HELENA-LEWIS AND CLARK NATIONAL FOREST LAND MANAGEMENT PLAN REVISION

Reviewing Officer Response to Eligible Objections

USDA Forest Service, Northern Region

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Contents

Introduction

The objection issues raised cover a broad range of resource management and public use concerns. However, many were similar enough to consolidate under specific topic areas. To facilitate my review and this response to the issues raised, I have grouped similar issues under general resource headings with one response provided for all objectors. Some, but not all proposed improvements to the plan (referred to as remedies in the following sections) are included as examples of what objectors provided for each issue. In some cases, objectors did not provide remedies.

The land management plan operates under the legal framework of the Multiple Use Sustained Yield Act, which requires sustainable, integrated resource management of the Forest in the context of the broader landscape. My review considers this, and Forest Service obligations under the National Forest Management Act and its implementation regulations at 36 CFR 219, the Endangered Species Act, and other related laws, regulation, and policy.

My review resulted in some instructions for Forest Supervisor Avey, as the responsible official for the land management plan. I found that for most issues, review of the final environmental impact statement (final EIS), the land management plan (plan), the draft record of decision, and associated planning record established that the responsible official sufficiently addressed the objection issues and complied with current law, regulation, and policy. The instructions provided are summarized at the end of the response.

For ease of discussion throughout this document, the Helena-Lewis and Clark National Forest will be referred to as "the Forest" when referencing the administrative unit, the staff that administers the unit, or the National Forest System lands within the unit. The 2020 Land Management Plan may be referred to as the plan, land management plan, or revised plan depending on the context of the discussion

Note all references to Council on Environmental Quality regulations refer to the 1978 version as they were current at the time the programmatic NEPA review was conducted.

The following acronyms are used in this document:

- CEQ – Council on Environmental Quality
- CFR – Code of Federal Regulations
- EIS – environmental impact statement
- FR – Federal Register
- FSH – Forest Service Handbook
- FSM – Forest Service Manual
- NEPA – National Environmental Policy Act
- USC – United States Code

National Environmental Policy Act (NEPA)

Programmatic NEPA Review

Objectors contend the effects analysis is inadequate.

Objectors' Proposed Remedies

Proposed remedies included revising the analysis or choosing different alternatives. See resource specific objection issue summaries for additional proposed remedies.

Background

The concept of "programmatic" NEPA reviews is imbedded in the Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508) that address analyses of "broad actions" and the tiering process. In 2014, the Council on Environmental Quality issued guidance for the effective use of programmatic NEPA reviews (CEQ, 2014) . The final EIS for the land management plan fits under “III. When to Use a Programmatic and Tiered NEPA Review” as a “decision to adopt formal plans, such as documents that guide or constrain alternative uses of Federal resources, upon which future agency actions will be based”.

As described in the planning regulations at 36 CFR 219.2, Forest Service planning occurs at three levels—national strategic planning, National Forest System unit planning, and project or activity planning. The development of this plan occurs at the unit level of planning. It results in a land management plan that provides a framework for integrated resource management and for guiding project and activity decisionmaking on the Forest. The plan does not authorize projects or activities or commit the Forest Service to take action. However, the plan may constrain the Agency from authorizing or carrying out projects and activities, or the manner in which they may occur. Implementation of the plan occurs at the third level of Agency planning, project and activity planning, consistent with the land management plan and supported with site-specific NEPA effects analysis. Although, all three levels of planning are subject to environmental review under the NEPA, the depth and detail of effects that can be described varies based on the nature of the decision associated with the planning level.

Response

Allegations of insufficient effects analysis, failure to describe effects of individual plan components, and inadequate assessment of baseline conditions are woven through many of the objections. Although I review and respond to specific resource area objections throughout this response, I wanted to provide the context for my review of this programmatic level analysis.

As indicated by the 2014 the Council on Environmental Quality guidance, programmatic NEPA reviews address the general environmental issues relating to broad decisions, such as those establishing the land management plan, and can effectively frame the scope of subsequent site- and project-specific Federal actions. Because impacts in a programmatic NEPA review typically concern environmental effects over a large geographic and/or time horizon, the depth and detail in programmatic analyses reflects the major broad and general impacts that might result from making broad programmatic decisions. The programmatic NEPA review of this land management plan addresses the broad environmental consequences relevant to guiding future project and activity decisionmaking. This includes constraints on the design of management activities to minimize the risk of adverse effects to the various Forest resources. The final EIS is clear about the context of the decision being made and how it relates to the context and intensity of any potential impacts (sections 1.1, 1.6, 2.6, 3.1, and in the environmental consequence description of individual resource sections). Section 3.1 indicates that the environmental consequences are assessed on a large scale in contrast to analyses conducted for site-specific projects.

The location, timing, and design of activities to be authorized under this plan are unknown at this time. Thus, the final EIS does not predict what will happen each time individual plan components are implemented. The environmental effects of individual projects will depend on the implementation of each project, the environmental conditions at each project location, and the application of the full integrated suite of plan components in each site-specific case. Thus, effects are generally described as the expected outcomes of the management guidance based on scientific information, monitoring implementation of the 1986 plans, the assessment, and the professional experience of the interdisciplinary team.

The discussions of the affected environment and environmental consequences in the final EIS allow a reasonable prediction of consequences on the Forest. However, as appropriate at the programmatic scale, the final EIS does not describe every environmental process or condition.

Conclusion

Unless otherwise indicated in a response to a specific resource area objection in the sections to follow, I find Forest Supervisor Avey disclosed the appropriate level of detail required for a programmatic NEPA review.

Response to Comments

Objectors contend the final EIS does not adequately respond to comments on the draft EIS.

Background

Council on Environmental Quality regulations at 40 CFR 1503.4 requires Federal agencies to assess and consider comments both individually and collectively, but do not require a point-by-point response. If a number of comments are identical or very similar, agencies may group the comments and prepare a single answer for each group. Comments may be summarized if they are especially voluminous (Council on Environmental Quality's Forty Most Asked Questions).

An agency may respond by one or more of the following possible responses (40 CFR 1503.4):

1. Modify alternatives including the proposed action.
2. Develop and evaluate alternatives not previously given serious consideration by the agency.
3. Supplement, improve, or modify its analyses.
4. Make factual corrections.
5. Explain why the comments do not warrant further agency response, citing the sources, authorities, or reasons, which support the agency's position and, if appropriate, indicate those circumstances, which would trigger agency reappraisal or further response.

Response

My review found the Forest used a systematic content analysis process to review, categorize, and summarize the information received in the approximately 1,100 public comment letters. In response to comment, Forest Supervisor Avey developed alternative F, modified and improved analyses, and made corrections to the land management plan and final EIS per the possible responses described at 40 CFR 1503.4 of the Council on Environmental Quality's regulations. In addition, appendix G of the final EIS includes both summarized and detailed responses.

Descriptions of changes made between draft and final EIS based on public comment can be found at section 2.1.1 of the final EIS, in each section of the final EIS under the header "Notable changes between the draft and final EIS", and pages 34-35 of the draft record of decision. As discussed in the preceding issue summary, the final EIS is a programmatic NEPA review and reflects the broad and general impacts of guiding project and activity decisionmaking consistent with the integrated suite of plan components. Thus, not every change between draft and final EIS is described in detail, such as the modifications to individual plan components or updates to effects descriptions where changes are minor and qualitatively with effects disclosed in the draft EIS. This is consistent with the Council on Environmental Quality's direction that "NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail".

Conclusion

This response addresses the broad obligations under the NEPA as it relates to the assessment and consideration of public comments on the draft EIS. Unless specifically discussed within individual resource issue summary responses, my review found Forest Supervisor Avey met his obligations under the NEPA as it relates to responding to public comments on the draft EIS.

Range of Alternatives

Objectors contend the final EIS fails to provide a full range of alternatives.

Objectors' Proposed Remedies

- Withdraw the proposed plan and begin a new public process where at least 50 percent of large blocks of the landscape are set aside just for wildlife management with no other vegetation management activities allowed.
- Evaluate a reasonable range of alternatives that include various standards and approaches for managing big game habitat and security.
- Remand the decision and address the numerous public comments about the lack of, and loss of recreation opportunities on the Forest by providing an additional alternative increasing multiple use recreational access.
- The Forest should include a full analysis of an alternative that includes interim standards, quantifiable measures, and specific terms and conditions for each livestock grazing permit so that conditions forest wide can make progress toward the desired conditions.

Background

Under the NEPA, the Forest Service must consider appropriate and reasonable alternatives sufficient to permit the responsible official a reasoned choice. The Council on Environmental Quality has indicated the "range of alternatives" referred to in 40 CFR 1505.1(e) includes all reasonable alternatives, which must be rigorously explored and objectively evaluated, as well as those other alternatives, which are eliminated from detailed study with a brief discussion of the reasons for eliminating them. In addition, they indicate that a reasonable range of alternatives depends on the nature of the proposal and the facts in each case (Council on Environmental Quality Forty Most Asked Questions). Agencies are to focus on significant environmental issues and alternatives (40 CFR 1502.1).

Response

The proposed action and need to change is described in chapter 1 of the final EIS, which identifies changes in the administration of the forests, social and ecological environment, recreation demands, and scientific information that necessitates revision of the 1986 plans to ensure management is responsive to current issues and conditions. In addition, the nature of the proposal is informed by new policy in the form of the 2012 Planning Rule (final EIS section 1.5).

The proposed action was based on the 2015 assessment, the need to change, implementation and monitoring of the 1986 plans, and the comments received during the public involvement period, interagency meetings, and meetings with tribal partners. Public scoping for the proposed action led to the identification of three primary issues that involved "unresolved conflicts concerning alternative uses of available resources" as described in the Council on Environmental Quality regulations at 40 CFR 1500.2(e) (final EIS chapter 2):

1) recommended wilderness and undeveloped areas;
2) mechanized means of transportation in recommended wilderness areas;
3) and timber harvest and timber production.

As a result of scoping comments and comments on the draft EIS, the Forest evaluated six alternatives in detail, including the no-action alternative. They represent a range of possible management options that meet the purpose and need for change and address one or more significant issues. While all alternatives provide a wide range of ecosystem services and multiple uses, some give slightly greater emphasis to selected resources based on the theme of the alternative and response to revision topics (final EIS section 2.7). In addition, 13 alternatives were considered but eliminated from detailed consideration. The final EIS provides a description of the suggested alternatives eliminated from detailed consideration and the rationale for not considering them (final EIS section 2.7.9). Although some organizations objected to the dismissal of their proposed alternative to divide the management emphasis of each watershed for wildlife and timber from detailed analysis, the rationale for dismissing the suggested alternative is sound. For example, concerns regarding large areas of unfragmented wildlife habitat and effects of climate change are addressed within the range of the alternatives considered in detail.

Regardless of objectors' primary resource concern, the written objections and discussions at the resolution meeting clearly communicated a concern that Forest Supervisor Avey unreasonably restricted the range of alternatives by keeping all alternative motorized and non-motorized recreation settings largely consistent with prior, project-level travel management plan decisions. I understand some objectors contend route and area motor vehicle or mechanized access closures have gone too far on the Forest and Federal lands in general. And I understand other objectors contend those authorized forms of access continue to have adverse effects to resources such as elk, grizzly bear, or bull trout habitat and seek additional restrictions to protect those resources or address recreation use conflicts.

Council on Environmental Quality regulations at 40 CFR 1501.7 provides guidance to Forest Supervisor Avey where it states agencies shall "… identify and eliminate from detailed study the issues…which have been covered by prior environmental review (40 CFR 1506.3) … providing a reference to their coverage elsewhere." As noted during scoping, and in the draft EIS, final EIS, and draft record of decision (page 37), broad shifts in opportunities for motorized and mechanized access were not identified in the need for change given the extensive public engagement and environmental review completed for the forests' travel management decisions.

While it is true that travel management plans must be consistent with the land management plan, rather than vice versa, plan revision is not zero-based planning. The first two steps in the process for revising a plan include assessment and preliminary identification of the need to change the plan based on the assessment. The public engagement and environmental analysis associated with the travel management decisionmaking provides information that informed the assessment and need for change. Thus, despite continued public interest in changing previously approved travel management decisions, Forest Supervisor Avey acted within his discretion to limit alternative development in response to the need to change and to only analyze alternatives in detail to address the issues he identified as significant.

Some objectors assert that limiting alternatives based on existing travel plan decisions unreasonably limited the consideration of an alternative with road density standards for grizzly bears and bull trout habitat. As described above, Forest Supervisor Avey identified three issues that drove alternatives. Section 2.6.1 of the final EIS explained how each of the alternatives were crafted to variously respond to those issues. Section 2.6.2 indicates a variety of topics did not drive the development of alternatives but were considered important elements of the analysis in the final EIS. This includes effects to at-risk species such as bull trout and grizzly bears and designated areas such as the Continental Divide National Scenic Trail. The response to comments at CR74 and CR91 (final EIS appendix G) addresses the need for road density plan components for grizzly bears and bull trout, respectively. Also see bull trout and grizzly bear issue summaries for my response regarding the sufficiency of the plan components for these species.

Another objector asserts their proposed plan components for the Continental Divide National Scenic Trail were a reasonable alternative that would better protect the nature and purposes of the Trail. The Forest Service received many public comments that included suggestions for plan component additions, deletions, and modifications, including a detailed set of plan components for the Continental Divide National Scenic Trail. Although none of the suggestions rose to the level of a significant issue that Forest Supervisor Avey determined should drive the development of another alternative, changes were made where appropriate in all alternatives (e.g., FIRE-GO-03 was added based on public comment) or are reflected in alternative F (e.g., development of the Grand View Recreation Area). Where plan components were not changed per public comment, the responsible official determined that the retained plan components were sufficient to meet planning regulation obligations as described in the final EIS, response to comments, and planning record. This is described for the Continental Divide National Scenic Trail in final EIS appendix G, CR115 and CR186-188, and the planning record supplemental response to comments at CR117, CR186, and CR188. Also see the Trail's issue summaries for additional detail regarding the sufficiency of the associated plan components for the Trail.

Some objectors contend a reasonable range of alternatives would have included evaluating and comparing a wide range of new and varying standards and approaches for managing big game habitat. As described above, section 2.6.2 of the final EIS indicates a variety of topics did not drive the development of alternatives but were considered important elements of the analysis in the final EIS. However, this section also states, "some issues include forest plan components that vary by alternative, to allow the analysis to display the effects of different approaches". Review of the EIS alternative descriptions and environmental consequences indicates that of the list of 25 issues listed in this section, elk habitat plan components and recreation opportunity spectrum settings vary by alternative. Although, it is not clear how varying these plan components across alternatives differs from the description in section 2.6 of what issues would drive alternatives, it does demonstrate the Forest was responsive to public comment to evaluate a range of alternatives for elk habitat. That range of alternatives includes the elk habitat-focused management areas and standards of the no action alternative similar to what objectors suggest, a range of motorized and mechanized suitability across the plan area that varies effects of wildlife disturbance and disturbance (section 3.13.6, pages 303-306), and a variation in elk habitat guidelines. Thus, a range of alternatives related to elk habitat management was addressed in the final EIS.

See the livestock grazing issue summary for my response related to the need for an alternative with interim standards and terms and conditions for all livestock grazing permits.

Conclusion

My review finds Forest Supervisor Avey acted within his authority and discretion to identify a reasonable range of alternatives at a programmatic scale that respond to need to change and the significant issues identified during scoping. Although some objectors sought different mixes of land allocations for lands and resources, the potential list of alternative allocations could be limitless. Thus, it was appropriate to limit the proposed action and alternatives based on the need to change as described in the planning regulations.

However, it would be helpful to clarify how varying plan components for elk habitat management across alternatives differs from the description in section 2.6 of what issues drove alternative development. Instructions provided in response to the Motorized and Mechanized Means of Transportation and Areas Recommended for Wilderness Designation issue summaries should also bring clarification objectors' issues.

Public Participation in the Objection Process

Objectors contend that the responsible official must provide hard copies of the forest plan revision documents, an email address to submit objections, and a comment period for the biological opinion.

Background

The planning regulations at 36 CFR 219.52 describes the requirements for giving notice of a plan revision subject to objection. The notice must specify a street, postal, fax, and email address; the acceptable format(s) for objections filed electronically; and the reviewing officer's office business hours for those filing hand-delivered objections. The final environmental documents, the draft plan decision document, and assessment must be made available online at the time of public notice.

Response

Some objectors took issue with use of an electronic webform for electronic submission of objections rather than an email address as described in the regulations at 36 CFR 219.52(c)(3) because an email would allow an individual to receive confirmation their objection was received and allow them to draft their objection over time and attach the objection to their email sent to the Forest Service for submission.

Four methods for submitting objections were described in the legal notice, the Federal Register, and on the Forest website. These included the Forest Service's electronic webform, fax, postal mail, and hand delivery. In terms of public participation, use of an electronic webform is not substantively different from use of an email address. The Forest Service uses the electronic webform system for efficient collection of electronic comments and objections, while allowing objectors the opportunity to ensure their personal identifiable information is protected. Individuals may draft their objections in a separate document and attach to their submission or use the text box provided in the form. An auto response confirming receipt of the submission is provided with the letter identification for record keeping. Unless flagged for sensitive information, all submissions are posted to the public reading room within 24 hours. Flagged submissions are published after review and clearance by Forest Service staff. The Helena-Lewis and Clark National Forest used this same webform application for comment submission for both the scoping period in 2017 and the draft environmental impact statement comment period in 2018. Thus, use of the webform did not represent a change in the public participation tools for objectors who had previously submitted formal comments.

Other objectors took issue with responsible official's failure to provide hard copies of the land management plan and final EIS for the objection period. The objection regulations at 36 CFR 219.52(C)(1) requires the plan, associated environmental documentation, draft record of decision, and assessment are made available online at the same time of the public notice of the opportunity to object. There is no requirement to provide hard copies. Recognizing internet speeds vary in rural Montana, the Forest's GovDelivery email notification to stakeholders about the opportunity to object stated flash drives with the relevant documents were available upon request.

Although the Forest Service has printed hard copies of plan revision documents for public distribution in the past, Congress has directed Federal agencies to reduce printing and reproduction costs. Therefore, the Chief of the Forest Service provided a letter of direction to ensure reductions, including direction to "significantly reduce the printing of forest planning and related documents". In a letter to the objector dated July 7, 2020, Forest Supervisor Avey explained the rationale for not printing hard copies at this interim stage of the process, provided the Chief's 2018 memo, sent the objector a flash drive with the requested documentation, and indicated hard copies of the final land management plan would be available after plan approval.

Some objectors indicated the Forest Service must provide an additional opportunity for the public to comment on the biological opinion before issuing a final decision approving the land management plan. The US Fish and Wildlife Service's biological opinion is not subject to Forest Service pre-decisional review. However, the Forest Service's biological assessment was available for review by objectors if they desired.

Conclusion

I conclude the responsible official acted within his discretion and authority regarding objectors' concerns with their ability to participate in the plan objection process.

Plan Framework

Plan Component Sufficiency

Objectors contend desired conditions, objectives, guidelines, and suitability plan components are insufficient to protect resources.

Objectors' Proposed Remedies

The commonly proposed remedies were to include additional "mandatory" standards or change guidelines and/or suitability plan components to standards.

Background

The planning regulations define the required plan components, desired conditions, objectives, standards, guidelines, and suitability of lands at 36 CFR 219.7(e)(1). It requires projects be consistent with each applicable plan component and describes how consistency is determined at 36 CFR 219.15(d). Optional plan content in the plan can include potential management approaches or strategies and partnership opportunities or coordination activities (36 CFR 219.7(f)(2).

36 CFR 219.2(b)(2) indicates plans do not authorize projects or activities or commit the Forest Service to take action. A plan may constrain the Agency from authorizing or carrying out projects and activities, or the manner in which they may occur. In addition, a plan does not regulate uses by the public. Plans should not repeat laws, regulations, or program management policies, practices, and procedures that are in the Forest Service Directive System.

Response

Some objectors contend the 2020 Land Management Plan is insufficient because they view the desired conditions as aspirational and guidelines as discretionary. They assert the land management plan does not include adequate "mandatory" standards to address adverse effects to resources or comply with planning regulation requirements. At the resolution meeting, one objector provided additional clarity regarding their objection that the plan "defers decisions about at-risk species to discretionary project-level decisionmaking" because their view is the plan components fail to articulate easily understood, plan-level ecological conditions necessary to maintain species viability so they can have "a high degree of confidence that the conditions is actually going to be provided". In cases where we cannot achieve the desired conditions, they seek "supporting standards or guidelines to achieve the condition".

Although I address specific resource or species objections regarding this issue throughout this document, I wanted to provide a broad response to set the context for my review. I understand that many of the objectors are accustomed to the previous planning regulation framework where Forest Service plan consistency could only be determined with respect to standards and guidelines, or just standards, because an individual project alone could almost never achieve objectives and desired conditions.

Although the Forest Service continues to believe that any single project or activity cannot achieve every desired condition or objective of a plan (preamble to the planning rule 77 FR 21241, April 9, 2012), two fundamental changes in Forest Service Policy remove the previous planning regulation's aspirational nature of desired conditions and objectives. The first is that desired conditions are specifically defined at 36 CFR 219.7(e)(1)(i) as the "description of specific social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area*, toward which management of the land and resources should be directed*" [emphasis added here]. Thus, desired conditions are a critical piece of the planning framework that guide where and why project and activity decisionmaking will

occur, even if they take multiple years or decades to achieve. As such, they are the basis for developing all the other plan components.

The second policy shift that removes the strictly aspirational nature of desired conditions is the required project and activity consistency with all plan components, including desired conditions (36 CFR 219.15(d)). For desired conditions, this requires a determination the project "contributes to the maintenance or attainment of one or more goals, desired conditions, or objectives, or does not foreclose the opportunity to maintain or achieve any goals, desired conditions, or objectives, over the long term" (36 CFR 219.15(d)(1). Regardless of *when* a desired condition may be achieved, Forest Service policy is that management should be directed toward achieving desired conditions and management actions cannot preclude achievement of them over time. As such they both show management intent and constrain projects, if the management actions would preclude attainment any of the desired conditions (Response to Comments on the Proposed Land Management Planning Directives).

The definition of the desired condition also indicates they "must be described in terms that are specific enough to allow progress toward their achievement to be determined". Objectors assert the qualitative descriptions in some of the 2020 Land Management Plan desired conditions are not specific enough. Review of the plan and final EIS indicates desired conditions are described in quantitative terms where landscape level information, data, and scientific information are sufficient to inform their description (e.g., terrestrial vegetation desired conditions). Where detailed data are lacking, and scientific information indicates site-specific conditions across the landscape are widely variable and/or dynamic, desired conditions are described in a qualitative format (e.g., riparian vegetation desired conditions). Qualitative descriptions are also used for resources where the desired characteristics may be more experiential in nature such as those for scenic resources or wilderness. My review of the plan's desired conditions found that both approaches are sufficiently descriptive to determine whether project effects would either contribute toward, or preclude, achievement over time. I respond in more detail to specific objections related to the sufficiency of the plan components for elk, bull trout, and other at-risk species in issue summaries that follow.

Some objectors seek standards and guidelines to "promote achieving" desired conditions or provide for "concrete action" for moving toward desired conditions. However, as with the change in policy regarding desired conditions, the planning regulations provide specific definitions for standards and guidelines. Per 36 CFR 219.7(e)(1)(iii) and (iv), standards and guidelines are *constraints* on project and activity decisionmaking. They place design or operational constraints on projects and activities; or prohibit the Forest Service from authorizing certain types of projects or activities. They *limit* management actions to address a resource risk or stressor to help achieve or maintain desired conditions, to avoid undesirable effects, or to meet applicable legal requirements. They *cannot* compel action to "achieve" a desired condition.

Similar to my review of the plan desired conditions described above, I find that the management constraints specified in the standards and guidelines appropriately vary depending on data and scientific information regarding what is needed for resource protection. Where there is scientific information that indicates a management activity provides a similar risk forestwide, the plan provides specificity (e.g., fill material shall not be side cast in streams). Where varying management strategies may be needed or appropriate to address variable site-specific conditions, standards or guidelines may be more descriptive in nature in order to minimize the risk while allowing for project design to be tailored to site-specific conditions (e.g., elk habitat security, see this issue summary for more detail).

While discussing the plan components for the Elkhorn Wildlife Management Unit at the resolution meeting, objectors shared that some of their concerns related to lack of understanding how the Forest Service determined whether a plan component should be a standard or guideline. Some see standards as equating to higher importance for a resource. They wonder if the Forest Service intends to comply with the guidelines "to the extent they replace what were standards in the 1986 plans".

As required by the planning regulations at 36 CFR 219.15 and as incorporated by the plan (page 11), both standards and guidelines have mandatory project and activity consistency requirements. Consistency with a standard is determined by strict adherence to the specific terms of the standard, while consistency with a guideline allows for either strict adherence to the terms of the guideline, or deviation from the specific terms of the guideline *if the purpose for which the guideline was included in the plan is met* at the project level (FSH 1909.15, chapter 22) [emphasis added here]. This approach to guidelines allows for flexibility as circumstances warrant; for example, when there is more than one way to achieve the intended purpose, or new information provides a better way to meet the purpose, *without lessening protections*. Thus, both standards and guidelines provide certainty in terms constraining management activities to address a resource risk or stressor.

Some objections requested standards or guidelines to require analysis or surveys prior to conducting management activities. However, standards or guidelines should not direct or compel processes such as analysis, assessment, consultation, planning, inventory, or monitoring. Those processes can be part of other plan content such as management approaches. The forest describes management approaches such as surveys for at-risk plant species or wildlife to support plan implementation in appendix C to of the plan.

