



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Mr. Ric Rine
Assistant Director for Planning Ecosystem Management
USDA Forest Service
201 14th Street, S.W.
Washington, DC 22050

Dear Mr. Rine:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Programmatic Environmental Impact Statement (Draft PEIS) for the Forest Service's Revised Land Management Planning Rule (36 CFR Part 219), which establishes procedures for the development and approval of land management plans (LMPs) for National Forest System (NFS) lands. Our review is pursuant to §309 of the Clean Air Act, the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) NEPA implementing regulations (40 CFR Parts 1500-1508).

The preferred alternative (Alternative A) proposes a Planning Rule that will be flexible and adaptable to a variety of the NFS landscapes, relies on science based decisions, can be integrated into existing plans nationwide, and increases the focus on public participation and collaboration. Individual forests and grassland LMPs have the mandate to examine a broader landscape, sustain forest health and resilience of ecosystems, and manage NFS lands so that they are ecologically sustainable and responsive to stressors such as drought, fire, and climate change.

EPA believes the Forest Service has put forth monumental efforts to involve the public and other stakeholders by holding numerous public listening sessions and forums across the nation, as well as using blogs and other social media to enhance participation. We appreciate that the Forest Service incorporated the issues raised at these sessions into its deliberations.

The process in the proposed Planning Rule consists of a three-part cycle: assessment, plan revision or amendment, and monitoring. In addition, the Forest Service will rely significantly on adaptive management plans and related monitoring, and when conditions change the plans will be improved with more frequent amendments based on new information and monitoring. We believe that the proposed Planning Rule offers an implementable and defensible planning framework which will result in improved protection and restoration of water resources.

However, we believe there are specific elements of the Planning Rule that could be clarified, modified, and improved as outlined in our detailed comments.

Based on our review of the Draft PEIS, we have rated the Draft PEIS as *Environmental Concerns – Insufficient Information* (EC-2). Specifically, EPA recommends modifications to the preferred alternative for the proposed Planning Rule to reduce impacts to watersheds, water quality, sole source aquifers, and wetlands. In addition, there is insufficient information in the Draft PEIS on the adaptive management approach that will be followed, including the triggers in the adaptive management plan that will require additional action, and the use of monitoring and model data in the decision-making process. Detailed comments are also enclosed, as well as a "Summary of Rating Definitions and Follow-up Actions."

In particular, EPA recommends that the Final PEIS include a more detailed discussion on the methods that will be used for watershed restoration and protection, and that the Forest Service's interdisciplinary "2011 Watershed Condition Framework" (WCF) is integrated into the Planning Rule. In addition, the proposed Planning Rule could be further enhanced by incorporating elements from both Alternatives A and D when establishing how watershed protection, restoration, and maintenance are to be prioritized. We believe additional consideration should be given to Alternative D, an alternative that was designed to evaluate additional protections for watersheds and an alternative approach to diversity of plant and animal communities. Given that over 50% of the nation's drinking water originates from NFS lands, protecting these resources for communities and wildlife is imperative.

We also recommend that the Final PEIS include specific information and examples of how the concepts of adaptive management would be used in the planning context. In particular we believe it would be useful to provide additional information and guidance on the types of monitoring that would be conducted and reflected in plan modifications, and how land managers will work with the general public to review the monitoring plans and results.

EPA also recommends some clarifications to the rule language that would increase protection of water quality, sole source aquifers and wetlands, included in the discussion about riparian protection. The proposed Planning Rule provides some additional direction with regard to riparian management; calling for the establishment of default widths for riparian management and for plan components to "maintain, protect, or restore riparian areas." We support this direction, but we are concerned by the lack of specificity.

EPA supports full implementation of the Forest Service's "right-sizing" guidance as expressed in the Forest Service's November 10, 2010 memo, "Travel Management, Implementation of 36 CFR, Part 212, Subpart A (36 CFR 212.5(b))" as an effective strategy to identify and implement a minimum necessary road system. This approach would support the removal of roads that contribute large amounts of sediment to streams and rivers.

EPA appreciates the opportunity to review the proposed Planning Rule and Draft PEIS. If you have questions or need further explanation of our comments please contact me at (202) 564-5400, or have your staff contact Elaine Suriano at (202) 564-7162.

Sincerely,

A handwritten signature in cursive script that reads "Susan E. Bromm". The signature is written in black ink and is positioned above the printed name and title.

