



# Forest Service Planning Rule Third National Roundtable

Legacy Hotel, Rockville, MD

May 11-12, 2010

## Summary Report

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# Summary Report: Third National Roundtable

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## Background

The National Forest Management Act (NFMA) of 1976 requires all national forests and grasslands to develop land management plans, the use and development of which are guided by the planning rule. The first planning rule was written in 1979. It was revised in 1982. There have been three attempts in the last decade (2000, 2005 and 2008) to rewrite the rule. The first attempt (2000) resulted in a rule that was considered un-implementable by the U.S. Department of Agriculture (USDA). The 2005 and 2008 rules were both enjoined by the United States District Court of Northern California. In March 2007 the court ruled that the development of the 2005 rule violated the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA) and the Administrative Procedures Act (APA); in June 2009 the court ruled that the development of the 2008 rule violated NEPA and ESA.

As the Forest Service approaches this latest rule revision, they have committed to trying something different – a nation-wide collaborative effort to engage, educate, and work with stakeholders to develop a rule that can succeed and endure over time. The collaboration process includes a Science Forum, roundtable meetings with stakeholders in all nine Forest Service regions, national roundtables, an inter-agency working group, an internal Forest Service working group, Tribal consultation and collaboration, and online discussions. The input gathered through these events and mechanisms is being utilized by the Forest Service rule-writing team to help inform the development of the new proposed rule.

The Planning Rule revision has been designated as one of USDA's flagship projects for President Obama's Open Government Initiative. The Forest Service is going to continue to explore new and creative ways to make the rule development process more open, transparent and inclusive.

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## Context for this Roundtable

On May 11-12, 2010 stakeholders met with the US Forest Service for the third national roundtable aimed at creating collaboration and dialogue around the revision of the Forest Service planning rule. The first Roundtable (April 1-2, 2010) focused on substantive topics and the second Roundtable (April 20-21, 2010) focused on process oriented topics. The third Roundtable, which was attended by 111 people from a wide diversity of perspectives, built on the results of the Science Forum and the preceding national and regional roundtables to address six key topics identified as needing additional public input by the Forest Service planning rule writing team. This document highlights takeaways and themes from the deliberations.

In preparation for this meeting, Forest Service staff reviewed all of the stakeholder input compiled to date (comments on the Notice of Intent and input received at the 40+ regional meetings, the two earlier national roundtables, the Tribal conference call, and the Forest Service all-staff conference

call). They then selected six topics to be the focus of the third roundtable, knowing it would not be possible to address every aspect of the rule in a two day meeting. All topics are equally important, but the team chose topics for which they desired more input and dialogue at this time. The topics were:

- Providing for plant and animal diversity;
- Restoration/resiliency;
- The contribution of recreation and other goods and services from National Forests to vibrant economies;
- Role of science;
- Managing Forest Service lands in the face of changing conditions; and
- Monitoring

The Meridian Institute and the US Institute for Environmental Conflict Resolution (USIECR) staff drafted a background document to provide context for these six topics. The document was an attempt to describe in very general terms all the previous collaboration input relative to each topic. It was not a comprehensive summary of all the input and did not reflect consensus. A copy of the background document can be found in Appendix A.

The roundtable was largely structured around break-out groups that worked through specific questions on each of the six topics. Many participants noted that there was more diversity of input on many issues during this roundtable than at earlier meetings. This may have been because all participants were pre-assigned to break out groups and asked to discuss all the topics as opposed to being able to self-select which topics to focus on.

At the end of the roundtable, participants were given an opportunity to offer specific rule language on each of the topics, as well as on other relevant issues. Their written suggestions are included in the appendices.

Because this document is a summary of the discussions, not every comment from the two day meeting is included. It should be noted that members of the rule writing team were present throughout the roundtable, in every session, and took detailed notes - so every comment was noted by the team.

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## Introductory Comments

The Roundtable was opened by Tom Tidwell, Chief of the Forest Service. He offered the following comments:

- There is strong support for this collaborative approach from the Forest Service leadership.
- The Forest Service is committed to publishing a final rule by November 11, 2011.
- A key Forest Service goal of this process is to ensure the new rule is implementable. Plans under the new rule must be more efficient to produce.

- The new rule must be legally and scientifically sound, and provide for a transparent forest planning process.
  - There will be a fourth national roundtable at the end of July to provide stakeholders the opportunity to react to draft concepts and language being developed by the rule writing team. There will also be another round of stakeholder involvement once the draft rule is released.
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## Breakout Topic 1: Providing for Plant and Animal Diversity

*Should the rule provide for diversity by focusing on habitat, populations, species, or a combination of the above? Are there other ways to provide for the diversity of plant and animal species?*

Many participants strongly supported an emphasis by the Forest Service on habitat management that focuses on ecological sustainability as a surrogate for species protection coupled with validation through collecting species specific data. Many noted that the Forest Service is primarily a habitat management agency. Also, since the Agency has limited influence over external factors not directly related to habitat, such as climate, that may affect forest ecosystems, it was suggested that the Agency can / should only be held accountable for what it is able to control.

Discussions also emphasized the critical importance of monitoring for plant and animal diversity on – using both fine and coarse filter approaches. Concern was expressed that the Agency may not have the resources to conduct sufficient monitoring, although the monitoring technology has improved dramatically in recent years and is available at lower costs. Recognizing that it will never be possible to monitor everything all the time, support was expressed by some for monitoring indicators or “collaboratively derived landscape characteristics” as proxies for a suite of species. However, there was an acknowledgement of the challenges with the use of indicator species in the past. Another suggestion was to require managers to determine which species are sensitive to development and destruction within the plan area so they can focus protective measures on those species.

*Should there be a specific standard of protection?*

Many stakeholders noted the challenges of implementing the 1982 rule standard of “viability.” Although views varied on whether this is the appropriate standard or not, most agreed that it has been difficult to implement effectively and as a result it has been a source of litigation.

Some stakeholders said the new rule should remain silent on this issue because, in their view, NFMA already provides enough direction regarding diversity. Others focused on whether rule language should be performance-oriented or prescriptive. Almost all emphasized the need to have any diversity language be science-based.

Those supporting more prescriptive-oriented language suggested that the rule provide clear, concrete direction regarding a standard of protection so that individual forests and their

communities don't get bogged down in trying to make these determinations. Other stakeholders suggested that the rule should include principles and/or criteria for how managers will assess diversity instead of a national standard. They emphasized the need for simplicity at the rule level, and flexibility at the forest plan level. For some, it is essential to have a national viability standard to know if the nation is achieving the NFMA goal of diversity. Others suggested that specific standards be determined at the plan level.

*What, if anything, should the rule say about coordination/protection beyond forest boundaries?*

Consistently, stakeholders emphasized the need to coordinate and cooperate beyond Forest Service borders for purposes of identifying and protecting critical habitat, migration corridors, etc., but noted that the rule cannot require other land owners and managers to comply with Forest Service priorities. The Forest Service should explicitly state in the rule why coordination across Forest Service boundaries is essential (i.e., given that plants, animals, and ecosystems do not read maps) to reduce concerns that the federal government is trying to take away private land rights. Stakeholders also discussed the need to communicate with other landowners about the planning process in ways that are free of scientific and legal jargon.

There were a number of specific suggestions for what the rule might say about coordination/protection beyond forest boundaries:

- Require forests to assess their contribution to plant and animal diversity within the context of a larger landscape/watershed/eco-region;
- Coordinate with other jurisdictions within a region to better monitor and manage wide ranging species;
- Explicitly consider and/or include state level wildlife action plans in the forest planning process;
- Consider replicating approaches such as the Environmental Protection Agency's watershed programs highlighting the interconnectedness of species, and the Northern Forest Plan;
- Include Tribal and community knowledge when gathering data and protecting diversity; and
- Take into account the impacts of global climate change on plant and animal diversity.

At the conclusion of the Roundtable, stakeholders offered specific rule language for consideration. The suggested language regarding plant and animal diversity can be found in Appendix B.

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## **Breakout Topic 2: Restoration/Resiliency**

*What if anything, should the rule provide regarding restoration?*

At the extremes of this issue, stakeholders generally agreed. No stakeholders argued that the rule should require restoration regardless of need. On the other end, no stakeholders argued in favor of an all out prohibition on restoration. There were some stakeholders who expressed the view that the concept of restoration should not be mentioned explicitly in the rule. The reasoning

behind this perspective was that the NFMA is silent on the concept of restoration; restoration is just one tool of many available to managers; the concept of restoration will be implicitly addressed as part of habitat management; and, including specific language about restoration in the rule could open up the Forest Service to unnecessary lawsuits. On the other hand, those desiring the rule to be explicit about restoration generally said the topic is simply too important to leave out, and noted that the Forest Service Chief has already indicated that it will be a high priority in Forest Service planning. Discussion generally centered on definitional issues such as how explicit the rule should be regarding restoration and what specifically should be required at the forest plan level.

Essentially everyone agreed that the term “restoration” needs to be clearly defined and explained if it is used in the rule. For example, there needs to be clarity about when the term is being applied to activities associated with cleaning up or rehabilitating a site that has been disturbed or damaged by a management activity as compared to when the term is used for a longer term process of either restoring an area to a previously existing ecological state, or to a higher level of ecological functionality or resiliency. Many stakeholders said that restoration should be viewed as a process towards the goal of ecosystem resiliency – and that an understanding of ecosystem functioning in the area over time can help inform the restoration process. Many also clearly said that it is unrealistic in most cases to “restore” ecosystems to something that existed in the past – because ecosystems are dynamic, because climate change may make it impossible to go “backward”, and because it is so hard to agree on the “best” historical point of reference. Some went so far as to suggest that the use of the term restoration is problematic because so many people associate the word with the problematic, un-implementable notion of going back to some historical point in time – even though that might not be what is intended.

Many stakeholders supported a requirement in the rule for some sort of forest level restoration needs assessments, particularly ones that include participation from community stakeholders (e.g., perhaps utilizing Restoration Advisory Committees in helping determine priorities for restoration and groups such as the Youth Conservation Corps to help conduct field work). Many suggested that the rule should only define the criteria and the process for conducting assessments and not dictate specific approaches. A few suggested that restoration assessments should be broad enough to encompass social and economic as well as ecological considerations.

To the extent groups discussed the use of triggers for restoration, most suggested that the rule should only specify that forests could establish triggers based on local needs and conditions, but not dictate further details.

*The precautionary principle has been suggested as one framework for forest planning. Should the rule include key concepts from the precautionary principle? If so, which ones, and what would be the implications of incorporating them? Are there alternative ways to address those concepts?*

None of the break-out groups had extensive discussions regarding the precautionary principle. The conversations that did occur focused mostly on trying to understand the concept and what it might mean in the planning rule context. Some said the term should not be used in the rule because it is so poorly understood, and could be misconstrued or misused. Others suggested that

the rule should include a precautionary (try to do no harm) approach without actually using the term. Some suggested that, if used, the concept should apply to social and economic systems as well as ecological. In any case, there should be clarity and transparency about whichever approaches are being required in the rule and utilized at the forest plan level.

At the conclusion of the Roundtable, stakeholders offered specific rule language for consideration. The suggested language regarding restoration/resiliency can be found in Appendix C.

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### **Breakout Topic 3: The Contribution of Recreation and other Goods and Services from National Forests to Vibrant Economies**

*What, if anything, should the rule say about what forests should do to contribute to vibrant local, regional, and national economies?*

Stakeholders from a diversity of perspectives said the rule should look at how national forests and grasslands contribute to local, regional, and national economies. Many clarified that the role of the Forest Service is to manage the forests, not to provide for economic growth or development. Others noted that the Forest Service has a poor track record for influencing economic factors when it has tried.

Many stakeholders recommend that the rule require an assessment of economic effects, but that the rule should mostly address the “how” and not the “what.” For example, some said, assessments should be simple, straightforward and conducted in close collaboration with local communities.

Stakeholders proposed different ways that assessments could be used in decision-making:

- To provide information about the potential economic impact of plan alternatives. Stakeholders from different perspectives also expressed hope that information from assessments would inform the selection of good alternatives – ones that have a positive economic impact as well as being grounded in ecological sustainability.
- To help anticipate trends.
- To help educate the public and foster passion for community problem solving.

A variety of stakeholders noted that any assessments should take into account economic impacts at a variety of scales (local, regional and national). To provide some continuity and accountability across the nation, some suggested that the rule should require consistency in how economic assessments are conducted across Forest Service units, but allow each forest to decide how to use the information. Others talked about the need for sharing information across regions so that it can be aggregated and compared.

*What, if any, guidance should there be in the rule about how forests provide for recreational uses?*

The importance of national forests for recreation was emphasized in every group. Some participants suggested the rule should give recreational uses unique consideration, others said it should be characterized and treated as one of many multiple uses.

There were several suggestions for what the rule might say about recreation. One was to require recreation needs assessments as part of the forest planning process. Some thought the assessments should also include calculations about the value of recreational amenities and uses. Another idea was to identify “maximum sustainable recreation,” perhaps as one of the NEPA alternatives. Participants noted the need for clarity about how to define sustainable recreation and to account for both the quality and quantity of recreation. Finally, many stakeholders noted the growing reality of conflicts between different kinds of recreational uses and the need for the Forest Service to proactive plan for and address that concern.