Conclusion

The dialogue held during the resolution meeting, and the accompanying objections, help clarify the basis of concerns raised, based on objectors' 30-plus years of experience under the 1986 plans. However, there has been a purposeful shift by the Agency on how we approach the use of standards and guidelines in land management planning, as described above. Thus overall, I find Forest Supervisor Avey appropriately identified a suite of integrated plan components, supported by additional plan content, to meet the requirements of the planning regulations and other law, regulation, and policy. There are some instances, however, in the issue summaries that follow where I provide instructions to review proposed plan component modifications to reflect an objector's desire for clarity, or to review new information to determine if additional plan components are warranted.

The response to comments in appendix G of the final EIS describes the reasons various suggestions for modifications, additions, or deletions to plan components were appropriate or needed to comply with planning regulation requirements.

Overall Scientific Integrity

Objectors contend the land management plan is not based on the best available scientific information, the final EIS is not informed by scientific integrity, and the responsible official fails to address the specific disclosure requirements at 36 CFR 219.3

Objectors' Proposed Remedies

Remedies requested additional analysis or changes in plan components. See resource-specific responses for more detail.

Background

Section 219.3 of the planning regulations addresses the role of science in planning. It requires the responsible official to use the best available scientific information to inform the planning process. In doing so, the responsible official determines what information is the most accurate, reliable, and relevant to the issues being considered.

Forest Service Handbook (FSH) 1909.12, chapter 07 describes the use of best available scientific information to inform the land management planning process. It describes how scientific information should be integrated in the planning process and indicates the plan decision document should summarize the general process of how the best available scientific information was identified, evaluated, and used throughout the planning process.

Documentation of what is most accurate, reliable, and relevant for the issues being considered may be done through a reference list or other methodology as determined by the responsible official. The plan decision document should also summarize the general process of how the best available scientific information was identified, evaluated, and used throughout the planning process. This summary should describe outreach to gather scientific information, the evaluation process, models and methods used, evaluation of risks, uncertainties, or assumptions, and any science reviews conducted (chapter 07.15b).

Council on Environmental Quality regulations at 40 CFR 1502.24 require Federal agencies to ensure the professional integrity, including scientific integrity, of the discussions and analyses in the environmental impact statements.

Response

The draft record of decision discusses the role of science in the revision effort. It indicates the Forest interdisciplinary team of resource professionals compiled and evaluated the relevant information for the assessment of the Forest (U.S. Department of Agriculture, Forest Service, Northern Region, 2015) and the best available scientific information and analyses contained therein. From this foundation, the interdisciplinary team used and updated the best available scientific information to develop the proposed action (December 2016), the alternatives, and the analysis and comparison of alternatives in the draft EIS (June 2018). This information includes material that was readily available from public sources (libraries, research institutions, scientific journals, and online literature). It also includes information obtained from other sources, such as participation and attendance at scientific conferences, scientific knowledge from local experts, findings from ongoing research projects, workshops and collaborations, monitoring reports, professional knowledge and experience, and information received during public participation periods.

The final EIS provides documentation of how the best available scientific information was used to inform planning, the plan components, and other plan content, including the plan monitoring program throughout individual resource sections and in general at section 3.2. Resource specialists considered what is most accurate, reliable, and relevant in their use of the best available scientific information to inform the plan development. This includes all or portions of the publications listed in the reference sections of the assessment and the final EIS, as well as any additional information that was used and is included in the planning record (e.g., planning record document D10B-26, Helena-Lewis and Clark Forest Plan Revision Elk Information and Status Report). These documents also include reference to and discussion of responsible opposing views or incomplete scientific information, as appropriate under the Council on Environmental Quality regulations.

Some of the objector's issues regarding the consideration of scientific information are related to their allegations that the Forest failed to adequately respond to comments on the draft EIS because it did not provide a point-by-point response to their individual comments. See Issue Summary – Response to Comments for my response to that general issue. Appendix G of the final EIS lists all literature submitted by the public and describes how the planning team used that information or why it was not used. This demonstrates consideration of public feedback to ensure the use of best available scientific information per Forest Service Handbook 1909.12, chapter 42.12.

I also heard from objectors that it wasn't always clear what was considered the best available scientific information or how it was used to inform the planning process. I suspect that some of this confusion is due to the sheer scope of plan revision, which took five years and generated thousands of pages of documentation. The best available scientific information is described in many different places throughout the planning record in different levels of detail. An objector quoted the general description of best available scientific information from section 3.2 of the final EIS, but every topic in the final EIS also contains a section with more detail on what was considered the best available scientific information for that topic area. Because an objector specifically mentioned the terrestrial wildlife section, I'll use that as an example. Section 3.13.4 of the final EIS describes in some detail the criteria used to determine what information was the most accurate, reliable, and relevant. Appendix B describes how plan

components were developed by using that information to identify key ecosystem characteristics and system drivers and stressors. Appendices H and I contain more detail on how the best available scientific information was used to develop the ecosystem-level plan components that support most terrestrial wildlife species. While individual sources are cited throughout the assessment, final EIS, and planning record, in many cases the information was considered more holistically in developing a suite of plan components that collectively provide for the needs of wildlife while supporting the Forest Service multiple use mandate.

While the planning record contains abundant documentation of the best available scientific information, I believe it would be helpful to clarify how the best available scientific information was identified and used by describing the general approach and providing context for the more detailed documentation that is scattered throughout the final EIS and other planning record documents.

Conclusion

Overall, I find the assessment, final EIS, and planning record demonstrates scientific integrity and the consideration of the best available scientific information to inform the plan revision. The draft record of decision discloses the methodology for integrating consideration of the best available scientific information throughout the planning process, supported by the planning record. However, I am instructing Forest Supervisor Avey to include a summary explanation in section 3.2 of the final EIS to provide clear documentation of what constituted the best available scientific information. I am also instructing him clarify how that information it was used to reach the final plan decision.

Monitoring

Objectors contend the monitoring plan is inadequate and fails to comply with the planning regulations and other requirements.

Objectors' Proposed Remedies

- The monitoring plan should specify the source of such reports. Further, the monitoring plan should clarify how reports of damage and social conflict will be generated.
- Include specific actions to proactively monitor for motorized violations through law enforcement patrols and overflights, as well as other efforts with cooperating agencies and partners.

Background

Direction for the monitoring and evaluation of land management plans is found in the planning regulations at 36 CFR 219.12 and in the directives at 1909.12 chapter 30.

Executive Order 11514 states, "Agencies shall develop programs and measures to protect and enhance environmental quality and shall assess progress in meeting the specific objectives of such activities".

Response

As required by 36 CFR 219.12, the plan monitoring program includes questions and indicators to monitor key ecological conditions, including conditions that contribute to the recovery, conservation, or maintenance of at-risk species (plan appendix B). Monitoring questions and indicators are informed by the best available scientific information, (36 CFR 219.3 and 219.14; plan appendix B; draft record of decision, page 46). Monitoring under the 1986 forest plans has helped inform the assessment and the development of plan components (draft record of decision, pages 36, 46). The monitoring program is within the financial and technical capability of the Forest and includes some broad-scale protocols (36 CFR 219.12(b); final EIS appendix G, pages 38, 42; plan appendix B, pages 1-3).

Several objectors raised concerns about the need to monitor specific species, plan components, or management strategies. Under 36 CFR 219.12, Forest Supervisor Avey has the discretion to set the scope, scale, and priorities for plan monitoring. While not every plan component must link to a monitoring question, the monitoring program includes a wide spectrum of questions designed to monitor indicators of ecological integrity or management success across many different resource areas. This includes questions and indicators addressing vegetation conditions, wildlife habitat, stressors, and some individual species and issues mentioned by objectors (i.e. Elkhorns core, big game species, lynx, and grizzly bear) (plan appendix B). Factors considered to help determine the need to track information related to specific species or plan components are described on pages 2-3 of the plan appendix B.

As the Forest Service has previously determined, "The final rule does not require monitoring species population trends… The requirement for monitoring questions that address the status of focal species is linked to the requirement of 36 CFR 219.9 of the final rule to provide for ecosystem integrity and diversity, which describes the coarse-filter approach for providing diversity of plant and animal communities and the persistence of native species in the plan area. Focal species are not intended to provide information about the persistence of any individual species." (Federal Register, volume 77, number 68, pages 21233-21234).

The data collection and reporting interval can vary across indicators, and individual biennial monitoring evaluation reports are not required to report on every monitoring item (FSH 1909.12 section 34; plan appendix B, page 1).

Finally, I would like to note that the monitoring program is not intended to depict all monitoring activities undertaken by the Forest, nor is the Forest limited to conducting only this monitoring. The biennial evaluation of the monitoring information will help determine whether a change to the plan or change to the monitoring program is warranted based on new information, whether a new assessment may be needed, or whether there is no need for change at that time (36 CFR 219.5). Several objectors expressed concern about the adequacy of specific indicators, and so I'd like to note that the indicators selected for monitoring will be evaluated as part of the biennial monitoring report, and changes can be made if any indicator is not providing sufficient information to address the monitoring question.

Conclusion

With regard to the objection issues raised, I find Forest Supervisor Avey, pursuant to 36 CFR 219.12 and other regulations (including Executive Order 11514), appropriately developed an adequate monitoring program using best available scientific information.

Coordination with Other Planning Efforts

Objectors assert the responsible official failed to coordinate with local governments because the final EIS indicates the plan is not fully consistent with country growth plans. They assert the inconsistencies must be reconciled.

Objector's Proposed Remedies

- Remand the decision and supplement the final EIS with a complete list of inconsistencies identified in the local plans of the 17 counties and how the Forest will reconcile these inconsistencies.
- Include a list and brief summary of all federal coordination and cooperation policies (statutes, regulations, presidential executive orders, agency directives, handbooks, and guides) that require cooperation and coordination with local and state governments.
- The final EIS should be changed to as consistent as possible with local growth policies. If it isn't achieved, define how the plan will be brought into line with local growth policies.

Background

There are many statutes and regulations that authorize the Forest Service to cooperate with state and local government agencies, as well as encourage early engagement and consultation. The substantive requirements for coordination and cooperation related to land management plan decisionmaking include those found in the following statutes and regulations:

- The National Forest Management Act requires the Forest Service to "... develop, maintain, and, as appropriate, revise land and resource management plans for units of the National Forest System, coordinated with the land and resource management planning processes of State and local governments and other Federal agencies" (16 USC Part 1604(a)).
- The Federal Land Policy and Management Act states, "[i]n the development and revision of land use plans, the Secretary of Agriculture shall coordinate land use plans for lands in the National Forests with the land use planning and management programs of and for Indian Tribes by, among other things, considering the policies of approved Tribal land resource management programs" (43 USC 1712(b)).
- The planning regulations at 36 CFR 219.4(a)(1) require the responsible official to engage the public—including Tribes and Alaska Native Corporations, other Federal agencies, State and local governments, individuals, and public and private organizations or entities—early and throughout the planning process as required by this part, using collaborative processes where feasible and appropriate. …In providing opportunities for engagement, the responsible official shall, …(iv) where appropriate, encourage States, counties, and other local governments to seek cooperating agency status in the NEPA process for development, amendment, or revision of a plan.
- 36 CFR 219.4(b) describes the requirement for coordination with other public planning efforts as follows

    1) The responsible official shall coordinate land management planning with the equivalent and related planning efforts of federally recognized Indian Tribes, Alaska Native Corporations, other Federal agencies, and State and local governments.

    2) For plan development or revision, the responsible official shall review the planning and land use policies of federally recognized Indian Tribes (43 USC 1712(b)), Alaska Native Corporations, other Federal agencies, and State and local governments, where relevant to the plan area. The results of this review shall be displayed in the environmental impact statement (EIS) for the plan (40 CFR 1502.16(c), 1506.2). The review shall include consideration of:

        i. The objectives of federally recognized Indian Tribes, Alaska Native Corporations, other Federal agencies, and State and local governments, as expressed in their plans and policies;

        ii. The compatibility and interrelated impacts of these plans and policies;

        iii. Opportunities for the plan to address the impacts identified or to contribute to joint objectives; and

        iv. Opportunities to resolve or reduce conflicts, within the context of developing the plan's desired conditions or objectives.

    3) Nothing in this section should be read to indicate that the responsible official will seek to direct or control management of lands outside of the plan area, nor will the responsible official conform management to meet non-Forest Service objectives or policies.

- The NEPA requires the responsible official to consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State, and local agencies, which are authorized to develop and enforce environmental standards shall be made available to the President, the

Council on Environmental Quality and to the public as provided by section 552 of Title 5, United States Code, and shall accompany the proposal through the existing agency review processes.

- Council on Environmental Quality regulations at 40 CFR 1502.16 states the Environmental consequences section of an EIS shall include discussions of: ..(c) Possible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned. (See 40 CFR 1506.2(d).)
- Council on Environmental Quality regulations at 40 CFR 1506.2 address the elimination of duplication with state and local procedures as "(d) To better integrate environmental impact statements into State or local planning processes, statements shall discuss any inconsistency of a proposed action with any approved State or local plan and laws {whether or not federally sanctioned). Where an inconsistency exists, the statement should describe the extent to which the agency would reconcile its proposed action with the plan or law".

Response

The planning record demonstrates the Forest conducted broad outreach to state, tribe, and local governments as required by both the NFMA and the NEPA. Contact lists include cities, counties, conservation districts, and their representatives (planning record document C2_150700_InteragencyContactList). In addition, the Forest held intergovernmental meetings. These meetings enabled the Forest to learn about upcoming plans and projects from other agencies, as well as being able to evaluate whether those planning documents were or were not consistent with the proposed land management plan. These meetings provided agencies an opportunity to exchange updates and information (final EIS section 2.4 and planning record documents C15_170717_CountyCommMtgs, C33_187500_CountyComMtgs, others).

In addition to engaging other government agencies, the responsible official is required to review the planning and land use policies of federally recognized Indian Tribes, Alaska Native Corporations, other Federal agencies, and State and local governments, where relevant to the plan area. The results of this review must be displayed in the environmental impact statement for the plan as described in the Council on Environmental Quality regulations at 40 CFR 1502.16(c) and 1506.2 (36 CFR 219.4(b)). The final EIS provides lists of plans that were considered and states that the 2020 Land Management Plan is "consistent with the majority of these plans" (final EIS section 2.4, page 9-10). As explained in that section, discrepancies, if any, are described in the cumulative effects sections for specific resources, under the heading of "Other Plans," and summarized in a table under each analyzed topic, for example, table 31 on aquatics and soils and table 135 on recreation settings (final EIS section 3.5.6, page 110 and section 3.16.6, page 16). Results of the review, consistent or discrepancies by specific resource, have been provided, as required by 36 CFR 219.4(b)(2). The description of discrepancies in the tables also satisfies the requirement in 40 1502.16 to include discussion of conflicts between the 2020 Land Management Plan and other plans in the EIS.

Although results of a review are displayed in the final EIS and section 2.4 indicates the Forest "will continue to work with these entities to address the impacts and benefits from forest management", it is not clear how the responsible official considered opportunities to resolve or reduce conflicts, within the context of developing the plan's desired conditions or objectives, as required by 36 CFR 219.4(b)(2)(iv) and 40 CFR 1506.2.

One objector felt that the identified inconsistency between the 2020 Land Management Plan and growth policies must be reconciled. However, neither the NFMA nor the NEPA regulations require the responsible official to conform management to meet non-Forest Service objectives or policies (36 CFR 219.4(3)).

Conclusion

I find Forest Supervisor Avey complied with the requirements to coordinate the development of the land management plan with the other government land use planning efforts as required by the NFMA, FLPMA, and NEPA. However, to clearly communicate how each relevant plan was considered per ii-iv of 36 CFR 219.4(2)(b), I am

instructing Forest Supervisor Avey to summarize the reviews from the environmental consequences sections of each resource area in an appendix to the EIS. In addition, section 2.4 of the final EIS should be clarified to describe the extent to which any inconsistencies remain and how the plan provides for opportunities to resolve or reduce conflicts.

Management Activities

Downstream Water Supply

Economic Importance

Some objectors contend the plan fails to adequately acknowledge and address the social and economic concerns of the affected communities relying on watersheds downstream of the national forest. Other objectors assert the Divide Geographic Area section of the plan fails to include sufficient information regarding the importance of the Upper Tenmile Watershed, water storage reservoirs, and the diversion flume to the city of Helena.

Objectors' Proposed Remedies

- More emphasis should be placed on fire suppression strategies until the fuel reduction objectives have been adequately achieved. Also, more emphasis and incentive need to be placed on extinguishing fires before they become catastrophic and unmanageable.
- Incorporate an aggressive and proactive fuel load reduction strategy to prevent widespread, intense, out-of-control forest fires that permanently alter the forest ecosystem. Unplanned fires need to be aggressively suppressed and controlled to avoid dangerous, widespread, devastating fires that grow "out-of-control".
- Address the needs of all water users by favoring thoughtful, well-planned fuel reduction efforts over allowing devastating uncontrolled wildfires in consideration of downstream affected communities and senior water right holders.
- Emphasize in the entire Plan that Forest land management practices have an impact to land, water and communities outside the National Forest Service boundaries while providing for plan provisions that address these concerns.
- Relocate the watershed information in appendix E to the Divide Geographic Area, adding more information about the Rimini watershed and the infrastructure and importance to the city of Helena. Add goals, objectives, and guidelines on how to sustain this high priority municipal watershed.

Background

The planning regulations at 36 CFR 219.8 requires land management plans provide for social, economic, and ecological sustainability within Forest Service authority and consistent with the inherent capability of the plan area. It requires plan components to maintain or restore the ecological integrity of terrestrial and aquatic ecosystems and watersheds in the plan area, including plan components to maintain or restore structure, function, composition, and connectivity, taking into account (among other factors) (a)(1)(iv) system drivers, including dominant ecological processes, disturbance regimes, and stressors, such as… wildland fire and climate change…. Plan components must also take into account (a)(1)(v) wildland fire and opportunities to restore fire adapted ecosystems.

The plan must also include plan components, including standards or guidelines, to maintain or restore (iii) water quality and (iv) water resources in the plan area, including lakes, streams, and wetlands; ground water; public water supplies; sole source aquifers; source water protection areas; and other sources of drinking water (including guidance to prevent or mitigate detrimental changes in quantity, quality, and availability).

Response

Objectors assert the 2020 Land Management Plan fails to account for the unique social and economic needs of the downstream affected communities, especially those with established senior water rights, by failing to aggressively manage the forest canopy and ground cover to avoid widespread, intense, and destructive forest fires. Participants at the resolution meeting discussed their concern that the value of water for irrigation is not clearly documented in the plan. They highlighted the economic value of water coming off the forest, the economic benefits of the agricultural industry to the American people, and Montana counties adjacent to the Forest.

As required by the planning regulations, the 2020 Land Management Plan accommodates downstream water interests through an integrated programmatic approach. The watershed section (page 14) states, "The [Forest] headwaters are important water resources delivering high quality and consistent quantity of water to users on and off forest in support of municipal drinking water, agricultural irrigation, stock growers, and recreation". This is supported by a suite of integrated plan components that maintain or improve water quality in many sections of the plan including forestwide direction for watersheds, riparian management zones, conservation watershed networks, and fire and fuels management; with additional desired conditions for specific municipal watersheds and source water protection areas in the geographic area direction. For example, Desired conditions FW-WTR-DC-01, 03, 06, and 07; FW-FIRE-DC-01 and 03; and FW-VEGT-DC-01, 02, 08 and 09 all describe desired forest conditions that support water as a provisioning service, both in quality and quantity, on forest that translates to an ecosystem service off forest. In addition, a management approach in appendix C to the plan (page 3) includes cooperating with private landowners and other agencies to improve water quality and restore aquatic ecosystems across multiple ownerships.

While the Divide Geographic Area does not provide a detailed description of the Tenmile municipal watershed additional information was added to the introduction in response to objector's comments on the draft plan (supplemental response to comment CR152). It also identifies the municipal watershed as an emphasis area on page 147, with a specific goal, desired, condition, and guideline for the watershed. Detailed information about all municipal watersheds and source water protection areas, as well as Watershed Condition Framework priority watersheds and the conservation watershed network are included in appendix E.

Section 3.5.5 of the final EIS (pages 54-56) describes the benefits to people provided by the Forest watersheds including clean water for drinking, livestock, and agricultural irrigation, among other values. It acknowledges watersheds provide many agricultural benefits for local rural communities in the form of grazing forage for livestock, and agricultural irrigation water on and downstream of the forest. It also describes the Tenmile watershed as the primary source of drinking water for the city of Helena, with a description of the reservoirs, diversions, and current management to reduce the risk of high intensity wildfire and associated post-fire watershed effects. Section 3.5.6 of the final EIS describes the effects of the plan to provide special protections for all municipal watersheds on the Forest, including Tenmile.

Section 3.26.1 of the final EIS identifies clean water, fire suppression, and ecosystem integrity (including erosion control, flood protection) among the list of key benefits to society from the plan area. Page 201 indicates many communities depend on ground and surface water from the Forest for both drinking water and agricultural irrigation. Page 204 indicates irrigation districts (particularly on the Rocky Mountain Front) have expressed great concern with wildfires in the wilderness, citing (perceptions of) negative effects to the water they use.

The final EIS also describes the consideration of the best available scientific information for fire suppression and mitigation management. The plan components are expected to provide a larger contribution to the well-being and safety of the public, compared to expected contributions under the current plans (final EIS section 3.26.1).

As a plan cannot authorize projects or activities or commit the Forest Service to take action, objectives are the key plan components to review to indicate anticipated management outcomes during the 15-year planning period. I find plan objectives in the fire and vegetation sections support achievement of the desired conditions described above. For example, FW-VEGT-OBJ-01 describes an outcome that "vegetation management occurs on at least 130,000 acres per decade to maintain, restore, or move vegetation towards desired conditions". It indicates treatments to achieve this objective may include, but are not limited to, "planned or unplanned fire ignitions; fuel reduction treatments such as thinning, piling, chipping, and mastication; removal of encroaching trees in non-forested ecosystems; timber harvest; tree planting and revegetation of native plants; or noncommercial thinning of forests".

FW-FIRE-OBJ-01 describes an outcome of "hazardous fuels treatments occur on a minimum of 15,000 acres per decade within the wildland urban interface". It allows the use of "any available wildland fire management opportunity to reduce fire intensity and severity" and "treatment includes initial entry and maintenance to ensure desired fuel conditions are achieved".

Accomplishing both the vegetation and fire objectives is expected to contribute to resilient forest vegetation conditions to reduce uncharacteristic wildfire that may have adverse effects on downstream beneficial uses. It's important to recognize that the plan objectives are not caps on the amount of vegetation management or fuels reduction can occur, but objectives must be described within the fiscal capability of the unit (using the Forest's past 3 to 5-year budget obligations). And budget directly affects how much we are able to treat mechanically and with prescribed fire (final EIS 3.7.6, page 141). However, the Northern Region has been increasing the number of acres treated in recent years with State partnerships under the Good Neighbor Authority and increased planning efficiencies. Thus, there is potential the Forest could exceed the current budget-limited objectives in the plan.

Section 3.7.6, page 131 acknowledges that due to climate change, in general, the fire seasons are expected to become longer, large wildfires are expected to occur more often, and total area burned is expected to increase. Changing climatic conditions may lead to effects, such as the timing of runoff, that are outside the inherent capability of the plan area or Forest Service authority to fully mitigate through the plan components. However, by increasing the amount of prescribed fire use, the 2020 Land Management Plan would be expected to partially offset predicted wildfire effects from climate change. The more fire use and mechanical treatments that occurs as a result of the plan, the greater the fuels will be reduced, and the forest vegetation restored to more resistant and resilient conditions, which could mitigate climate change effects on wildfire behavior. It's important to note that there are limitations for aggressively addressing fuel reduction activities in portions of the plan area such as wilderness and inventoried roadless areas, where law and policy prohibit or limit vegetation management. Using unplanned ignitions or applying planned ignitions (prescribed fire), where mechanical treatments cannot be achieved will be an important tool to achieve desired conditions. The windows for prescribed fire may become longer with a warmer climate.

Conclusion

At the resolution meeting, irrigation use objectors expressed concern that their interests are not as valued in the plan as municipal watersheds. The objector concerned about the Tenmile municipal watershed, in turn, asserted the important aspects of the municipal watershed is not addressed in the plan. While I agree with both objectors that water off of national forests is critically important and "one of the two principle national forest products as stated in the Organic Act of 1897 and Multiple Use Sustained Yield Act of 1960", my review indicates Forest Supervisor Avey has given both beneficial uses due deference.

Specifically, I find the plan and final EIS discuss the importance of downstream beneficial uses in multiple locations. Plan components will guide management, within the inherent capability of the plan area and Forest Service authority, to achieve resilient vegetation conditions to maintain or restore water quality and water resources, to prevent or mitigate detrimental changes in quantity, quality, and availability resilient source of water quantity that

is ultimately delivered downstream beyond the Forest boundary as a beneficial use. In addition, the plan includes objectives, within the fiscal capacity and the inherent capability of the Forest, to achieve desired vegetation conditions including addressing fuel reduction to reduce the potential for catastrophic wildfire that may affect downstream irrigation uses and municipal watersheds.

I also find Forest Supervisor Avey has developed an appropriately integrated plan that will efficiently guide managers, including using appendices to the plan to inform implementation of the plan components. Moving the details from appendix E to each individual geographic area is not necessary and would add unnecessary redundancy throughout the plan.

