been made for most national forests and grasslands, and that they are not plan components.¹¹⁸ Instead, decisions to make areas available for mineral leasing are "resource plans." This means that they must be consistent with plan components, and existing availability decisions will be subject to the requirement that they be conformed to newly revised plans if necessary.¹¹⁹

Monitoring

The most important thing to know about monitoring is that the monitoring program is not a plan component. That means it can be changed without amending the plan (but with public comment on "substantive" changes).¹²⁰

The Rule explicitly states that actual monitoring is not a prerequisite for making a decision to carry out a project.¹²¹ This language addressed situations where lack of monitoring had led to litigation of projects, and also the reality that monitoring actions are dependent on funding. However, it is within the discretion of a forest supervisor to include plan components (standards) that would make future projects contingent upon the occurrence or results of monitoring. This step would not be taken lightly, but may be necessary in cases where uncertainty and risk are high. This could occur where monitoring is a key piece of a conservation strategy for a species at risk in the plan area.

While most parts of the 2012 Rule won't apply until a plan is revised or amended, all plans must include new plan monitoring programs by May 2016 (or "as soon as practicable") that meet the requirements of the new Rule.¹²² Requirements for these new monitoring programs include species of conservation concern, which would not be found in existing plans.¹²³ Moreover, the existing monitoring plans that would be replaced contain provisions for management indicator species that were part of the 1982 requirement for diversity.¹²⁴ If the current monitoring requirement for diversity is removed from a plan before knowing what should be monitored for a revised plan, plans could fail to meet the diversity requirements of either regulation. This suggests a need for SCC to be identified for all units as part of developing monitoring strategies—independent of their revision schedule.

There are two especially important documentation requirements associated with monitoring that should promote adaptive management. One is the "information needs identified through the planning process as most critical for informed management of resources on the plan area."¹²⁵ A forest supervisor must consider these in developing the monitoring program, so they should be documented prior to that step in the planning process (logically as part of the assessment). The other important requirement related to adaptive management is that future required monitoring evaluation reports must indicate whether or not new information warrants changes in management.¹²⁶

There is a new requirement for regional foresters to prepare "broader-scale monitoring strategies" for plan monitoring questions that can best be answered at that scale.¹²⁷ These strategies must be completed as soon as practicable,¹²⁸ so their development should currently be ongoing. Both these and individual plan monitoring programs must be designed to take into account multi-party monitoring, which provides an ongoing opportunity for public participation in the planning process.¹²⁹

Plan Amendments

The discussion of monitoring indicated some potential challenges for the transition from existing plans, and amendments also pose such challenges. The Rule states (in a backhanded way) that the consistency requirement of 219.15 does not apply until plans are amended or revised under the new Rule, but for amendments, it only applies "with respect to" the amendments.¹³⁰ Different consistency rules would therefore apply to different parts of a plan until the plan is revised.

The Rule does not answer a more difficult question: "When do the new substantive requirements for sustainability, integrity and species viability apply?" These requirements apply to an entire plan, and it's not clear how they would apply to an amendment (or an amended plan), especially one that affects ecosystems or species, as most probably would. Arguably, the diversity requirements of one rule or the other must be met by a plan at all times. The ambiguity of this situation may create a disincentive to amend plans prior to revising them under the new Rule.

The 2012 Planning Rule made some changes that may reduce the process required to change a plan. It creates a new category of "administrative changes" that is not an amendment and requires only public notice (except that public comment is required for changes in a monitoring program).¹³¹ While this category is designed to correct errors or make changes in the plan that do not change plan components, it also allows "conformance of the plan to new statutory or regulatory requirements." This could allow a quicker response to changes in those requirements that narrow Forest Service discretion, such as those of the Endangered Species Act.

CONCLUSION

In some ways, the planning process is generally familiar to the agency as a result of thirty years of experience. On the other hand there are few individuals remaining in the agency who have any experience with creating or revising plans. And of course the details are new to everyone. Only some of those have been highlighted here.

The Forest Service is anxious to show results from the new Planning Rule, and is stressing this to the "early adopter" national forests that have initiated plan revisions under the new Rule. The Forest Service also wants these early examples to be successful, so it should be willing to listen to reasonable proposals to produce a better product within the parameters of the new Planning Rule.

One last thing that is certainly different from 30 years ago is that the public now understands what forest plans do and how important they can be to their particular interests. They are paying more attention. Focusing that attention on some of the key provisions described here might make their participation more effective, and contribute to an improved next generation of forest plans.