Susan E. Bromm
Director
Office of Federal Activities

Enclosure

**U.S. Environmental Protection Agency- Detailed Comments
Draft PEIS for the Forest Service's Revised Land Management Planning Rule**

Water Quality and Water Quantity

EPA recommends that the Final PEIS discuss the integration of the "2011 Watershed Condition Framework" (WCF) and "Forest Service Watershed Condition Classification Technical Guide" (Technical Guide) into the proposed Planning Rule to address EPA's interests regarding Water Quality and Water Quantity. The WCF contains specific indicators of Watershed Condition and is integrated with the Clean Water Act (CWA) Water Quality Standards and 303(d) listed waters. The WCF is also supplemented by the Technical Guide, which includes twelve indicators of Watershed Condition. The first indicator is Water Quality and contains a direct reference to 303(d) listed waters under the CWA (pg.25).

In addition, as the WCF focuses primarily on Watershed Restoration, we believe that the WCF should be revised to balance the objectives of Watershed Restoration and Watershed Protection. We recommend the "Aquatic Conservation Strategy" developed under the Northwest Forest Plan as an example of a document that includes both Watershed Restoration and Watershed Protection components.

Coordination and Cooperation Beyond National Forest Service (NFS) Boundaries

The "all-lands" approach, as described in the Draft PEIS and the proposed Planning Rule, is ideally suited to aid conservation efforts and to protect watersheds that cross jurisdictional boundaries. It is also effective in coordinating input and interaction with Federal, State, Tribal and Local government agencies and Non-Governmental Organizations (NGOs). The "all-lands" approach is especially suited for the design and implementation of unit monitoring plans and broader-scale regional monitoring strategies.

EPA believes that pollution and habitat degradation problems can best be solved by using an "all-lands" approach. The watershed approach incorporates a comprehensive strategy and the language in the final Planning Rule should reflect the need for watershed scale assessments, which will later be used to revise or amend Land Management Plans (LMPs) based on the need for change.

Watershed Analysis and Key Watersheds

The proposed Planning Rule includes an adaptive management framework that will assess conditions and stressors in the context of the broader landscape. LMPs will be revised or amended accordingly, and changes in the unit and landscape will be monitored. EPA believes that watershed analysis and watershed scale assessments are needed to appropriately guide the desired conditions that will be developed in the LMPs.

A watershed analysis is designed to provide information to understand the processes at work in a watershed including: how those processes are distributed in time and space, what the current upland and riparian conditions of the watershed are, and how all of those factors

influence riparian habitat and other beneficial uses. Examining conditions and stressors at the broad landscape scale has been shown to be an effective restoration strategy.

Overall, we favor the language in Alternative D at Section 219.6(b)(6) regarding watershed analyses. This Alternative was designed to evaluate additional protections for watersheds and an alternative approach to the diversity of plant and animal communities. We would support the language being modified to reflect the fact that some regions, such as the Northwest Forest Plan area, have completed a watershed analysis for a majority of watersheds. However, we recommend the rule be clear that watershed analysis should be completed (or updated as appropriate) for all NFS lands.

Given that broad scale assessments are a major objective of the final Planning Rule, EPA recommends the Final PEIS clarify why Alternative A, requires the assessments and monitoring needed to develop plan components to maintain and restore wetlands, but does not specifically require watershed scale assessments. We recommend that the final Planning Rule and EIS explicitly state the need for watershed analysis and watershed scale assessments. Many forests have already undergone watershed scale assessments and this language would not impact what has already occurred; if watershed scale assessments have already been conducted, tiered watershed assessments would likely be carried out.

EPA also recommends the final Planning Rule include the identification of key watersheds and the prioritization of watersheds as a focus of LMPs. Although rigid management prescriptions may not apply to all watersheds and flexibility is important, comprehensive forest management practices in general generate better protection and restoration of ecosystem functions on large spatial scales. In many regions, coordination with the States is vital to this process.