***How should the rule address the need to include, balance, and reconcile local, regional and national interests?***

While acknowledging the need to include, balance and reconcile the interests of many different constituencies – both national and local – stakeholders did not offer any “one-size-fits all” solution that could be incorporated at the rule level. Some expressed the view that local interests should be prioritized over national concerns, especially in areas where the Forest Service manages a large percentage of the land base. Others suggested having local representatives from national groups serve as a part of forest level advisory efforts.

At the conclusion of the Roundtable, stakeholders offered specific rule language for consideration. The suggested language regarding contribution of forest lands to vibrant economies can be found in Appendix D.

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## **Breakout Topic 4: Role of Science**

***If the rule requires the use of “best available science,” how should “best available science” be characterized?***

Stakeholders generally agreed on the imperative to use accurate and up-to-date science in forest service planning, but they struggled with whether and/or how to mandate and define “best available” science. Some preferred using the term “best available science” and defined it as science that is objective, peer-reviewed, repeatable, transparent and collaborative.

Others expressed concern with the term, noting that “best” is highly subjective. A few stakeholders raised the concern that requiring the use of best available science has the potential to create even more barriers and mistrust by resulting in competing science instead of complementary science. They noted that this is not in keeping with the tone of this rule-writing effort and the approach of adaptive management in general.

***What if anything should the rule say about the role of science in decision-making?***



- *How should science and public participation be integrated or weighted in decision-making? What should the rule say about the relationship?*
- *What should the rule say about decision-making in the face of scientific uncertainty?*

Participants from a diversity of perspectives said that science, as well as traditional and local knowledge, should help inform (but not be the only factor in) forest plan decisions. There was a suggestion that interdisciplinary Forest Service teams work with communities to ensure that science is incorporated and communicated in ways that enlighten rather than confuse the decision-making process.

At the conclusion of the Roundtable, stakeholders offered specific rule language for consideration. The suggested language regarding the role of science can be found in Appendix E.

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## **Breakout Topic 5: Managing Forest Service Lands in the face of Changing Conditions**

### *How should the rule allow for flexibility in land management plans?*

Participants ranged widely in their views about flexibility in the planning process. On one end of the spectrum, some said the term “flexibility” is code for “gut NEPA”, and believe the current forest planning process is too flexible, as evidenced in their view by the fact that projects (e.g. mines, ski resorts) with potentially large and significant negative impacts to forest ecosystems can now happen in a “de facto” manner. Stakeholders on the other end of the spectrum said the current planning process is too prescriptive and complicated, leading to delays and frustration. In spite of this divergence a few ideas emerged that might help bridge these gaps, including:

- Consider a tiered, segmented approach to planning with differing amounts of flexibility for different resources, level of risk, etc., but within a clearly defined national-level framework.
- Require that plans and projects be developed more cooperatively with both community and scientific involvement – thereby building the buy-in and accountability that are prerequisites for many stakeholders to trust the Forest Service with flexibility. Move away from the “decide, announce, defend” paradigm.

In regard to the amendment process, many suggested that the rule require triggers for updating plans, but that the actual triggers would have to be defined at the local level. Some believe the rule should specify regular intervals for updating plans. There was a suggestion for a petition process for stakeholders to be able to initiate an update when they think there is a problem to be addressed. Another suggestion was to institutionalize a “cooling off period”, during which no changes to a plan can occur for a specified length of time, so that there is an opportunity to see how things evolve.

Generally participants recommended that the rule require plans to anticipate changing conditions by employing adaptive approaches. At a minimum, there should be a way for forest plans to incorporate new information as it becomes available. Many stakeholders believe the rule should

require a more rigorous version of “adaptive management.” However, many expressed concern about the lack of resources for monitoring and the failure to ensure feedback loops between monitoring results and management choices – both of which are essential to an adaptive approach. The consequence of trying to implement adaptive management without the necessary resources and steps could be additional litigation and delays. Another suggestion for anticipating and preparing for changing conditions was scenario planning, particularly for potential catastrophic events. Proactive scenario development could better prepare national forests and grasslands to respond to changes in the landscape, as well as provide opportunities to incorporate the diversity of ideas and concerns that are often ignored in crisis situations.

Climate change was specifically discussed in several groups. Some participants believed that climate change is such a fundamental ecosystem stressor that it needs to be addressed explicitly in the rule. Others believed it does not need to be mentioned in the rule, although for different reasons. Some think there is too much uncertainty about the causes and effects of climate change (particularly at the forest level). Others thought the rule could include adequate provisions for dealing with change in general without mentioning climate change specifically, and that in fact specific reference to climate change could result in unnecessarily controversy.

Finally, representatives of the Native American community expressed concern that their interests and knowledge were often not well incorporated with respect to assessing and responding to changing conditions.

At the conclusion of the Roundtable, stakeholders offered specific rule language for consideration. The suggested language regarding managing in the face of change can be found in Appendix F.

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## Breakout Topic 6: Monitoring

*What should the rule require for monitoring and reporting within an adaptive management framework?*

Participants across the board seem to agree that monitoring is not working well now. They offered many suggestions for changes that should be reflected in the rule, including:

- A requirement that project plans include a monitoring component;
- A better connection between monitoring and budgeting. Many stakeholders said projects should not be implemented without the resources to conduct the appropriate level of monitoring; and
- A common framework for regional and plan level monitoring, with requirements to:
  - Articulate the goals and objectives of monitoring;
  - Establishing a baseline;
  - Engage the broader community in developing and possibly conducting the monitoring, with special emphasis on including regional and state interests, Native Americans, neighbors, and volunteers;
  - Include key health indicators;

- Include mechanisms for shared learning and feedback loops; and
- Ensure that data is not only collected, but also analyzed and reported to managers.

*How, if at all, should the rule address the prioritization of monitoring needs?*

Many suggested that the rule require community involvement in helping to establish and prioritize forest level monitoring.

*What should the rule say about monitoring across landscapes or regions?*

Stakeholders said that to the extent possible, the rule should incentivize monitoring across landscapes and regions, coordinated among Forest Service units and with other land management agencies, the scientific community, and stakeholders.

At the conclusion of the Roundtable, stakeholders offered specific rule language for consideration. The suggested language regarding monitoring can be found in Appendix G.

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## Conclusion

Participants in this roundtable had the opportunity in the closing session of the meeting to offer their own language on the topics summarized above, and on other topics of concern. They also provided suggestions for improving the collaboration process. Please refer to the appendices for the suggested language and comments.

In closing, Forest Service and USDA leadership thanked participants for their time and wisdom. They expressed appreciation for the richness and diversity of the stakeholder input, while acknowledging that not all suggestions will make it into the rule – especially in light of the desire to make the planning process more straightforward and efficient. The meeting concluded with an invitation to all interested stakeholders to stay engaged – through the planning rule blog, the next roundtable tentatively scheduled for late July, and other public engagement opportunities that will be offered as the rule development process goes forward.



**Appendix A: Background Document Provided to Participants**

# BACKGROUND PAPER

## Third National Roundtable May 11-12, 2010

Draft: May 7, 2010

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## INTRODUCTION

This document was prepared by the Meridian Institute and the US Institute for Environmental Conflict Resolution (USIECR). Its purpose is to provide context and background for the six topics that will be discussed at the Forest Service Third National Planning Rule Roundtable. It represents an attempt to describe in very general terms some of the major themes and a few of the suggestions that have emerged to date from all the previous collaboration activities (the Science Forum, first and second national roundtables, regional roundtables, Tribal roundtable, and on-line forums) relative to each topic. It is NOT a comprehensive summary of all the input, and does not reflect consensus. Meridian Institute and USIECR are entirely responsible for its contents.

### I. Plant and Animal Diversity

*“Biological diversity includes the variety of genes, species, communities and their interactions.”*

*--Science Forum Presenter*

#### Legal Context

NFMA at 16 USC 1604(g)(3)(B) requires that the planning regulation specify guidelines to:

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

**Question 1: Should the rule provide for diversity by focusing on habitat, populations, species, or a combination of the above? Are there other ways to provide for the diversity of plant and animal species?**

The Science Forum presented many ways to think about bio- and ecosystem diversity. Biodiversity can include the diversity of genes, species, communities and their interactions. Ecosystem diversity can include the variety of vegetation cover types, stand structures, stand patterns and disturbance regimes.

At all of the roundtables, participants expressed a strong desire to protect plant and animal species and biodiversity. Participants noted that there is already some legislation (such as the Endangered Species Act) that will drive some management decisions at the forest level, but suggested further ways that the Forest Service could promote diversity.

Some participants suggested that the Forest Service should focus on “at-risk” species. The rule would have to define “at-risk” species and/or give guidance to forests for determining which species are meant by this. Some suggested that species that are important to local communities should be protected by the Forest Service.

Many participants suggested that protecting plant and animal species could be achieved by protecting and maintaining healthy habitats and sustainable ecosystems. If there are healthy habitats, it was suggested, plant and animal species will thrive. However, some participants noted that there may be other factors than habitat which affect species health, and that these also need to be considered. Some participants suggested that the Forest Service should focus on multiple measures of plant and animal health, including habitats, genetic diversity, physical health, population size, and population dynamics.

Some participants suggested that promoting biodiversity, and measuring it through some sort of biodiversity index was a better solution. It was also suggested that analyzing and reducing stressors in the environment could be a way to promote plant and animal diversity.

### **Question 2: Should there be a specific standard of protection?**

Scientists noted that it is important to understand that extinct species are lost forever; however, maintaining a species is not the same as maintaining ecosystem function. Within ecosystems, disturbance, diversity and evolution are all related.

Traditional standards, such as viability analyses and the use of indicator species, do not yield reliable predictions, and scientists presented a number of new ways to consider and track biodiversity.

There were a number of conversations that focused on how to develop a standard that protects and ensures biodiversity. Many participants wanted the standard to be developed and informed by science.

Among some participants, there was a strong desire to continue using the viability standard in the 1982 rule. Some suggested that viability should be the bare minimum, and suggested that “sustainable” populations should be maintained or that the Forest Service should “contribute to” or “conserve” a species. Some participants suggested that the Forest Service should not create a new standard and that the language should mirror that in the Endangered Species Act. Others suggested that measures of individual species are hard to collect and that the standard should be to maintain healthy habitats.

Some said the standard needs to develop accountability for maintaining stable populations. Some participants wanted a standard that was very prescriptive, with a clear national directive. However, others suggested that a standard that allows for some measure of local flexibility is more workable.

Scientists and roundtable participants noted that the protection of plant and animal diversity needs to also acknowledge changing conditions and their affects on species and populations. Populations may move or relocate due to disturbance or climate change; forests may see an influx of non-native or invasive species. Many suggested that the Forest Service should pursue both active and passive policies to address these changes. Some suggested that the precautionary principle should be used to guide management. Participants noted that both active and passive actions can be pursued under the precautionary principle.

Monitoring will be important to ensure that plant and animal species are protected. Participants suggested that active monitoring using the best and most efficient techniques should be strongly mandated in the rule. Many suggested that the rule should not prescribe specific monitoring techniques, but should encourage the use of the best techniques. The Science Forum highlighted a number of new techniques that could be used to better monitor populations of plant and animal species.

### **Question 3: What, if anything, should the rule say about coordination/ protection beyond forest boundaries?**

It was noted at the Science Forum that land management decisions must consider diversity in a many different ways. Because most species exist across administrative boundaries efforts to sustain their populations will have to consider effects beyond Forest Service lands. Participants suggested that the Forest Service should work with adjacent landowners, state and local governments and other federal agencies to address plant and animal habitats across the greater landscape. Some tools for developing cooperation could include wildlife easements, landscape cooperatives and collaborative groups that involve citizens and public interest groups. Many suggested that the Forest Service should work closely with the US Fish and Wildlife Service to develop complimentary protection strategies.

Participants did understand that the Forest Service may only be able to control actions on its lands; however, many said that the Forest Service should consider conditions beyond its jurisdictional boundaries when making decisions. They also suggested that the Forest Service could make decisions that apply across proximal National Forest units.

Both participants and scientists suggested that collaboration and coordination with other groups and agencies should also allow for the sharing of monitoring and data.

## **II. Restoration/Resiliency**

*“Resiliency is comparable to desired conditions, rather than restoration, which is the means to achieve the gap between conditions on the ground and conditions in the plan.”*

*--National Roundtable Participant*

### **Legal Context**

“Restoration” and “resiliency” are not mentioned in National Forest Management Act (NFMA) of 1976.

The Forest Service Interim Directive (FSM 2020) defines ecological restoration as:

*“The process of assisting the recovery of resilience and adaptive capacity of ecosystems that have been degraded, damaged, or destroyed. Restoration focuses on establishing the composition, structure, pattern, and ecological processes necessary to make terrestrial and aquatic ecosystems sustainable, resilient, and healthy under current and future conditions.”*

## Question 1: What, if anything, should the rule provide regarding restoration?

Across all forums, many people were nervously excited by the idea of restoration. Many noted that it will be important to clarify and define what is meant by restoration. Many participants were worried that the term “restoration” implied an attempt to return forests to an historical state. Participants in the roundtables and presenters at the Science Forum suggested that the Forest Service should aim to build sustainable or “resilient” forests that would be able to adapt to changing conditions. The focus, participants said, should be on desired future conditions, not on the past.