Monitoring

Objectors assert the that the monitoring plan should address water quality and downstream water supply. They are concerned that reduced or complete removal of forest canopy by fire or intentional removal increases the rate of spring runoff affecting water management and water rights of irrigation districts and producers.

Objector's Proposed Remedy

- Address downstream water supply and water quality in the land management plan monitoring program, referencing the State of Montana Water Plan discusses the Upper Missouri River Basin Climate Impacts Assessment.

Background

36 CFR 219.12 (a)(5) requires each plan monitoring program must contain one or more monitoring questions and associated indicators addressing eight factors including four relating to aquatic resources: (i) the status of select watershed conditions, (ii) the status of select ecological conditions including key characteristics of terrestrial and aquatic ecosystems, (iii) the status of focal species to assess the ecological conditions required under 36 CFR 219.9, and (vi) measurable changes on the plan area related to climate change and other stressors that may be affecting the plan area.

Response

The planning regulations at 36 CFR 219.12 (a)(5) require watershed and ecological monitoring that is indirectly relevant to objector's concern. As such, the plan monitoring program identifies aquatic ecosystem, watershed, and vegetation monitoring questions and indicators for evaluation of plan area conditions that include: MON-WTR-01 through -05, MON-RMZ-01, and MON-VEG-02 and -03. While the plan monitoring elements do not call for the direct measurement of water volume leaving the forest there are monitoring elements (e.g. MON-RMZ-01, MON-VEG-01, MON-FIRE-01 through -04) that will indicate how desired stream, watershed and forested conditions are trending, which has ties to outcomes for water quantity and quality leaving the forest.

It's also important to note that implementation of all activities under the 2020 Land Management Plan must comply with the Clean Water Act, which in turn requires compliance with all Federal, State, and local requirements, administrative authority, process and sanctions related to the control and abatement of water pollution (CWA, Sections 313(a) and 319(k), USC 2002). Montana Code Annotated Section 85-2-311(1) specifies that any adverse effect on downstream beneficial uses of prior appropriators resulting from implementation of the 2020 Land Management Plan is not permitted. Accordingly, the Forest must ensure all downstream beneficial uses- related to both water quality and water quantity- are maintained during implementation of management activities analyzed under the land management plan. As plan implementation must comply with all statutory requirements, it is unnecessary to repeat this requirement in the plan as indicated by 36 CFR 219.2(b)(2), which indicates plan should not repeat laws, regulations, or program management policies, practices, and procedures that are in the Forest Service Directive System.

As required by 36 CFR 219.4(b), the responsible official reviewed the compatibility and interrelated effects of the revised land management plan with the 2015 Montana Water Plan and did not find identify any conflicts. However, strategic planning and coordination documents and reports such as the 2015 Montana Water Plan and The Upper Missouri Climate Impacts Assessment are important for contextualizing application of land management plan direction within project planning activities. Application of these documents would occur as a part of coordinated project planning with stakeholders using the land management plan.

The plan recognizes that the "Forest is the headwaters of many downstream water users including municipal water systems, irrigation districts, and small instream flow rights" (2020 Land Management Plan, p 13). It states that the "headwaters are important water resources delivering high quality and consistent quantity of water to users on and off forest in support of municipal drinking water, agricultural irrigation, stock growers, and recreation" (2020 Land Management Plan, page 14). It also acknowledges "a large percentage of streams coming off the forest are diverted to supply these uses (ibid).

In addition, the plan includes several goals to work cooperatively with other governments to preserve instream flows and address watershed management such as FW-WTR-GO-03 to work with Montana Department of Environmental Quality on development of watershed restoration plans, total maximum daily load plans, water quality issues, monitoring, wetland characterization, and mapping.

The final EIS acknowledges that forest management and resource stewardship called for in the plan is connected to downstream communities. Section 3.5.5 of the final EIS (page 54) notes "Watersheds across the planning area provide many benefits to people that include clean water for drinking, high quality habitat for fish and sport fishing, wildlife, livestock, and agricultural irrigation. Forest Service managed lands include the headwater tributaries for a large percentage of source (drinking) water protection areas in the U.S. High quality water and habitats provides high elevation refugia for fish across the planning area in a warming environment. Watersheds provide many agricultural benefits for local rural communities in the form of grazing forage for livestock, and agricultural irrigation water on and downstream of the forest". As such, The 2020 Land Management Plan includes desired conditions (FW-WTR-DC-01-11) and associated components that should improve and protect riparian areas and watersheds in the light of the ever-changing climate to fully support beneficial users, municipal water supplies, and natural resources. These components also support beaver and their ecologic important habitat across the forest in the aid to mitigate climate change.

Conclusion

Upon review of the plan and final EIS, I find the plan components will provide for improved water quality, a consistent and resilient source of water quantity that is produced and stored on-forest, though ultimately delivered downstream beyond the Forest boundary as a beneficial use for downstream consumption. I find the plan monitoring program complies with the monitoring requirements at 36 CFR 219.12(a)(5) and address objectors concerns to address the delivery of downstream water quality and quantity with the inherent capability of the Forest. Site specific analysis and cumulative effects will be a part of all vegetation management actions proposed under this plan and will give added insight into how forest management could influence water quality and quantity in a more than programmatic way.

Timber

Background

The planning regulations at 36 CFR 219.7(c)(2)(viii) requires the responsible official to "identify the suitability of areas for the appropriate integration of resource management and uses, with respect to the requirements for plan

components of 36 CFR 219.8 through 219.11, including identifying lands that are not suitable for timber production (36 CFR 219.11)".

36 CFR 219.8(a)(3) requires plan components to maintain or restore ecological integrity in riparian areas. At (ii) the regulations require the plan to establish widths for riparian management zones around all lakes, perennial and intermittent streams, and open water wetlands, within which the plan components required by paragraph (a)(3)(i) of this section will apply, giving special attention to land and vegetation for approximately 100 feet from the edges of all perennial streams and lakes.

36 CFR 219.8(a)(3)(ii)(B) requires plan components "ensure that no management practices causing detrimental changes in water temperature or chemical composition, blockages of water courses, or deposits of sediment that seriously and adversely affect water conditions or fish habitat shall be permitted within the riparian management zones or the site-specific delineated riparian areas".

The NFMA at USC 1604(k) states "In developing land management plans pursuant to this Act, the Secretary shall identify lands within the management area which are not suited for timber production, considering physical, economic, and other pertinent factors to the extent feasible, as determined by the Secretary, and shall assure that, except for salvage sales or sales necessitated to protect other multiple-use values, no timber harvesting shall occur on such lands for a period of 10 years."

The planning regulations at 36 CFR 219.11(c) indicates "the plan may include plan components to allow for timber harvest for purposes other than timber production throughout the plan area, or portions of the plan area, as a tool to assist in achieving or maintaining one or more applicable desired conditions or objectives of the plan in order to protect other multiple-use values, and for salvage, sanitation, or public health or safety".

Lands Suitable for Timber Production, Sustained Yield Level, and Projected Timber Sale Quantity

Objectors contend the 2020 Land Management Plan should include all possible acres for management and does not treat enough annual acres to address insect and disease problems on the Forest. They also assert the final EIS should include an alternative that project harvest volumes closer the sustained yield limit.

Objectors' Proposed Remedies

- Prepare an alternative that would address the insect and disease problems found on the Forest.
- Prepare an alternative that would reflect a sustained yield closer to what actually grows on the forest. The forest should provide an annual timber sale volume that more closely reflects the growth and mortality on this forest.

Background

The planning regulations at 36 CFR 219.1(g) require the responsible official to ensure that the plan components, and other plan content, are within Forest Service authority, the inherent capability of the plan area, and the fiscal capability of the unit.

FSH 1909.12, section 22.12, indicates that plan objectives must be attainable within the fiscal capability of the unit, determined through a trend analysis of the recent past budget obligations for the unit (3 to 5 years).

FSH 1909.12, section 64.32 indicates the estimation of both the projected wood sale quantity and the projected timber sale quantity must take into account the fiscal capability of the planning unit and be consistent with all plan components.

Response

Timber production and harvest was a key issue that drove alternatives. Alternative E was designed to assign the greatest possible amount of land suitable for timber production and timber outputs. However, as noted in the final EIS (section 3.28.6, page 259), "There is relatively little variance [in lands suitable for timber production across alternatives] because of the legal and technical factors that do not vary by alternative, such as the inherent capability of the land and designations such as [inventoried roadless areas]." In other words, there is relatively little opportunity to increase the amount of lands suitable for timber production. But other than designated wilderness, wilderness study areas, and recommended wilderness areas, timber harvest is allowed to achieve desired conditions, which address objectors request that "remaining acres should be maintained for potential harvest". This includes harvest within inventoried roadless areas where harvest conducted consistent with the 2001 Roadless Area Conservation Rule would contribute to timber volume.

Early in the planning process, commenters noted that the sustained yield limit did not reflect the total levels of growth and mortality on the Forest. In response to this concern, total growth was estimated (170227_PA_timber_clarification_errata.pdf) and the total growth/mortality as estimated by FIA across both Forests is about 71 MMCF/year. It is true that the sustained yield limit of 10.7 MMCF (2020 Land Management Plan FW-TIM-STD-07, page 114) does not approach this level. However, the total calculated growth and mortality occurs across all lands, including those where harvest is prohibited or constrained by laws outside the scope of the 2020 Land Management Plan. For example, harvest is not allowed in designated wilderness and is highly constrained in inventoried roadless areas. These two designations make up the majority (70 percent) of lands on the HLC NF (20 percent of the Forest is designated wilderness per final EIS section 3.22.5, page 139 and another 50 percent of the Forest is inventoried roadless area per final EIS section 3.21.4, page 69). Additionally, the final EIS appendix G, CR230d explains that other resource considerations preclude the ability of the Forest Service to harvest at levels that match growth and mortality.

Regarding the potential to achieve harvest levels at the sustained yield level, the sustained yield limit is calculated utilizing all lands that *may* be suitable for timber production and does not include any other resource objectives or constraints (2020 Land Management Plan, page 111; final EIS section 3.28.1, pages 239 and 257, and final EIS appendix H, page 101). The projected timber sale quantity is calculated based on anticipated harvest levels from lands both suitable and not suitable for timber production to achieve the plan's integrated resource desired conditions, within the fiscal capability of the Forest Service. Each alternative must provide for multiple uses and meet law, regulation, and policy with respect to all resources. In order to achieve this, it is necessary to constrain the level of timber harvest in some areas or some conditions. For example, not allowing harvest in key lynx habitats and adjusting levels of harvest based on land classifications such as inventoried roadless areas, as described in the final EIS appendix H, page 22. Thus, "No alternative (with or without a budget constraint) results in volume levels that are the same as the sustained yield limit because sustained yield limit includes what could be produced on all lands that may be suitable for timber production, without considering other multiple uses (FSH 1909.12, 64.31)" (final EIS appendix G, CR236o, page 141).

An interested person at the resolution meeting expressed concern that there was nothing in the plan that talked about a departure from a consistent flow of harvest up to the sustained yield limit. Unlike the 1982 planning regulations, there is no requirement in the planning regulations to conform to a non-declining even flow of timber. Timber volumes may change from decade to decade as long harvest levels are consistent with management for all multiple uses and do not exceed the capability of the land to sustainably produce timber (final EIS appendix G CR236(l), page 142). The sustained yield calculation did not include a non-declining even flow constraint for the first 50 years in order to get the Forest into an age-balanced state. However, although not required, the projected timber sale quantity calculation did include an objective to achieve non-declining even flow across all alternatives to achieve a consistent contribution to economic sustainability (final EIS appendix H, page 21).

The 2012 planning regulations indicate a plan may depart from the sustained yield limit as provided by the NFMA when departure would be consistent with the plan's desired conditions and objectives. FSH 1909.12, section 64.33 provides additional guidance stating "The projected timber sale quantity may not exceed the sustained yield limit, unless a departure limit is specified by the responsible official for the first decade or two of the plan to achieve multiple-use management objectives". The 2014 Assessment of vegetation conditions and the need to change did not identify a need to forego other multiple use values in order to depart from the sustained yield limit. The 2020 Land Management Plan's projected timber sale quantity does not approach sustained yield limit under any alternative or budget scenario due to other resource constraints (final EIS appendix H, page 101). As disclosed in final EIS appendix G CR236(j) and (o), even with unlimited budgets the anticipated sale volumes that may be achieved while complying with all plan components that provide for other resource values is lower than the sustained yield limit. Therefore, there was no need to establish a departure limit.

However, the final EIS analyzed alternatives that provide opportunities to utilize timber harvest to address forest health and hazardous fuels to the degree appropriate while meeting law, regulation, policy, and desired conditions for other resources. As explained in the response to comments (final EIS appendix G, CR230), the 2020 Land Management Plan recognizes the importance of wood products and timber harvest in reducing fire hazard and improving forest health (e.g., FW-TIM-DC-02, page 112). Further, the desired conditions for terrestrial vegetation (starting page 32 of the 2020 Land Management Plan) include an array of conditions that allow for natural disturbances to occur within the estimated natural range of variation. Current levels of insect, disease, and hazardous fuels conditions are incorporated into the existing vegetation layer upon which the modeling that establishes these desired conditions is based (see final EIS appendix H, page 12 and 17).

The final EIS, section 3.8.6, indicates that where timber harvest is identified as suitable to occur, both harvest and prescribed burning are acknowledged as tools to alter the condition of vegetation. Objective functions for timber production in the model PRISM varied across alternatives. Although alternative E under a constrained budget is calibrated to maximize timber production, it achieves this goal by harvesting fewer acres of productive forests and does less to achieve the vegetation desired conditions than the other alternatives. Alternatives A, B/C, and D were calibrated to maximize desired condition attainment, while alternative F was designed to blend the objectives of timber production and desired condition attainment. This results in a range of average acres per year treated between 2 to 5 thousand acres, depending on budgetary considerations. The final EIS acknowledges this limited scope and impact of vegetation management treatments compared to the effects of natural disturbances and discusses the limitations of active management in land area designations outside the scope of the land management plan (e.g., wilderness designations) as discussed above. The timber section of the final EIS (section 3.28.6, page 289) concludes, "Within the decision space of forest plan revision, the range of alternatives shows the potential to conduct harvest and produce timber volumes in a sustainable manner that matches or exceeds the levels that have been done in the past…Preferred alternative F provides timber outputs and harvest acres only slightly less than alternative E but does nearly as well at moving the forest toward desired conditions as alternatives A, B/C, and D."

During the objection resolution meeting, objectors and interested persons discussed the importance of this issue in terms of supporting a viable timber industry and the concern that by sizing our projected harvest to funding we're missing opportunities of long-term stewardship programs and partnerships with the private sector that are helping the Agency get to those goals. It's important to note that neither the projected wood sale quantity nor the projected timber sale quantity serve as limitations on harvest. Rather, they are projections based on reasonable expectations about the fiscal capability and organizational capacity to achieve the desired conditions and objectives in the plan for the planning period. Although the Forest Supervisor identified them within fiscal capability, the final EIS analysis also modeled and disclosed timber harvest and volume production without a budget constraint for all alternatives. A footnote was added to plan components FW-TIM-OBJ-01 and 02 (page 113 of the 2020 Land Management Plan) disclosing timber volumes that could be achieved if additional funding and capacity were

realized. These levels are still less than the sustained yield limit but represent the volumes that could be achieved with unlimited budgets while still being consistent with all other plan components.

The social and economic environment section of the final EIS highlights the importance of forest outputs on local economies and communities within the analysis area. As indicated in the final EIS (appendix G, CR231), "the preferred alternative (F) reflects the desire for a timber harvest level that provides local jobs and income and generates products for local mills and other forest products businesses to improve forest health within organizational capacity and reasonably foreseeable budgets and while protecting wildlife and other resource values".

Conclusion

I find the responsible official was responsive to public comment regarding providing a sustainable flow of timber to support economic sustainability, while using timber harvest as a tool to achieve desired conditions in the plan area.

Timber Harvest Economics

An objector contends the Forest Service does not give enough attention to the non-monetary impacts of logging.

Objector's Proposed Remedy

- I propose the Forest Service set out standards for evaluating these "costs" and impacts for all proposed timber sales.

Response

The objector asserts the final EIS does not address the effects of timber harvest such as but not limited to the loss of carbon, biomass (wildlife habitat), weed spread from roads, soil compaction, disruption of water flow by road cuts, loss of security cover and displacement of wildlife, and loss of scenic values.

The review of the final EIS demonstrates a thorough programmatic analysis of the ecological impacts of timber harvest throughout all affected resource sections. For example:

- Prior to conducting logging activities, site-specific project development and analysis would incorporate all relevant plan components, including those related to the protection of resources such as clean water and carbon sequestration. Plan components and EIS analysis included the influence of a changing climate (final EIS appendix G, CR243). Wildfire and insect and disease remain the prominent disturbance processes that impact the carbon sequestration that the forest can provide. Harvests result only in minor impacts to carbon sequestration (final EIS section 3.30.5, page 319).
- Prior to conducting any logging activity, projects would consider all plan components for all native wildlife species, including but not limited to lynx, grizzly bear, and wolverine. During implementation, all prescribed design elements and mitigation measures determined to be necessary to be consistent with these plan components would be followed (final EIS appendix G, CR257). Plan components are designed to influence distribution and availability of wildlife which includes limiting disturbance [such as timber harvest] (final EIS section 3.14.6, page 349).
- Risks of weed spread would be minimized with localized site restoration and rehabilitation, as well as the use of weed control measures during implementation in order to be consistent with the invasive plant plan components (e.g., contract clauses to wash equipment) (final EIS section 3.12.6, page 280).
- Effects of timber harvest on water yield and peak flows and associated indirect effects on stream channel morphology and aquatic habitat, are routinely assessed during project planning required by the National Environmental Policy Act (final EIS section 3.5.6, page 100).

- Timber harvesting and road building can sometimes create obvious and long-lasting effects to the scenery of an area. Since scenery is measured from viewpoints within and across the forest, placement of these types of management activities is critical to overall effects to scenery. Final silviculture prescriptions and the design of the units themselves would mimic naturally occurring landscape and forest vegetation patterns. All action alternatives include plan components that consider the management of scenery as an integral part of timber and vegetative management (final EIS section 3.20.3, page 57).
- The social and economics environmental consequences acknowledges the intrinsic values that may be affected by timber harvest indicating in all alternatives, "In communities where income and jobs are dependent on the timber industry, timber provided by the Forest would indirectly contribute to social sustainability through contributions to jobs and income, which in turn contribute to the well-being of local residents" (final EIS section 3.26.6, page 210); and that alternative E "may negatively impact the quality of life of those who are opposed to timber harvest due to preservationist values" (final EIS section 3.26.6, page 215).

These excerpts from the final EIS demonstrate that the impacts of harvest will be considered during the site-specific NEPA review of proposed timber sales. As indicated in FSH 1909.12, section 22.13, standards "should not direct or compel processes such as analysis, assessment, consultation, planning, inventory, or monitoring". Therefore, a plan standard to evaluate the costs or impacts of timber harvest is neither necessary nor appropriate.

Conclusion

I find Forest Supervisor Avey addressed the programmatic effects of timber harvest and additional plan components to require costs and impacts for all timber sales is not needed.

Timber Suitability in Primitive and Semi-Primitive Recreation Settings (CR137)

An objector contends that timber production and associated road-related activities are inconsistent with primitive, semi-primitive non-motorized, and semi-primitive motorized recreation opportunity spectrum settings.

Objector's Proposed Remedy

- The PRISM timber model should be calibrated to recognize that forecasting timber harvests in these recreation opportunity settings is unpredictable and should not be scheduled.

Response

Recreation opportunity spectrum settings are used in the PRISM harvest model to inform constraints due to their associated plan components (final EIS section 3.28.6, page 271). As indicated on page 271 of the final EIS section 3.28.6, modeling assumed no harvest would occur in primitive, and would be "low" in semi-primitive nonmotorized settings and semi-primitive motorized settings. This is to account for the limitations associated with these recreation opportunity spectrum classes including (but not limited to) limited road access and scenic integrity objectives as well as other overlapping land designations such as inventoried roadless areas.

Appendix H (pages 15 and 23) describe the specific modeling parameters. It indicates semi-primitive nonmotorized areas were included in a group constrained to less than 5 percent of the total planned harvest; and semi-primitive motorized were in a modeling group constrained to less than 10 percent of the total planned harvest.

Conclusion

Upon review, I find Forest Supervisor Avey acknowledged the timber harvest limitations resulting from plan components associated with primitive and semi-primitive recreation settings. These conservative modelled harvest levels would be consistent with recreation setting plan components.

Timber Harvest Suitability in the Elkhorns Geographic Area

An objector contends suitability plan component EH-TIM-SUIT-01 in the Elkhorn Geographic Area would allow timber harvest activities that are not compatible with the wildlife purpose of the wildlife management unit.

Objector's Proposed Remedy

- Adjust the current suitability statement as follows: "Timber harvest may occur outside of roadless areas to provide for other multiple use values compatible with wildlife values and habitats."

Response

EH-TIM-SUIT-01 currently reads "The Elkhorns Wildlife Management Unit is not suitable for timber production. However, timber harvest may occur to provide for other multiple use values." The objector contends the phrase in the plan component that indicates "timber harvest may occur to provide for other multiple use values" lacks the clear criteria provided in other timber suitability plan components. They provide the South Hills Recreation Area example that states, "harvest may be conducted to provide for other multiple use values compatible with the recreation values of the area" (DI-SHRA-SUIT-01). They assert the same sort of compatibility requirement should apply to the Elkhorn Wildlife Management Unit.

The analysis in the final EIS and suitability plan component for the Elkhorns Geographic Area reflect public comment that the Elkhorns Wildlife Management Unit should not be suitable for timber production under any alternative, based on a desire to carry forward the wildlife management unit designation and associated emphasis from the 1986 Forest Plan. However, based on public comments and interest, it was also determined that timber harvest would be a valuable tool in the geographic area to achieve desired conditions other than timber production including wildlife habitat maintenance and/or enhancement.

Plan components for the Elkhorns Wildlife Management Unit include several that emphasize wildlife values and habitats, including EH-WL-GDL-01 which states, "Maintenance, enhancement, and restoration of wildlife habitats should be the priority for resource management in the Elkhorns Wildlife Management Unit. Management activities and permitted uses should be compatible with wildlife values and habitats, and/or should be designed to avoid negative impacts to wildlife and wildlife habitats."

The final EIS section 3.21.24, page 117, discusses timber harvest and vegetation management in the Elkhorns Wildlife Management Unit and concludes, "Plan components would ensure that these activities improve wildlife habitat, restore or maintain desired vegetation conditions, reduce hazardous fuels, and/or protect values at risk…While the Elkhorns Geographic Area would be unsuitable for timber production, timber harvest could be used in areas that do not specifically preclude this activity…While some very limited amounts of harvest could potentially occur in inventoried roadless areas, it would be restricted by the terms of the 2001 Roadless Area Conservation Rule, and due to accessibility is unlikely to occur in the Elkhorns Wildlife Management Unit..."

After careful review of the specific wording objectors have proposed regarding compatibility with wildlife values and habitats, I have determined accommodating their suggestion in full is not necessary as there are other plan components (e.g., EH-WL-GDL-01) that will ensure timber harvest would be conducted in manner that addresses objectors' concerns. In addition, suggested wording to exclude timber harvest in the inventoried roadless area portion of the Elkhorns Geographic Area is not necessary and would create a prohibition on harvest that is not applied to any other inventoried roadless area on the Forest outside of recommended wilderness areas. The plan includes a timber suitability plan component for inventoried roadless areas, allowing timber harvest "to provide for other multiple use values when consistent with the 2001 Roadless Area Conservation Rule". One of the exceptions on timber harvest prohibitions in the Roadless Rule includes "cutting generally small diameter timber that is needed for one of the following purposes and will maintain or improve one or more of the roadless area characteristics: To

improve threatened, endangered, proposed, or sensitive species habitat; to maintain or restore the characteristics of ecosystem composition and structure." The roadless rule, combined with the desired conditions, standards, and guidelines for the Elkhorns Geographic Area, will ensure timber harvest activities are compatible with wildlife values and habitats.

Conclusion

Based on the above rationale, I conclude that the responsible official has adequately addressed timber suitability within the Elkhorn Geographic Area and Wildlife Management Unit based on public comment and consistent with the planning regulations. However, I also recognize the desire for additional clarity that that continues to emphasize the importance of wildlife habitat in the Elkhorns Wildlife Management Unit. Therefore, I am instructing Forest Supervisor Avey to incorporate a portion of the suggested rewording of the plan component EH-TIM-SUIT-01 as follows: "The Elkhorns Wildlife Management Unit is not suitable for timber production. However, timber harvest is suitable to provide for other multiple use purposes when compatible with wildlife values and habitats."

Timber Harvest in Riparian Management Zones

An objector is concerned the riparian management zone harvest plan components prohibit any thinning in riparian areas.

Objector's Proposed Remedy

- Remove the management restraints from the riparian management zone plan components which are artificially lowering harvest levels.

Response

The objector points to the Montana streamside management zone law as an effective management tool to protect watersheds in Montana and other land ownerships. They are concerned the 2020 Land Management Plan removes the flexibility to treat fuels and vegetation conditions that the 50-foot streamside management zone allows.