Notes

¹ 16 U.S.C. §§1600-1614

³ Another convention will be to refer to other planning regulations as "regulations," which was the term generally used for those adopted in 1982.

⁴ In fact, the 1982 regulations replaced the first regulations written in 1979. *National Forest System Land and Resource Management Planning, Final Rule*, 44 FR 53928, September 17, 1979 (36 CFR Part 219).

⁵ USDA Forest Service, Policy Analysis Staff, "Synthesis of the Critique of Land Management Planning," FS-452, June 1990.

⁶ National Forest System Land and Resource Management Planning. Proposed Rule, 60 FR 18886, April 13, 1995 (amending 36 CFR Parts 215, 217, and 219).

⁷ National Forest System Land and Resource Management Planning. Final Rule, 65 FR 67514, Nov. 9, 2000 (amending 36 CFR Parts 217, and 219).

⁸ National Forest System Land Management Planning. Final Rule, 70 FR 1023, Jan. 5, 2005 (amending 36 CFR Part 219).

⁹ National Forest System Land Management Planning. Final Rule and Record of Decision, 73 FR 21468, April 21, 2008 (amending 36 CFR Part 219).

¹⁰ National Forest System Land Management Planning. Final Rule and Record of Decision, 77 FR 21162, 21163, April 9, 2012 (amending 36 CFR Part 219).

¹¹ NFMA requires that plans be revised at least every 15 years, but almost all existing plans are much older than that (*National Forest System Land Management Planning. Final Rule and Record of Decision*, 77 FR 21162, 21164, April 9, 2012 (amending 36 CFR Part 219)).

12 36 CFR 219.2(b)

¹³ The Forest Service has recently released internal agency procedures for implementing the 2012 Planning Rule (*National Forest System, Land Management Planning Directives, Notice of final directives*, 80 FR 6683, February 6, 2015). This paper focuses on the Rule itself, but will refer to these directives where necessary.
¹⁴ Recommendation I from the 1990 Critique of Land Management Planning was, "Simplify, clarify and shorten the planning process." (USDA Forest Service, Policy Analysis Staff, "Synthesis of the Critique of Land Management Planning," FS-452,

June 1990, p. ix).

¹⁵ National Forest System Land Management Planning. Final Rule and Record of Decision, 77 FR 21162, 21169, April 9, 2012 (amending 36 CFR Part 219).

¹⁶ 36 CFR 219.2(b)(3)

17 36 CFR 219.56(e)

¹⁸ 36 CFR 219.2(b)(5)(ii)

¹⁹ 36 CFR 219.5(a)

20 36 CFR 219.3(b)(3)

21 36 CFR 220.6(e)(15)

²² While actions having both beneficial and adverse effects would be subject to NEPA (40 CFR 1508.8), it is consistent with the purpose of NEPA (and therefore appropriate for a categorical exclusion) when agencies "avoid or minimize any possible *adverse* effects of their actions upon the quality of the human environment" 40 CFR 1500.02, emphasis added).

²³ The Planning Rule stresses that the planning process must be within "the fiscal capability of the unit" (36 CFR 219.1(g)).

²⁴ See *Salix v. US Forest Service*, 944 F. Supp. 2d 984, D. Montana, 2013 and cases cited therein.

²⁵ 36 CFR 219. 7(c)(1)

²⁶ National Forest System Land Management Planning. Final Rule and Record of Decision, 77 FR 21162, 21177, April 9, 2012 (amending 36 CFR Part 219).

² 16 U.S.C. §§1600-1614

²⁷ This may have been in anticipation of the recently released Council on Environmental Quality guidance on programmatic NEPA reviews (Council on Environmental Quality, Memorandum from Michael Boots: "Effective Use of

Programmatic NEPA reviews," December 18, 2014).

http://www.whitehouse.gov/sites/default/files/docs/effective_use_of_programm atic_nepa_reviews_18dec2014.pdf

²⁸ 36 CFR 219.4(a)

²⁹ 36 CFR 219.6(b), 1982

³⁰ 36 CFR 219.4(a)(1)

³¹ 36 CFR 219.4(a)

³² 36 CFR 219.6(a)(3)

33 36 CFR 219.12(f), 1982

³⁴ 36 CFR 219.14(a)

35 36 CFR 219.3

³⁶ In abandoning the 1982 regulations, the Forest Service stated, "Outcome-based planning shifts the focus from how to get something done to why it is done" (*National Forest System Land Management Planning. Final Rule and Record of Decision*, 77

FR 21162, 21168, April 9, 2012 (amending 36 CFR Part 219)).