At the Science Forum, presenters gave the Forest Service many suggestions for pursuing restoration activity on National Forest lands. They suggested that the Forest Service should figure out ways to use data where appropriate, acknowledge uncertainty where possible, and use comparisons to make decisions in the absence of clear data. They also noted that uncertainty can lead to paralysis and that by increasing scientific literacy and public understanding, it will be easier to make decisions in the face of uncertainty.

There was some disagreement around the extent to which restoration should be included in the rule. Many thought that the planning rule should declare restoration a priority for forest management. However, a number of participants did not think that restoration was necessary and were disturbed by what they perceived as an assumption forest lands are degraded and need fixing.

Participants noted that if restoration were to occur across National Forest lands, the scale would be very large. There are planning issues and costs with doing anything at that large of a scale that need to be considered in this decision.

Some suggested that the rule needs to clearly define restoration, and many liked the definition that is currently in the Forest Service Interim Directive. Some participants did suggest that there needs to be some flexibility to define the meaning of restoration at multiple levels.

### **Should the rule require forests to do a restoration needs assessment and identify which restoration efforts would be of greatest value?**

Several presenters at the Science Forum said that an assessment is critical to developing a coherent restoration strategy. The Forest Service cannot afford to practice “random acts of restoration,” they said and they suggested a number of different ways to assess restoration. They noted that new technologies and monitoring techniques will allow assessments to be carried out more efficiently. They also noted that it could be helpful to consider metrics that are easy to measure and analyze when designing an analysis. Scientists as well as participants in the roundtables suggested that constant monitoring would make assessing restoration needs and results easier.

Many of the participants at the roundtables strongly supported the use of a needs assessment that was comprehensive across multiple scales and spatial and temporal landscapes. The needs assessment would need to define baseline conditions to compare forest sites against. The Science Forum presenters noted that historical ranges of values can inform the baseline; however, many



noted that the baseline will need to be able to account for changing conditions due to disturbance, wildland fire or climate change.

Some suggested that the planning rule could identify restoration priorities, such as core issues and stressors. Some suggestions for prioritization included: sites damaged by extraction activities, lands crucial to habitat connectivity, lands damaged by noxious weeds or invasive species, economic resources such as water for industry and watersheds. Others suggested that sites that are most removed from baseline values should be prioritized.

Some participants suggested that collaborative groups, consisting of federal state and local governments, NGOs, users and other stakeholders could help to define the goals of restoration in each forest. They said that there should be clearly delineated ways for the public to become involved in these projects. Similarly, they noted that some restoration activities may need to occur across jurisdictional boundaries, and partnerships with surrounding lands may support these kinds of activities.

A number of participants noted that restoration can occur across both human and ecological needs. They suggested that restoration projects should be evaluated for the value they add to human and ecological systems. Some suggested that an overall value that combines economic, social and ecological benefits should outweigh great value for any single sector. However, some participants suggested that restoration should focus foremost on ecological health and balance.

### **Should the rule say something about whether land management plans have to identify triggers for restoration on the basis of exceeding certain disturbance or change thresholds?**

Presenters at the Science Forum suggested that plans should identify triggers, thresholds and benchmarks that are tied to monitoring and restoration. These benchmarks should be derived from the desired conditions of the forests and should be forest-specific. Some participants suggested that forests should be required to maintain desired conditions once they have been attained.

### **How should fire and other natural disturbance regimes be dealt with in land management plans?**

At the Science Forum, it was noted that fire interacts in very complex ways within forests. Fire has traditionally played an important role in forest lands. However, with new changes, such as climate change, human settlement and invasive species, the way that forest and human communities relate to fire has changed dramatically. The scientists recommended looking for ways to restore the historic benefits that fire provided in forest lands.

Many participants said that the planning rule should acknowledge the important role that natural disturbances such as fire play in maintaining forest health. Many participants noted that while small fires are beneficial, fires that grow too large can have very negative ecological and social effects. Some participants suggested that restoring natural disturbance could be dangerous and that the Forest Service should use other management techniques, such as fuel reduction and mechanical thinning to simulate the benefits of disturbances like forest fires.

Participants also noted that forest plans should be able to be more responsive to major disturbances such as fire.

**Should there be a national objective that all land management plans address restoration? Are there forests where restoration is not needed?**

Participants felt that the rule should encourage the consideration of restoration in all forests. However, many noted that forests are different and unique across the country, and that restoration activities should reflect this. Some forests may not need any restoration; others may require localized restoration projects; and still more may require restoration at broad scales. Many suggested that forest plans should be able to judge restoration activities to determine their benefits.

**Question 2: The precautionary principle has been suggested as one framework for forest planning. Should the rule include key concepts from the precautionary principle? If so, which ones and what would be the implications of incorporating them? Are there alternative ways to address those concepts?**

**A 1998 consensus statement characterized the precautionary principle this way:**

"When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically ". (Raffensperger C, Tickner J, eds. Protecting Public Health and the Environment: Implementing the Precautionary Principle. Washington, DC: Island Press, 1999.)

Scientists were split on the use of the precautionary principle. Those who supported the use of the precautionary principle believed that it is valuable to use caution when making forest management decisions. Others thought too much caution may lead to inaction, and that in some cases inaction may be more detrimental to forests than pursuing management approaches.

In the roundtables, participants clarified that the precautionary principle can support both action and inaction. Some participants suggested that the Forest Service should develop a framework to be able to use experimental approaches with a precautionary underpinning to address forest challenges.

Some noted that restoration is expensive and suggested that caution (whether enacted actively or passively) is the appropriate framework to reduce costs in the national forests.

### III. Contribution of Recreation and Other Goods and Services from National Forests to Vibrant Local Economies

*“Forest planning teams need a balance of disciplines and should initiate contact with local governments, request participation, and invite them to bring socio-economic concerns to the table.”*

*--Regional Roundtable Participant*

#### Legal Context

The National Forest Management Act 16 USC 1604(g)(3)(B) directs the Forest Service to:

“Integrate consideration of physical, biological, economic, & other sciences and have guidelines for plans which insure consideration of the economic and environmental aspects of various systems of renewable resource management, including the related systems of silviculture and protection of forest resources, to provide for outdoor recreation (including wilderness), range, timber, watershed, wildlife, and fish;.”

#### Question 1: What, if anything, should the rule say about what forests should do to contribute to vibrant local economies?

##### **Should forests be required to assess the potential contribution and/or impacts of forest management on local/regional/national economies?**

For the most part, participants seem to assume that such assessments would occur. Many noted that it is difficult to conduct such assessments, and that not everything can be quantified.

##### **What would the social/economic assessment(s) look like, how would they be used and at what scale?**

How Should Social/Economic Assessments be Performed? A theme across the roundtables was that assessments should be done in partnership with communities and stakeholders. Examples of comments on this topic: “Planning tools [such as assessments] cannot be used as a black box that the public is not a part of and/or does not understand, or they will not accept them” and assessments should “be open, collaborative, practical, and easy to use.” Another theme was that data should be gathered from many diverse sources, including local governments, and Tribal governments and elders, but without placing an undue burden on those sources. Assumptions and data limitations should be explicit and the public should have direct and easy access to the raw data. In order to achieve this open and collaborative spirit, many suggested that forest planning teams need a balance of disciplines and should initiate contact with local governments, request participation, and invite them to bring socio-economic concerns to the table.

At What Scale Should the Assessments be Performed? To the extent stakeholders commented on the scale of assessment, they mostly said the analysis needs to occur at multiple scales, and that the scale will vary by topic and issue. For example recreation assessments would usually be most useful at the recreation level and assessments related to energy would have to include a national context. Whatever scale is used should be apparent in the documentation.

What Should the Assessments Cover? Stakeholders generally said the rule should provide broad guidance and criteria for what assessment should look like. Forests and communities should

determine specific methodology. Participants offered a wide range of ideas for what they thought should be included in these assessments, including (but not limited to):

- A comprehensive list of ecosystem services, examples, and a prioritization framework;
- Analyze what uses are being displaced and what would be the economic effect and cost of the action;
- Long term sustainability yield analysis for recreation and social resources, projected 30,50, and 100 years into the future in order to recognize changing economies;
- An estimate of the number of jobs the forest plan will sustainably support (including, for example, restoration work);
- Analysis of the effect of the plan on the value of adjacent lands;
- A review of local economic development and tourism plans to get a sense of the expected future of a community;
- The economic impact of closing trails;
- Maintenance costs;
- An inventory and/or baseline of existing resources—cultural, ecological, etc.
- Quantification of the value of non-market / passive uses of land. (For example, send mail surveys to people to determine how much they value knowing that forests exist and are healthy).
- Financial benefit to nearby communities to manage for wildlife in conjunction with the Forest Service (e.g., Farm Bill conservation dollars);
- The economic and ecosystem trade-offs of grazing and data on current grazing use;
- The value of current and future recreation uses;
- Extractive resources (value some differently when not a renewable resource)
- Carbon storage and biomass value;
- A separate analysis for bicycling;
- The value of winter as well as summer recreation; and
- The value of volunteerism.

Participants also offered a number of ideas for guidance/methodology, including, but not limited to:

- Do not place monetary values on all items. Intrinsic values can be determined by local collaborations.
- Use a systems integration approach;
- Do ecological, economic, and social assessments all at once and note the overlap.
- Do not measure everything—this will be too much detail;
- Determine cumulative effects; and,
- Use net present value for all costs and benefits.

### **How should the assessment be used?**

Participants generally said assessments should be used to help inform priorities and decision making. Many expressed concern that these kinds of documents served merely as good dust gatherers in the past. A variety of participants said language in the rule should be stronger than “assessments should be considered,” but participants had a hard time expressing how this should be articulated in the rule. A common view expressed is that stakeholders should be able to work with and “own” the assessments or they will not support decisions based upon them. Following is a sampling of a few specific suggestions about priority setting:

- Ecological, environmental, and social assessments should have equal weight;
- Decisions should be made based on resource availability and sustainability.
- The value of ecosystem services should be considered during forest plan development, but not be a primary driver of plan outputs to generate economic returns versus environmental concerns.

### **How might the rule deal with differences around the country in degree of influence of forest lands to local economies and the extent to which forest management can really make a difference?**

Participants recognized that the relationship between communities and national forests and grasslands is extremely variable. For example, there many are counties, particularly in the west, that are heavily influenced by and reliant upon forest management because a large percentage of the land base is under Forest Service or other public jurisdictions. Many other communities are only minimally impacted by their local forest or grassland. The rule needs to be cognizant of this variability.

### **Question 2: What if any guidance should there be in the rule about how forests provide for recreational uses?**

Many participants said the rule should reflect recreation as a core value. A few specific suggestions were that the rule should direct forests to:

- Address travel management within the forest planning process;
- Assess recreational carrying capacity;
- Anticipate new recreational uses (e.g., mountain biking which really did not? exist as a recreational use in 1982);
- Provide equity/balance for different kinds of uses (motorized and non-motorized, hunters, horseback riders, etc.),
- Consider uses across seasons;
- Provide for more consistency (e.g., national trail classification system);
- Promote the use of volunteerism;
- Promote the engagement of youth;
- Promote experimentation.

### Question 3: How should the rule address the need to include, balance and reconcile local, regional and national interests?

Many stakeholders acknowledged the need to include and balance interests from all levels. A commonly heard general suggestion was that the rule set broad objectives at the planning rule level while empowering decision makers at the local level to make specific land use decisions and that balancing among uses would be facilitated by an iterative, open, collaborative process. Education was another theme. For example, some noted the importance of educating national stakeholders about local realities, especially when they engage mid-way in forest level planning process. Others commented on the overall need to have an educated public for any collaborative process to work effectively.

Stakeholders expressed a wide range of views regarding the role that the Forest Service and forests should play in local, regional, and national economies. Very roughly, these views can be separated into six categories, which are not intended to be mutually exclusive.

## IV. ROLE OF SCIENCE

*“Robust science is integral to the planning rule.”*

*--National Roundtable Participant*

### Legal Context

The National Forest Management Act (NFMA) of 1976 at 16 USC 1604(b) provides:

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

### Question 1: If the rule requires the use of “best available science,” how should “best available science” be characterized?

While people seemed to generally accept that science should be integral to the planning process, there was much discussion and a range of positions on how science should be integrated with other types of knowledge to support or inform decisions. Some people noted that terms such as ‘best available science’, ‘real science,’ or ‘latest science’ are not well defined or universally accepted. For example, many participants were confused by the phrase ‘latest planning science’ in the NOI. They didn’t know if it referred to decision science or natural resource management science. There also was a divergence of opinion of the value of “latest” science. Some participants observed that latest science doesn’t always mean best science. Further, some noted that there is often disagreement among scientists, and the available science may not be relevant or scalable to the issues being addressed.

### Question 2: what if anything should the rule say about the role of science in decision-making?

Many people grappled with the role of science in decision making. On one end of the spectrum, there were those who argued that “science should be the basis of decision-making,” or as another

participant argued, “A great rule would identify the characteristics of ‘best available science’ and would guide forests to use it during the plan development process.” On the other end of the spectrum were those who held that the rule must “acknowledge that ‘best available science’ means many things to many people, and when possible seek to develop a mutual understanding of data with affected stakeholders. Some participants also noted that science needed to be grounded in management practices.

- Include a committee of scientists throughout the planning rule process
- Require scientific peer review of the forest plans
- Use most recent science (independent science)
- How is plan driven? Consider science from many perspectives.
- Put reality in science – What is an acceptable management practice?
- We are battling over best available science. Science cannot dictate goals and objectives. Science informs decisions.