The planning regulations require plans to establish widths for riparian management zones around waterbodies, giving special attention to land and vegetation for approximately 100 feet from the edges of all perennial streams and lakes (36 CFR 219.8(a)(ii). The Inland Native Fish Strategy amendment to the west of the Continental Divide include riparian habitat conservation strategy widths varying from 100 to 300 feet depending on stream type, consistent with this requirement. Long-term monitoring has demonstrated this is a successful strategy for maintaining and restoring aquatic integrity. Thus, Forest Supervisor Avey continued this strategy in a consistent manner forestwide, with updates consistent with the current planning regulations and based on best available scientific information, to apply the requirements in 36 CFR 219.8 for water quality and riparian resources. (See Issue Summary – Riparian Management Zones for more additional response information.)

It's important to note that while riparian management zones aren't suitable for timber production, timber harvest is allowed to achieve desired conditions, addressing objectors concerns about the need to thin vegetation. As stated in the final EIS section 3.5.6, "Management of the outer [riparian management zone] would allow for other management objectives such as the reduction of uncharacteristic fire as long as treatments do not create long-term degradation to riparian and aquatic conditions". The plan components were developed to explicitly recognize that riparian management zones can benefit from active management, while protecting the areas closest to the stream edge.

Conclusion

I find Forest Supervisor Avey complied with the planning regulations to provide plan components to maintain or restore aquatic integrity.

Salvage Harvest

An objector contends salvage logging may not be conducted on lands not suitable for timber production. They also assert salvage harvest cannot be used to achieve other resource objections such as maintaining or restoring aquatic or riparian resources as it is inconsistent with recovering economic value.

Objector's Proposed Remedy

- Salvage logging (beyond hazard tree removal) must be precluded in [riparian management zones].

Response

The objector cites the definition "salvage cut" from the FSM 2470 as the reason salvage harvest cannot occur on lands not suitable for timber production because it focus on the removal of trees "to recover value that would otherwise be lost". However, the NFMA explicitly allows for salvage harvesting on lands not suitable for timber production at USC 1604(k). In addition, planning regulation handbook at FSH 1909.12, section 60.5, defines salvage harvest as "The removal of dead trees or trees damaged or dying because of injurious agents, other than competition, that recovers economic value that would otherwise be lost, or because the removal of the dead or damaged trees *contributes to achieving plan desired conditions or objectives*" [emphasis added here].

The 2020 Land Management Plan does indicate "salvage harvest shall not occur in the inner [riparian management zone]" (FW-RMZ-STD-06). Although salvage harvest is permitted in the outer riparian management zone, standard FW-RMZ-STD-03 indicates, "Vegetation management may occur within the outer [riparian management zones] to meet desired conditions, so long as project activities within [riparian management zones] do not prevent attainment of desired conditions for wildlife and the inner [riparian management zone]". It also includes the following suitability statement: "[riparian management zones] are not suitable for timber production, but harvest for other multiple use values is allowed as appropriate under the [riparian management zones]plan components" (FW-RMZ-SUIT-01). And the timber section of the plan includes the following guideline: "To help achieve desired conditions on lands unsuitable for timber production, but where timber harvest could occur, the use of timber harvest should be limited to the following purposes: Salvage dead or dying trees…" (FW-TIM-GDL-02). Thus, there are multiple places in the plan that ensure any harvest, including salvage harvest, contributes to achieving plan desired conditions, consistent with the definition in the planning regulation implementation directives.

Conclusion

My review finds that Forest Supervisor Avey's draft record of decision is consistent with the NFMA and planning regulations.

Fire and Fuels

Objectors contend the final EIS fails to acknowledge that climate change and weather has more influence over high severity fire than fuels, that there is evidence that thinning the Forest does not preclude high severity fires, and that managing home protection zones should be prioritized over a fuels management program.

Objectors' Proposed Remedy

- Acknowledge that thinning the Forest is unlikely under extreme fire conditions to reduce fire spread. Indeed, there is a growing body of science that finds that thinning can exacerbate fire spread. The Forest needs to revise its assumptions about wildfire and act accordingly.

Background

The planning regulations at 36 CFR 219.8(a)(1), required plan components to maintain or restore the ecological integrity of terrestrial and aquatic ecosystems and watersheds in the plan area, including plan components to

maintain or restore structure, function, composition, and connectivity, taking into account…(iv) System drivers, including dominant ecological processes, disturbance regimes, and stressors, such as natural succession, wildland fire, invasive species, and climate change; and the ability of terrestrial and aquatic ecosystems on the plan area to adapt to change; and (v) Wildland fire and opportunities to restore fire adapted ecosystems…"

Response

The planning regulations direct the responsible official to consider wildland fire and opportunities to restore fire adapted ecosystems in developing plan components that restore and enhance ecological integrity. As such, the 2020 Land Management Plan includes multiple plan components that address objectors' concerns. For example, desired condition FW-FIRE-DC-01 states, "Wildfire maintains and enhances resources and, as nearly as possible, is allowed to function in its natural ecological role across the landscape, including wilderness. Under favorable conditions, wildfires and prescribed fires are managed to ensure highest probability of success, minimum exposure to responders, and to meet resource objectives." Desired condition, FW-FIRE-DC-02 reads, "Within the wildland-urban interface and around high value resources, surface fuel loading and crown spacing provide conditions for low severity surface fire that minimizes threats to values". Goals in the land management plan emphasize coordinating with communities and local government to improve collective understanding of fire and reduce risks (FW-FIRE-GO-01, 02, and 03). An objective for fire management sets a goal of 15,000 acres per decade of hazardous fuels treatments in the wildland-urban interface (FW-FIRE-OBJ-01). Collectively, these plan components reveal a direction for fire management that emphasizes managing fire in a safe manner that reduces risks and achieves ecological goals, focusing fuels treatments in areas around homes.

As it relates to fires severity, the introduction to the fire and fuels section of the land management plan recognizes the importance of fire as an ecological process stating: "Fire is a natural and essential ecological disturbance process that occurs along a spectrum of differing intensity, severity, and frequency that allows ecosystems to function in a healthy and sustainable manner" (Plan, page 28). Desired condition FW-VEGT-DC-01 recognizes "there is wide variability in size class because of high severity, low frequency disturbance regime" in the cool moist potential vegetation type (Plan table 4, page 32). And the calculation of the natural range of variation, used as a measure of ecological integrity, includes estimations of acres burned per decade at different severities, including as stand-replacing fires (final EIS section 3.8.1, page 143 and section 3.7.5 figure 3, page 128).

The final EIS also recognizes the importance of climate in affecting fire stating, "Of all the ongoing and foreseeable future actions that have the potential to affect fire, especially unwanted wildfire, climate change is likely to be the single most important factor" (final EIS section 3.7.6, page 131). It addresses the complexity of the relationships between fuels, fire, and weather indicating, "It is readily apparent that vegetation, fire, climate and weather are closely interconnected, and the relationship between the multiple aspects of each is extremely dynamic and complex" (final EIS section 3.7.6, page 132).

Section 3.7 of the final EIS provides rationale for managing wildfires and implementing fuels treatments in the wildland urban interface, estimating the expected amount of treatments that would occur under different alternatives based on modelling. The effects of these treatments is discussed for all resources, including but not limited to terrestrial vegetation (see final EIS section 3.8.6, page 173, pages 184-186, page 201), aquatic ecosystems (final EIS section 3.5.6, pages 100-101), old growth (final EIS section 3.8.6, page 234), and terrestrial wildlife diversity and specific species (final EIS section 3.13.6, page 303; section 3.14.6, pages 345-346; and section 3.14.8, pages 374-375).

Finally, the final EIS forest recognizes limitations of fuels treatments stating "Vegetation treatments can increase fuel loadings resulting in higher severity fire (Hanson, 2010)" (final EIS section 3.7.6, page 135), while also presenting evidence of the effectiveness of fuels treatments, citing the forest's Fuels Treatment Effectiveness Database and several peer-reviewed papers (see for example final EIS section 3.8.5, page 166).

Conclusion

The 2020 Land Management Plan and final EIS recognize the ecological role of fire, including high-severity fire. The analysis considered by the responsible official includes discussions of fire, climate and weather, effects to other resources, and the effectiveness of fuels treatments using the best available scientific information as required by the planning regulations.

Livestock Grazing

Background

The planning regulations at 36 CFR 219.10(a) requires a plan to include plan components including standards or guidelines, for integrated resource management to provide for ecosystem services and multiple uses, including range.

Forest Service Handbook 1909.12 at section 23.23(d) provides guidance that plan components should be designed to accommodate the range of site-specific needs of individual areas, species, allotments, and plant communities. Allotment management plans for livestock provide specific operational guidance and are the most appropriate planning level to carry out management tools such as minimum stubble height, multiple year mean utilization, or streambank alteration limitations.

Forest Service Handbook 2209.13, section 11 states administrative modifications to term grazing permits would occur as needed for those allotments with completed allotment management plan revisions. If allotment plan revisions are not yet complete, changes would be incorporated during that planning effort.

The range management regulations at 36 CFR 222 subpart A requires allotment level analysis and planning consistent with land management plans.

Plan Components and NEPA Analysis

Objectors assert the forest must disclose comprehensive quantitative baseline data and a capability and suitability analysis to accurately assess and support continuation of the Forest grazing program. They contend the Forest should manage an interim grazing program with reduced animal use months and reduced season of use until all site-specific NEPA analyses are completed for the grazing program. Objectors also proposed additional plan direction designed to reduce livestock grazing and its impacts on rangeland condition.

Objectors' Proposed Remedies

- Establish methods to quantitatively assess the rangeland health across the forest. Provide a schedule for completion of the analysis and provide the public the opportunity to review and comment on the actual baseline rangeland data during an official NEPA process. Additionally, provide overarching criteria-based guidance related to the determination of areas that are suitable and capable for livestock grazing. Establish interim guidelines for grazing management to reduce grazing impacts forest wide until this analysis is complete.
- Provide a full analysis of the potential use of targeted grazing for weed control using the best available science, and current ecological conditions.
- The Forest must provide the data used to conduct the capability and suitability analysis. Further, the Forest must honestly assess the capacity to manage the grazing program and adjust the scope of the grazing program to reflect that reality. In the short term, the Forest must adopt interim standards to protect riparian and aquatic habitats that are measurable and demonstrable to permittees.
- The Forest must disclose vegetation data, capability and suitability analysis, livestock-grizzly interaction analysis; and must also implement standards and guidelines that will move the current conditions towards desired

conditions. An interim grazing program with reduced animal use months and reduced season of use must be implemented until all site-specific NEPA analysis is completed for the grazing program.

- Close all vacant allotments and remove them from the grazing base.
- The Forest should include a full analysis of an alternative that includes interim standards, quantifiable measures, and specific terms and conditions for each livestock grazing permit so that conditions forest wide can make progress toward the desired conditions. All alternatives should include language for the voluntary permanent retirement of grazing permits.
- Prior to authorizing management activities that will spread invasive species and reduce native plant vigor, the Forest should perform a forest wide invasive species assessment. Interim standards including a reduction in animal use months, stubble height requirements, and utilization thresholds should be put in place until all site-specific NEPA analyses can be completed. Options for controlling invasives also include a long-term reduction or removal of animal use months and a change in season of use. Additionally, a specific guideline to exclude livestock for a minimum period of three growing seasons following surface disturbing activities should be implemented.

Response

The current planning regulations do not require a rangeland suitability analysis at the plan level. The Forest Service Handbook at 1909.12 section 13.32 indicates the interdisciplinary team should identify and evaluate *available* information about range conditions, levels of grazing activity, the capability and productivity of the plan area to support grazing, the impacts of grazing on ecological integrity and species diversity, and the contribution of grazing in the plan area to social, economic, and ecological sustainability. That information is described in the 2015 Forest Plan assessment, chapter 6, and in the final EIS at section 3.27 and in response to comments in appendix G (CRs 59, 106, 108, 161, 180, and 185).

Review of rangeland condition and trends described in section 3.27.5 (pages 221-222) of the final EIS and the data described in CR 106 (page 125) of appendix G indicates the responsible official had sufficient information to inform the development of plan components intended to guide site-specific allotment planning. Although the objectors described a need for "comprehensive analysis of land health" and "better assessment of noxious weeds forestwide" during the resolution meetings, detailed, quantitative analysis of rangeland conditions and trends, and rangeland health indicators, is not possible or necessary at the programmatic scale.

The final EIS describes the environmental consequences of livestock grazing program to many resources including aquatic resources, terrestrial vegetation, at-risk plant species, invasives plant management, terrestrial wildlife, recreation, and carbon and climate in those sections of the final EIS. The plan includes standards and guidelines to guide allotment management decisionmaking for the aspects of livestock grazing that pose a risk to these resources in the plan area. For example, forestwide guidelines FW-RMZ-GDL-01 through 13 and FW-GRAZ-GDL-03 through-07 limit management activities inside riparian management zones to protect riparian-related resources. Also see the aquatic integrity issue summaries for additional discussion.

Objectors also indicate the analysis in the EIS doesn't support the use of targeted grazing for weed control because it fails to describe what areas would qualify for targeted grazing and fails to define how this would be applied as a treatment. The use of goats and sheep to address an invasive species infestation is considered a biological control as part of FSM 2900 requirements to use an integrated pest management approach to prevent, control, and eliminate priority infestations of invasive species in aquatic and terrestrial areas of the National Forest System. Targeted grazing is an authorized tool in current Forest Noxious Weed Control EIS documents.

The final EIS describes the use of domestic livestock grazing as "an effective method in managing some large invasive plant infestations while assisting the ecological succession process", citing scientific information to support this conclusion. However, the plan does not direct targeted grazing must be used, nor site-specifically authorize it's

use (36 CFR 219.2(b)(2)). The final EIS clearly notes the programmatic nature of the analysis and that site-specific decisions, such as authorization of sheep and goats for weed control, are not being made at this time (final EIS section 1.1, page 1 and section 2.5.2, page 11). Use of targeted grazing for invasive weed treatment is allowed on the Forest through the existing invasive weed management decisions (U.S. Department of Agriculture, 1994 #19256).

Conclusion

I find that, as directed in the planning handbook at FSH 1909.12, section 23.23d, the plan components are designed to accommodate the range of site-specific allotment conditions that occur forestwide. Forest Supervisor Avey has provided appropriate programmatic information and analysis to understand the effects of how those plan components will guide livestock grazing management and allotment management planning into the future.

In addition, as described in the draft record of decision, components applicable to livestock grazing (including the end of season stubble height guideline) will be incorporated through permit modification(s), reissuance of existing term permits, issuance of new term grazing permits, and/or as allotment management plan revisions and sufficiency reviews occur. Thus, an interim grazing program with reduced animal use months and reduced season of use does not need to be implemented until all site-specific NEPA analysis is completed for the grazing program.

Review of Existing Allotment Plans for Plan Compliance

Objectors requested clarification on how plan direction would apply to allotments with existing management plans and the effects of implementing the revised land management plan on grazing permittees. They contend that information regarding how the revised land management plan direction would be implemented and affect permitees is inconsistent in the plan and final EIS.

Objectors' Proposed Remedies

Include more specific wording in guideline FW-GRAZ-GDL-01 that makes it clear that the 158 allotments with earlier updated allotment plans, along with others in need of allotment plan updates, are all subject to use indicators such as greenline stubble height via administrative modifications to existing term grazing permits.

Response

The final EIS clearly notes the programmatic nature of the analysis and that site-specific decisions, such as changes to allotment management plans, are not being made with the plan decision (final EIS section 1.1, page 1 and section 2.5.2, page 11). Thus, the analysis assumptions described for the livestock grazing program in the section 3.27.3 are accurate at a programmatic scale. Indirect effects described in the environmental consequences would not occur until site-specific adjustments were made at the allotment management plan level.

At the resolution meeting, objectors stressed one of their biggest concerns was the rate at which allotment management planning is being addressed. As discussed in the previous summary, they are concerned that grazing land isn't being assessed at either a forestwide or a site-specific scale in a timely manner. Thus, they seek a schedule to complete allotment management planning or "more stringent interim standards" until the NEPA planning is completed to "ensure resources do not continue to be degraded".

A schedule for allotment management plan revisions was set as part of the 1995 Rescissions Act (Public Law 104-19), with clarification provided later under the 2004 Interior Appropriations Act (Public Law 108-108) section 325. The 2004 Appropriations Act allowed for schedule adjustment based on environmental analysis need of grazing allotments and available funding. The Forest follows the National Allotment NEPA Schedule 2017-2028, which is updated on a 3-year cycle to reflect changes in allotment planning. This effort is outside the scope of forest plan revision.

The 2020 Land Management Plan is not designed to provide site-specific allowable use levels or prescribe management systems for livestock grazing allotments. However, the draft record of decision (page 56) states plan components applicable to livestock grazing (including the end of season stubble height guideline) will be incorporated through permit modification(s), reissuance of existing term permits, issuance of new term grazing permits, and/or as allotment management plan revisions as sufficiency reviews occur. Monitoring data will be used to prioritize both allotments and stream reaches where changes in management practices may be warranted. It is expected that all allotments will be consistent with the 2020 Land Management Plan direction within the first decade.

Conclusion

I find that the requested clarification is unnecessary and that Forest Supervisor Avey has adequately described how plan direction will be addressed in the existing allotment management plans.

Effects to Aquatic and Riparian Resources

Objectors contend that plan direction for livestock grazing will not provide adequate protection for aquatic and riparian environments, and that the EIS analysis is not specific enough to support conclusions that plan components will be effective.

Background

See the Programmatic NEPA Review issue summary for information on the depth and detail of programmatic analyses provided for impacts that might result from making broad programmatic decisions.

Response

The 2020 Land Management Plan is not designed to provide site-specific allowable use levels or prescribe management systems for livestock grazing allotments. Forest plan components guide the development, update, and revision of allotment management plans, which provide site-specific operational guidance (FSH 1909.12).

As indicated in section 3.27.5 of the final EIS, physical factors such as stream type, geology, climate, and elevation greatly influence the recovery of riparian areas. Specific management action (in regards to livestock grazing management) must be made to fit local conditions (Clary & Webster, 1990), which also includes selecting annual use indicators that match the resource goals of a riparian site. Riparian grazing plans should be site-specific and based upon the best research and evidence available to maintain and enhance vegetation and protect streambanks (Mosley, Bunting, & Manoukian, 1999; Brett B. Roper, 2020). Kovalchik and Elmore (1992) recommended carefully designed grazing systems to maintain diversity of plant associations in riparian communities along stream reaches.

Section 3.5.6 of the final EIS (page 98) states: “Forestwide plan components would protect and minimize the effects of grazing on riparian resources in all action alternatives. Standards specific to grazing, FW-GRAZ-STD-01, 02, 03 and 04 require authorization of new and existing management plans to avoid, minimize, or mitigate adverse effects to riparian habitats. Indicators such as forage use, bank alteration or riparian stubble height (e.g., FW-GRAZ-GDL-01) would be used to move rangeland vegetation, riparian function, and wildlife habitat towards desired conditions. Forestwide guidelines would limit management activities inside riparian management zones. Specifically, all activities within riparian management zones, including grazing, should protect key riparian processes, including maintenance of streambank stability, input of organic matter, temperature regimes, and water quality”.

Regional PacFish/InFish Biological Opinion (referred to as PIBO) monitoring indicates that implementation of grazing standards adopted from INFISH led to improving trends for some monitoring indicators (B. B. Roper, Saunders, & Ojala, 2019) west of the Continental Divide. That trend is projected to continue in the west side geographic areas and is expected to occur within eastside geographic areas as riparian management zone plan direction is extended

forestwide. PIBO monitoring will be a tool that continues to support effectiveness monitoring and the adaptive management process.

Conclusion

I find Forest Supervisor Avey has provided sufficient plan direction, as supported by the programmatic EIS, to guide livestock grazing in a manner that protects aquatic and riparian resources.

Designated Areas

Objectors assert the presence of livestock and associated infrastructure take away from the feeling of naturalness and removes any opportunities for solitude and unconfined recreation.

Objectors' Proposed Remedy

- Disallow livestock grazing in recommended wilderness areas, wild and scenic river corridors, wilderness study areas, and inventoried roadless areas.

Background

The Wilderness Act (1964) (16 USC 1131-1136) provides the statutory definition of wilderness and management requirements for these congressionally designated areas. This act established a National Wilderness Preservation System to be administered in such a manner as to leave these areas unimpaired for future use and enjoyment as wilderness. At section 4(d)(4)(2) the grazing of livestock, where established prior to September 3, 1964, shall be permitted to continue subject to such reasonable regulations as are deemed necessary by the Secretary of Agriculture.

FSH 1909.12, section 74.1 states "when developing plan components for recommended wilderness areas, the responsible official has discretion to implement a range of management options. All plan components applicable to a recommended area must protect and maintain the social and ecological characteristics that provide the basis for wilderness recommendation." But plan components may "2. Continue existing uses, only if such uses do not prevent the protection and maintenance of the social and ecological characteristics that provide the basis for wilderness designation." The responsible official should strive to maintain consistency with the provisions of 16 USC 1133(d) in developing plan components for the management of recommended wilderness areas.

The land management plan must include plan components for management of rivers found eligible for the National Wild and Scenic River system to protect the values that provide the basis for their suitability for inclusion in the system (36 CFR 219.10(b)(1)(v)). "Feeling of naturalness and opportunities for solitude and unconfined recreation" are wilderness characteristics and are not outstandingly remarkable values for the eligible rivers on the Forest.

There are no regulatory requirements to protect wilderness characteristics of inventoried roadless areas.

Response

The 2020 Land Management Plan includes a suitability plan component, FW-RECWILD-SUIT-08, that states "Recommended wilderness areas are suitable for existing livestock grazing allotments, but they are not suitable for new or expanded livestock grazing allotments." This is consistent with provisions of the wilderness act, which allowed grazing to continue where it was authorized at the time of the enactment of the legislation. A similar plan component is included for wilderness study areas at FW-WSA-SUIT-07.

Neither the Wild and Scenic Rivers Act, nor the Inventoried Roadless Rule, require the elimination of livestock grazing to protect the feeling of naturalness or opportunities for solitude and unconfined recreation.

Conclusion

I find the 2020 Land Management Plan complies with regulation and policy related to livestock grazing the designated areas of the plan area.

Minerals Management

Locatable and Saleable Minerals

An objector is concerned the plan is written to limit mineral exploration and development in violation of the 1872 Mining Law.

Objector's Proposed Remedies

- Remove "or gravel mining" from guideline FW-RMZ-GDL-07.
- Include statement that gold and other metal placer deposits will be allowed in riparian areas but, as per previous Gallatin NF Desired Condition "When authorizing or reauthorizing mineral development and operations, --- If the riparian management zone cannot be avoided, then ensure operations take all practicable measures to maintain, protect, and rehabilitate water quality and habitat for fish and wildlife and other riparian associated resources ---."
- Insert the following in the plan:
    - The FS has a minerals management mission to encourage, facilitate, and administer the orderly exploration, development, and production of mineral and energy resources on NFS lands.
    - The right of reasonable access for purposes of prospecting, locating, and mining is provided by statute. Such access must be in accordance with the rules and regulations of the FS.

Background

The Code of Federal Regulations at 36 CFR 228 Subpart A provide the rules and procedures through which use of the surface of National Forest System lands in connection with operations authorized by the United States mining laws (30 USC 21-54), which confer a statutory right to enter upon the public lands to search for minerals, shall be conducted so as to minimize adverse environmental impacts on National Forest System surface resources.

36 CFR 228 Subpart C describe authority, scope, definition, and policy governing the disposal of mineral materials. 36 CFR 228.41 indicates mineral materials consist of petrified wood and common varieties of sand, gravel, stone, pumice, pumicite, cinders, clay, and other similar materials…. 36 CFR 228.43 indicates decisions to authorize the disposal of mineral materials must conform to approved land and resource management plans (36 CFR 219.22).

The planning regulations at 36 CFR 219.10(a) require plan components for integrated resource management for multiple use (2) renewable and nonrenewable energy and mineral resources.

Response

Although the objector is concerned plan components restricting "gravel mining" could be misinterpreted as gold placer mining, each classification is clearly defined in the mineral regulations at 36 CFR 228. Gold is defined as a locatable mineral, subject to the Mining Law of 1872. Gravel, however, is considered a mineral material, for which the Forest Service has authority for disposal (36 CFR 228.40, 41(c), and 42). The 2020 Land Management Plan describes all three categories of minerals – locatable (e.g., gold), mineral materials (e.g., sand and gravel), and leasable (e.g. oil and gas) on pages 118 and 222. Guideline FW-RMZ-GDL-07 is applicable to sand and gravel, as specifically stated, and could not be applied to gold per law and regulation. Thus, I've determined the Forest did not intend to use the term gravel as a euphemism for placer mining, and no additional clarification is needed.

While I agree with the objector's discussion at the resolution meeting that gravel extraction is rare in more inaccessible headwater reaches on the Forest, the plan component applies forestwide. It's important to note the plan component will guide Forest Service gravel pit development when there is a need to provide surface material for forest roads and this may occur in many remote areas on the Forest. This plan component ensures aquatic and riparian resource protection within Forest Service authority.

As to the objector's suggestion to address circumstances when mineral development and operations cannot avoid the riparian management zone, I find the responsible official has addressed this in the Geology, Energy, and Minerals section of the plan with guidelines FS-EMIN-GDL-01 and FS-EMIN-GDL-02 (2020 Land Management Plan, page 119). These guidelines incorporate the objector's recommended language.

Other proposed plan text is not necessary as it repeats law, regulation, and policy.