Riparian Buffers

We support prioritizing restoration projects to maximize the economic and ecological benefit of the treatment. These treatments should be based on a watershed analysis, targeted at “causes” rather than “symptoms,” and integrated at a watershed scale. We also support protecting watersheds that contain high quality (or high potential) habitat. These watersheds represent the best of what remains, and provide the ecological infrastructure needed to support species recovery and the restoration of ecological integrity in lower functioning watersheds¹. This position is consistent with the interdisciplinary, WCF document issued by the Forest Service², which should be integrated into any of the alternatives selected. This will ensure a systems approach to assessment for prioritizing protection and restoration activities. Adopting such an approach is consistent with and complementary to the assessment and management approaches encouraged under EPA’s “Healthy Watershed Initiative” (<http://water.epa.gov/polwaste/nps/watershed/index.cfm>.)

We recommend that the final Planning Rule incorporate elements from both Alternatives A and D when establishing how watershed protection, restoration and maintenance are to be

¹ http://water.epa.gov/polwaste/nps/watershed/upload/complete_033111_final_low.pdf

² http://www.fs.fed.us/publications/watershed/Watershed_Condition_Framework.pdf

prioritized. Specifically, we recommend that the WCF is used to identify priority watersheds for active restoration of habitat and healthy watershed function.

EPA supports including Section 219.8(a)(3)(ii) to prioritize protection, maintenance, and restoration of Riparian Conservation Areas in LMPs. This prioritization should take place such that management activities within these areas are used primarily for restoration and when not, that best available science and applicable BMPs are used to minimize impacts to ecological function of the area.

The proposed Planning Rule provides additional direction with regard to riparian management; calling for the establishment of default widths for riparian management and for plan components to “maintain, protect, or restore riparian areas.” We support this direction, but we are concerned by the lack of specificity. While the current trend in forest planning is toward active restoration and protection (Draft PEIS p. 94), there remains a range of views as to how and to what extent riparian areas should be protected and restored. Without an established minimum buffer, we are concerned that there may continue to be a wide variation in the resultant protection for riparian management.

The final Planning Rule should establish the importance of riparian conservation areas. All relevant LMPs should include a well documented rationale for selecting minimum or default widths for riparian areas in which only conservation-oriented management is allowed. For instance, a minimum of one “site potential tree height” or equivalent should be considered as the default *minimum* buffer width in forested ecosystems. The final Planning Rule should prohibit plans in which management activities within riparian areas are not consistent with the promotion of aquatic and riparian values and should direct forest plans to include standards and guidelines that require management activities within riparian areas to be primarily for purposes of restoration.

We believe that the minimum buffer required under Alternative D would provide both consistency and flexibility. While ecologically derived buffers may be wider or narrower for a particular site, it is generally accepted that disturbance to vegetation or soil within 100 feet length of a water body carries with it the potential to impact a number of riparian and aquatic functions (e.g. water temperature regulation, microclimate, sedimentation and nutrient filtration, streambed/bank stability and fish and wildlife habitat)³. The 100-foot or other minimum buffer therefore provides a reasonable point of departure for developing future management strategies. We recommend, however, that Section 219.8(a)(3)(I) of the proposed Planning Rule clarify that the minimum width does not replace established management strategies such as the Aquatic Conservation Strategy under the Northwest Forest Plan where buffers have already been established in accordance with the best available science.

We believe that alternative D provides flexibility because the minimum buffer widths established under Alternative D would be temporary pending riparian area delineation, and the temporary defaults could be greater than 100 feet. Following delineation, buffers could be

³ Fred H. Everest and Gordon H. Reeves. 2007. Riparian and Aquatic Habitats of the Pacific Northwest and Southeast Alaska: Ecology, Management History, and Potential Management Strategies. United States Department of Agriculture Forest Service Pacific Northwest Research Station General Technical Report PNW-GTR-692

widened or narrowed, based on site specific characteristics. Further, the buffers established under Alternative D do not represent “no management” areas, but rather areas where any management should support protection and restoration goals. This point could be reinforced by replacing the term “riparian conservation area” with “riparian management area.”

Road Systems

Managing the millions of miles of NFS and other non-NFS roads on the forests and grasslands is a perpetual task. Over 300,000 miles of roads need to be maintained, improved and/or removed and the need far exceeds the dollars available. The Draft PEIS states (page 98) that road density standards alone might not be effective in addressing the greatest resource impacts, and that density is not always a reliable indicator of impacts. While there is support for this statement, it should also be acknowledged that road systems and road conditions have a greater effect on water quality, fish, and wildlife than any other management feature on NFS lands. In addition, on average, there are numerous benefits for decommissioning, closing, and maintaining roads. The Science Review Summary Report⁴ identified additional areas that should receive attention, including road building and erosion, especially in habitats vulnerable to erosion (Science Review p. 17). This is particularly true in sensitive riparian zones and key watersheds. EPA recommends including objectives to achieve reductions in road density and mileage in key watersheds as one way to improve watershed health (Alternative D, Section 219.8(a)(4)(ii)).