### **How should science and public participation be integrated or weighted in decision-making? What should the rule say about the relationship?**

Some noted that science is only one way of knowing, and that forest planning should accommodate other ways of knowing (such as traditional ecological knowledge and professional judgment) and social and planning science. In fact, a key issue was how input should be valued and how that input should be used and weighted in decision making. As one participant stated, “(USFS) needs to consider how input from different collaborators is weighted; does science have a higher priority than the layman?” Some participants argued that other forms of knowing, such as resource expertise, local experience or traditional knowledge, should be given “‘equal’ consideration to science in the decision process. Tribal members and regions with a strong tribal presence specifically noted the importance of valuing traditional ecological knowledge and practices and seeking the wisdom of the elders.

Others struggled with how much influence local versus non-local input, or local versus regional versus national, should have in decision-making. For example, some argued that locals are more affected and have greater knowledge of the issues and land. Others noted that while locals should have input, forests belong to every American citizen, and so local stakeholders should not necessarily have prioritized input. One participant tried to strike a balance by proposing a weighting system. “Basis for policy formulation should be 50% national, 50% regional. Within the regional policy the basis should be 33% national, 33% state, and 33% local.”

Regardless of the proposed formula for weighting, many of the participants highlighted the need for buy-in from stakeholders and local communities, and therefore the need for a collaborative process that is accessible to the public. However, some still thought that there should be different levels of collaboration or partnership. For example, state resources agencies should be engaged as full partners in the decision process because they act as full partners in land management, maintenance, enforcement, and public safety. As such, they should have a higher level of involvement in Forest Service decisions than other stakeholders.

The group highlighted the need to develop relationships with local stakeholders and noted that FACA committees can help bridge the gap between local and federal groups. In addition, many

participants suggested the need to ensure cross-agency collaboration as well as better coordination with the other branches of the agency (e.g., State and Private; Research). There was also a strong current from youth and others calling for the education of and more interaction with youth in forest planning and management. They noted that youth need to play a role in forest decisions that will affect their future. Engaging youth now will guarantee they continue to have a vested interest in being stewards of the land.

- The rule should give guidance on how to best engage in collaboration with stakeholders including users, adjacent landowners, youth and local, state, and federal governments. However, collaboration and adaptive management cannot allow the Forest Service to sidestep standards or good science.
- There is a need to make good management decisions by talking with people who have experience with the land. Planners need to be out on the land figuring out how things work instead of sitting inside a building. To get things done, need people out in the woods working with nature and working with each other. It is not the rule that makes a good plan; it is the people coming together in the area that make a good plan.
- Utilize a collaborative group or FACA committee. These groups can generate valuable dialogue and comprehensively examine important issues. While these types of groups require more investment on the front end, they often result in plans that are more robust, stand up to legal action, and are cheaper in the long run.
- The Rulemaking process would require that forest planning engage local affected communities and young people who may be responsible for managing our forests in the future. The new Rule would make this engagement a formal part of the forest planning process. Rules and forest plans would consider future generations in their long-term goals.
- USFS should do more outreach, engagement, collaboration with AmeriCorps volunteers, to engage and guide the next generation of public leaders.

Some stated that it is important to involve non-scientists in the decision process because many of the issues and problems in forest planning have social and economic components that cannot be resolved through 'technical solutions.' There was some discussion on the role of science in addressing value differences. One participant stated that "collaboration is a tool to reach consensus on values, while science is a tool to reach consensus on objectives."

Other suggestions proposed by participants spoke to the need for bringing 'relevant' science into the collaborative process and increasing the shared understanding and the capacity of all participants to inform decision-making. These proposals represent variations of either trying to integrate science into collaboration, or alternately drawing on the expertise of resource managers and resource specialists, local and public knowledge, and indigenous knowledge to help build a shared body of knowledge that includes science – for example, through joint fact finding.

- Include science in collaboration
- Collaborative groups including scientists to identify what's working and narrow differences



- Engage scientists in the creation, validation, and implementation of the Rule. Researchers and scientists should be involved in studying the effects of restoration, interpreting data, discovering trends, and integrated technology.
- Research stations and forests work together/communicate
- FS has to get away from using data generated elsewhere to make decisions here.
- Best science and mathematical formulations conceived for Lower 48 states don't always apply to Southeast Alaska.
- Require that management plans define and apply science at the local level instead of relying on 'global' information whenever possible.
- The Forest Service could develop partnerships in the planning process through a consortium, joint fact finding, or data collection. It should find ways to solidify partnerships from creation through monitoring and evaluation
- Encourage collaboration in research and on-the-ground projects, as well as planning. (e.g., The Nature Conservancy [TNC] and Audubon are involved in research on Tongass NF, and TNC involved as partner with FS in watershed restoration.)
- The rule could also encourage the Forest Service to share knowledge, by accepting data from a wide variety of sources, including the Forest Service, other agencies, Academia, and citizen-scientists as long as that data met a certain level of truth or authenticity.
- The Forest Service could develop partnerships in the planning process through a consortium, joint fact finding, or data collection. It should find ways to solidify partnerships from creation through monitoring and evaluation.
- Use maps to create an overview of existing resources and corridors, and lay out various options for how the land should be used. For example, there is an effort underway in New Mexico under the Galisteo Basin Act/Archeological Sites Act that is using GIS mapping very effectively in soliciting public input and informing planning decisions

### **What should the rule say about decision-making in the face of scientific uncertainty?**

Another issue related to science that was addressed from different perspectives was how to address the inherent uncertainty in science and the increased uncertainty in the face of climate change. Some participants advised that the Forest Service should prescribe to the precautionary principle to handle management uncertainties. However, others argued that "uncertainty shouldn't stop agency from making a decision." They advised that the agency not "wait for perfect science before taking action," but instead to use 'scenario based planning' to evaluate the potential outcomes for a range of actions. One benefit cited for integrating science into the collaborative framework is that it allows scientist and stakeholders to jointly address uncertainty by devising what one called "accountability processes" tied to monitoring and an adaptive framework that allow decision-making to continue in the face of uncertainty. Some participants also tried to address how to deal with the fact that science is changing, and how to integrate new science into the decision framework.

- Science is an uncertainty – science is not absolute
- Forestry is not an exact science – need flexibility due to change
- Add scenario modeling to adjust
- Because the full effects of climate change are still unknown, the precautionary principle should be used, and that the primary focus of land management should be on healthy, diverse, and resilient forests.
- Science management is not equivalent to information management. The Forest Service needs to deal intelligently with uncertainty and risk through information management and adaptive management.
- Collaboration with stakeholders and agencies should include sharing and utilizing data, scientific research, and scientific and monitoring tools. Stakeholder involvement should include a mechanism to address scientific uncertainty. There is a need for an accountability process that shows the results of the monitoring. This could be done as part of a collaborative meeting with the stakeholders.
- Consider utilizing a steering committee with work groups process to develop forest plans; local work groups on specific issues
- Must be streamlined & rapid pace to keep up with evolving/changing issues
- BLM citizen-based Resource Advisory Councils offer potential model
- Focus on local-level public involvement; use tools like maps to engage stakeholders; create timelines with accountability mechanisms to keep process moving
- Adapt to changing science
- Concern –good science/bad science? Common sense in management. Adapt to changing science. Are we required to respond to every new theory?

## V. CHANGING CONDITIONS

*“The issue is not climate change, or fire, or invasive species, the issue is CHANGE. Our forests need to be able to survive in and adapt to major change.”*

*--National Roundtable Participant*

### Legal Context

The NFMA provides at 16 USC 1604 (f)(4) and (5) that :

- Plans [...] shall--be amended in any manner whatsoever after final adoption after public notice,
- Plans [...] shall—be revised from time to time when the Secretary finds conditions in a unit have significantly changed, but at least every fifteen years,

### General Background

Climate change was the focus of much of the discussion about changing conditions. There was a lot of disagreement about the extent to which climate change is occurring and how related to the

“climate change principle” focused on how to work with the uncertainties associated with climate change impacts. There was some difference of opinion among participants about how proactively national forest and grassland management plans should address climate change.

Many participants acknowledged that there is uncertainty associated with various aspects of climate change (e.g., how exactly its impact will be felt on the level of an individual forest or grassland), but that enough is known about climate change and humans’ contribution to it that it should be addressed proactively in management plans.

Some thought climate change is going to be the underlying driver for much of the coming ecosystem change. In other words, climate change may cause increases in other drivers, such as fire, drought, flooding, disease, and insects. Consequently, information and assumptions about climate change need to inform decisions. One participant saw it as a natural phenomenon, requiring no elevated response. Another felt that it should be “considered” in the planning process, but because there is significant uncertainty about likely impacts, it is premature to address it “proactively.”

Participant suggestions about how the rule might guide planners in considering climate change despite the associated uncertainties included:

- Acknowledge the uncertainties;
- Provide guidance regarding the scale at which planners should assess likely climate change impacts;
- Acknowledge the diversity of local climate conditions and empower planners to use a diversity of management strategies;
- Use scenario planning (e.g., under “x” conditions, we’ll take this management approach; under “y” conditions, we’ll take that management approach);
- Frame climate change as 1 of a cluster of “disturbance events” (including fire, invasive species infestations, ice storms, etc.);
- Require management plans to identify risks pertinent to that forest or grassland, but that a national rule should not specify which risks are pertinent to local management units;
- Encourage planners to focus on cultivating the adaptability of the ecological communities they manage
- Manage for species and habitat viability by protecting refugia and “adaptation corridors”
- Avoid exacerbating existing system threats
- Manage with the aim of increasing the resilience of ecological communities;
- Manage for ecological redundancy as a defensive strategy
- Continually adapt and refine tools (for monitoring, etc.) to gain a stronger understanding of climate change impacts
- Identify trigger points for updating management plans

- We need flexibility to adapt to warmer/dryer conditions. The Rule should not dictate how to respond to climate change, but enable the flexibility to adapt to change.

### **Question 1: How should the rule allow for flexibility in plans?**

Regardless of whether people embraced climate change as the primary driver of change or the need to address climate change proactively, the majority of participants recognized the need to address change as a constant in the planning environment. Many noted that the planning rule needed to address not only ecological changes, but also economic and social changes, and even technological changes and how they would impact potential uses. There was a tension here between focusing on preserving and protecting current uses and practices – some of which were critical to the survival of local or indigenous people who live in or near the forests - and the need to remain open to evolving social and economic conditions. The theme of expanding the temporal and spatial scale of planning came up repeatedly.

- Forest planning process should evaluate past historic uses and plans of the National Forest – considering how to develop future plans that can better serve the communities dependent on these forests.
- Planning rule should address food security, specifically subsistence food sources and activities. This includes defining relevant terms and addressing access issues. Communities want control of subsistence activities (especially important for communities totally surrounded by Forest Service land.)
- Rule should allow for changing economic conditions--changes in goods and services
- Plan needs to provide for the flexibility to be able to adapt to both economic opportunities (e.g., hydroelectric project) and changing environmental conditions (e.g., insect outbreak).
- The Forest Service should recognize that social and economic uses are changing, and adapt to those changes. For example, clean alternative energy developments should be encouraged wherever appropriate, and they can provide many “green jobs” in local communities. Many western communities are also heavily economically reliant on tourism, and much of this may be dependent on maintaining a clean environment, beautiful scenery, abundant wildlife, and varied opportunities to engage in healthy recreational uses.
- The West is changing from a resource use and extraction economy to a recreation and restoration economy. The Forest Service should accept and reflect this change in the final planning rule in terms of guidance on social and economic uses.
- The Forest Service should also recognize that recreational uses are changing. There should be a framework to address and incorporate new recreational uses into forest plans. The Recreational Opportunity Spectrum (ROS) needs to be revised to include new uses such mountain biking and air strips.
- Future growth and changes in technology should be addressed in planning rule; e.g., future technology may allow additional mining activities.
- The planning rule should require regional economic analysis to capture changing conditions and new opportunities. This is especially important in Alaska where

economic conditions and challenges are unique. This economic impact analysis should be cross-generational, providing insight into impacts on younger Americans and their future in the region.

- For each land allocation – what will land look like in 5 years/15 years/50 years so public/FS will know what they'll see when they visit.

### **What should the rule specify regarding the amendment process to account for changing condition/threats/problems?**

Given the fact that many people proposed that forest plans be adaptable, they also addressed how the planning rule should allow for an efficient plan amendment process (e.g., for use between plan revision cycles). In general, they proposed that forest plans be 'living documents' that could be amended fairly quickly. Some suggested having segmented or 'sector' planning, where only portions of the plans would need to be changed or could be held up with litigation. Some proposed that the plan identify 'triggers' that would require an amendment.