³⁷ 36 CFR 219.15(b)

³⁸ See "The Important Role of Standards in National Forest Planning, Law, and Management," Martin Nie and Emily Schembra, 44 *Environmental Law Reporter* 10281, 10283 (2014).

³⁹ 36 CFR 219.11(b), 1982.

⁴⁰ 36 CFR 219.7(e)(1)(i)

⁴¹ "Our vegetation management projects are guided by the principle that what we leave on the land is more important than what we take away…" Forest Service Chief Dale Bosworth, from an article in Fire Management Today (based on his 2002 McClure Lecture at the University of Idaho)

(http://www.foresthistory.org/ASPNET/Publications/first_century/sec10.htm) ⁴² 36 CFR 219.15(d)(1)

⁴³ 36 CFR 219.7(e)(1)(i). The likelihood of desired conditions being achieved should be determined as part of evaluating the effects of the plan in the EIS. ⁴⁴ The draft handbook for the 2012 planning rule stated: "Responsible officials should include sufficiently detailed descriptions of desired conditions so that long lists of standards, guidelines, and suitability determinations are not needed to determine the "purpose and need" for future projects and activities." (USDA Forest Service, FSH 1909.12, Land Management Planning Handbook, 22.11, Version 02/14/2013)

(http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5409939.pdf) (The reference to standards, guidelines and suitability was dropped in the final version of this section. USDA Forest Service, FSH 1909.12, *Land Management Planning Handbook*, 22.11, 2015)

⁴⁵ The Planning Rule itself states that standards (as well as guidelines) should be used "to meet applicable legal requirements" (36 CFR 219.7(e)(iii)).

⁴⁶ 36 CFR 219.5

⁴⁷ 36 CFR 219.19

48 36 CFR 219.19

49 36 CFR 219.7(d)

⁵⁰ Vagueness about plan components or where they would be applied would also make the NEPA process of evaluation and disclosure of effects more challenging. ⁵¹ 16 U.S.C 1604(g)(3)(B). "The regulations shall include, but not be limited to - … specifying guidelines which - … provide for the diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives …"

⁵² 36 CFR 219.19, 1982

61 36 CFR 219.19

63 36 CFR 219.6(b)(5).

⁶⁴ The Forest Service Handbook makes the process more confusing and misleading by suggesting that during the assessment process the responsible official has the discretion to eliminate species from "consideration" by the regional forester. (FSH 1909.12, *Land Management Planning Handbook*, 12.52d, 2015.)

65 36 CFR 219.3

⁶⁶ Forest Service Manual Chapter 2670, *Threatened, Endangered and Sensitive Plants and Animals*, 2005.

67 http://www.natureserve.org/

⁶⁸ The Planning Handbook seems to lean this direction: "If there is insufficient scientific information available to conclude there is a substantial concern about a species' capability to persist in the plan area over the long-term that species cannot be identified as a species of conservation concern." (FSH 1909.12, *Land Management Planning Handbook*, 12.52c, 2015). The Handbook provides no guidance

⁵³ 36 CFR 219.2(c). This provision permanently codified the approach initially taken by an interpretive rule providing for transition to the 2000 planning regulations that immediately suspended the application of the 1982 requirements (especially diversity requirements), and replaced them with a requirement to consider "best available science" for projects instead. (National Forest System Land and Resource Management Planning; Use of Best Available Science in Implementing Land Management Plans; Final Rule; Interpretation, 69 FR 58055, September 29, 2004) ⁵⁴ "Viable population. A population of a species that continues to persist over the long term with sufficient distribution to be resilient and adaptable to stressors and likely future environments." (36 CFR 219.19) ⁵⁵ National Forest System Land Management Planning. Final Rule and Record of Decision, 77 FR 21162, 21212, April 9, 2012 (amending 36 CFR Part 219). ⁵⁶ National Forest System Land Management Planning. Final Rule and Record of Decision, 77 FR 21162, 21175, April 9, 2012 (amending 36 CFR Part 219). 57 36 CFR 219.9(a) 58 36 CFR219.19 ⁵⁹ Noon, B. R. 2003. An optimal mix of coarse- and fine-filter elements to conserve biological diversity (oral abstract) in "Innovations in Species Conservation: Integrative Approaches to Address Rarity and Risk" Symposium; April 28-30, 2003; Portland, Oregon. ⁶⁰ NRV is defined in the Forest Service Planning Handbook: "The variation of ecological characteristics and processes over scales of time and space that are appropriate for a given management application. In contrast to the generality of historical ecology, the NRV concept focuses on a distilled subset of past ecological knowledge developed for use by resource managers; it represents an explicit effort to incorporate a past perspective into management and conservation decisions (adapted from Weins, J.A. et al., 2012, internal citation omitted). The pre-European influenced reference period considered should be sufficiently long, often several centuries, to include the full range of variation produced by dominant natural disturbance regimes such as fire and flooding and should also include shortterm variation and cycles in climate. The NRV is a tool for assessing the ecological integrity and does not necessarily constitute a management target or desired condition. The NRV can help identify key structural, functional, compositional, and connectivity characteristics, for which plan components may be important for either maintenance or restoration of such ecological conditions" (FSH 1909.12, Land Management Planning Handbook, 05, 2015). It is difficult to reconcile the requirement for integrity in the planning rule, which is defined as NRV, and the statement here that NRV is not necessarily a desired condition.