Conclusion

I find the responsible official has provided appropriate plan direction guiding the development of mineral materials versus locatable minerals on National Forest System lands per the 1872 Mining Law and both the minerals and planning regulations.

Oil and Gas Leasing

Objectors seek modifications to the record of decision and plan standards related to oil and gas leasing.

Objectors' Proposed Remedies

- Add this statement to the final record of decision: "An Oil and Gas Environmental Impact Statement and Record of Decision was released in 1998 for the Helena National Forest and for the Elkhorn Mountains Portion of the Deerlodge National Forest. In 1998 the Helena National Forest Supervisor made the Elkhorn Wildlife Management Unit unavailable for oil and gas leasing. This decision is still in place and the Elkhorn Wildlife Management Unit is still discretionary unavailable for federal oil and gas leasing but may be changed by subsequent new laws and legislation."
- Modify standards FW-RECWILD-STD-01 and FW-WSA-STD-01, which prohibits surface occupancy in recommended wilderness areas and wilderness study areas, to exclude new leases.
- Include a plan component stating oil and gas leasing is not suitable in the Badger Two Medicine area.

Background

36 CFR part 228, subpart E, section 228.102(c) sets forth the rules and procedures by which the Forest Service of the United States Department of Agriculture will carry out its statutory responsibilities in the issuance of Federal oil and gas leases and management of subsequent oil and gas operations on National Forest System lands.

The Bureau of Land Management (BLM) manages the Federal mineral estate for locatable and leasable mineral resources and has specific authorities and expertise in managing Federal minerals. The Forest Service manages surface use for the exploration and development of minerals and nonrenewable energy resources on National Forest System lands. In the land management plan, plan components applicable to mineral and nonrenewable energy development must be within Forest Service authority consistent with applicable laws and regulations, including the requirements of the Planning regulations.

FSH 1909.12 section 23.23i indicates the plan may include "suitability, standards, or guidelines to identify measures, *within appropriate legal authorities* of the Forest Service, to minimize or avoid impacts on surface or subsurface resources or to protect purposes for which lands were acquired" [emphasis added here].

Response

Forest Service decisions regarding which lands are available for oil and gas leasing is supported through preparation of a leasing availability analysis. As there is a difference in scope, proposed action, and level of detail between a planning effort and a leasing analysis, the responsible official exercised his discretion not to include that decisionmaking concurrent with plan revision. Current leasing availability for the Helena and Lewis and Clark National Forests was determined in the 1998 and 1997, respective oil and gas environmental impact statements and record of decisions (final EIS section 3.29.1 and FSH 1909.12 section 23.23i).

Regarding objectors' concern for the Elkhorns, as stated in the draft record of decision, "Authorizations for occupancy and use made before this plan approval may proceed unchanged until time of reauthorization" (page 56). Thus, the oil and gas leasing decisions remain unchanged with the approval of the plan and the Elkhorns Wildlife Management Unit is still discretionarily unavailable for federal oil and gas leasing.

Typically, site-specific NEPA decisions that fit under the framework of a land management plan are not disclosed as part of the plan decision, because they are subject to change under separate analyses. For example, as the draft record of decision states on page 56, "Resource plans (such as travel management plans) developed by the Forest that apply to the resources or land areas within the planning area must be consistent with the plan components. Resource plans developed prior to this plan decision will be evaluated for consistency with the plan and updated if necessary." The oil and gas leasing decision falls within a category of a resource plan that will be evaluated after approval of the land management plan and updated if necessary. As the leasing availability of the Elkhorn Wildlife Management Unit is an administrative decision it would be in appropriate for the plan decision to indicate it could only be changed through legislation.

Regarding objectors' concern for recommended wilderness areas, Forest Supervisor Avey does not have the authority to indicate leasing would not be suitable in recommended wilderness areas without completing a leasing analysis. Thus, it would be inappropriate to include a standard excluding leasing. However, the plan standard FW-RECWILD-STD-01 states "new leases for leasable mineral shall include a no surface occupancy stipulation", which protects wilderness characteristics by prohibiting surface occupancy of oil and gas leasing infrastructure.

However, section 3.21.8 of the final EIS (effects to minerals management from recommended wilderness) indicates that an effect common to all alternatives is that "[recommended wilderness areas] would be discretionarily unavailable for mineral leasing". Section 3.29.5, which describes the environmental consequences for geology, minerals, and energy indicates acres administratively unavailable for mineral leasing would vary by alternative based on acres recommended for wilderness designation. The discussion does not clearly indicate if the effects would occur *if* Congress made the designation or if the effects are based upon the plan standard.

Lastly, the regulations at 36 CFR 228.102(b)(2) indicate wilderness study areas are legally unavailable for leasing. And the Badger Two Medicine Area has been congressionally withdrawn from all mineral entry (including locatable, leasable, and saleable minerals) by The Tax Relief and Healthcare Act of 2006 (PL 109-432). Therefore, a suitability determination would repeat what has been covered in law or regulation. The plan should not need repeat law or regulations, so the proposed plan components are not necessary.

Conclusion

I find Forest Supervisor Avey has included plan direction within Forest Service legal authority. Accommodating objectors' remedies is neither necessary nor appropriate within guiding law, regulation, and policy.

However, based on my review, I am instructing Forest Supervisor Avey to clarify and differentiate the effects to leasable minerals management based upon the no surface occupancy plan standard for recommended wilderness areas versus the effects of future Congressional designation.

Transportation System and Travel Management

Compliance with US Department of Agriculture Memorandum and the Forest Service National Strategic Plan

Objectors assert the 2020 Land Management Plan contradicts the June 2020 directive from former USDA Secretary Purdue by reducing access opportunities for recreation. They also contend Forest Supervisor Avey ignored national direction to increase access and provide additional recreational opportunities for senior citizens, large family groups, and families with infant strollers or young children.

Objectors' Proposed Remedies

- Remand the 2020 Land Management Plan and develop a plan that is consistent with the June 12, 2020 directive from Secretary Purdue.
- Review the Plan for consistency with the Forest Service Strategic Plan: Fiscal Year 2015-2020 and remand the decision until consistency is achieved.

Background

Secretarial Memorandum to the Chief of the Forest Service (June 12, 2020) establishes vision, priorities, and direction on increasing the productivity of national forests and grasslands, valuing our nation's grazing heritage and the national grasslands, increasing access to national forests, and expediting environmental reviews to support active management. To increase access to National Forest System Lands, it directs the Forest Service to:

- increase access to Forest Service lands by streamlining the permit process for recreational activities and embracing new technologies and recreation opportunities
- open public access to National Forest System lands with currently limited access where feasible in cooperation with States, counties, and partners
- improve customer service by modernizing and simplifying forest products permitting and the Forest Service land exchange process

The USDA Forest Service Strategic Plan: Fiscal Year 2015-2020 establishes goals, objectives, performance measures, and strategies for the Forest Service. It does not specify any specific land management direction. However, the Forest Service planning directives require land management plans to align with the National Strategic Plan's goals and objectives.

Response

The secretarial memorandum referenced by objector calls for increasing access to National Forest System Lands through streamlined permitting processes and working with states, counties, and partners to open public access where it is currently limited. Consistent with this direction, the plan includes desired conditions to provide for access to and into National Forest lands for both summer and winter recreation. FW-ROS-DC-06 through 13 describe motorized access desired conditions. The goal of FW-ACCESS-GO-01 is to work in cooperation with landowners, other agencies, and partners to provide legal access to public lands.

The draft record of decision and plan both state the plan advances the goals of the strategic plan (draft record of decision, page 1; 2020 Land Management Plan chapter 1, page 12). Section 2.5.1 of the final EIS describes the first two goals and objectives as directly related to the current planning effort. They include:

1. Sustain our Nation's forests and grasslands
    a. Foster resilient, adaptive ecosystems to mitigate climate change

b. Mitigate wildfire risk

c. Conserve open space

2. Deliver benefits to the public

a. Provide abundant clean water

b. Strengthen communities

c. Connect people to the outdoors

I find the plan includes a wide range of plan components to address the objectives associated with goals 1 and 2. Given objector's primary concern is recreation access, I'll highlight here that there are several plan components related to the objective to connect people to the outdoors by making recreation facilities more accessible for senior citizens, family groups, and families with infant strollers. This includes desired condition FW-REC-DC-01 that "recreation opportunities enable visitors to connect with the unique natural environments and historic and cultural occurrences that have taken place throughout the area and instill a culture of stewardship and appreciation" and objective FW-REC-OBJ-03 to "Improve accessibility of facilities or programs at least five developed recreation sites (development scale 3-5), such as campgrounds, trailheads, cabin rentals, or the Lewis and Clark National Historic Trail Interpretive Center". See the Motorized Recreation Opportunities issue summary for additional details.

Goals 3 is to Apply Knowledge Globally which includes advance knowledge, improving technology, and exchange of natural resource expertise. Goal 4 is to Excel as a High-Performing Agency by recruiting a diverse workforce, promoting an inclusive culture, and attracting and retaining top employees. While both are critical Agency goals, neither are best addressed in the land management plan, thus not mentioned in the EIS or plan.

I'll also note the Forest Service is subject to several statutes related to accommodations for individuals with disabilities. The law most directly relevant to issues of equitable access to National Forest System lands for those with physical disabilities or limitations is the Rehabilitation Act of 1973. Under section 504 of this act, no person with a disability can be denied participation in a Federal program that is available to all other people solely because of his or her disability. The planning regulations, consistent with the Multiple-Use Sustained Yield Act and the National Forest Management Act, direct the agency to provide a variety of recreational opportunities. The 2020 Land Management Plan provides a range of opportunities for both motorized and non-motorized uses in a manner that is ecologically sustainable over the long term that apply to all individuals. National Forest System lands are not reserved for the exclusive use of any one group, nor must every use be accommodated on every acre.

Conclusion

I find the 2020 Land Management Plan is consistent with the referenced memo and other laws, regulations, and policy regarding access to National Forest System lands.

Motorized Recreation Opportunities

Objectors contend that the EIS is inadequate because it does not include an alternative that increases access and fails to address the cumulative effects of motorized prohibitions across the state. They allege the plan "proposes to close thousands of acres to winter snowmobile use and hundreds of miles currently open to motorized and mechanized use".

Objectors' Proposed Remedies

- Remand the decision and address the numerous public comments received about the lack of, and loss of recreation opportunities.

Background

The National Environmental Policy Act at 42 USC 4332(2)(e) requires Federal Agencies to "…study, develop and describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts of alternative uses of available resources . . ."

The "Forty Most Asked Questions Concerning CEQ's NEPA Regulations," Question and Answer 1, March 1 6, 1981 states "Reasonable alternatives depend on the nature of the proposal and the facts of the case. Factors may include the cost of the proposed alternative, the actual need or desire for the alternative in the affected community, and the state of the technologies involved in developing the alternative.

Forest Service Handbook 1909.12 section 21.21 indicates "the need to change the plan helps define the proposed action, purpose and need, and decision framework for the environmental analysis related to the planning process."

Response

As objectors' notes, the Forest received numerous comments regarding recreation access on the Forest seeking both increases *and* decreases in motor vehicle access. Information from the public provided during the scoping comment period led Forest Supervisor Avey to identify motorized and mechanized means of transportation in recommended wilderness areas as a significant issue that drove alternative development in the environmental impact statement.

Recreation opportunities, recreation access, and recreation special uses were also all identified as issues in the EIS. However, those issues did not drive alternative development because the forest has completed travel plans for all locations across the forest. Therefore, broad shifts in motorized access were not identified in the need for change. Regardless, Forest Supervisor Avey acknowledged those issues as important elements of the analysis and addressed the Plan's effects to them in the draft EIS for public review and comment.

Although objectors contend there is a substantial loss of motorized access in the plan, it's important to note the plan does not directly regulate uses by the public such as motor vehicle use designations. While the plan identifies where motorized recreation may or may not be suitable, public uses cannot be changed without site-specific analysis and decisionmaking. Forest Supervisor's plan approval will not change motor vehicle access. (See the Authorization of Motorized and Mechanized Means of Transport issue summary for a detailed discussion of this issue.)

I recognize objectors are concerned with motorized and mechanized transport suitability plan components that may lead to future site-specific prohibitions in areas recommended for wilderness designation. The draft record of decision indicates Forest Supervisor Avey prioritized maintaining existing recreation uses when choosing areas to recommend for wilderness designation. He did this either by selecting areas where motorized and mechanized uses are currently not authorized or occur rarely; or by modifying boundaries to exclude popular mountain bike trails and snowmobile areas. This includes, for example, the boundary choices for the Big Snowies and Nevada Mountain Recommended Wilderness Areas (also see the Recommended Wilderness Area Management issue summary).

However, there are some recommended wilderness areas where motorized and mechanized access is currently authorized, and the final EIS discloses these existing uses would not be consistent with plan suitability components. Given the high level of public interest in this issue, Forest Supervisor Avey is very transparent in the potential future effects and identifies the specific miles and acres of existing access that future travel plan decisionmaking will need to address for plan consistency. But it's important to note, that while the final EIS doesn't speculate on potential quantitative increases in miles or acres of motor vehicle access that could occur during site-specific decisionmaking, there are 1,098,892 acres on the Forest in motorized recreation settings that provide this opportunity (final EIS appendix G, CR46).

Rather than a loss of "thousands of acres" of motor vehicle access, review of the final EIS indicates the 2020 Land Management Plan represents little change in the overall forestwide suitability from current conditions. Summer motorized recreation opportunity spectrum settings remain constant at 38 percent of the Forest with a reduction of only 118 acres (0.004 percent of the plan area) in motorized settings. Winter motorized recreation suitability is only reduced by 1 percent from 36 to 35 percent of the plan area.

At the resolution meeting, an objector highlighted their concern that the final EIS doesn't address the cumulative effects of all motorized closures that have occurred across the state, citing the State of Montana's Environmental Quality Council House Joint Resolution No. 13 Final Study Report. But given the scope and effects of the decision described above, assessing specific miles of individual travel management decisionmaking on other Federal lands is neither needed nor appropriate at a programmatic level. The final EIS indicates overall forestwide change in motorized recreation suitability from the current condition is minimal, with land allocations that offer both motorized and non-motorized recreation settings. Review of the cumulative effects in the recreation resource sections indicates the Forest properly reviewed and considered the effect of adjacent land management with the effects of the proposed land management plan.

Both the written objections and discussions at the resolution meeting revealed concerns regarding increasing motorized access to address increasing recreation demands, particularly as evidenced with people visiting their public lands during the pandemic this past year. However, I find the plan provides a wide range of plan components and land allocations designed to enhance recreation opportunities and access and provide safer experiences for recreationists. This includes plan objectives and two recreation emphasis areas that will contribute towards managing the increased demands for recreation near local communities and to benefit local economies.

Conclusion

I find Forest Supervisor Avey acted within his discretion to determine the range of alternatives based on the need to change and issues identified through public comment. In addition, the final EIS provides sufficient detail at a programmatic scale to inform the decision. See also the Programmatic NEPA Review issue summary.

Authorization of Motorized and Mechanized Means of Transportation (Forestwide Concerns)

Some objectors allege the plan illegally authorizes motorized and mechanized uses. Another objector contends the 2020 Land Management Plan does not address the minimization criteria in Travel Management Rule, Subpart B and C to ensure the plan provides for sustainable recreation.

Objectors' Proposed Remedies

- Standards and guidelines should ensure that all motorized designations minimize impacts; are periodically monitored, reviewed, and modified as needed; and are modified immediately when considerable adverse damage is occurring as described in Executive Orders 11644 and 11989.
- Prohibit motorized uses until the environmental impacts of the activity area carefully analyzed and evaluated by the Service. This includes, but is not limited to, the Little Prickly Pear area (Nevada Mountain Inventoried Roadless Area).
- Reclassify the Little Prickly Pear area as (winter recreation opportunity spectrum) semi-primitive non-motorized (SPNM) with exceptions for over snow vehicles on Marsh Creek and Lost Horse Forest Roads.
- Except for the Badger Two Medicine, non-wilderness areas that are identified as primitive recreation opportunity spectrum, but not recommended for wilderness, should not be identified as either suitable or unsuitable for mountain biking in the final plan. For those areas, the final plan and record of decision should

commit the Forest Service to undertake a separate planning process to decide whether the areas should be open or closed to mountain biking.

Background

The travel management regulations at 36 CFR 212 implement Executive Order (E.O.) 11644 (February 8, 1972), ''Use of Off-Road Vehicles on the Public Lands,'' as amended by E.O. 11989 (May 24, 1977) to ensure that the use of off-road vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands (preamble, page 68264 Federal Register, Vol. 70, No. 216).

In doing so, the Forest Service codified the "minimization criteria" of the executive orders in subparts B and C of the regulations and the agency is required to comply with these criteria when designating routes or areas for motor vehicle use.

As such 36 CFR 212.55(b) requires the consideration of specific area as follows: When *designating* [emphasis added here] National Forest System trails and areas for motor vehicle use on National Forest System lands, the responsible official shall consider effects on the following with the objective of minimizing:

1. Damage to soil, watershed, vegetation, and other forest resources;
2. Harassment of wildlife and significant disruption of wildlife habitats;
3. Conflicts between motor vehicle use and existing or proposed recreation uses of National Forest System lands or neighboring Federal lands; and
4. Conflicts among different classes of motor vehicle uses of National Forest System lands or neighboring Federal lands.

In addition, the responsible official shall consider:

5. Compatibility of motor vehicle use with existing conditions in populated areas, taking into account sound, emissions, and other factors.

National Forest System lands are generally suitable for a variety of uses consistent with the purposes for which they are administered (outdoor recreation, grazing, timber, watershed, and wildlife and fisheries). The identification of suitability of lands is not required for every resource or activity.

A plan's identification of certain lands as suitable for a use is not a commitment to allow such use but only an indication that the use might be appropriate. A specific use or activity may be approved or may be disapproved in an area identified as suitable for such types of use.

Per 36 CFR 219.2(b)(2) a plan does not regulate uses by the public. Rather, that is accomplished through project or activity decisionmaking to issue and order under 36 CFR Part 261, Subpart B. Although regulating mountain biking is not required by the travel management rule, the Forest Service has the discretion to designate or prohibit mountain biking on routes and areas of a National Forest.

Response

Subparts B and C of the Travel Management Rule (36 CFR 212) describe the requirements for designating roads, trails, and areas for motor vehicle use; and for identifying designated roads, trails, and areas on a motor vehicle use map and an over-the-snow vehicle use map. It is important to note that Subpart B and C of the Travel Management Rule apply to site-specific designations of motor vehicle use. As stated in the draft record of decision (page 10), the plan decision is strategic in nature. It does not authorize projects, activities, or site-specific prohibitions, commit the Forest Service to take action, or dictate day-to-day administrative activities needed to carry on the Forest Service's

internal operations (e.g., personnel matters, law enforcement, or organizational changes). Site-specific analysis in compliance with the National Environmental Policy Act (NEPA) will need to be conducted in order for prohibitions or activities to take place on the ground, in compliance with the broader direction of the plan.

Prior to this revision, the Forest designated the specific roads, areas, and trails for the use of motor vehicles that are displayed on the motor vehicle use and over-the-snow vehicle use maps as required by 36 CFR 212 subparts B and C. Although the Plan identifies landscape level suitability for motor vehicle use (including over-the-snow), this programmatic plan decision does not designate any additional roads, trails, or areas for motor vehicle use, or prohibit existing motor vehicles uses, therefore those maps remain unchanged. Plan suitability alone does not mandate off-road vehicle use or indicate an area is subject to unmanaged off-road vehicle use. Public use must continue to adhere to the current motor vehicle and over-the-snow vehicle use maps until site-specific planning is completed.

The Forest Service must consider the minimization criteria when *designating* motor vehicle use on trails and areas. The landscape level suitability plan components, together with the suite of desired conditions, standards, and guidelines that provide for ecological integrity and sustainable recreation will provide the guidance that will be used when considering the effects on (with the objective of minimizing) forest resources and recreation conflicts as described at 36 CFR 212.55. These include the plan components associated with the recreation opportunity settings, infrastructure, and those that address management risks and stressors to wildlife habitat, connectivity, soil productivity, and aquatic resources.

The travel management rule does not regulate mechanized means of transport (mountain bike use). It is a recreation use that is allowed on National Forest System Lands unless prohibited with a site-specific order. However, similar to the explanation above for motor vehicle use, the responsible official chose to identify landscape level suitability for mountain bike use, identifying some lands as suitable for mountain biking and some lands as not suitable based on the desired conditions for those lands. As described in Range of Alternatives issue summary, the suitability determinations are largely consistent with current Forestwide orders (draft record of decision, page 12) as approved within the Forest's previous travel plan decisionmaking. Thus, the plan does not "open or close" areas to mountain biking or "set in motion changes to the wilderness character" of those areas not recommended for wilderness.

Conclusion

Regarding motor vehicle use, the plan does not make any site-specific designations of motor vehicle use in the plan area, including the Little Prickly Area. As such, the responsible official is not required to consider the effects on (with the objective of minimizing) forest resources and recreation conflicts as described at 36 CFR 212.55. Furthermore, I found the suite of integrated plan components for sustainable recreation will provide the framework to guide site-specific designations consistent with that requirement and in consideration of effects to big game species and other wildlife.

Regarding mechanized travel (mountain biking) at the forestwide scale, Forest Supervisor Avey acted within his discretion to identify areas as suitable or not suitable for mountain biking. Additional issue summaries below disclose my findings regarding mountain bike use in specific geographic areas or designated areas.

Minimum Road System

Objectors contend the land management plan does not comply with the Travel Management Rule, Subpart A, to provide a sustainable minimum road system and planning regulation requirements for sustainable infrastructure. They seek "clear direction to identify and implement a minimum road system over the life of the plan".

Objectors' Proposed Remedies

- Establish road and motorized trail density standards to provide for the protection of National Forest Service System Lands, and clear direction to identify and implement a minimum road system over the life of the plan. In addition to establishing road and motorized trail density standards, the Forest Service should convert guidelines FW-RT-GDL-1 through 13 into standards.
- Revise the infrastructure plan components to reflect best available scientific information, comply with the planning regulation requirements for sustainability and diversity, and include a monitoring plan with meaningful timelines and parameters that enables the responsible official to determine if a change in plan components is needed.
- Revise infrastructure plan components to work towards a realistic desired infrastructure that is sustainable and can be managed along with plan components for ecological sustainability, consistent with the planning directives.
- The monitoring plan must ask how many road miles meet their road management objectives, and how many miles are maintained to their objective maintenance level.
- The monitoring plan needs to ask the current funding levels for annual road maintenance and how does compare with the need for annual maintenance. It also must ask what the deferred maintenance backlog is and how much is it being reduced on an annual basis.

Background

Subpart A of the Travel Management Rule at 36 CFR 212 establishes requirements for administration of the Forest transportation system, including roads, trails, and airfields, and contains provisions for acquisition of rights-of-way. Subpart A requires identification of the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of NFS lands and use of a science-based roads analysis at the appropriate scale in determining the minimum road system. This portion of the rule is intended to help ensure that additions to the NFS network of roads are those deemed essential for resource management and use; that construction, reconstruction, and maintenance of roads minimize adverse environmental impacts; and, finally, that unneeded roads are decommissioned and restoration of ecological processes are initiated.

The planning regulations at 36 CFR 219.10(a)(3) indicates the development of plan components shall consider appropriate placement and sustainable management of infrastructure, such as recreational facilities and transportation and utility corridors for the integrated resource management of multiple uses in the plan area.

Direction for the monitoring and evaluation of land management plans is found in the planning regulations at 36 CFR 219.12 and in the directives at 1909.12 chapter 30.

Response

The portion of subpart A most relevant to the objectors' issue is 36 CFR 212.5(b), which includes two requirements. One is to identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands. The other is to identify the roads on lands under Forest Service jurisdiction that are no longer needed to meet forest resource management objectives. In determining the minimum road system, the responsible official must incorporate a science-based roads analysis at the appropriate scale.

Note the requirement to identify the minimum road system does not require the Forest to establish an upper or absolute limit on the miles of road that the Forest must not exceed. Nor do the regulations include a substantive requirement mandating specific road management actions (e.g., decommissioning) to "implement a minimum road system over the life of the plan". As indicated in FSM 7700, the Forest Service uses travel analysis to inform

decisions to identify the minimum road system and inform decisions relating to administration of the Forest transportation system (e.g., road maintenance and other road management decisions such as road construction, reconstruction, decommissioning, storage, and motor vehicle use designations). Road management priorities are given to reconstructing and maintaining needed roads and decommissioning unneeded roads, or, where appropriate, converting them to less costly and more environmentally beneficial uses.

Consistent with these requirements, the final EIS (section 3.25.5, pages 182 through 184) discusses the 2015 forestwide travel analyses, describing its assessment of the road infrastructure and set of findings and opportunities for changes to the Forest's transportation system. It indicates those findings are being used now to prioritize ongoing road maintenance and inform project development as the Forest works to effectively manage an efficient transportation system. Relevant to objectors' issue, the travel analysis report was appropriately used at the programmatic scale to inform the land management plan components such as the objectives for miles of roads to be maintained, decommissioned, or stored.