- Forest plans should be living documents. They should be able to be changed or amended quickly when conditions in the forests change. Thresholds and triggers could also be used to know when forest plans should be changed.
- Make the plans living documents. They should not stay static for fifteen years between revisions. They should be changed and updated as conditions in the forests change. Utilize new monitoring technologies to understand the changing nature of the forests.
- Plans need to be written to be more legally severable; if a court ruled that one element of the plan were invalid, the rest of the plan would remain intact.
- Consider implementing sector planning. The forest plan would give guidelines for how to develop plans for a sector. Sector plans could be updated more or less frequently than the forest plan. Sectors where management actions are out of sync with forest goals and priorities should be updated before other sectors. Thresholds for revision and/or a public petition process could trigger a sector plan revision. All sector plans should also be examined after a certain amount of time.
- Designate some parts of a plan that will be made "permanent" and other sections on which to focus revisions and amendments
- Make a provision that plans would be updated every 5 years; complete an update every 10 years, but not re-writing the plan every time
- Include in the rule when certain pieces of plans will be reviewed/revised, where possible; break down revision process into pieces so that don't have to deal with entire plan at once
- Revisions should be based on benchmarking and how successfully the plan is meeting the marks.
- The Rule should allow for a less burdensome iterative process of plan improvements and updates, for instance to incorporate lessons learned or to reduce

inconsistencies in planning and plan implementation within forests and between forests. How can this be done while meeting NEPA requirements?

- Plan amendments after catastrophic events (such as fire) should be streamlined so that new management policies can be put in place more rapidly and therefore be more effective.
- Plans need to not be so specific as to require a plan amendment for any change in conditions (e.g., need to be able to identify and provide access corridors for energy development without a plan amendment).

**Should forests be required to specify thresholds or triggers for amendments? If a threshold is reached, should it also trigger an assessment and a reexamination of new management objectives?**

Some participants suggested that the rule should require forest plans to identify triggers that would require the plan to be revisited. The trigger should include a threshold and a range. Once the threshold is crossed, the plan must be revisited to see if action is necessary. The planning rule needs to address multiple types of adaptive management for different levels of activity. There are different ways to conduct adaptive management – some more rigorous than others. The Forest Service should use a tiered approach to adaptive management, in that low levels of rigor are appropriate in some aspects of a forest plan, and higher levels of rigor are important in other aspects.

Large-scale and dramatic changes, such as flooding or fire, should trigger plan amendments. The Forest Service needs to be able to change its land management policies immediately following these types of events.

**What, if any, other ways should flexibility be incorporated? For example, should the rule develop an adaptive management framework? What should it look like? How do you make it feasible?**

Adaptive Management. A number of participants made recommendations on how the planning rule should try to incorporate flexibility into plans. Many expressed the hope that the planning rule would be grounded in science and use an adaptive management framework. They noted that the planning rule needs to reflect current science while allowing flexibility to evolve as science evolves without having to issue a new planning rule. Some tried to address how accountability could be built into an adaptive framework. In general, the recommendations focused on opening up the planning process, including more consistent evaluation at a range of scales, developing measurable objectives, monitoring toward objectives, establishing some kind of ‘trigger’ for revision, and making small changes to forest plans between major revisions and keeping the parts of forest plans that work intact while revising only the pieces which need to be addressed – or as was succinctly stated, “Conditions change. Monitor and revise.”

- The definition needs to make clear that adaptive management is not simply ‘flexibility,’ but rather a structured framework for reducing uncertainty, analyzing and reducing risks, and addressing unforeseen changes.

- Forests could be monitored consistently for many characteristics (plants, animals, temperature, precipitation, fire, variability, etc.). This data would be analyzed for trends that emerge beyond natural variability. The Forest Service could then implement different land management policies to address these changes. These land management policies would be developed to help the forest reach the level of desired conditions spelled out in plan.
- The rule should explore options for using adaptive management. The rule could foster accountability by requiring plans to conduct monitoring and include triggers for management actions based on the monitoring results. It will be important to determine how and when thresholds should be set, monitoring should be conducted and changes should be implemented. The specifics could be outlined in forest plans. The rule could set rules or give guidance on how to develop these specifics.
- There is a need to establish clear guidance in the new rule about how to utilize an adaptive approach for determining when and under what conditions amendments to forest plans should be made.
- There have to be clearly defining desired outcomes in order to determine whether or not management practices are, in fact, making progress towards those outcomes.
- The public should have the opportunity to engage in adaptive management processes.
- A collaborative group (possibly a FACA committee) that is very involved and meets regularly can ensure that all issues are thoroughly considered and can help make decisions which are more robust and withstand judicial scrutiny.
- The planning rule should make the link between monitoring, desired outcomes, key indicators and triggers for forest plan amendments – i.e. the process of adaptively managing in the face of changing conditions.
- It is important that the rule enable and foster innovation. Climate change represents an example of an issue where the science and technology are evolving quickly – managers need to be able to take advantage of innovations in order to respond appropriately.

Trend Analysis and Monitoring. Some participants also suggested that the trend analysis and monitoring at the local level could be used to inform or improve models and trend analysis at larger scales, such as regional or national scales.

- We have to be able to look at the Forest Service contribution to what is happening at larger scale, because that's the way ecosystems work.
- There is a continuing need at multiple levels - communities, local governments, and the Forest Service – to build capacity and share information about how to work together to create sustainable local communities and ecosystems
- Data collection should not occur only through Forest Service staff. Data should be shared with other agencies, citizen scientists, and academics. Data should be collected according to “best science” practices and should be peer reviewed. The compilation of this data is what should be utilized.

- This greater set of data could also be used to feed into climate change models. By increasing the amount of local data available for these models, they could provide better resolution of the potential changes and effects expected at smaller scales.
- Predictive models are not very accurate and they should not be used to make land management decisions
- Most thought there should be a nested approach. Forest plan should complement the larger eco-regional approach.

## **Question 2: What are the implications of changing conditions on standards and guidelines?**

Many of the participants also noted that these changing conditions would require management flexibility. They struggled with how to balance the desire for accountability with flexibility. As one participant stated, “A tension exists between flexible plans and those that are accountable, implementable and directive. The forest plan should not maintain the amount of detail that requires everything to be reconsidered when a certain aspect changes.” In particular, participants tried to address the adequate degree of detail or prescription in the form of sideboards, standards, or guidelines that could be balanced with flexibility.

- Climate and resilience require a scientific, adaptive approach. Striking a balance in the Rule’s detail is a challenge: the Rule can provide sideboards and guidance to the regions to provide consistency and accountability. The Rule should also support flexibility.
- Flexibility and the ability to respond quickly are important, but should not shortchange the need to identify problems correctly and to determine how emerging scientific information and data will help inform sound management practices.
- Yes, with a balance of each (standards and guidelines) in the plan with clear definition of what each means (including legal direction and glossary) and have some degree of flexibility throughout life of the plan
- Need some hard and fast rules (standards) and some guidelines for adaptability.
- Too many standards can make a plan too cumbersome. A broader and more general rule that gives a vision and sets priorities for forests will allow for more flexible management.
- There is a need for flexibility. While there is uncertainty about the mechanism of, the extent to, and the rate at which change will occur, forests, forest uses, and the plants and animals which reside in the forest, all may be affected. Rapid and flexible response to these changes should define forest management in the future.
- The Rule needs to more clearly establish what the overarching long-term desired conditions are (whether we want to manage to forested land, grassland, etc.) and what conditions we want to maintain after use. We need greater accountability through standards, and a shorter, streamlined planning horizon. There needs to be a better and more intentional process for building constituencies and engaging people going forward.



- Don't need really prescriptive limits on items of uncertainty
- Plans are too rigid and unable to take into account new science or deal with rapidly changing environments.

## VI. Monitoring

*"Monitoring needs to be realistic, effective and scientifically valid."*

*--Regional Roundtable Participant*

### Legal Context

NFMA at (16 U.S.C. 1604(g)(3)(C)) says:

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

### Question 1: What should the rule require for monitoring and reporting within an adaptive management framework?

Many people said that that Forest Service has not done enough monitoring in the past, that monitoring is sometimes an after-thought and that monitoring data is rarely used or useful. Some said that the Forest Service over-promises and under-delivers. Across the forums, many people expressed a strong desire to see more and better monitoring. It was suggested that monitoring should be built into plans, the planning cycle and projects, so that it becomes a standard part of forest management. A large number of participants also recognized that there are budgetary constraints, and that not everything can be monitored.

Participants at all forums suggested many different components to monitor, including: plant and animal diversity, watershed health, water resources, timber stands, recreation uses, carrying capacity, economic benefits, social benefit and ecosystem integration. Some participants suggested that the planning rule should designate certain categories that all forests need to conduct monitoring within. Others thought that monitoring decisions should be made locally and to fit with local and forest needs.

At the Science Forum, presenters noted that it is important to design monitoring to be effective. They said that monitoring should focus on aspects of the forest that can be easily measured and analyzed, data should be representative of the forest or ecosystem, monitoring needs to exist within the appropriate spatial and temporal scales, and monitoring needs to be conducted using standardized protocols.

Across the roundtables, many of these same sentiments were echoed. Participants wanted the Forest Service to be using the most effective monitoring tools. They suggested that the Forest Service should base their monitoring on measurements that provide the best insight into forest health.

Some participants did suggest that monitoring was so crucial that more resources from the current Forest Service budget should be directed to it and that the Forest Service should also lobby for more funding to support monitoring programs.

Many of the Science Forum presenters commented on the new tools that are available. They commented that they are continuously being refined and adapted to be cheaper and more efficient. They suggested that the Forest Service should find ways to incorporate the best new technology in their monitoring plans. Participants in the roundtables echoed this same sentiment.

Science Forum presenters noted the prevalence of uncertainty in scientific data. They said it will be important to acknowledge uncertainty when presenting and using data. They also suggested that monitoring could be increased where the cost of uncertainty is high.

Participants in the roundtables expressed a desire for more accountability for Forest Service actions. They suggested that regular monitoring reports, at one, two or five year increments, would greatly increase accountability. Regular reporting would also help the Forest Service understand whether and how its standards or benchmarks are or are not being met.

### **Question 2: How, if at all, should the rule address the prioritization of monitoring needs?**

Science Forum presenters noted that monitoring and data should be tied to decision-making. Monitoring data can set boundaries for forest decisions and can be used to determine the most pressing management or restoration needs. Many presenters also suggested that models, fed by data from robust monitoring, could also be utilized more in decision making. Models with more data are more robust and can be used to predict the range of future conditions.

Participants in the roundtables thought that monitoring, within an adaptive management-like framework where monitoring data is tied to thresholds and trigger mechanisms, could make management and restoration more efficient. Projects would become priorities after a threshold was reached. This type of framework could be useful as forest management is forced to adapt in the face of rapidly changing conditions. Some participants did note that data should not drive decision-making, though, and that good decision-making and good leadership would still be important for better forest management.

### **Question 3: What should the rule say about monitoring across landscapes or regions?**

Many participants in the roundtables agreed with the Science Forum presenters that monitoring should happen at appropriate temporal and spatial scales. Things like plant and animal ranges, watersheds, and changing habitats often cross administrative boundaries. It is important for the Forest Service to understand what is happening in the greater landscape, watershed or ecosystem, and monitoring that crosses landscapes and administrative boundaries is critical to achieving that.

Some roundtable participants suggested that collaborative or shared monitoring, where the Forest Service partners with other agencies, state and local governments and public-interest groups could

be used to monitor more broadly without increasing the burden on the Forest Service. Although, some participants were worried that the Forest Service already has a difficult time using the data it collects, and that increasing the amount of data could overwhelm Forest Service resources. Standardized protocols for monitoring and reporting would ensure that data could be shared.

Other suggested that instead of collaborative monitoring, a more robust system for data management, which gathers data from various agencies, institutions and the Forest Service in a central location could help the Forest Service gain the landscape understanding it needs.

Finally, it was noted that monitoring can be useful in judging the effectiveness of plans, projects or management actions. By closely monitoring the forests after a change is implemented, the Forest Service and its constituents will be able to clearly understand the effects of that change on the forest.

## Appendix B: Plant and Animal Diversity

*At the end of the roundtable, participants were given an opportunity to write specific rule language and suggestions for the rulemaking process moving forward. This appendix includes the suggested rule language offered on the topic of plant and animal diversity. Meridian typed up the suggested language as it was written. In cases where a word or phrase is unclear, this is marked as (word?) or with a question mark in parentheses. Other parentheses were already present in the original written comment.*

1. Forest wide is not always the right scale to look at in providing for diversity.
2. Forest plans shall provide for ecosystem/species diversity (plan for and manage)
3. Define ecosystem/species diversity objectives (standard)
4. Species diversity objective: Maintain viable populations of native and desired non native except management for desired non native shall not interfere with the maintenance of viable populations of native species. Have a high likelihood of persistence over time based on habitat quality, distribution, abundance
5. For decision making purposes: assess and monitor – ecosystem diversity, focal populations to validate ecosystem-scale assessment (establish process/criteria)
6. If impossible to maintain viability: contribute to condition of population, do not exacerbate the decline, public involvement when decide impossibility (notice and comment)
7. Criteria shall tier to the purpose and intent of the rule making-for instance species are selected based on degrees of vulnerability (at risk are given priority in selection)
8. Plan Rule should allow stand level timber inventory systems to provide a foundation for integrated multi-disciplinary analyses and landscape level plans etc. Data collected at stand level provides inventory framework to address plant diversity and is necessary to identify necessary prescriptions and actions & plant diversity and is necessary to identify prescriptions & actions that may be taken to improve protect etc.
9. Rule should factor in economic benefits of P&A diversity (i.e. big game recreation) and social benefits of viewing wildlife (birding, fishing for youth) with biological as the forest seeks a balance in species of access to public land.
10. Economic impacts of trophy species vs. broad diversity only.
11. Rule will need to target desired conditions in landscapes of habitats to achieve desired P&A diversity
12. The watershed based approach provides an integrated focus for protecting and managing plants and animal on a regional ecosystems basis as well as a species level monitoring capability. The watershed based approach is critical to providing focus for planning and protection.