EPA also recommends that the final Planning Rule include additional guidance on road management. Although the Travel Management Rule (36 CFR part 212), requires individual forests to identify the minimum necessary road system, we believe there should be more direction regarding roads required in the LMPs, given that roads are the major source of sediment and the adverse impacts it causes in the forests. The Draft PEIS states that fewer and better maintained roads result in a lower potential for sedimentation into streams, blockage of aquatic passage, habitat fragmentation, channel instability, and alteration of surface and subsurface flows (p. 85). The final Planning Rule should incorporate language that NFS roads be adequately maintained, constructed, decommissioned, and monitored to achieve sediment reduction, minimize erosion, and maintain connectivity of aquatic and riparian habitat. Many forests already use best management practices (BMPs), developed in conjunction with the state, for adequate road construction and maintenance. The proposed Planning Rule should support any developments implemented by forests resulting in road improvements. We recommend the Forest Service incorporate language from Alternative D (Section 219.8(a)(4)) which indicates that LMPs should include standards and guidelines for minimum necessary road systems, road removal and remediation, protection, maintenance and restoration of a natural range of variability.

Total Maximum Daily Loads (TMDL)

The Draft PEIS states that guidance for watershed condition varies widely and that many plans already focus on meeting water quality requirements for 303(d) listed water bodies (p. 82). Across the country, coordination with states is imperative to develop the 303(d) list and to meet water quality targets. In order to avoid duplication of efforts, we recommend the TMDL process

⁴ http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5295052.pdf

is considered in the final Planning Rule, and it should be included specifically in Section 219.6(b)(2), “identifying and considering relevant governmental assessments and plans”, Section 219.8(a)(iv), “including 303(d) listed water bodies as criteria for maintaining and restoring watersheds”, and Section 219.12(a)(5)(I), “monitoring indicators”.

Multiple Uses

The definition of Ecosystem Services, as it is described in the Proposed Planning Rule (pg. 8523), is drawn from the "Millennium Ecosystem Assessment (MEA)" completed by the United Nations in 2005. The title for the Synthesis and Full Report in the MEA is "Ecosystems and Human Well-Being." We recommend final Planning Rule reference the MEA and Human Well-Being in Section 219.19 in the definition of Ecosystem Services and that “Human Well-Being” is included as the objective of Ecosystem Services. This distinction is important and creates the balance between the objectives stated in Section 219.9, “Diversity of plant and animal communities” (nature centric) and Section 219.10, “Multiple Uses” (human centric).

Ecosystem Restoration

EPA supports the changes in the Draft PEIS and proposed Planning Rule that replace the application of traditional Silvicultural Systems with the concepts of “Ecosystem Restoration” and “Desired Future Condition” to achieve the desired Multiple Uses, including Ecosystem Services. This is a major positive change. The intervention (treatment(s)) necessary to restore forest ecosystems is different than the Silvicultural Systems needed to maintain them in perpetuity. EPA recommends the Final PEIS include a discussion of how guidance on these concepts will be transferred to the field.

The example of a Longleaf Pine Savanna Ecological Restoration on page 8489 of the Proposed Planning Rule is a case in point. We move from the "Existing Condition", a loblolly pine forest with closed canopy to a "Desired Future Condition" a longleaf pine savanna open canopy that is maintained by recurring fire on an average 3-year cycle. The ongoing and repeatable Silvicultural System being employed to sustain a longleaf pine savanna has not been identified. Moving beyond Ecosystem Restoration to Sustainable Forest Management Silvicultural Systems achieves the desired Multiple Uses, including Ecosystem Services. We recommend guidance is developed and communicated to the stakeholders as part of a plan revision.

Climate Change

NFS land management planning provides a unique opportunity to conduct Landscape Level Ecosystem Management in the United States. The Forest Service recently completed a National Roadmap and Performance Scorecard for Climate Change. The three components or modes in this roadmap are: assess, engage, and manage. The assessment of risk and vulnerabilities is central to the “assess mode” and largely accomplished through a Climate Change Vulnerability Assessment. EPA recommends that a Climate Change Vulnerability Assessment is included as a required component in the final Planning Rule and incorporated as part of the Assessment Phase of the planning cycle.