^{62 36} CFR 219.9(c)

for finding "sufficiency," but the concerns of any relevant experts should be taken into account.

⁶⁹ The 1982 planning regulations included a section on the "minimum requirements for integrating individual forest resource planning into the forest plan" (36 CFR 219.13, 1982). These were treated as necessary components of each forest plan alternative. The 1982 viability requirement was one of these so-called "minimum management requirements" (MMRs).

70 36 CFR 219.3

⁷¹ 36 CFR 219.9(b)(2)(ii))

⁷² 36 CFR 219.9(b)(1)

73 36 CFR 219.4(a)(1)

74 Greater Yellowstone Coalition, Inc. v. Servheen, 665 F.3d 1015 (9th Cir. 2011)

⁷⁵ 36 CFR 219.8(a)(1)

⁷⁶ 36 CFR 219.8(a)(3)

77 36 CFR 219.19

⁷⁸ 36 CFR 219.4

⁷⁹ 36 CFR 219.10(a)(4). See also USDA Forest Service, *Forest Service Open Space Conservation Strategy*, FS-889, November 2007

(http://www.fs.fed.us/openspace/national_strategy.html)

80 36 CFR 219.8(a)(3)(ii)

⁸¹ 16 U.S.C. 1611(a)

⁸² 26 CFR 219.3, 1982

⁸³ NFMA generally imposes a limit on the ASQ that is "the quantity which can be removed from such forest annually in perpetuity on a sustained-yield basis."(16 U.S.C. 1611(a).

⁸⁴ 36 CFR 219.11(d)(7)

⁸⁵ The first apparent public acknowledgement that the Forest Service was taking a "new approach" was in comments accompanying the final Handbook (USDA Forest Service, Response *to Comments on the Proposed Land Management Planning Directives*, January 2015 (page 71)).

(http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3828565.pdf)

⁸⁶ USDA Forest Service, FSH 1909.12, *Land Management Planning Handbook*, 64.31, 2015 (emphasis in original)

⁸⁷ USDA Forest Service, FSH 1909.12, *Land Management Planning Handbook*, 61.2, 2015. Timber production is defined as, "The purposeful growing, tending, harvesting, and regeneration of regulated crops of trees to be cut into logs, bolts, or other round sections for industrial or consumer use" (36 CFR 219.19). It may be worth asking how much land can be devoted to "timber production" while still meeting requirements for ecological integrity.

⁸⁸ USDA Forest Service, FSH 1909.12, *Land Management Planning Handbook*, 64.32, 2015. There is also a "projected timber sale quantity" that is a subset of the PWSQ that meets wood utilization standards.

⁸⁹ USDA Forest Service, FSH 1909.12, Land Management Planning Handbook, 60.5, 2015

⁹⁰ 36 CFR 219.10(e), 1982

⁹¹ Decisions about motorized recreation on public lands have been referred to as the "most virulent controversy in recreation management." Burchfield, James and Martin Nie, *National Forests Policy Assessment, Report to Senator John Tester*, University of Montana, September 2008.

⁹² 36 CFR 219.15(e)

⁹⁴ 36 CFR 219.15(e)

^{93 36} CFR 212.50

⁹⁵ 36 CFR 219.2(b)(2). This is derived from the consistency requirement in NFMA that applies to "resource plans and permits, contracts and other instruments," but not directly to public use.