13. Each plan must be based on consideration of local conditions and what level of biodiversity is appropriate, and sustainable. An increased index of biodiversity in and of itself might not be the best indicator of forest health and provision of ecosystem services.
14. Planning rule should not call for species diversity. This leads continually to paralysis. The overlying law of ESA is more than enough to work with and include. Good adaptive management for habitat will produce both plan and animal diversity. We're making this more complicated than it needs to be, and for less productive or operationally sound.
15. Include pollinators, beaver, wolves and other top level predators in consideration of biodiversity. Note: for the most part, current range utilization standards result in most flowers being consumed.
16. The rule should include PAD all USFS activities.
17. Plant and animal diversity should be ensured at the community level, on forest service land.
18. The responsible official shall analyze current and potential threats to specific plant and animal populations and diversity and devise and implement a plan to remedy or mitigate against these threats (subpopulations and district population segments
19. This rule neither expands nor changes the requirements of NFMA or of the ESA
20. This rule should promote system functions, rather than just single species protection. Identify scales of continuity of eco systems: vegetation; hydrology; range and migration; interspecies synergy and (word?) webs
21. The rule should require a process to meet the NFMA diversity requirement as follows: 1. In a collaborative process identify conservation targets that are a mix of habitat and community and species as apply to the specific forests; 2. Identify, in a collaborative process, the key attributes associated with each conservation target; 3. Identify measurable indicators for each attribute which later becomes the monitoring plan; 4. Assess current condition against this set of benchmarks and develop strategies in the plant o conserve biodiversity. Similar to R8 – ESE tool, discussed in Groups 1 & 5)
22. "Conservation" includes management actions that aim to reduce or eliminate stressors and or promote ecological processes required for the resiliency of communities, species, and other values.
23. How do you define conservation? As I think of it this is far too narrow to meet NFMA or Organic Act.
24. The rule shall prohibit the inclusion of roadless areas in the suitable timber base, and prohibit the construction of roads in roadless areas.
25. The responsible official shall devise and implement a plan to restore species that have been eliminated or reduced to non viable numbers. The responsible official shall renew and analyze all

previous forest actions that have caused the reduction of species that historically occupied areas of the forest lands.

26. The rule should be consistent with the endangered species act and in cooperation with Federal agencies mandate for compliance with that act. Avoid mandating monitoring protocol in the planning rule. There needs to be consideration of biodiversity but not at the expense of commodity and recreational use. No other resources, services or product derived from forest system lands touches the lives of more Americans nor has greater opportunity to foster citizen's support than does the opportunity to choose from the variety of recreation settings necessary to enjoy a quality recreation experience.

27. Principle National forest planning will use a "coarse-filter/fine-filter" approach to conserving plant and animal diversity. Definition: a "coarse filter/fine-filter" approach has to efficiently address ecological needs and requirements by identifying species and communities and their supporting ecological process across multiple scales of ecological organization. These include regional, migratory species, representative communities in recurring natural landscapes, (word?) communities and habitats, and selected species populations of urgent conservation concern.

## Appendix C: Restoration and Resiliency

*At the end of the roundtable, participants were given an opportunity to write specific rule language and suggestions for the rulemaking process moving forward. This appendix includes the suggested rule language offered on the topic of restoration and resiliency. Meridian typed up the suggested language as it was written. In cases where a word or phrase is unclear, this is marked as (word?) or with a question mark in parentheses. Other parentheses were already present in the original written comment.*

1. The rule should provide guidelines for restoration/resiliency as it relates to landscape scale planning and ties to local economies/biomass industry. Planners should consider the relationship between landscape scale restoration and the ties to local economies/biomass industry.
2. At USFS units where there is existing back country airstrips consider reaching out to the users to assist in maintenance and upkeep of the airstrip and immediate adjacent area, such users could be state aviation depts.
3. Restoration as an identified topic, category or core element is not appropriate for the plan rule and should say nothing about restoration.
4. Define resiliency and develop metrics, assess current resiliency, develop strategies to enhance resiliency, evaluate performance, adjust strategies.
5. Relief from stressors is to be a first consideration before active restoration for the recovery, attainment and maintenance of resilience in the face of climate change.
6. Each forest/district/region/area plan must provide for ecosystem “housekeeping” functions of the FS and provide a sufficiently broad NEPA umbrella under which most such activities can be accomplished without significant delay (ex. Invasive species early detection and rapid response (EDRR))
7. Restoration should include the science of historic (Native American) and modern science for the betterment of individual lands as well as each human interaction on the land or land activity. Restoration and resiliency should be considered and linked to all FS interactions and activities.
8. Restoration already occurs and shall not be a part of the Rule.
9. The restoration content needs to include aesthetics; we need to “restore landscapes that have vestiges of past management practices” i.e. address discordant lines, square cut block that don't fit in the landscape. Trini Juarez.
10. Help discourage the building of homes near within forest boundaries and reduce the FS responsibility for protecting such homes (parallel: homes built in flood plains often cannot be insured. Restoration of natural fire regimes is essential for restoration and resilience.
11. Eliminate these two terms from this rule. These management terms/approaches are imbedded in professionally done habitat management. We need to stop this love affair with too many terms.

12. Agree
13. Clearly delineate “resilience of what?” and “resilience to what?”
14. Alternatives for the restoration of mature and old growth must be required in call (?) forest plan. Standard: No logging of forests older than 100 years. Standard: Identify areas suitable for restoring mature and older growth. Standard: Identify wildlife component on each forest, particularly top predators that are currently missing and develop alternatives for reintroducing those species.
15. Content: Integrate fire management plans into forest plans.
16. Restoration should be put in context of differences between existing and desired conditions. Plan language should address restore degraded, sustain intact ecosystems and prevent degradation.
17. Rule should define resiliency as: Resilient ecosystems are those that retain key ecological attributes, such as food webs and dynamic regimes that can effectively respond to changing conditions.
18. “Principle” National forest should be managed for resiliency.
19. “Content” Ecological restoration may be needed to shift ecosystems toward a more resilient condition.
20. “Process” ecosystem management and restoration is addressed by applying principles of adaptive mgmt. (i.e. management is a series of testable hypotheses.)
21. Passive restoration is an essential first step in all areas needing restoration.
22. Ecological restoration includes passive restoration: i.e. the removal of stressors that would allow a system to revert to a desired condition.
23. Use spatial analysis in collaboration processes to identify restoration zone of agreements.
24. Protection and proper management are a requirement for restoration and resiliency of the forests. A watershed-based approach toward protection and management allows incorporation of a broad scaled approach along with a species approach to monitoring in order to provide a framework for restoration and resiliency.
25. Develop a standard for defining, assessing, and measuring resilience in the context of ecological sustainability, climate change, and wildlife viability.
26. Require each forest to assess the contribution of anthropogenic stressors on the capacity of ecosystems to respond (resilient) to change, particularly climate change, and develop alternatives through NEPA that enable ecosystems to adapt.



27. Encourage larger scale assessments to look at current condition in watershed/basin/ecoregion in which the management unit or units function (think economy of scale and “all lands” USFS/DOI/Non Federal
28. Require that each forest include a broad suite of restoration tools tailored to specific restoration needs including the application of passive (remove stressors) and active restoration approaches.
29. Consider the restoration of beaver throughout historic habitat, as a primary means of healing incised streams and hydrological engineers/riparian restoration/extension.
30. Require each forest to base restoration on concepts of ecological integrity (species, processes, functions) whereby areas of low integrity are restored to high integrity based on reference conditions or desired states and conditions.
31. The rule should require each forest to conduct a restoration needs analysis. Define “restoration” to be clear it is informed by historical conditions but not requiring a return to those conditions. Allows for forests where restoration is not needed to state that in their assessment. Require a collaborative process to review the science and develop the restoration needs assessment in a stakeholder process.
32. Restoration is future oriented; can be about ecosystem services provided from restored forests.
33. Restoration is not an end in itself. It’s a tool to achieve other goals. Keep the rule simple. Non need to address restoration or resiliency in the rule (talk about in the preamble)

## Appendix D: Recreation and Economics

*At the end of the roundtable, participants were given an opportunity to write specific rule language and suggestions for the rulemaking process moving forward. This appendix includes the suggested rule language offered on the topic of recreation and economics. Participants in this group organized their written suggestions under the headings of "Consider," "Require," and "Analyze." Meridian typed up the suggested language as it was written. In cases where a word or phrase is unclear, this is marked as (word?) or with a question mark in parentheses. Other parentheses were already present in the original written comment.*

### **Consider**

1. Consider (and analyze) the potential for new backcountry airstrips within the Forest as the science allows it.
2. Consider that it is not the Forest Service's job to establish or maintain viable (vibrant) economic communities. At most, the FS should consider the relationship between the plan and local economies. This can/should be done during the EIS process. It does not need to be in the planning rule. (Discuss it in the preamble)
3. The favorable economic impact recreational uses will have on local economies adjacent to FS lands.
4. Consider that various recreational uses have different impacts on FS lands and will need to be managed differentially, according to those impacts and their relation to various other management goals.
5. Expand topic area in rule to "sustainable recreation and amenity values" consider adding another substantive principle that covers "sustainable recreation and amenity values on "human influence and values".
6. Add "place" as an overarching constraint (?): we need to strengthen use of place based planning to capture people's emotional attachment to landscapes
7. We have just released the framework for sustainable recreation—we need to make sure that the rule complements the sustainable recreation principles; rule language responds to SR Framework focus areas.
8. In lieu of collaboratively derived landscape character goals, use recreation opportunity spectrum (ROS) in helping define desired landscape character; i.e. "Semi-primitive condition" The more preferable path is to provide guidance that causes desired landscape character to be derived at a local level, for specific "places".
9. When considering contributions to local economies, consider all ecosystem services, including the non-market benefits to communities (use of contingent valuation and or willingness to pay analyses to quantify value of, for example, potable H2O).

10. Recreation must not compromise ecosystem functions, wildlife habitat. Recreation must be sustainable.
11. Collaboratively identify the niche, or rolls/contributions of a Forest.
12. Economic conditions of the surrounding communities shall be considered.
13. Recreation/Economic contributions should only be called out in the Rule to the extent other resources and values also have independent treatment. Otherwise it suggests that the Rule is modifying NFMA.
14. To the extent the Rule does address a process or characteristics to be considered in Forest level planning similar systems should be applied to all. In that case, no need for separate analytical tools for recreation. The kinds of things I see on other sheets-if used-would have greater reach and should be used at the larger scale
15. Recreation increase will develop a need for the allowance for the cleanup and removal of mechanical devices (cars, bicycles or trash) in the forest as well as wilderness.

### *Require*

1. To be in compliance with the primary directive of protection, it is critical to protect the forested mountain ridges from industrial development. The forested mountain ridges provide interception of rainfall for water to gently reach the ground. This provides for groundwater recharge and also reduces the quantity and velocity of surface runoff. Groundwater and surface water are on integral unit. The groundwater sustains wetlands and provides water to streams during times of drought. The forested areas are critical to sustain headwaters, which function to protect aquatic organisms at the base of the food chain. The U.S. forests are the last stronghold against destruction of our watersheds.
2. Drilling is allowed due to mineral rights owned by private corporations. However, it is critical to require a MSDS list of fluids used in drilling. It is also critical to strictly control drilling tailings and wastewater because the Marcellus shale is radioactive.
3. Forest Plans shall include assessments of recreation uses that take into account existing travel management plans.
4. Forest Plans shall include recreation management that adheres to tenets of actively managed recreation. Meaning minimum standards of maintenance shall be established, monitored, enforced and adapted according to current status.
5. Forest Plans must adhere to existing recreation use statutes, including directives from the multiple use sustained yield act.
6. Forest Plans must provide for public input in the development of recreation management strategies. This shall include at least two public meeting with a minimum of 30 days notice.

Notice must be provided through at least two news outlets outside of the Forest Service (e. newspaper, PSA, etc)

7. An Aquatic and Riparian conservation strategy with the elements set forth in e.g. the RG ARCS (2008). (RMA, Key Watersheds, Restoration, Objectives watershed scale etc.)
8. Current and best available science (site specific where available) in determining what recreational uses will be allowed.
9. Require forests to analyze geologic resources prior to preparing forest plans (minerals, oil & gas, geothermal, etc)
10. Planning rule should affirm that recreation is a major & growing use of forest service lands.
11. Planning for recreation should be integrated into forest planning at large.
12. The planning rule should acknowledge that a variety of recreational settings and experiences opportunities are necessary to provide quality outdoor and wildland recreation to meet the needs of a culturally diverse American public. General guidance similar to that provided in the 1982 planning rule (36 CCFR 219.21) required that “to the degree consistent with needs and demands for all major resources, a broad spectrum of forest and rangeland related outdoor recreation opportunities shall be provided for in each alternative” should be included. Also the procedural requirements in paragraph 1-6 as identified in the 1982 planning rule should also include: A (1) The physical and biological characteristics that make land suitable for providing a broad spectrum of recreation opportunities A (2) The recreational preferences of user groups and the setting need to provide quality recreation opportunity; A (3) Recreation opportunities on the national forest system lands. (B) The supply of developed recreational facilities to meet present and future demands (C) alternatives shall include consideration of physical facilities, regulation of use and recreation opportunities responsive to current and anticipated user demands.
13. At USFS units where there are existing back country airstrips, the Forest Plan should include/provide for a plan to continue access and use of the strip, monitor usage, collaborate with organizations with an interest in the airstrip to include State Aviation Departments, State Pilots Associations, and natural organizations such as the recreational aviation foundation and the aircraft owners and pilots association.
14. The plan should require each forest to ensure that recreation uses include land, water, and air.