In addition, adaption and mitigation objectives are accommodated in the Agency's National Roadmap and Performance Scorecard for Climate Change. However, the overriding goals of ecology integrity, resilience and resistance on National Forest Service Lands means that short-term changes in carbon stocks and fluxes may result from restoration actions that enhance long-term sequestration of carbon in ecosystems.

Use of Science

Section 219.6(b)(2) of the proposed Planning Rule states that the Responsible Official shall "(i) identify and consider relevant information contained in governmental or non-governmental assessments, plans, monitoring evaluation reports, and studies, including relevant neighboring LMPs." We support the proposed all-lands approach, and bringing all of the best available science to bear on the land management planning process. However, controversial resource management issues are often accompanied by peer-reviewed science that supports several points of view. In order to ensure the integrity and productivity of the planning process, EPA recommends that the final Planning Rule establish a process or criteria for determining what constitutes "relevant information." One possibility could be to allow the Responsible Official in consultation with the interdisciplinary planning team, agency cooperators, and USDA Forest Service Research and Development to determine when a piece of science does not have adequate standing to be brought forward into the planning process.

Monitoring

The proposed rule emphasizes the need to keep plans current through an adaptive planning cycle. By its nature, this cycle is closely tied to monitoring. We agree that the planning process should be responsive to new science, new information, and new conditions on the ground, and that monitoring is key to setting the stage for adaptation. We are concerned, however, that the Draft EIS does not contain sufficient detail on the adaptive management approach that will be followed or the triggers within the adaptive management plan that will require additional action such as mitigation or a reduced level of disturbance. In addition, the Final EIS should clarify what data (either monitored data or model data) will be used for adaptive management decisions. We also encourage the Forest Service to incorporate language into the final Planning Rule that would endorse a precautionary approach when decision makers have only limited data available to make a fully informed decision about a significant change in resource management.

Public Involvement

The proposed Planning Rule at Section 219.6(1) sets a high bar for broad internal and external involvement in the assessment process to inform plan development or revision. Specifically, the proposed Planning Rule encourages the participation of the public and appropriate Federal agencies, States, local governments, other stakeholders, and scientists in the assessment process. The expectation for public involvement in plan amendment assessments, however, is not described in the rule. The proposed Planning Rule at Section 219.6(c) states, "(w)here the responsible official determines that a new assessment is needed to inform the need

for an amendment, the responsible official has the discretion to determine the scope, scale, process, and content for the assessment depending on the issue or issues to be addressed.” While there is a need to establish a practical amendment process, we also note that amendments are a key component of adaptive management, and that assessments informing those amendments will be of key interest to public and agency stakeholders. EPA recommends that Section 219.6(c) be revised to define when and to what extent the public should be involved in amendment assessments.

Public Water Supplies

Below please find for your consideration specific rule language changes concerning public water supplies and sole source aquifers:

Page 41, Paragraph 2, recommended change:

“The proposed rule would require that plans include components to maintain, protect, and restore public water supplies, source water protection areas, *and sole source aquifers* where they occur on NFS lands. Source water protection areas are areas delineated for public water systems as part of the State *or Tribal* source water assessment and protection program and may include ground water or surface water or both.”

At the end of this paragraph, please add: *Sole source aquifers are underground water supplies designated by the Environmental Protection Agency (EPA) as the "sole or principal" source of drinking water for an area.*

Page 136, item (IV), recommended change:

“Public water supplies, source water protection areas, *sole source aquifers*, ground water, and other bodies of water . . . “

Page 162, recommend adding "Sole source aquifer" to the Definitions Section, just above "Source water protection area:"

"Sole source aquifer. Sole source aquifers are underground water supplies designated by the Environmental Protection Agency (EPA) as the "sole or principal" source of drinking water for an area. The program was established under Section 1424(e) of the Safe Drinking Water Act of 1974. There are currently 77 Sole Source Aquifers in the U.S."

Page 162, recommended change to the definition of "Source water protection areas:"

The area delineated by the state *or tribe* for a public water system (PWS) or including numerous PWSs, whether the source is ground water or surface water or both, as part of the state *or tribal* source water assessment and protection program (SWAP) approved by the US Environmental Protection Agency under Section 1453 of the Safe Drinking Water Act.