The planning regulation requirement for "appropriate placement and sustainable management" of transportation infrastructure is well-aligned with the travel management regulations at subpart A. Consistent with both requirements, the plan includes objectives, standards, and guidelines to guide the management of forest system roads and trails to achieve the desired condition that "a safe and cost-effective transportation system provides public and administrative access to Forest Service lands while protecting natural and cultural resources" (FW-RT-DC-01). It includes measurable and time-specific objectives for road decommissioning, placing roads in intermittent stored service, road reconstruction, and road maintenance to address road-related resource effects (2020 Land Management Plan, page 103). Standards and guidelines constrain transportation management actions, including location (placement) of road construction and relocation, to minimize risks of adverse environmental effects. The final EIS specifically addresses effects of the road and trail infrastructure plan direction for water quality, riparian areas, grizzly bear, and wildlife habitat connectivity (see final EIS sections 3.5.6, 3.14.6, and 3.13.6). While the final EIS recognizes that roads can have environmental impacts, the land management plan's road-related direction is expected to guide management that maintains or restores ecological integrity. Also see Issue Summary – Plan Component Sufficiency for discussion related to how a plan can "direct removal of roads" or the efficacy of standards versus guidelines.

Although the objectors don't find the road maintenance objectives sufficient to achieve the road and trail desired conditions, they reflect the fiscal capability of the Forest based on the last 3-5 years of budget allocations as required by the planning regulations. However, if funding is available, additional maintenance will be completed. In addition, the plan includes goal FW-RT-GO-01 to develop partnerships for additional maintenance needs.

The objector also finds the monitoring program insufficient to monitor progress toward achieving desired condition FW-RT-DC-01 and to track how well the Forest Service is achieving a cost-effective road system because it only measures miles of road decommissioned or converted to trail.

Under 36 CFR 219.12, Forest Supervisor Avey has the discretion to set the scope, scale, and priorities for plan monitoring. The monitoring program includes a wide spectrum of questions designed to monitor indicators of ecological integrity or management success across many different resource areas and achievement of every desired condition does not need to be monitored. MON-INFRA-01 directly monitors progress toward achieving a minimum road system by measuring of number of miles decommissioned or converted, and percent of decommissioned road that were identified as likely not needed by the forest wide travel analyses. This provides an indication of the extent that road status changes are occurring to provide a safe and cost-effective transportation system consistent with the regulations at 36 CFR 212.5(a).

Conclusion

I find the land management plan complies with the planning regulation requirements to guide sustainable management of transportation infrastructure. I also find the land management plan will appropriately guide project and activity decisionmaking consistent with Travel Management Rule to move the forest toward achieving the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands.

Recreation Opportunity Spectrum

Several organizations and individuals objected to various aspects of how the recreation opportunity spectrum was used to define recreation settings either generally or within specific geographic areas of the forest. Some also objected to plan components associated with primitive and semi-primitive settings, primarily related to those indicating mechanized transport (mountain biking) is suitable in desired primitive recreation opportunity spectrum settings. Other objectors requested changes to assigned settings in specific areas.

Background

The planning regulations at 36 CFR 219.19 defines a recreation setting as: "The social, managerial, and physical attributes of a place that, when combined, provide a distinct set of recreation opportunities." The Forest Service uses the Recreation Opportunity Spectrum to define recreation settings and categorize them into six distinct classes: primitive, semi-primitive non-motorized, semi-primitive motorized, roaded natural, rural, and urban.

FSH 1909.12, section 23.23l(3)(c) indicates a plan may identify types of trails and recreational use that are suitable or not suitable in a management or geographic area and that these should be aligned with the desired recreational settings and opportunities identified for the area. It continues with "while the plan does not determine the use for each specific trail, it does establish desired conditions and other plan components that indicate what types of trails are appropriate within different parts of the plan area".

FSM 2310.5 defines the Recreation Opportunity Spectrum as "A system, by which existing and desired recreation settings are defined, classified, inventoried, and monitored." The underlying premise of the recreation opportunity spectrum is that visitors choose a specific setting and activity to derive desired experience(s) and other benefits (FSM 2310.5).

FSM 2311 indicates primitive settings are: "predominately unmodified, naturally evolving, vast, and remote" with natural vegetation conditions "no treatments except for fire use". Semi-primitive non-motorized and semi-primitive motorized recreation opportunity spectrum settings, in both summer and winter, are: "predominately natural/natural appearing; rustic improvements to protect resources" and "predominately natural appearing, motorized use visible and audible", respectively. Physical characteristics related to vegetation management for both semi-primitive non-motorized and semi-primitive motorized recreation opportunity spectrum settings, in both summer and winter, are: "vegetation treatments enhance/improve forest health and mimic natural vegetation patterns".

Geographic Area Recreation Opportunity Spectrum Setting Changes

Multiple objectors requested recreation opportunity spectrum setting changes in various locations of the plan area. Some objections suggesting changes from semi-primitive non-motorized to primitive recreation opportunity spectrum settings, such as those for the Loco Mountain Inventoried Roadless Area or the portion of the Nevada Mountain area between Gould-Helmville Trail and South Fork Poorman. They assert the primitive setting would preserve current uses such as backcountry hunting, hiking, fishing, and horseback riding, and to protect wildlife such as elk, wolverines, goshawk, and Canada lynx. Other objectors requested changes to align with ongoing collaboratively developed proposals.

Objector's Proposed Remedies

- The Loco Mountain Inventoried Roadless Areas in the Crazies Geographic Area should be a primitive recreation opportunity spectrum setting.
- Summer recreation opportunity spectrum for the area between Gould-Helmville and South Fork Poorman Creek should be corrected from semi-primitive motorized to primitive with one-half mile of Poorman Creek Road.
- The primitive recreation opportunity spectrum area in the Alice Creek drainage should match the Recommended Wilderness Boundary. The remainder of the area should be reclassified as semi-primitive non-motorized. In addition, we recommend the Forest and Region submit changes to the National Recreation Opportunity Spectrum Mapping Protocol to eliminate mechanized use from being suitable in primitive settings.
- Adjust the summer recreation opportunity spectrum map to be consistent with the proposed future trail corridors for mountain bikes and off-highway vehicles in the Upper Blackfoot Working Group consensus landscape proposal.
- Modest adjustments in summer recreation opportunity spectrum configuration are necessary to better reflect desired conditions that accommodate connecting trails between Stemple Pass and Lincoln supported by the Montana High Divide Trail Collaborative.
- Include this desired condition in the Upper Blackfoot Geographic Area: Trails connect the community of Lincoln to the Continental Divide near Stemple Pass, with minimal impact to wildlife habitats and movement corridors.

Response

The underlying premise of the recreation opportunity spectrum system is that visitors choose a specific setting and activity to derive desired experience(s) and other benefits across forest lands (FSM 2300). As defined in the 2020 Land Management Plan, primitive settings encompass large, wild, and predominately unmodified landscapes. Semi-primitive nonmotorized settings encompass large, semi-remote areas of the forest that provide for backcountry nonmotorized uses. Although these settings are not as vast or remote as the primitive recreation opportunity spectrum settings, they offer opportunities for exploration, challenge, and self-reliance. Semi-primitive motorized settings provide a similar backcountry recreation setting but may offer travel routes for off-highway vehicles and other high clearance vehicles.

As described in the final EIS (section 2.7, page 15) and draft record of decision (pages 12 and 37), outside of recommended wilderness areas, the assigned recreation settings do not generally change the opportunity for any of the current recreation uses (see also the Range of Alternatives issue summary). In addition, most semi-primitive settings are located within inventoried roadless areas. Regulatory and plan components for these areas provide large, undisturbed, unfragmented areas of land (FW-IRA-DC-01) where natural processes predominate (FW-IRA-DC-02). As such, these areas provide for wildlife habitats similar to that described above for designated wilderness areas and recommended wilderness areas (final EIS section 3.13.6). Therefore, the allocation of semi-primitive recreation opportunity spectrum settings within inventoried roadless areas should not preclude the continuation of valued backcountry uses or protection considerations for a variety of wildlife. For more details, see my responses in the Wolverine and Lynx issues summaries.

Other objectors requested area-specific recreation opportunity spectrum setting changes to align with or accommodate local collaborative proposals. For example, a representative at the Montana High Divide Trail collaborative discussed their concern that the semi-primitive motorized recreation opportunity spectrum setting in Nevada mountain area between Gould-Helmville and South Fork Poorman Creek is a mapping error as it is not currently open to motorized use. They seek a change to the Nevada Mountain Recommended Wilderness Area that aligns with the collaboratively developed proposal, but at the very least prefer this be assigned to a non-motorized recreation setting.

One individual objected that the plan does not include a non-motorized recreation area in the Middleman-Hedges Mountain area South of the Gates of the Mountain Wilderness area and Magpie Gulch as suggested by the Montana High Divide Trail Coalition recommendation. Although the plan doesn't create a special recreation allocation, the recreation settings are aligned with the recommendation. Maps BB-4 and BB-5 of appendix A to the 2020 Land Management Plan depict the majority of the Middleman-Hedges Mountain landscape as primarily desired semi-primitive non-motorized and primitive recreation opportunity spectrum setting allocations.

Other objectors are concerned that the desired summer recreation opportunity spectrum setting for the Upper Blackfoot Geographic Area conflicts with local collaborative landscape proposals for future mountain bike and off-highway vehicles trail corridors in the areas of Stemple Pass and Lincoln. In addition to changes in recreation opportunity spectrum setting, they requested the addition of a desired condition to reflect the collaborative trail connectivity recreation goals.

Although the plan does not authorize specific trail construction, it does establish desired conditions and other plan components that indicate what types of trails are appropriate within different parts of the plan area. The Upper Blackfoot Working Group's proposed mountain bike trail running from Crater Mountain, westward along the northern side of Baldy Mountain (detailed in the objectors' maps) traverses two desired summer recreation opportunity spectrum settings – semi-primitive non-motorized in the east and roaded natural in the west (see Map UB-4 in appendix A to the 2020 Land Management Plan). Objectors request that this roaded natural desired summer recreation opportunity spectrum setting be changed to a desired semi-primitive recreation opportunity spectrum setting to accommodate the full length of the proposed mountain bike trail.

The 2020 Land Management Plan, at pages 63 through 68, includes plan components for each mapped desired recreation opportunity spectrum setting. FW-ROS-SUIT-18 indicates that mechanized means of transportation is suitable on designated routes and areas in desired roaded natural settings. Thus, the proposed mountain bike trail would be consistent with the assigned recreation opportunity spectrum setting allocations.

The Upper Blackfoot Working Group's proposed off-highway vehicle trail running from north of Stemple Pass, along route 601 to the west, and crossing 601 and continuing southwest along Fields Gulch (also detailed in the objectors' maps) also traverses both roaded natural and semi-primitive non-motorized desired summer recreation opportunity spectrum settings (see Map UB-4 in appendix A to the 2020 Land Management Plan). Objectors are correct in recognizing the motor vehicle use designation of the proposed OHV trail would not be consistent in two areas assigned to semi-primitive non-motorized settings.

Conclusion

Overall, I find that the responsible official has met the requirements of the planning regulations and supporting policy related to the assignment of recreation opportunity spectrum settings. As it relates to specific requests for changes aligned with collaboratively developed proposals, I appreciate the information shared at the resolution meetings regarding the great work local stakeholders are doing to find common ground for a broad range of recreation opportunities in two geographic areas of the Forest. Nonetheless, I also recognize Forest Supervisor Avey's plan allocation decision represents a broad array of forestwide management issues and trade-offs. My review indicates that although not all aspects of the proposals are fully represented in the plan, most were addressed in one or more alternatives and many are consistent with the preferred alternative as acknowledged by an objector in the resolution meeting. Thus, I don't find a compelling reason to instruct Forest Supervisor Avey to adjust his decision to fully align with all aspects of the collaborative efforts. However, I am instructing Forest Supervisor Avey to correct the assigned recreation setting in the Nevada mountain area between Gould-Helmville and South Fork Poorman Creek consistent with his rationale to remain consistent with current travel plan decisions.

Plan Components are Inconsistent with the 1986 Recreation Opportunity Spectrum User Guide

An objector asserts the characterizations of recreation opportunity spectrum classes in the 2020 Land Management Plan are a significant deviation from established physical setting descriptions of the “1986 ROS Red Book”. They indicate this is because the plan improperly omits "evidence of humans," "non- recreation uses," and "naturalness" setting indicators in the narratives for primitive, semi-primitive non-motorized, and semi-primitive motorized recreation settings.

Objector’s Proposed Remedies

- Establish recreation opportunity spectrum plan components that are consistent with the 1986 ROS Red Book which is the basis for the planning rule as informed by the planning rule programmatic EIS.
- The definition of recreation opportunity spectrum classes should be expanded to address access, remoteness, naturalness/evidence of humans, facilities and site management, social encounters, visitor impacts, and visitor management of each class.
- Additional plan component modifications, deletions, and additions

Response

The objector suggests additions, deletions, and modifications of specific plan components for timber harvest, road construction, and recreation uses to ensure the recreation opportunity spectrum plan components are consistent with the 1986 ROS Red Book (McConnel & Bacon, 1986). However, the “Red Book’s” introduction states it is not a policy document and acknowledges that recreation opportunity spectrum continues to evolve and requires creative application. While it continues to offer guidance to land managers, FSM 2300, Recreation, Wilderness, and Related Resource Management, published April 23, 2020, outlines recreation-related policy.

While terminology has been updated in the 2020 manual, many of the measures associated with the previous descriptors remains. For example: “evidence of humans” is captured using: scenic integrity objectives, maintenance levels of roads and trails, the development scale of recreation sites, the occurrence and type of facilities and structure present (water supply, sanitation, signing, interpretation, bridges) and whether motorized vehicles are present. Many of these measures are the same as those presented in the 1982 ROS Users Guide (page 22). They have been updated to link with contemporary corporate data and tools.

The degree of “naturalness” has been replaced with scenic integrity objectives for each recreation opportunity spectrum class. Scenic integrity objectives measure the degree of deviation from the scenic character but is described using ecological concepts as opposed to “naturalness”. This is consistent with the Scenery Management System and replaces the Visual Management System.

“Non-recreation uses” is not included in the 1982 ROS Users Guide or the amended FSM 2310. Desired recreation opportunity spectrum classes are derived through an integrated planning process as required in FSH 1909.12, sec. 23.23a. As outlined in FSM 2310.2 recreation-related policy “The overarching objective of sustainable recreation planning is to inform decisions that result in sustainable recreation outcomes. To be sustainable, recreation settings, opportunities, and benefits must: 1. Be compatible with other multiple uses;…”

Conclusion

I find Forest Supervisor Avey has met the requirements of the planning regulations and the FSM 2300 policy regarding the plan components identified for the recreation opportunity spectrum settings.

Mountain Biking in Primitive Settings

Objectors assert the decision to allow mountain biking in primitive settings erodes the definition of primitive and that the final EIS inaccurately implies national guidance compels a determination that mountain biking is suitable in all primitive recreation opportunity spectrum settings outside of recommended wilderness. One objector contends assigning primitive settings outside of recommended wilderness and allowing mountain biking erodes the "purpose and effectiveness of recreation opportunity spectrum as a wild landscape conservation tool".

Objectors Proposed Remedies

- Remove FW-ROS-SUIT-02 from the primitive suitability section for the Middle Fork Judith, Colorado Mountain, and also for all other areas in the plan designated for primitive recreation.
- Strike (FW-ROS-SUIT-02) from the primitive recreation opportunity spectrum suitability section. Provide place-based guidance for primitive recreation opportunity spectrum settings outside of recommended wilderness and wilderness study areas.
- The site-specific decision for primitive recreation opportunity spectrum means of travel outside of recommended wilderness should be analyzed within three years.
- Amend (FW-ROS-SUIT-07) as follows to clarify that cross-country wheeled use off Forest Service trails is not suitable: Mechanized means of transportation and mechanized equipment are suitable on Forest Service designated trails in desired semi- primitive non-motorized settings, unless prohibited by law, forest plan direction, or forest closure order.
- We recommend the Forest and Region submit changes to the national recreation opportunity spectrum mapping protocol to eliminate mechanized use from being suitable in primitive settings.
- The discussion of the recreation opportunity spectrum and travel planning in the draft Record of Decision and final EIS should be corrected to clarify that neither national direction nor past Forest's travel planning decisions compel a determination that mountain biking is a suitable use in all primitive recreation opportunity spectrum settings outside of designated wilderness.

Response

The planning regulations require the responsible official to "identify the suitability of areas for the appropriate integration of resource management and uses" (36 CFR 219.7(c)(2)(viii). Thus, he identified lands within the plan area as either suitable or unsuitable for mountain biking based on compatibility with the desired conditions applicable to those lands (36 CFR 219.7(e)(1)(v).

The 2020 Land Management Plan at page 65 includes the following plan component for desired primitive settings: "Mechanized means of transportation and mechanized equipment are suitable on designated trails in desired primitive settings, unless prohibited by law, forest plan direction, or forest closure order" (FW-ROS-SUIT-02). Although Forest Supervisor Avey determined recommended wilderness (which is also mapped as a desired primitive setting) should not be suitable for mountain biking, this is to preserve "the wilderness characteristics, including the sense of remoteness and the opportunities for solitude in recommended wilderness" and "to manage recommended wilderness areas for the social and ecological characteristics that provide the basis for their recommendation" (draft record of decision, pages 15, 25-31). Protecting wilderness characteristics is not the obligation in primitive settings in areas *not* recommended for wilderness.

Despite an objector's assertion that "mechanized travel is not "primitive" travel, only foot and horseback travel are", allowing mountain bikes in primitive settings is consistent with the definitions for recreation opportunity spectrum settings. Exhibit 01 of FSM 2300, chapter 2310 that states, "primitive settings encompass large, wild, and predominately unmodified landscapes. Their size and configuration create remoteness from the sights and sounds of human activities, management, and development. Signs and other structures are minimal and constructed of

rustic, native materials. Motorized travel does not occur. Encounters with other users is very low, offering visitors the opportunity for solitude, self-reliance, closeness with nature, challenge, risk, and discovery. Many primitive settings coincide with designated wilderness areas in which mechanized equipment is not present. Additional primitive settings may also occur outside of wilderness areas. *Mechanized travel and motorized equipment may occur in non-wilderness primitive settings*" [emphasis added here].

The final EIS (section 3.16.6) addresses public comments requesting that the definition of primitive recreation opportunity spectrum settings include language that would prohibit the use of mechanized means of transportation (including bicycles). This section indicates: "The National Recreation Opportunity Spectrum (ROS) Inventory Mapping Protocol, April 2018, provides guidance for not only how recreation opportunity spectrum settings are mapped but also what activities are appropriate in each recreation opportunity spectrum setting. Adherence to this protocol contributes to the consistent application of recreation opportunity spectrum settings across [National Forest System] lands. In accordance with this national protocol, mountain bikes are suitable in all recreation opportunity spectrum settings, unless those areas are specifically closed due to legislative action, such as congressionally designated wilderness, or by closure order at the Forest or District levels." This text was added after realizing the proposed action incorrectly stated national direction did *not* allow mountain biking in primitive settings (final EIS appendix G, CR24). However, I can see how objectors could interpret the phrasing to imply national direction requires mountain bike use be an allowed activity, rather than being within Forest Supervisor Avey's discretion to make the determination.

One objector expressed concern that allowing mechanized use transforms primitive settings to semi-primitive settings, "eroding the very purpose and effectiveness of recreation opportunity spectrum as a wild landscape conservation tool". However, nothing in the regulations or directives indicate the recreation opportunity spectrum is intended to be a wild landscape conservation tool. Forest Service Manual, chapter 2310, Sustainable Recreation Planning, states that the underlying premise of this system is that visitors choose a specific setting and activity to derive desired experience(s) and other benefits across Forest lands. Although the primitive setting description is analogous to a wilderness setting, the Forest Supervisor has the discretion to offer a similar recreation setting in areas outside of designated wilderness areas.

Conclusion

I find Forest Supervisor Avey has properly exercised his discretion to determine mechanized travel is suitable in primitive areas in non-wilderness settings. However, the discussions at the resolution meeting highlighted objectors' concerns that the descriptions of the national recreation opportunity spectrum protocol and manual direction are inaccurate and could set an inappropriate national precedent. Therefore, I am instructing him to clarify the description of how this information was used in the final EIS.

Regarding objectors' remedy to suggest changes to national policy regarding the recreation opportunity spectrum, that is outside the scope of this plan revision.

Geographic Area Changes in Mountain Bike Suitability

Objectors expressed concern over potential conflict of mountain bike use with other forms of non-motorized recreation uses such as hiking and horse-back riding and seek specific geographic areas to be identified as not suitable for mountain biking. Other objectors allege that allowing mechanized recreation in certain areas will impact wilderness characteristics, degrade cultural resources, or adversely affect wildlife habitat security.

Objectors Proposed Remedies

- Use the same discretion to determine mountain bikes are not suitable in recommended wilderness areas to determine mountain bikes are not suitable in the Elkhorn Wildlife Management Unit.

- Provide place-based guidance for primitive recreation opportunity spectrum settings outside of recommended wilderness and wilderness study areas.
- The remedy for the Neil Creek Trail to manage it as a foot and horse trail and the preferred access for livestock use and away from the Crystal Lake Trail loop.
- The Forest should either immediately produce documentation of its adverse effects analysis and determinations, or complete its analysis for how plan components for the Badger Two Medicine as well as mechanized travel affect the traditional cultural district and document its determination prior to signing the final record of decision for plan.
- The plan should clearly identify that mechanized transport is non-suitable in the Badger Two Medicine area.

Response

The place-based objections related to areas suitable for mountain biking are primarily related to the objectors' preference for areas to be recommended for wilderness. Those issues are addressed in the Designated Area issue summary responses. Concerns regarding mountain bike conflict with wildlife are addressed in the responses to Elkhorns Wildlife Management Unit and Grizzly Bear- Adequacy of Plan Direction to Contribute to Recovery.

Regarding potential conflicts between mountain bike and equestrian use, as indicated in the response to comments (final EIS appendix G, CR209) not all trail use conflicts can be addressed at the plan level. It's important to remember that even though a use is broadly suitable, site-specific decisionmaking can limit that use to specific trails or areas through project decisionmaking. I appreciated the discussions among objectors and interested persons about the trails in the Crystal Lake area in the resolution meeting. It appears there are opportunities for stakeholders to work together to develop trail or access proposals for the Forest Service to consider during site-specific implementation of the plan to address potential use conflicts.

Regarding the Badger Two-Medicine Area, objectors contend mountain biking should not be suitable because it is incompatible with achieving plan desired conditions for the area and would have adverse effects on the Traditional Cultural District. However, the Badger Two-Medicine Travel Plan decision made the site-specific decision to designate the 182 miles of mountain bike trails in the Traditional Cultural District in 2009. Broad changes in plan level suitability was not identified in the need for change as described in the final record of decision and as discussed in the Range of Alternatives issue summary. Nor have the objectors provided an explanation of what adverse effects mountain bikes are causing or may cause to the cultural resources of the area. In fact, the objection admits that "mountain bike use in the Badger Two Medicine remains relatively low at the moment", but state that because of "increasing popularity and changing technology both suggest allowing its continuation in the Badger Two Medicine will result in unacceptable impacts to the integrity of the Traditional Cultural District". Thus, it appears the concern is related to the potential for adverse effect if use patterns change. However, the planning regulations provide "an adaptive framework that will help responsible officials respond to changing conditions and new information" for this very reason (Preamble to the Rule Vol. 77, No. 68, page 21173). I note that the monitoring program addresses mountain biking in the Badger Two Medicine at MON-BTM-01. This monitoring question addresses some of the objectors' concerns regarding mountain biking in this area. I have, however, provided instruction with the Badger Two Medicine monitoring issue summary to help address objectors' concerns about mountain bike effects to cultural resources, rather than just the primitive setting. This will allow the Forest to adapt the plan or implementation should the effects of mountain biking point to a need for change.

Several objectors cite the Blackfeet Nation comments on the draft EIS regarding their preference for mountain bike suitability and assert the Forest Service is failing to meet tribal consultation requirements by not choosing an alternative that is responsive to their comments. However, as indicated in the response comment at CR14 (final EIS appendix G), plan components have been included based on government to government consultation with the Blackfeet Nation. They did not object to the draft decision that included mountain biking as suitable in the Badger

Two Medicine Area. In addition, it should be noted that standard RM-BTM-STD-01 ensures that the Badger Two Medicine is managed in close consultation with the Blackfeet Nation to fulfill Blackfeet treaty rights and the federal Indian trust respectively. It requires management of the area will protect and honor the Blackfeet reserved rights and sacred lands and that the uses of the area are compatible with desired conditions with compatibility determined through government to government consultations (final EIS section 3.21.28).

Conclusion

I find Forest Supervisor Avey acted within his discretion to determine where mountain bike use is suitable in the plan area based upon previous travel plan decisions and compatibility with desired conditions. As described in the Authorizations of Motorized and Mechanized Means of Transportation issue summary, a plan's identification of certain lands as suitable for a use is not a commitment to allow such use but only an indication that the use might be appropriate. A specific use or activity may be approved or may be disapproved in an area identified as suitable for such types of use. Thus, there are opportunities to accommodate site-specific trail management ideas discussed at the resolution meetings during plan implementation if recreation use conflicts increase.

Although objectors allege mountain biking is incompatible with the desired conditions of the Badger Two Medicine Area, they do not provide any specificity regarding the effects to cultural values outside of those addressed in the responses regarding mountain biking effects on primitive settings or wildlife habitat address elsewhere in this response. Therefore, I find no reason to provide instructions to change Forest Supervisor Avey's decision.

Developed Recreation and Outfitter Guide Permitting

Ski Area Plan Components

An objector requests plan component changes and a special designation to address the unique management needs of ski areas.