### *Analyze*

1. Impact of regulations on small businesses using the Regulations Flexibility Act.
2. Analyze recreational user conflicts in order to manage in a manner that will reduce these conflicts
3. Build trust with Native American communities by encouraging their participation in the forest planning process and by managing forests to meet their needs. Two examples include using

Native American crews for cultural heritage surveys, and setting aside areas for burial lands. Both of these will encourage participation in the process (forest planning) and help to build trust with these communities.

4. Economic contribution of commodities produced in the forests (minerals, oil & gas, etc.) and consider this in the forest plan.
5. Recreational use data utilizing strict adherence to NEPA, SBRFA, and uniform management practices.

## Appendix E: The Role of Science

*At the end of the roundtable, participants were given an opportunity to write specific rule language and suggestions for the rulemaking process moving forward. This appendix includes the suggested rule language offered on the role of science. Meridian typed up the suggested language as it was written. In cases where a word or phrase is unclear, this is marked as (word?) or with a question mark in parentheses. Other parentheses were already present in the original written comment.*

1. Prefer that the term “Best Available Science” be left out. If it is included- clearly define. Including “BAS does not require the planning unit to generate new data simply because it is obtainable.”
2. Content: Science shall (must) be used to inform decision-making. This science would include the identification of uncertainties.
3. We want the Rule to utilize (in equal portions) 1. Modern Science-today’s most accurate, best available. 2. Past knowledge and science- what did or did not work in the past
3. Generational science- special interest groups over multiple generations. 4. Historical Science-including Native American input on the land.
4. Use science/technology to assess uncertainties and develop coordinated adaptive management process regionally.
5. Science should be allowed to include different cultural and local parameters of definition and description. While the Western scientific method mode would be the prevailing one, at least four different spheres of impact should, wherever possible, be included in the scientific team: Research (word?) done apart from the local conditions of the specific National Forest. Local scientific investigation (?) Tribal Wisdom and local lore by “people of the forest” who have lived on the land for centuries.
6. To ensure that the latest and most relevant scientific information is utilized to guide the implantation of and any subsequent revisions or amendments, to Forest Plans, forests (regions) will hold biennial Science forums. The objective of these forums will be: 1. Identify important or emerging issues that bear on Plan implementation. 2. Provide an outlet and established venue for reviewing and synthesizing monitoring data relevant to evaluating Plan assumptions or outcomes. 3. Provide an opportunity for the public to be informed on Plan issues, new science, and results of monitoring efforts. 4. Retarget monitoring.
7. Consider leveraging monitoring volunteers through science ombuds people at the level of forest clusters; the ombuds person could help translate science; encourage FS staff to develop citizen-friendly data gathering.
8. Invite, encourage and support citizen science, collaborative monitoring, citizen input on elements needing to be monitored, and independently-gather monitoring data.

9. Each plan should provide for development and maintenance of public outreach, particularly to schools and other educational organizations, on the role of science in forest/grasslands management.
10. Require each forest to apply Best Available Science in determining ecosystem/species thresholds for ensuring maintenance of wildlife ucab (word?) /persistence and ecological forecasting in response to stressors and climate change.
11. Forest managers should be encouraged/rewarded for linking management to Best Science and res. Exp. Stations should be encouraged to work with units in developing testable hypotheses and effectiveness monitoring protocols.
12. Peer Review of plans is not necessary.
13. Characterizing uncertainty: suggest following approach of the National synthesis and Assessment report (climate change, mitigation, etc.)
14. Sound Science Means: Peer Reviewed, Current, Transparency
15. Science shall be a tool used in the decision making process, but not the final answer.
16. Science should include "social" sciences.
17. Science/analysis must include economic impact and science should include recreational impact
18. If it's objective and repeatable, we'll consider it" (sup. Allen Rowley referring to independently-gathered monitoring and survey data)
19. "Principle" = "adaptive mgmt"= implies that management can be articulated as a series of testable hypotheses.
20. Content: Monitoring & evaluation reflects testable hypotheses that are periodically evaluated and reported
21. Process: Stakeholders will assist in the development of the monitoring and evaluation strategies. Identify and prioritize questions, means of measurement, forms of reporting, etc.
22. I don't think we need to address "the Role of Science". We need to focus on building a framework for planning and decision making.
23. The definition of "Best Science" should be broadened and defined to include information other than that produced by scientific research. This can include cultural wisdom, expert opinion, historic records, models, and other sources. The type of information used should be based on the question asked and the risks associated with levels of certainty of that source of information should be assessed.

## Appendix F: Changing Conditions

*At the end of the roundtable, participants were given an opportunity to write specific rule language and suggestions for the rulemaking process moving forward. This appendix includes the suggested rule language offered on the topic of changing conditions. Meridian typed up the suggested language as it was written. In cases where a word or phrase is unclear, this is marked as (word?) or with a question mark in parentheses. Other parentheses were already present in the original written comment.*

1. Integrate forest planning with the cohesive wildfire management strategy (FLAME Act of 2008 or 2009)
2. Management that allows for flexibility within changing conditions grows out of and is integral to a collaborative process with a variety of stakeholders who form a team with forest personnel in the vision and objectives process. The Management of the National forest and the surrounding area included in the landscape perspective.
3. Managing lands and water<sup>4</sup> in the face of changing conditions
4. Water has not been stressed enough. Simply put without water, no trees, plants, animals = NO Forest! Watershed health is vital. Federal lands are key “holders” of drinking water for many communities/cities, and with facing changing conditions which in some places would seem to have reduced “rainfall”/water, how will this be addressed.
5. Climate change – would be very careful about the statutory authority to use this as a principal. Would eliminate this term
6. Adaptive management: have the rule call for flexibility to use adaptive management at the project level not the Forest Plan. You’ll never get the Plan approved or legally defensible as NEPA compliant if you call for it at Forest Plan level. The adaptive management flexibility at the project level will be positive cumulative effects within the plan. Have the rule call for Forest Plans to review total adaptive management actions (all projects) every three-four years. Supervisor would then make recommendations for amendment or omission to plan if deemed necessary. Make absolutely certain of the legal defensibility adaptive management.
7. Changing Conditions analysis assessed in Rule. Must look at emerging demographics and outdoor recreation trends in market zones of NFS lands. Consider roles of NFS in supporting-nature/cultural resource based tourism and benefit for job and viable communities in influence zone of NFS trends (?)...enhances future stewards for forest.
8. Changing conditions (rule language): need to assess how forests can contribute to “outdoor gurus” and living classrooms to enhance social conditions of “childhood/adult obesity- lack of contact with nature – OPEN SPACE. Public access- enhanced facilities and partnership w/ private /NOE to provide on NFS lands allocation for permit areas for this to occur.



9. NFS lands revolving as prime- conserved protected areas in USA. Now to sustain recreation use/enjoyment into 15 year planning horizon for sustained quality with enhanced capacity.
10. Develop a standard for the application of down-scaled climate projections and ecological forecasting in relation to ecological sustainability, natural resources, watershed protection, and wildlife viability for each planning process.
11. Each forest is required to make use of best science (use 2000 Rule definition here) in ecological forecasting and climate change planning, including assessments of anthropogenic stressors on the productive capacity and adaptability of ecosystems and the species within.
12. Each forest is required to conduct a conservation assessment to identify areas of potential refugia and areas at risk for maintaining viable populations of wildlife, including areas of high ecological integrity and wildlife corridors to better ensure maintenance of viable populations in hanging conditions.
13. Acknowledge the predicted climate change consequences for rangeland throughout the intermountain and southwest regions and the options for regaining, enhancing, maintaining resilience and ecosystem functions on rangelands in light of climate change.
14. Planning Rule should require forest plans to identify fire regimes on the Forest.
15. No! Does not belong at that scale and conditions will change more quickly than the forest plan. Don't want tied to that schedule. I use a tiered approach cover fire at a mid tier but be careful on linking only to the regime.
16. Planning rule should require forest plans to pre plan for inevitable disturbances.
17. Forest plans will be more flexible and more easily adaptable if they are not made unnecessarily complicated. Consider a tiered system of planning where the NFMQA plan is simple and broad scale, and resource specific plans get into more detail. This will not only promote flexibility; it will help direct public participation to the interest of individual members of the public and interest groups.
18. Planning rule should promote innovation in planning.
19. Set goals for planning processes to be limited in size (#of pages) and duration (no more than 18 mos.)
20. The planning shall require the protection areas identified as having the highest ecological integrity (i.e. Roadless and mature forests) to assure (?) resilience in changing conditions.
21. The planning Rule shall not provide exceptions to NEPA for natural disturbances (please clarify...hurricanes, forest fires)
22. Forest plan decisions should not be exempt from NEPA. (cat-x's are not a plan decision)

23. Plan amendments are prohibited for individual projects.
24. One constancy in the face in the force of change is the watershed. A watershed approach allows management and monitoring at the regional ecosystem scale, and also allows monitoring at the species scale. A watershed based approach will protect all forested ridges, thereby protecting groundwater recharge and headwater areas, which are critical to the basis of the food chain for all downstream aquatic organisms.

## Appendix G: Monitoring

*At the end of the roundtable, participants were given an opportunity to write specific rule language and suggestions for the rulemaking process moving forward. This appendix includes the suggested rule language offered on monitoring. Meridian typed up the suggested language as it was written. In cases where a word or phrase is unclear, this is marked as (word?) or with a question mark in parentheses. Other parentheses were already present in the original written comment.*

1. Wherever possible, a monitoring component is to be included for each item within the management plan and such component shall include a historical survey, beginning statutes, a collaborative process, and be placed within a global (larger) perspective.
2. Close the monitoring/implementation loop: implement....monitor.....assess conditions.....adapt management as needed to achieve desired conditions.....monitor.....assess.
3. Monitoring must include commercial and recreational stakeholders.
4. "In revising a forest plan, the planning unit shall include a plan for monitoring the conditions within the unit, and whether the forest is moving toward the desired conditions, could also say "meeting the stated objectives". The monitoring plan should include a proposed cycle for monitoring various resources.
5. "In revising a forest plan the planning unit shall include the types of monitoring that should be included in projects undertaken to implement the forest plan"
6. "Monitoring"= Research, inventory, plan monitoring, project monitoring, FS "program monitoring element"(define terms and overlap)
7. Monitoring of implementation of plan should be required as an integral part of projects implementing the plan...not something that comes "out of the project"
8. Plans should require consistent collection/sharing/accessibility of monitoring data/results (for agency, partners, landowners, & public)
9. Rule should lay out monitoring framework (what, not how) addressing: effectiveness, implementation, validation. Prioritizing hierarchy of monitoring needs based on spatial & temporal factors related to 1604g3c in NFMA. Use sampling schemes to reduce redundancy, increase efficiency. Include requirements for each NF to prep Man. Report annually. Use other sources of info (university's NGO's). Have research prepare "status of our knowledge" reports on key questions.
10. Use a watershed based approach to have a monitoring plan or an ecosystem or regional scale. The USGS has already generated a national hydrologic index for watershed reference. The EPA is using the watershed-based approach. The USFS needs to collaborate with these other agencies and share watershed monitoring data. (see EPA webpage and click zip code)

11. USFS needs to facilitate incorporation of volunteer-generated data, especially associated with stream monitoring (save our streams program) extending from the headwaters in our national forests to their extent downstream (such as Chesapeake Bay). The health of the watershed's headwaters and aquatic organisms is directly related to the health of the forest community. (groups monitoring include Isaac Walton, Trout Unlimited)
12. Monitoring should be tied to an objective within the management plan thus making it give more (?) to the plan and furthering its goals and objectives.
13. The rule should include Native American history as well as the current observations as an equal with science.
14. Monitoring must be required for birds of conservation concern as identified by the US fish and wildlife service.
15. No project may go forward unless funds have been set aside to pay for required monitoring.
16. 15% (negotiable) of a project budget shall be allocated solely for project monitoring.
17. Planning rule should require monitoring elements to be developed near the start of the planning process, right after goals and conservation targets are selected, and key attributes and indicators identified.
18. The rule should allow for, but not require, multiparty monitoring to emerge from collaborative process and to leverage partnerships and data across landscapes.
19. Encourage, support and provide training for volunteer and collaborative contributions to monitoring.
20. Monitoring of management actions that are of uncertain or contentious consequences are a priority.