⁹⁸ Restoration is defined in the Rule as "The process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed. Ecological restoration focuses on reestablishing the composition, structure, pattern, and ecological processes necessary to facilitate terrestrial and aquatic ecosystems sustainability, resilience, and health under current and future conditions."

99 36 CFR 219.9(a)(1)(iv) and (v)

¹⁰⁰ 16 U.S.C. Chapter 84, Subchapter I

¹⁰¹ 36 CFR 219.6(a)(1)

¹⁰² USDA Forest Service Manual 2151.2

¹⁰³ The Forest Service Manual currently provides this direction for fire: "Overall direction for hazardous fuels management and prescribed fire is provided by the Land/Resource Management Plan. The LRMP serves as the document to initiate, analyze, and provide the basis for implementing hazardous fuels management and prescribed fire projects to meet resource management objectives. The broad direction for implementing the hazardous fuels management and prescribed fire projects to meet resource management Reference System (see the Fire Management Planning Guide, http://fsweb.wo.fs.fed.us/fire/fmp)." (USDA Forest Service Manual 5141). The Fire Management and Analysis Planning Handbook (FSH 5109.19) states: "This handbook is removed in its entirety, as it has become obsolete due to changes in policy. All current information related to the handbook can now be found in the Fire Management Planning Guide: http://fsweb.wo.fs.fed.us/fire/fmp/.

¹⁰⁴ An undated document titled "Fire Management Planning Guide" that refers to forest plans can be found here:

https://www.frames.gov/files/3414/2428/8733/FS_Fire_Mgmt_Planning_Guide. pdf. It states: "To integrate wildland fire management into LRMPs, fire managers should participate in the LRMP planning process" (p. 3).

¹⁰⁵ 36 CFR 219.17, 1982

¹⁰⁶ 36 CFR 219.7(c)(2)(v)

¹⁰⁷ 36 CFR Part 294.

¹⁰⁸ Subsequently promulgated roadless rules now apply different provisions to national forests in Idaho and Colorado.

109 36 CFR 294.14(e)

¹¹⁰ 36 CFR 294.11

¹¹¹ 36 CFR 219.7(f)(1)(i)

¹¹² National Forest System Land Management Planning. Final Rule and Record of Decision,
 77 FR 21162, 21207, April 9, 2012 (amending 36 CFR Part 219).

¹¹³ Forest Service Manual 2522.03, cited in "Watershed Condition Framework," USDA Forest Service, FS-977, May 2011, p. 12

(http://www.fs.fed.us/publications/watershed/Watershed_Condition_Framework. pdf)

¹¹⁴ Existing plans may include designations of "priority watersheds" for areas where the management emphasis is aquatic species habitat. These would be management areas with appropriate plan components, so to avoid confusion the term "priority watersheds" should not be used for this purpose in revised plans. ¹¹⁵ 36 CFR 219.13(c)

¹¹⁶ FSH 2709.11 – Special Uses Handbook, Chapter 70 – Wind Energy Uses. There is no counterpart for solar energy facilities; as of 2011 there had been no applications (see Statement Of Joel Holtrop, Deputy Chief, National Forest System

⁹⁶ 36 CFR 219.15(e)

⁹⁷ See footnote 41.

United States Department Of Agriculture, Forest Service, Before The United States House Of Representatives Committee On Natural Resources Subcommittee On Energy And Mineral Resources, June 23, 2011, referring to "the roughly 3 million acres of NFS land that have been identified as suitable for that purpose.") ¹¹⁷ National Forest System Land Management Planning. Final Rule and Record of Decision, 77 FR 21162, 21205, April 9, 2012 (amending 36 CFR Part 219). ¹¹⁸ National Forest System Land Management Planning. Final Rule and Record of Decision, 77 FR 21162, 21205, April 9, 2012 (amending 36 CFR Part 219). 119 36 CFR 219.15(e) 120 36 CFR 219.13(c)(1) 121 36 CFR 219.12(a)(7) ¹²² 36 CFR 219.12(c)(1) 123 36 CFR 219.12(a)(5)(iv) ¹²⁴ 36 CFR 219.19(a), 1982 ¹²⁵ 36 CFR 219.12(a)((4)(i) ¹²⁶ 36 CFR 219.12(d)(2) ¹²⁷ 36 CFR 219.12(b) ¹²⁸ 36 CFR 219.12(c)(2) 129 36 CFR 219.12(c)(3) 130 36 CFR 219.17(c) ¹³¹ 36 CFR 219.13(c)