Objector's Proposed Remedies

- Amend desired condition LB-SHOWSKI-DC-01 to: The Showdown Ski Area provides public access to developed recreation activities such as downhill skiing, snowboarding, snowshoeing, and other potential recreational opportunities.
- Amend suitability LB-SHOWSKI-SUIT to: Timber production is not suitable in the Showdown Ski Area. However, timber harvest is suitable for other multiple use purposes such as improved recreation opportunity, guest safety, protection of facilities and infrastructure, fuel reduction, and forest health.
- Add a ski area designation to the recreation opportunity spectrum classes for Showdown and Teton Pass Ski Areas.

Background

The planning regulations at 36 CFR 219.9 defines recreation setting as "the social, managerial, and physical attributes of a place that, when combined, provides a distinct set of recreation opportunities. The Forest Service uses the recreation opportunity spectrum to define recreation settings and categorize them into six distinct classes: primitive, semi-primitive non-motorized, semi-primitive motorized, roaded natural, rural, and urban".

FSM 2310.5 characterizes rural settings as "modified natural environments". While these landscapes often contain geometric patterns created by management activities, there is a dominant sense of open, green space, typically characterized as pastoral farm and ranch lands. Facilities are common and may include resorts and summer home complexes; administrative sites and work centers; and highly developed campgrounds, interpretive sites, trailheads, picnic areas, and other recreation facilities. The sights and sounds of human activity and management are readily evident and the level of interaction with other users ranges from moderate to high.

Response

LB-SHOWSKI-DC-01 currently reads as "the Showdown Ski Area provides public access to developed recreation activities such as, but not limited to, downhill skiing, snowboarding, and snowshoeing". Either phrasing provides for the same management opportunities over time and both are within the discretion of Forest Supervisor Avey's decisionmaking.

LB-SHOWSKI-SUIT currently reads, "Timber production is not suitable in the Showdown Ski Area. However, timber harvest is suitable for other multiple use purposes". As with the desired condition, the effect of management under either phrasing would be the same and neither violates law, regulation, or policy. However, the objector's request to add examples of "other multiple use purposes" would be consistent with the approach taken to describe timber harvest suitably in other areas of the plan, such as the South Hills Recreation Area. (Also see Issue Summary – Timber Suitability in the Elkhorns Geographic Area.)

As to the objector's request for the plan to include an administrative designation for ski areas, the response to comments at CR90 (final EIS appendix G) indicates a rural recreation opportunity spectrum setting was assigned to the ski areas to allow for continual development of these sites, allowing for changes over time. In addition, the plan includes desired conditions and suitability plan components for both Showdown and Teton Pass Ski Areas, recognizing their unique management needs. As written, those plan components apply to the currently permitted areas. Creating a designated area allocation in the land management plan could limit expansion of the permit area in the future.

Conclusion

I find Forest Supervisor Avey has provided appropriate management direction for the ski areas on the Forest. Accommodating the suggested plan component modifications are within his discretion to consider. However, if he chooses not make changes in the suitability plan component, I am recommending he provide rationale for the variation in timber harvest suitability plan components in the final record of decision.

Outfitter and Guide Permitting

An objector asserts the number of outfitting licenses should be capped at current levels south of Highway 200 to ensure continued hunting opportunities for Montanans.

Objector's Proposed Remedy

- Establish a standard stating that no new outfitting licenses shall be issued south of highway 200.

Background

Outfitters rent or deliver to National Forest System land pack animals, vehicles, boats, camping gear or similar supplies or equipment for a fee or other gain. Guides provide services or assistance such supervision, protection, education, training, packing, touring, subsistence, transportation, or interpretation for a fee or other gain. A special use permit is required if an activity has entry or participation fees or the primary purpose is the sale of a good or service (36 CFR 251.51).

The Recreation Special Uses Handbook (Forest Service Handbook 2709.14), chapter 50, provides guidance for outfitting and guiding and other concession services. It indicates the needs assessment to determine the public or agency need for authorized outfitting and guiding activities should consider accessibility, size of the area, difficulty of the terrain, current levels of outfitting and guiding, and demographics of visitors to the area.

Response

The final EIS includes an alternative not considered in detail that would set limits on the number and kinds of outfitter and guide special use permits across the forest. This alternative was not addressed in further detail because setting limits for the number and kinds of special use authorizations is not required by the planning regulations. The level of detail required to inform a needs assessment cannot be appropriately analyzed at the programmatic scale of plan revision. Rather, plan components are in place that would inform decisions regarding such authorizations, including desired conditions for all resources. The response to comments at CR90 (final EIS appendix G) indicates, "decisions regarding the specific number and kinds of outfitter and guide permits would be determined outside of the forest planning process".

Conclusion

Although I agree it is not appropriate to limit outfitter and guide permitting without a comprehensive capacity analysis, the final EIS is not clear why this was not conducted during assessment or in the final EIS other than to say it is not required. Therefore, I am instructing Forest Supervisor Avey to add clarification on this issue by providing additional explanation in the alternative not considered in detail section of the EIS.

Species Diversity

Background

The planning regulations requires plan components to maintain or restore ecosystem integrity and ecosystem diversity. Ecosystem integrity is maintained if the dominant ecological characteristics remain within the natural range of variation, thus providing ecological conditions that support native species that have evolved under those conditions.

The planning regulations outlines an approach for maintaining ecosystem integrity using a combination of ecosystem-level (coarse-filter) and species-specific (fine-filter) plan components (36 CFR 219.9). The ecosystem components ensure that the broad habitat types and characteristics that support the majority of native species are maintained. The responsible official must add species-specific plan components when additional direction is needed to ensure the long-term persistence of a specific species.

As stated in the Federal Register (volume 77, number 68, page 21212): "The premise behind the coarse-filter approach is that native species evolved and adapted within the limits established by natural landforms, vegetation, and disturbance patterns prior to extensive human alteration. Maintaining or restoring ecological conditions similar to those under which native species have evolved therefore offers the best assurance against losses of biological diversity and maintains habitats for the vast majority of species in an area, subject to factors outside of the Agency's control, such as climate change. The final rule recognizes the importance of maintaining the biological diversity of each national forest and grassland, and the integrity of the compositional, structural, and functional components comprising the ecosystems on each NFS unit. The coarse-filter requirements of the rule are set out as requirements to develop plan components designed to maintain or restore ecological conditions for ecosystem integrity and ecosystem diversity in the plan area. Based upon the current science of conservation biology, by working toward the goals of ecosystem integrity and ecosystem diversity with connected habitats that can absorb disturbance, the Department expects that over time, management would maintain and restore ecological conditions which provide for diversity of plant and animal communities and support the abundance, distribution, and long-term persistence of native species. These ecological conditions should be sufficient to sustain viable populations of native plant and animal species considered to be common or secure within the plan area. These coarse-filter requirements are also

expected to support the persistence of many species currently considered imperiled or vulnerable across their ranges or within the plan area."

Persistence of Native Species

Objectors contend that the 2020 Land Management Plan does not adequately provide for the persistence of all native species. They also claim that plan direction is not based on the best available scientific information and that the EIS analysis should have provided more detail on how the plan will affect individual species.

Objector's Proposed Remedies

- Withdraw the proposed revised forest and begin a new process of public collaboration where at least 50 percent of large blocks of the landscape on these national forests be set aside just for wildlife management.

Response

Forest Supervisor Avey took a "coarse-filter and fine-filter" approach to provide ecosystem integrity, as required by the planning regulations at 36 CFR 219.9 and described in the Terrestrial Vegetation and Wildlife sections of the final EIS. The land management plan contains components that address key ecosystem characteristics, including composition, structure, function, and connectivity. The Terrestrial Wildlife Diversity section of the final EIS (section 3.13) evaluates the impacts of the land management plan on current Region Forester Sensitive Species. Information regarding the requirements, threats, and stressors for a variety of species considered in the planning process are provided in The Terrestrial Wildlife Diversity section (final EIS sections 3.13 and 3.13.11). Appendix D of the final EIS contains additional information about terrestrial wildlife species' habitat needs that were considered in the planning process. In the draft record of decision, Forest Supervisor Avey provides rationale for his decision and explains how the plan provides for the diversity of plant and animal communities.

All literature submitted by commenters was reviewed and addressed in the supplemental response to comments (final EIS appendix G, table 3). The determination of the best available scientific information was described in final EIS section 3.2 section 3.8.4. The EIS includes descriptions of the body of science used in plan development and analysis with sources listed in the bibliography. This includes a number of monitoring reports. The planning record also contains a detailed worksheet of all literature submitted by the public and the rationale for its inclusion or exclusion as best available scientific information used in the analysis. This documentation demonstrates compliance with the requirements at 36 CFR 219.3.

The final EIS analyzes the effects to specific at-risk species (e.g. grizzly bear, Canada lynx, flammulated owl, Lewis's woodpecker), as well as elk as a species that benefits people. The final EIS addresses other native species through groupings or guilds (e.g., species associated with aquatic, wetland, and riparian habitats, hardwood tree habitats, dry conifer habitats, mixed conifer habitats, high elevation habitats, late successional forest habitats, snags, coarse woody debris, and cave/cliff/rock or other geologically determined habitats). The description and rationale for this analysis approach are found in the final EIS (section 3.13.1, page 285; section 3.15.1, page 405).

Objectors voiced concern about several specific species, both in the written objections and during parts of the resolution meeting. My review of the final EIS and planning record, however, finds the 2020 Land Management Plan contains the necessary components to address these objection issues. For example, most of the species mentioned in the objections require large trees or snags for denning or nesting habitat (final EIS appendix D table 3). Coarse-filter plan components designed to provide the necessary habitat conditions for continued persistence of these species include desired conditions for diversity in tree size and density classes (FW-VEGF-DC-02 and 03), large and very large trees (FW-VEGF-DC-04), old growth (FW-VEGF-DC-05), snags (FW-VEGF-DC-06), and downed wood (FW-VEGF-DC-07). Desired conditions explicitly recognize the role of natural disturbances such as mountain pine beetle outbreaks in maintaining some of these key characteristics. A complementary suite of standards and guidelines is

provided to guide the forest towards achieving these desired conditions by ensuring that important habitat elements are protected during management operations.

In addition to the ecosystem-level plan components described above, species-specific plan components were included in the plan to support or promote specific species or other beneficial uses (e.g., elk) (draft record of decision, page 21). For example, FW-WL-DC-08 provides for habitat needs specific to bats, while FW-WL-GDL-03 and 04 provide additional protections for the western toad. And although vegetation management plan components such as those for snag retention, coarse woody debris, or riparian habitat don't name specific wildlife species, they contribute to the integrated plan content designed to maintain or restore the ecosystem integrity and diversity of the plan area per 36 CFR 219.9.

Conclusion

Upon reviewing the effects analyses for terrestrial vegetation, terrestrial wildlife diversity, and other sections in the final EIS, I find that Forest Supervisor Avey complied with 36 CFR 219.9 and 36 CFR 219.10(a) in providing plan components, including standards or guidelines, that provide the ecological conditions necessary to support the persistence of native species on the Forest. I also find the extensive effects analysis in the final EIS is based on best available scientific information, and that effects to both at-risk and other native wildlife species were disclosed.

Wildlife Monitoring

Objectors assert that the forest should monitor forest plan impacts on a larger suite of wildlife species.

Response

As required by 36 CFR 219.12(a)(5)(iv), the plan monitoring program includes questions and indicators to monitor key ecological conditions, including conditions that contribute to the recovery, conservation, or maintenance of at-risk species. Forest Supervisor Avey has included a suite of monitoring elements related to wildlife (2020 Land Management Plan, appendix B, pages 11-15). There are elements specific to grizzly bear (MON-NCDE-01 to 07), Canada lynx (MON-LYNX-01 to 07), flammulated owl (MON-WL-03), bighorn sheep (MON-WL-07) and ungulates (MON-WL-04). Other elements are designed to monitor key habitat conditions that encompass many wildlife species such as seclusion (MON-WL-06), connectivity (MON-WL-01), as well as issues such as human-wildlife conflict (MON-WL-02) and diseases and pathogens in bats and western toads (MON-WL-05).

In addition, there are numerous monitoring elements for terrestrial, forested, and nonforested vegetation (2020 Land Management Plan appendix B, pages 7-10) which will provide the monitoring needed to address habitat conditions for most native species in the plan area per the ecosystem/species-specific framework of the plan (final EIS section 3.4, page 42). A biennial monitoring evaluation report will be prepared to indicate whether a change to the plan, management activities, or monitoring program may be needed, and that report will be available to the public (draft record of decision, page 25).

Conclusion

I find that Forest Supervisor Avey has provided a suite of monitoring components for wildlife species in the plan area. These components are designed to help the forest track how management activities affect key habitat features and species. Collectively, they demonstrate compliance with the direction for the monitoring and evaluation of forest plans found at 36 CFR 219.12.

Management "Flexibility"

Objectors contend plan components such as the big game habitat guideline shift land management plan required decisionmaking to the project-level, which circumvents the plan amendment and public engagement processes.

They also assert the final EIS fails to acknowledge the uncertainty and risk of adverse effects associated with plan components that provide management flexibility.

Background

FSH 1909.12, section 06 describes the features and phases of the planning regulation's adaptive management framework. Section 05 defines adaptive management as "the general framework encompassing the three phases of planning: assessment, plan development, and monitoring (36 CFR 219.5). This framework supports decisionmaking that meets management objectives while simultaneously accruing information to improve future management by adjusting the plan or plan implementation. Adaptive management is a structured, cyclical process for planning and decisionmaking in the face of uncertainty and changing conditions with feedback from monitoring, which includes using the planning process to actively test assumptions, track relevant conditions over time, and measure management effectiveness".

Also see the issue summary for plan component sufficiency.

Response

Objectors express broad concerns about the effects of "flexibility" discussed in the final EIS but provide the most specificity about their issue in the objection to the elk habitat guideline FW-FWL-GDL-01. They use this guideline as an example of a plan component that inappropriately "says, we'll figure this out later", and as such fails to provide certainty the plan provides for the species viability. In addition, they contend the final EIS's description that the guideline "will allow managers needed flexibility to manage for specific conditions at an appropriate scale without having to amend the forest plan" (supplemental response to comment, CR44a), is the Forest "trying to circumvent the requirements of NFMA to use the plan amendment process for adaptive management".

I think it's important to distinguish the difference between the regulatory "adaptive planning cycle" through which a plan "can be changed to reflect new information and changing conditions" (36 CFR 219.2(b)(2)) and writing plan components that are *adaptive* to variable site-specific conditions across a 3 million-acre landscape.

For the purposes of the planning regulations, "adaptive management" is defined in the Forest Service Handbook as the "general framework encompassing the three phases of planning: assessment, plan development, and monitoring" described at 36 CFR 219.5 (FSH 1909.12, section 05). The Forest has followed this framework throughout the revision effort beginning with the 2015 Assessment through the plan development, including the identified monitoring program. As the draft record of decision indicates on page 56-57, the plan "monitoring program is an integral part of the adaptive management cycle". The "plan may be amended at any time…based on a new assessment, land management plan monitoring, or other documentation of new information, changed conditions, or changed circumstances." This meets the intent of the planning regulations "to provide a flexible planning framework that allows for continuous learning and improvement in implementation" (Federal Register, volume 77, number 68, page 21188). However, nothing in law, regulation, or policy limits the option to include plan components that are *adaptive* in nature when scientific information indicates varying management strategies can be used to achieve desired conditions. Nor will it circumvent the plan level requirements to monitor, assess, and amend or revise the plan if needed in response to changing conditions or information that indicates plan components are not sufficient to achieve desired conditions.

As elk are not a species of conservation concern, the final EIS appropriately describes the assumption that "the coarse filter approach as described in the Introduction…and in the vegetation (section 3.8) and terrestrial wildlife diversity (section 3.13) analyses in this document, will retain representative habitats and seral stages needed for use by elk and other big game species" (final EIS section 3.15.3) per the requirements at 36 CFR 219.9(a). Thus, regardless of objectors' concerns that guideline FW-FWL-GDL-01 doesn't "provide the certainty needed to meet

legal requirements", the responsible official was *not* required to identify species-specific plan components per 36 CFR 219.9(b) to provide the ecological conditions to maintain the species persistence.

Rather, the guideline FW-FWL-GDL-01, and other big game plan components (FW-FWL-DC-01 and GO-01) were included per the multiple-use requirements at 36 CFR 219.10(a)(5) to *consider* [emphasis added here] "habitat conditions… for wildlife, fish, and plants commonly enjoyed and used by the public; for hunting, fishing, trapping, gathering, observing, subsistence, and other activities…(in collaboration with…State governments)". As such, the Forest worked with Montana Fish, Wildlife, and Parks (planning record D10C-27) to develop plan components (including the guideline) to help ensure elk are "present and potentially available to hunters on [National Forest System] lands during both the archery and rifle hunting seasons" (final EIS section 3.15.6). Because the guideline is intended to guide management to support the State's "recommendations regarding big game distribution, population size, and harvest" (FW-FWL-DC-01), it reflects best available scientific information that "recommends elk habitat security be based on the characteristics and needs of specific watersheds or herd unit areas, rather than being developed or applied across broad geographic areas" (supplemental response to comments, page 45). I find this "management flexibility" provides certainty the State and public desires for hunting opportunities will be appropriately addressed during plan implementation, rather than representing "unregulated management activities" with "undisclosed…adverse effects".

Lastly, although objectors allege this approach "proposes cutting the public out of the planning process", activities implementing project decisionmaking consistent with this plan direction is subject to site-specific NEPA public engagement.

Conclusion

I find the final EIS demonstrates the ecosystem plan components will maintain elk persistence in the plan area as required by 36 CFR 219.9(a). In addition, it includes additional plan components that consider its habitat needs as a species commonly enjoyed by the public in collaboration with the Montana Fish, Wildlife, and Parks per 36 CFR 219.10(a)(5).

And while I agree the plan amendment process is an important part of the adaptive management framework to keep a plan current as conditions change, it should not be relied upon to address the ecological variation in site-specific conditions. Thus, I find the adaptive nature of the plan components provides appropriate management guidance for this species and does not violate the NFMA's amendment process.

Also see my responses to issues summaries for bighorn sheep, lynx, and the at-risk species regarding management flexibility effects.

Elk Habitat

Objectors contend that the 2020 Land Management Plan does not provide adequate protection for elk and other big game species.

Objectors' Proposed Remedies

- Retain all big game standards from the existing forest plans (Helena and Lewis and Clark), or adopt new standards (not voluntary guidelines) that are consistent with the best available science and include a hiding cover component.
- Take a hard look at how the revised forest plan (and removal of all big game standards) may directly impact big game species and habitat and then re-evaluate the decision.
- Include species-specific plan components for elk (and other wildlife species) and adequate monitoring.

Background

The planning regulations require plan components provide for the persistence of all native species within the plan area (36 CFR 219.9) and must include plan components "for integrated resource management to provide for ecosystem services and multiple uses in the plan area. When developing plan components for integrated resource management, to the extent relevant to the plan area and the public participation process and the requirements of 36 CFR 219.7, 219.8, 219.9, and 219.11, the responsible official shall consider:

> (5) Habitat conditions, subject to the requirements of 36 CFR 219.9, for wildlife, fish, and plants commonly enjoyed and used by the public; for hunting, fishing, trapping, gathering, observing, subsistence, and other activities (in collaboration with federally recognized Tribes, Alaska Native Corporations, other Federal agencies, and State and local governments) (36 CFR 219.10(a)).

Response

Objectors raised several concerns related to management direction for elk and other big game species, contending that the plan direction and final EIS analysis are not based on the best available scientific information. It was clear to me from reading the objections and speaking with objectors during the resolution meetings that elk management is a key issue for many objectors that value big game and want to preserve hunting and wildlife viewing opportunities on the Forest, and so I would like to respond in some detail to the concerns that I heard.

Elk management on the Helena-Lewis and Clark National Forest has a long history. The 1986 forest plans included standards designed to maintain elk security or hiding cover, which at the time was thought to be one of the most important factors in maintaining elk populations and hunting opportunities. Several objectors would like to see these standards carried forward in the 2020 Land Management Plan. However, our understanding of elk management has increased in the past 30 years and the final EIS cites numerous papers that show other factors may be equally or more important than hiding cover in influencing both elk numbers and distribution (final EIS section 3.15.5).

Section 3.15.5 in the final EIS provides a thorough discussion of the changing history of elk management concerns since the 1986 plans were written. The information there includes discussion of recent research findings regarding the influence of differing levels of hunting pressure, as well as forage, cover, and other factors that influence elk movements and distribution during the hunting season. Additional information is provided in the planning record document D10B-26, titled "Elk Status Report". Forest Supervisor Avey worked closely with biologists from Montana Fish Wildlife and Parks to develop plan components based on the most current scientific information, including recent monitoring data (planning record D10C-27). Although the plan does not include standards specific to elk, there are many plan components designed to maintain key habitat features including hiding cover, which was the primary concern for some objectors (final EIS table 110, pages 425-426). These include forestwide wildlife plan components: desired conditions 01-07, goals 01-02, guidelines 01, 05, 06, and 14 (2020 Land Management Plan, page 49-51).

One thing that I heard repeatedly during the objection resolution meetings was a desire for additional standards and a sense that other types of plan components are not "enforceable". For more detail on this issue, please see my response in the Plan Component Sufficiency issue summary. In the draft record of decision, Forest Supervisor Avey describes how the elk guideline in the 2020 Land Management Plan is aligned with the 2013 recommendations for managing elk habitat, which describes a variety of different management approaches that can be used to manage for elk security at the scale of individual herds, based on site- and herd-specific conditions. Plan appendix C describes possible management approaches that could be used, and the guideline allows an appropriate level of flexibility to maintain elk security using the approach that is most likely to be effective based on current conditions at an appropriate spatial scale. Although objectors contend this direction isn't "integrated" with the other plan

direction, I don't find that to be true. Project compliance with this guideline will be followed in consideration of the full suite of plan direction. See the Management Flexibility issue summary for additional discussion.

Section 3.15.6 in the final EIS analyzes the effects of the 2020 Land Management Plan and shows how it will benefit elk and other big game species on the forest. The effects of retaining elk direction from the 1986 forest plans are analyzed as part of alternative A, the no action alternative. Literature cited throughout this section supports the conclusion that the plan will continue to provide the habitat conditions necessary to support elk in the planning area and allow opportunities for hunting and wildlife viewing. This is accomplished in part through the inclusion of numerous ecosystem plan components designed to maintain the habitat conditions necessary to support a wide range of species (also see my response to Persistence of Native Species). Table 110 in the final EIS summarizes how plan components from across many other resource areas contribute to supporting key needs of elk, including hiding cover. The plan also includes monitoring components to track management actions and big game habitat (MON-FWL-02, MON-WL-06).

Conclusion

I find that the forest has developed a plan that will provide for the habitat needs of elk and other big game species while preserving opportunities for hunting on the Forest. Analysis in the final EIS is thorough and considers the best available scientific information. However, there is a new paper provided by one objector (Lowrey, Devoe, Proffitt, & Garrott, 2019) that should be reviewed before finalizing the plan. Therefore, I am instructing Forest Supervisor Avey to review this new literature and determine if it would lead to any changes in plan components.

Bighorn Sheep

Objectors contend that the revised land management plan does not provide adequate protection for bighorn sheep.

Objectors' Proposed Remedies

- The Forest Service must prohibit domestic sheep and goat grazing under permit or for vegetation management in any geographic area that once supported bighorn sheep populations, and in any area which the best available scientific information indicates grazing would pose a greater than minimal risk to bighorn sheep.
- The Forest Service must include a standard requiring a permeability assessment prior to the authorization of any vegetation management project that may increase the risk to bighorn sheep from domestic sheep and goats occurring off national forest system lands.
- The Forest Service must coordinate with the BLM and other land management agencies to reduce the risk to bighorn sheep herds from domestic sheep and goats off national forest system lands, and must likewise coordinate with those agencies to support the restoration of bighorn populations to all habitats from which they've been extirpated.
- Adopt wildlife standards similar to those found within alternatives listed in other nearby national forests.
- The Forest should have a policy of removing or eliminating sheep grazing in any area utilized by wild bighorn sheep.

Background

The planning regulations at 36 CFR 219.9 state land management plans must provide for the persistence of all native species within the plan area. They also require that a plan include plan components, including standards or guidelines, for integrated resource management to provide for ecosystem services and multiple use [including wildlife and fish] (36 CFR 219.10(a)).

When developing plan components, the responsible official shall take into account plants, wildlife and fish, and related uses, that contribute to local, regional, and national economies in a sustainable manner (36 CFR 219.8(b)(3)) and consider fish and wildlife species and habitat and habitat connectivity (36 CFR 219.10 (a)(1)).

Response

The final EIS identifies respiratory disease epidemics as the primary threat to bighorn sheep populations on the forest (section 3.13.5). To address this potential stressor, the 2020 Land Management Plan includes components designed to minimize the risk of disease transmission from domestic livestock (e.g., BB-WL-DC-01, EH-WL-DC-04, RM-WL-DC-02, FW-INV-STD-02, FW-GRAZ-STD-03, and FW-GRAZ-STD-04). Standards BB-WL-STD-01 and RM-WL-STD-02 require the Forest to use scientific information to achieve effective separation between bighorn sheep and domestic sheep and goats. In addition, guideline RM-WL-GDL-01 states that livestock grazing in identified bighorn sheep winter range should be managed to prioritize maintenance of overwinter forage for bighorn sheep. Lastly, there is an indicator in the monitoring plan (MON-WL-07) that has quantitative measures of the potential for contact between bighorn sheep and domestic sheep and goats, including both domestic sheep and goat grazing as well as pack goat use.