## Appendix H: Other Topics (Wild Card-What Else?)

*At the end of the roundtable, participants were given an opportunity to write specific rule language and suggestions for the rulemaking process moving forward. This appendix includes the suggested rule language on issues besides the six topics discussed in depth at the roundtable. Meridian typed up the suggested language as it was written. In cases where a word or phrase is unclear, this is marked as (word?) or with a question mark in parentheses. Other parentheses were already present in the original written comment.*

1. There needs to be consideration of biodiversity objectives but not at the expense of commodity and recreational use – no other resource, service or product derived from forest system lands touches the lives of more Americans nor has greater opportunity to choose from the variety of recreation settings necessary to enjoy a quality recreation experience.
2. I applaud the forest service for convening this process, but there is a real danger that it will lead to further complicating what is already a too complicated and complex a process. Don't lose sight of the nonprofessional members of the public who may want to be involved at the "vision" scale but are not interested or sufficiently knowledgeable about the details. Keep the NFMA plans themselves simple and accessible to the general public.
3. Preamble or rule should speak to the full spectrum of what multiple use encompasses. This document (old and latest attempts) focuses and resonates as multiple uses is all about American coming to the forecasts and utilizing the various resources and amenities. This, however, is 50% of the message of multiple use and the agency is really missing delivering 50% of the message the total country needs to hear. While this may not seem appropriate for inclusion in a planning rule I would ask that the agency recognize it's an obligation to help our nation understand why multiple use is so appropriate (legally sharing the landscape).
4. The rule should require the protection of mountain tops from industrial development.
5. Develop a petition process for revision of plans through amendments so that the public can alert forests to the need to address elements the forest is ignoring, avoiding, or hasn't considered.
6. Establish a system of reference areas: relatively unimpacted habitats which are impacted by uses elsewhere in the forest. (Note: this is being done in the Dixie, Fishlake, and Monti – LaSal NFs; is not a bureaucratic burden as are RNA's)
7. Amend Forest plans by sector acc. To new information, untoward consequences, new socio-economic options—but all within forest desired conditions.
8. Elevate the value of walking- for health, discourage obesity, for environmental protection. Require all forests to produce a map of walking trails (similar to what the NPS does- informing visitors of easy, family, challenging, etc. hikes) Note: walking is being lost amid the extraordinary attention to motorized recreation.

9. For the first time, acknowledge the extent of livestock grazes and consider options for obtaining landscapes free of livestock grazing.
10. A priority for monitoring will be livestock free areas in comparison to livestock grazed areas.
11. In putting the proposed rule out, be clear as to the nature of the environmental analysis that has been/will be done to support the rule. Ask for comment on the scope/detail of that analysis.
12. The local national forest shall establish a broadly based collaboration team prior to the development of the management plan. The collaboration team shall be an ongoing, but fluid interim membership, Team with which the forest staff shall work with on a regular basis and through which the developed management plan will be accountable in terms all lands approach. This collaboration team shall work from start to finish in the development of the management plan and shall work with the national forest staff in collaborative implementation. The management plan shall include "all-lands", landscape component(s) that match those g (?) to the national forest itself.
13. The rule should allow for the large need for plots f ground to be involved in stewardship for short term ( 5 to 10 years) and long term (25 to 100 years) to help science with data, practice, and a increase in ability for animal, plant growth resiliency.
14. The responsible official shall devise and implement a plan to restore species that have been eliminated or reduced to non viable numbers to areas within each national forest from which they have been eliminated or reduced.
15. The responsible official shall review and analyze all previous forest actions that have directly or indirectly caused the extirpation or reduction of species that historically occupied those areas of the forest lands.
16. Collaboration between forest as well as all stakeholder especially with regards to information sharing and data, what works, what doesn't so the "we" don't repeat the same mistakes.
17. Watershed framework is to be one of the organizing principles of the management plant it shall include both an internal (within the national forest) and an external (downstream from the forest and any streams that are upstream of the forest) component. Management (mainly by others) of the external component shall be considered integral to the management plan. Water quality and quantity shall be included as well as the essential inter relational between water and the health of the forest.
18. Planning shall work to maintain (?) intact watershed and prioritize those in need of restoration. New planning rule has the opportunity to prioritize watershed issues in a way that lines up to the fundamental role our national forests have been intended to play. Water going back to the organic act.
19. Planning rule needs a "pithy" preamble that briefly describes why the F.S. does planning; creating a social contract with stakeholders based on F.S.'s unique mission, etc.

20. Impossible to do or manage. Inconsistent with ability to respond to changing conditions
21. Planning rule must require the Forest Service to identify areas suitable for protection to mitigate climate change impacts. Each forest must have a % of the forest in protected status and be managed for mature and older growth.
22. Standard: Logging of mature forests over 100 years is prohibited and in areas where there is a lack of mature forest part of the landscape must be allowed to reach mature condition.
23. Too prescriptive at rule level. This is really for congress not FS
24. Rule should put in place comparable (across forests) “web 2.0” tools to include broader participation in forest plan development (e-collaboration) (process to expand content)
25. 1982 rule includes a section on minerals- at minimum keep that in the new rule.
26. Use the media resources - T.V. local access channels for everything.
27. Process note: keep your audience in mind- who uses the planning rule and how do they use it. In the real world, not ideally.
28. Process should include property owner surrounding the forest. Emerge them as stakeholders.
29. Content: Give guidance that encourages collaboration without fearing FACA violations (YES!)
30. The public repeatedly expressed concern about having money appropriated (budget) to implement the rules and plan deserves to be reflected somewhere toward the front. We want congress to see the public’s concern expressed – we know this is not a budget document- but too much public effort in the development of this document and public sentiment/concerns have been stated loud and clear they should not be ignored.
31. Water must remain as long as naturally possible on the forest, even if that means native ecosystem vegetation uses it (which it will). Note: the forests must not be ditched delivery systems of water off the forests to communities.
32. Less is more in updating planning rule- reducing complexity.
33. To endure, this rule must establish a workable, affordable framework to forest plans and projects adaptive, flexible framework.
34. There is a broad range of changes to consider; keep current topics like “climate change” out of the rule they are just examples – could be in preamble.
35. Timber suitability, suitability of uses and availability decisions (for oil & gas & minerals have not been addressed so far) AGREE!

36. Rule should say: “The suitability of the land management unit for various uses shall be determined as appropriate. This includes the requirement for determining their suitability (as defined in subpart (x), suitability for grazing (defined at subpart (x) suitability for carbon sequestration/storage (defined in subpart (x), and other significant uses as they are developed. This also includes the availability decision for minerals management (oil, gas, hardrock and other minerals) or defined at subpart (x).
37. Establish a time limit. If you can't finish in a year, you are done anyway.
38. Less is more; keep it simple and sweet.
39. The forest service must also address the issue of timber suitability and harvest on unsuitable lands (in conformance with NFMA) in this restoration focused environment to ensure that overall forest harvest meets the long term sustained yield provisions of NFMA. Recommend language to address the analysis of wild fire use for resource benefits in areas unsuitable for timber harvest to ensure both wildland fire use and reduce the use of what would already be below cost harvest operations on unsuitable lands. Language should also address the integration of the various suitability determinations to ensure examination of, and creation of forest plan alternatives, that look at the possible mixes of timber harvest, wildland fire use and carbon sequestration/storage on applicable and appropriate units.
40. Each forest is required to conduct an assessment (process) of the carbon storage (mitigation) potential of ecosystems and to analyze a range of alternatives (NEPA) to optimize long-term carbon sequestration and storage potential of ecosystems.
41. Each forest is required to conduct an energy life cycle analysis of emissions rising from land use activities (forestry, AF) and to (process) analyze a range of alternatives under NEPA- This includes logging, livestock, biomass, energy development, and transportation
42. Planning process: Spatially explicit scenario planning is supported by current GIS-based decision support tools; enabling planning to move towards an ongoing dynamic process; always based on current data and knowledge.



## Appendix I: Input Regarding the Next Roundtable and Updating the Blog

*At the end of the roundtable, participants were given an opportunity to write specific rule language and suggestions for the rulemaking process moving forward. This appendix includes suggestions for future collaborative efforts for this rulemaking. Meridian typed up the suggested language as it was written. In cases where a word or phrase is unclear, this is marked as (word?) or with a question mark in parentheses. Other parentheses were already present in the original written comment.*

### Future Collaboration: July Meeting

1. Please consider having the meeting out West (e.g. Boise, Denver, SLC)
2. Somewhere west would be good.
3. July is not the best month. Folks are on vacation and doing fieldwork.
4. Explain why as well as what. Describe how ideas were either 1) used and converted to rule language, or 2) not used (consider offering other appropriate venues for addressing issues not treated in the planning rule.
5. Make sure discussions are open to all subjects (at RT #3, some topics seemed “off-the table” (i.e., water and climate change)
6. Informational Session at beginning. Keep people focused on purpose of the rule, not on what they think the purpose is.
7. Less is more keep it simple and sweet.
8. West is good, but D.C. ok for many.
9. Random reports back not best way to deliver information from breakouts; needs more structure
10. Have rule-writing team formulate questions based on actual quandaries they are having.
11. By the July RT, an early draft or as much of the rule as possible should be written and then RT would spend its time reacting to and further developing the Rule!
12. Please outreach to Hispanic leadership to ensure their participation in July. Trin Juarez F.S. 707.562.8844.
13. Involve regional tourism groups.
14. Get meeting materials out sooner rather than later to give participants time to digest.
15. Diversity: Local educational college and university; chambers of commerce, community based organizations, local churches etc.

16. Reach out to students! It will increase their interest- the FS future depends on their interest.
17. Yes! Include draft language as well as alternative draft language. Include beginning effects analysis.
18. Hold this roundtable in the West – perhaps Denver or SLC.
19. July is a tough time given vacations; need to find a way for existing participants to weigh in without attending.
20. Between now and July look for gaps in stakeholder group involvement and target/encourage those entities to be involved
21. Should have some draft statement/concepts for discussion points- pro/con dialogue for analysis.
22. More direction/guidance from DC as to collaboration/consulting with tribal entities.
23. Re-emphasize in July how these summary comments were used to help create the rule compared to the comments given during the NOI public comment period.
24. Try and bring more water/watershed professionals either internally or externally (or both) so that they can share that aspect
25. The July meeting should be known as the “Down in the Weeds” Roundtable: FS should share draft language and seek robust discussion on the words on the page: why they work, why they don’t, why they might....This would allow for good conversation on the kinds of details we would/will submit as comments on the draft rule ahead of the draft rule comment period.
26. Role of State Foresters
27. Breakouts similar to 3<sup>rd</sup> roundtable
28. Fire should be a major topic of discussion (50% of budget)
29. Provide Meta-data summary of baseline analysis and database systems concerning natural resources on and around NFS lands for use by FS and stakeholders in drafting of plans.
30. Private landowners will be involved in the design and decision making process
31. FS internal test group before and at the meeting (and part of design of meeting).
32. Meeting Location: setting is important. Elements like “isolation from other distractions” (no big hotel with coffee shops, restaurants, long hallways to wander off to, etc. are conducive to productive collaboration) Break out rooms close by, coffee in the hallway, bathrooms nearby all keep people in one location together and talking together. Even ceiling height can make a difference. Big hotel ballrooms with high ceiling make people think that chit-chat with their

neighbors will go unnoticed. Lower height ceilings cut down on this and keep people focused on the events at hand.

33. Some great ideas were shared that don't necessarily need to be incorporated into the Rule. It would help to pull these ideas together 1) so folks know they didn't fall through the cracks & 2) to highlight where these ideas are all ready being implemented or perhaps having a forest district or region adopt one as a pilot & actually implement it. This not only demonstrates that we heard people but also indicates a willingness to act on those ideas. If you decide to pursue let me know & I will help (Deb Whitall)

24. When explaining the draft it would be helpful to use a variety of venues and language styles. Most people won't understand the ""ar?" rule language that comes out in the draft.

26. National Roundtable to be located in Nation's Capital! Please hold within DC or within Beltway!

### **Future Collaboration: Blog And Web**

1. Please consider having a collaboration meeting with National Hispanic leaders to see if themes resonate with Hispanic community; engage them at planning rule development stage, or at draft rule review stage (Trin Juarez)
2. Use e-collaboration tools under development by USFS (e.g. CARA -- new NEPA analysis tool in Forest Service).
3. Rule should clarify the role of FACA in electronic input processes.
4. It would be helpful to provide a list of participants that includes their areas of interest and or job and their contact information. This should be a voluntary list so that the participants who choose not to be listed can have their wishes honored.
5. Be very careful about the agency's capacity to verify, US authenticity of people providing input. Foreign nations should not be commenting or getting legal standing through electronic input unless it is federal land under a UN treaty such as Yellowstone Park.
6. Ask for suggested specific wording on the web, like you are doing this afternoon.
7. Build off other groups' web presence. Could use Outdoor Nation as an example. They have a robust web presence and we could use their site for outreach – use it to advertise Forest Service blog and increase participation.
8. Require people to identify who they are and what group they are with. Or at least provide this as an optional thing people can do.
9. Email updates would be a good outreach and update tool for many people. Then people don't have to keep checking the website for updates. This is better than RSS feeds because many people are not comfortable with that technology. Or do both email updates and RSS feeds.

10. Use more traditional tools too. Could planning rule information and meetings be shared through CSPAN?

11. You can't just rely on new social media. Many individuals and groups don't use it.

12. Other tools to consider include the CARA tool (new NEPA analysis tool in Forest Service), and making a tutorial on how to submit formal comments. Other potential tools are creating videos or podcasts as educational materials – i.e. What is a Planning Rule?, or giving the rationale for why we are taking a particular approach in the rule.

13. Concerned that all these new tools create a process that's harder to manage. If you are an interested group or citizen you have much more to keep track of and stay engaged with.

14. There are new social media tools available, but Forest Service needs to make it easy and straight forward to use these tools. Connect with tools that people are already comfortable using (e.g. email). Make it clear and easy for the tools to connect.