During the resolution meeting, I heard that some objectors would prefer to eliminate domestic sheep grazing on the forest entirely, due in part to concern about how grazing might limit opportunities for bighorn sheep population expansion. While I understand the desire for caution, the best available scientific information indicates that the risk of disease transmission will be minimal if domestic animals are effectively separated from bighorn sheep, as required by components in the 2020 Land Management Plan (final EIS section 3.13.6). Grazing standards that require effective separation apply forestwide and would continue to provide protection if bighorn sheep expand beyond the areas currently occupied.

Objectors also requested greater specificity in plan components. There is some inherent tension between specificity in the plan and flexibility that allows adaptation to new science or new circumstances, such as the expansion of a bighorn sheep herd. At the resolution meeting, one objector noted that the draft Nez Perce-Clearwater National Forest land management plan contains a standard specifying that sheep and goat grazing shall not be authorized within 16 miles of bighorn sheep occupied core herd home ranges, whereas the Helena-Lewis and Clark land management plan takes a different approach by requiring a risk assessment using the most recent scientific information and agency or interagency recommendations. Appendix C of the 2020 Land Management Plan, Potential Management Approaches, suggests applying the Recommendations for Domestic Sheep and Goat Management in Wild Sheep Habitat (2012) or subsequent versions. This document was developed by a group of wildlife and land management experts and is part of the best available scientific information considered during plan development and analysis. It recommends site- and herd-specific risk assessments and notes that buffer zones might not be needed where topographic or other barriers maintain effective separation. Thus, the plan is aligned with this scientific information to ensure site-specific information is used to achieve effective separation.

The final EIS analysis examined the effects of this entire suite of plan components and found that the 2020 Land Management Plan will maintain or restore bighorn sheep habitat and ensure that the risk of contact between bighorn sheep and domestic sheep and goats remains low (final EIS section 3.13.6). Additional analysis located in the biological evaluation also supports this conclusion.

Conclusion

I find that the 2020 Land Management Plan includes plan components that provide a reasonable assurance that activities authorized by the Forest Service will not significantly increase the risk of disease transmission to bighorn sheep, consistent with 36 CFR 219.8(a).

Wolverine

Objectors contend that the plan direction and analysis for wolverine are inadequate, and that the Forest should take a more proactive approach to conservation.

Objector's Proposed Remedies

- We urged the agency to: (1) recognize and manage the wolverine as a protected species proposed for ESA listing; (2) provide for the "conservation" of wolverine; (3) designate wolverine as a species of conservation concern; (4) collect the necessary data on wolverine population, presence, denning, and movement on the HLC; (5) develop and adopt standards to conserve wolverine; (6) take a hard look at the impacts of winter recreation on denning habitat and adopt standards that restrict winter access to important denning areas; (7) minimize the risks of wolverine being caught and killed in traps and snares set for other species; (8) take into account and study the effects of forest management on wolverine; (9) maintain and restore connectivity among wolverine subpopulations on the HLC; 1. maintain and restore connectivity between wolverine in the contiguous United States and Canada; (11) consider cumulative impacts to wolverine; and (12) develop an accurate monitoring program for wolverine.
- Include standards designed to protect denning habitat, protect wolverine from trapping, restrictions on travel planning, standards to preserve connectivity, and other standards designed to protect wolverine from human disturbance.

Background

The plan and final EIS were developed while wolverine were proposed for listing as a threatened species under the Endangered Species Act. As a result, the plan addresses the planning regulation requirement to "contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern within the plan area" (36 CFR 219.9(b). Because wolverine was proposed for listing, it could not be identified as a species of conservation concern (SCC). A species of conservation concern is a species, *other than federally recognized threatened, endangered, proposed, or candidate species*, that is known to occur in the plan area and for which the regional forester has determined that the best available scientific information indicates substantial concern about the species' capability to persist over the long-term in the plan area (36 CFR 219.9(c)) [emphasis added here].

On October 13, 2020, the Fish and Wildlife Service withdrew the proposed rule to list the distinct population segment (DPS) of the North American wolverine (Gulo gulo luscus) occurring in the contiguous United States as a threatened species under the Endangered Species Act of 1973, as amended.

Due to the change in status, I have reviewed the recent science and information about wolverine population and habitat on the Helena-Lewis and Clark National Forest. I have determined that the best available scientific information does not indicate substantial concern about the species capability to persist over the long term in the plan area. While I did not identify wolverine as a species of conservation concern, the planning regulations still require plan components to maintain the diversity of plant and animal communities and the persistence of native species in the plan area (36 CFR 219.9).

Response

Many of objectors' concerns were linked to specific threats, including incidental trapping, winter recreation, and forest management. I found the wolverine analysis in the final EIS (sections 3.14.9 and 3.14.10) to be extensive and address all these concerns. It indicates plan includes numerous components that provide for the ecological conditions necessary for wolverine and address relevant threats (final EIS appendix D, tables 4 and 5). Plan components for terrestrial vegetation (e.g., FW-VEGT-DC-01 through 04) are intended to maintain the integrity of alpine ecosystems, and to provide vegetation conditions that would support native species and provide connectivity (final EIS section 3.14.10, page 392). The final EIS explains that because specific vegetation conditions appear to be relatively unimportant to wolverine, vegetation management is unlikely to have a measurable effect (final EIS section 3.14.9, page 389).

Objectors were particularly concerned about the impact of recreation, yet I found that there are many components designed to restrict motorized access and limit human influence on the landscape. Motorized over-snow vehicle use is suitable in just 8 percent of modeled maternal denning habitat, and 96 percent of the action area having modeled persistent spring snow 7 out of 7 years occurs in non-motorized winter recreation settings (final EIS section 3.14.10). In addition, motorized and mechanized transport and timber production and harvest are not suitable within designated wilderness (FW-WILD-SUIT-02 and 03), which comprises 41-65 percent of modeled wolverine habitat on the forest, depending on which model is used (final EIS section 3.14.9). A large proportion of wolverine habitat outside wilderness occurs in inventoried roadless areas, and so in total, 91 percent of modeled primary habitat and 99 percent of modeled maternal habitat is protected by one of these two designations. The final EIS notes that forest management does not affect potential mortality from incidental trapping, though it was not clear to me how plan allocations that affect access might affect that potential. Numerous plan components provide for wildlife habitat connectivity (see appendix D table 5) and may help mitigate the effects of climate change (final EIS section 3.14.10). The largest block of wolverine habitat on the Forest occurs in the Rocky Mountain Geographic Area and is adjacent to habitat on the Flathead National Forest and in Glacier National Park, which further enhances connectivity.

Some objectors were concerned that the revised forest plan does not contain any species-specific standards for wolverine, and instead provides what they view as “voluntary guidelines” and “discretionary desired conditions”. Projects implemented under the 2020 Land Management Plan must comply with all relevant plan components, and I address this concern in more detail in the Plan Component Sufficiency issue summary.

Objectors also criticized the final EIS analysis for wolverine. An objector asserts that Forest Supervisor Avey must acquire and map information on the local wolverine population and their denning and movement patterns within the forest. The planning record documents how Forest Supervisor Avey used the best available scientific information to inform his analysis and decision, including the use of data from Montana Natural Heritage Program Element Occurrence database and the Forest Service corporate database for species occurrences (planning record documents D8-1A through D8-1E). The final EIS also cites a recent study of the wolverine population in the Northern Continental Divide Ecosystem, where most of the wolverine habitat on the forest is located. Habitat was mapped following both the Inman et al. methodology (Inman et al., 2013; Inman et al., 2012), which incorporates topographic features, and the Copeland methodology (Copeland et al., 2010), which focuses on areas of persistent spring snow (final EIS section 3.14.9).

Objectors also felt that the final EIS analysis downplays the effects of winter recreation on wolverine. However, I found the final EIS presents a balanced analysis of research findings. It discloses that winter recreation may displace individual wolverines while acknowledging that there remains uncertainty about if and how winter recreation affects wolverines (final EIS section 3.14.9). The effects analysis describes how designated areas and recreation opportunity spectrum allocations minimize the potential overlap between modeled wolverine habitat and motorized winter recreation (final EIS section 3.14.10). Objectors raised a similar point regarding the analysis of impacts from vegetation management. However, I found this analysis to be well-reasoned and supported by relevant citations too (final EIS section 3.14.10; plan biological assessment, pages 114, 118). And finally, an objector requested additional detail in the cumulative effects’ analysis for wolverine, however I found that the existing analysis provides a level of depth that is appropriate for a programmatic NEPA review.

Several objectors expressed a desire for wolverine to be included in the monitoring plan. Although there are no monitoring questions specific to wolverine, there are several questions designed to assess the effect of the land management plan that will provide relevant information on key habitat characteristics necessary for wolverine (MON-WL-01, MON-WL-06). In addition, the Northern Region is working with stakeholders on development of a broad-scale monitoring strategy for multiple forest carnivores, including wolverine.

Conclusion

I found that the 2020 Land Management Plan includes plan components that provide for key ecosystem characteristics necessary for wolverine persistence and minimize potential threats. The final EIS includes an extensive effects analysis based on the best available scientific information to support this conclusion. As noted above, however, I did find it unclear as to how plan allocations that affect access might influence potential mortality from incidental trapping. Thus, I am instructing Forest Supervisor Avey to clarify analysis of how the land management plan addresses this issue.

Aquatic Integrity

Background

See the issue summaries for programmatic NEPA review and plan framework for additional background information.

The planning regulations at 36 CFR 219.8 require plan components to maintain or restore the ecological integrity of terrestrial and aquatic ecosystems and watersheds in the plan area, including plan components to maintain or restore structure, function, composition, and connectivity; as well as soil, water, and riparian areas.

In addition 36 CFR 219.9 requires plan components to maintain or restore the diversity of ecosystems and habitat types throughout the plan area, and where necessary include species-specific plan components to provide the ecological conditions necessary to contribute to the recovery of federally listed threatened species such as bull trout; or contribute to maintaining a viable population of species of concern across its range for a species such as westslope cutthroat trout, where it outside Forest Service authority and the inherent capability of the plan area to do so.

The Endangered Species Act and implementing regulations at 16 USC 1536(b)(4) and 50 CFR 402.14(i) requires Federal agencies, in consultation with the US Fish and Wildlife Service, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7 (a)(1) of the ESA directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of threatened and endangered species.

36 CFR 219.7(f)(1)(i) requires the plan to “identify watershed(s) that are a priority for maintenance or restoration” to focus effort on the restoration of watershed conditions in these areas. FSH 1909.12 section 22.31 requires the Forest Service to use the national Watershed Condition Framework (WCF) to identify priority watersheds and include them as other plan content.

The Watershed Condition Framework is a comprehensive approach to implement integrated restoration on priority watersheds. It establishes a nationally consistent reconnaissance-level method for classifying watershed condition, using a set of 12 indicators that are surrogate variables representing the underlying ecological, hydrological, and geomorphic functions and processes that affect watershed condition. Primary emphasis is on aquatic and terrestrial processes and conditions that Forest Service management activities can influence (U.S. Department of Agriculture, Forest Service, 2011).

Forest Service Handbook 1909.12, section 61.2 indicates the responsible official should consider whether timber production is a desired primary or secondary use when determining if it is compatible with the desired conditions and objectives of the plan.

The Helena Forest Plan was amended in 1996 to incorporate the Inland Native Fish Strategy (INFISH), which provides management direction to protect aquatic resources in areas west of the continental divide. INFISH delineated interim riparian habitat conservation areas (RHCAs) for every watershed on National Forest System lands

where it applies. Riparian habitat conservation areas are portions of watersheds where riparian-dependent resources receive primary emphasis, and management activities are subject to specific standards and guidelines. INFISH also identified priority watersheds to provide a pattern of protection across the landscape where habitat for inland native fish would receive special attention and treatment.

Changes to the Inland Native Fish Strategy

Objectors assert the INFISH has been "weakened" for three primary reasons: failure to use the numerical riparian management objectives as measurable desired conditions, failure to require watershed analysis in a standard, and failure to maintain the INFISH prohibitions against retarding attainment of riparian management objectives. Objectors assert the land management plan components are not based on the best available scientific information and that the "flexibility represents less of a commitment and creates uncertainty that obligations for at-risk species would be met, and therefore plan components are less likely to provide the necessary ecological conditions".

Response

For this issue summary, I'll respond to objectors' overarching concerns regarding the changes in the INFISH plan components to address allegations "mandatory requirements have been removed or relaxed" to the detriment of aquatic species. The issues summaries that follow address the development of the desired conditions, the conservation watershed network, bull trout, and westslope cutthroat trout in more detail.

The final EIS (section 3.5.6, page 66) states there is a need to update the INFISH, which was intended to be an interim amendment to land management plans, yet remain consistent with strategies in place across public lands in the western United States that have proven successful in improving aquatic conditions. Therefore, the text and style of the 1995 original INFISH plan components were built upon and adjusted to comport with the 2012 planning regulations' current regulatory definitions and implementing directive guidance at FSH 1909.12, chapter 20.

To fully understand the degree of change from the current plan to the revised plan, it's important to review the stated intent of the amendment in the INFISH decision notice and environmental assessment, and the actual requirements in attachment A of the decision. The 1995 Decision Notice and Finding of No Significant Impact for the Inland Native Fish Strategy states that it was "intended to maintain options for inland native fish by reducing the risk of loss of populations and reducing potential negative impacts to aquatic habitat" (see also page I-1 of the environmental assessment).

As part of this strategy, the INFISH identified a network of "priority watersheds". "These priority watersheds were designated where watersheds have excellent habitat or strong assemblages of inland native fish, particularly bull trout, or watersheds that provide for population distribution goals, or where the watersheds have a high restoration potential. Within the priority watersheds, ongoing projects were to be screened to determine their potential habitat effects and whether they will need to be modified to reduce risk to inland native fish habitat. Watershed analysis would also be required for some management activities within the riparian habitat conservation areas in priority watersheds" (page 1 1998 INFISH Decision Notice). The 2020 Land Management Plan's conservation watershed network used multi-scale analysis and current climate science to build upon and update the INFISH concept of priority watersheds. The conservation watershed network includes watersheds important for westslope cutthroat trout and municipal watersheds, not just bull trout. See *Conservation Watershed Network* issue summary for additional discussion.

The INFISH also delineated riparian habitat conservation area (RHCA) widths around various waterbodies, similar in function to riparian management zones required under the current planning regulations. The 2020 Land Management Plan riparian management zone widths are similar to those in the INFISH with additional refinements to include inner and outer zones. The identification of inner and outer riparian management zones and the

associated plan components that address permitted activities is based on post-1995 scientific information about management's effects in riparian areas (Everest & Reeves, 2007; Reeves, Pickard, & Johnson 2013).

INFISH included riparian goals, riparian management objectives, and "standards and guidelines" that applied within the riparian habitat conservation areas. The riparian goals described on pages A1-A2 (decision notice attachment A) were to "maintain or restore" the same factors the current planning regulations require a land management plan take into account to "maintain or restore" ecological integrity at 36 CFR 219.8(a)(3), such as water temperature, sediment, connectivity, floodplain values, etc. The 2020 Land Management Plan builds upon the INFISH direction to include a suite of integrated plan content that applies inside and outside riparian management zones, with goals, desired conditions, objectives, and standards and guideline to address these requirements.

The INFISH riparian management objectives are described on pages A3-A4 acknowledging they "represent a good starting point to describe the desired condition for fish habitat". They are similar to desired conditions under the current planning regulations. The INFISH strategy acknowledged that the components of good habitat can vary across specific geographic areas. Thus, the interim riparian management objectives were considered to represent the best watershed scale information available in 1995, but national forest managers were encouraged to establish site-specific riparian management objectives through watershed analysis or site-specific analysis. See the *Sufficiency of Desired Conditions for Aquatic Ecological Integrity* issue summary for a detailed discussion of aquatic and riparian desired conditions.

INFISH "standards and guidelines" are combined under a single heading with no discrimination or definition of which are standards, and which are guidelines. Although intent can be interpreted through verb use in some of the statements (e.g., verbs such as prohibit imply a standard), many of the statements compel action, processes, analyses, monitoring, or tactical planning which standards and guidelines developed under the current planning regulations should not do. Under the current planning regulations, outcomes for action are described in objectives. And standards and guidelines "place design or operational constraints on projects and activities; or prohibit the Forest Service from authorizing certain types of projects or activities to help achieve or maintain desired conditions, to avoid undesirable effects, or to meet applicable legal requirements" (FSH 1909.12, section 20).

Thus, where the INFISH "standards and guidelines" could be rewritten as design or operational constraints on management actions in such a way that they did not compel action, analysis, or planning, they were rewritten as either explicitly a standard or a guideline. Where the Forest determined an INFISH "standard and guideline" that described an action was an important outcome to support achieving a desired condition, it was included as a plan objective.

For example, the final EIS (section 3.5.6, page 92) explains that FW-RT-STD-02 is comparable to INFISH RF-4 to ensure stream crossings are constructed to minimize a risk that high stream flows would wash out the crossing. This standard improves on the INFISH direction in that it applies more broadly to all road and trail crossing structures, whereas INFISH RF-4 only required installation of a 100-year crossing structure where "a substantial risk to riparian conditions" exists. In addition, the 2020 Land Management Plan includes other plan components to minimize this risk and identity management outcomes such as:

- Guideline FW-RT-GDL-09 states, Transportation infrastructure should be designed to maintain natural hydrologic flow paths to the extent practical (for example, streams should have crossing structures and not be routed down ditches).
- Guideline FW-RT-GDL-11 states, To maintain free-flowing streams, new, replacement, and reconstructed stream crossing sites (culverts, bridges and other stream crossings) should be constructed to prevent diversion of stream flow out of the channels in the event the crossing is plugged or has a flow greater than the crossing was designed.

- Objective FW-RT-OBJ-02 describes an outcome to "complete at least 100 miles of reconstruction or road improvement projects. Priorities shall include reducing effects on desired aquatic and riparian conditions from chronic sediment delivery or potential future road prism failures, and conservation watershed networks that have westslope cutthroat or bull trout habitats."

This suite of plan components includes the same requirements to accommodate a 100-year flood and prevent diversion of the stream flow out of the channel as the INFISH. The plan guides future projects and activities by placing design constraints on new construction or reconstruction. Time-specific and measurable objectives set forth outcomes that can be accomplished within the fiscal capability of the unit, rather than implying the plan is compelling the Forest Service to "improve existing" crossings in the absence of a proposed action or authorized activity.

It is important to note that the INFISH was developed under the 1982 Planning Rule. Unlike the 1982 Planning Rule, the 2012 Planning Rule (current planning regulations) explicitly defines plan consistency (36 CFR 219.15(d)) for each defined plan component (desired conditions, objectives, standards, guidelines, suitability of lands, and goals) (36 CFR 219.7(e)). There were no project consistency requirements for riparian goals and objectives, although three of the "standards and guidelines" included guidance to design activities so they did not "retard attainment" of riparian management objectives. For the purposes of the INFISH, "to retard" means to slow the rate of recovery below the near natural rate of recovery if no additional human caused disturbance was placed on the system (page A3).

However, project and activity decisionmaking under the 2020 Land Management Plan must be consistent with all applicable plan components. Projects or activities are consistent with desired conditions when they contribute to the maintenance or attainment of one or more desired conditions, or they *do not foreclose the opportunity* to maintain or achieve any desired conditions, over the long term [emphasis added here] (36 CFR 219.15(d)(1)). Using TM-1 as an example, not foreclosing the opportunity to maintain or achieve all aquatic and riparian desired conditions is functionally the same as the requirement to only allow timber harvest "where cutting would not retard or prevent attainment of" riparian management objectives. Repeating it as a standard or guideline in the 2020 Land Management Plan is not necessary, nor does failing to repeat it as a standard or guideline weaken protections for bull trout.

Objectors also assert the INFISH has been weakened because standards have been "changed to guidelines (or otherwise relaxed)". However, as noted above, the INFISH does not differentiate standards from guidelines. More importantly though, Forest Supervisor Avey has the discretion to identify the necessary plan components and content needed to meet current plan requirements in the form goals, desired conditions, objectives, either standards or guidelines, or other plan content. In addition, guidelines are a mandatory constraint similar in function to standards (See the Plan Component Sufficiency issue summary for more detail).

Lastly, objectors dispute whether the INFISH's requirement to complete a watershed analysis before "any road construction [RF-2], recreation facility construction [RM-1], or salvage logging [TM-1] projects in RHCAs within priority watersheds" (page II-8) should remain in the plan. Objectors contend that removing the requirement for watershed analysis and relying on project NEPA analysis "would not achieve the purpose of understanding broader scale watershed issues before an action is proposed that was incorporated into INFISH as the best available science".

Requiring analysis cannot be a plan standard since it is neither a design nor an operational constraint. However, as recommended by the Interior Columbia Basin Ecosystem Management Project (2014) strategy a multi-scale analysis management approach has been described in appendix E of the 2020 Land Management Plan. While not required in a standard, it is an important tool that will be used to for project-specific decisions when useful.

Rather than requiring a watershed analysis, the 2020 Land Management Plan addresses the management risks associated with RF-2, RM-1, and TM-1 with a number of standards and guidelines that apply forestwide (not just limited to INFISH priority watersheds) in the fish and aquatic habitat, riparian management zone, conservation watershed network, roads and trails, and recreation sections. For example, standard FW-RMZ-STD-06 states salvage harvest shall not occur in the inner riparian management zone, guideline FW-RMZ-GLD-04 states new road and landing construction should be avoided in riparian management zones, and guideline FW-REC-GDL-04 states placement of new facilities or infrastructure should avoid riparian management zones. See also guidelines FW-RMZ-GDL-09 and 11, FW-REC-GDL-05, FW-RT-ST-09, FW-RT-GDL-01, and notably FW-RMZ-GDL-12: "To reduce the likelihood of sediment input to streams and reduce adverse effects to stream channels and riparian areas**,** *all management activities in [riparian management zones] should protect key riparian features and processes,* including maintenance of stream bank stability, input of organic matter, temperature regimes, water quality, and aquatic and terrestrial habitat connectivity" [emphasis added here].

Thus overall, the 2020 Land Management Plan broadens aquatic and riparian resource protections rather than weakening them. Although the final EIS does not include a plan component by plan component comparison of the changes from the 1986 plans to the 2020 Land Management Plan, both the final EIS and biological assessment provide sufficient detail to inform the decisionmaker of the broad environmental consequences of the plan components. They discuss the effects of management activities, past and present, and describe the plan components that both constrain actions that pose risks to aquatic and riparian resource and will guide pro-active restoration where needed.

Conclusion

I find the land management plan has appropriately revised the INFISH's interim direction with a suite of integrated plan components and plan content per the planning regulation requirements using the best available scientific information and 20-plus years of PIBO monitoring data. Rather than adding a degree of flexibility that "represents less of a commitment and creates uncertainty that obligations for at-risk species would be met", I find the plan components provide a clear framework for guiding future activity decisionmaking to achieve desired conditions through time-specific and measurable objectives, with operational and design constraints where management activities pose a risk or stressor to aquatic integrity or at-risk species.

Objectors identified, however, some inaccuracies or mischaracterizations in the supplemental response to comment document. Upon review, I agree that this planning record document is not clearly described as an iterative draft that informed the development of the response to comments in appendix G in the EIS. And as such, some of the drafted portions are incomplete. Therefore, I'm instructing Forest Supervisor Avey to identify the purpose and intent of the supplemental document, and any response that is unclear.

Sufficiency of Desired Conditions for Aquatic Ecological Integrity

Objectors contend that the PIBO reference site information should be used to inform development of a range of quantifiable desired condition indicators for riparian management zones similar to the function of INFISH riparian management objectives.

Objector's Proposed Remedy

- Use reference site condition information as the characteristics in riparian habitat desired conditions.

Response

As part of PACFISH and INFISH consultations with National Marine Fisheries Service and US Fish and Wildlife Service in 1996 and 1998 respectively, the PIBO required monitoring to determine if components in PACFISH and INFISH were effective at preventing further habitat degradation at the scale of the entire Columbia River Basin, and in

recent years, to areas as small as sub-basin watersheds (i.e., an 8-digit Hydrologic Unit or HUC8). This monitoring program collects reach-level stream habitat, temperature, macroinvertebrate, and riparian data to evaluate whether key biological and physical components of aquatic and riparian communities are being degraded, maintained, or restored. With two decades of consistently collected data and improvements in data analysis, comparisons between managed and reference watersheds can now be scaled down to conditions on an individual national forest. Currently, PIBO monitoring provides rigorously collected local data that can be statistically compared to reference conditions in the same geophysical province. However, although this data and monitoring is useful for trend monitoring over time, it's not as useful for outlining static numerically measured thresholds in land management plan desired conditions.

Riparian management objective values were identified by researchers in the late 1980s and early 1990s and used for the PACFISH and INFISH (1995) plan amendments as a starting point and as aspirational metrics for well-functioning systems. During the over 20 years implementing INFISH, an expectation developed that all watersheds could be managed to a rating of proper functioning condition at the same point in time (Reeves & Duncan, 2009) . However, a review by Kershner and Roper (2010) discussed results of monitoring eight riparian management objectives and their related rankings and noted that many locations in *unmanaged, reference* watersheds do not meet the measures of "proper functioning condition". Several years into the PIBO monitoring effort, Kershner and Roper (2010) disclosed that the eight riparian management objectives monitored in 726 reference and managed subwatersheds had never all been properly functioning in one watershed at the same time.

Thus, directing management to achieve a set of fixed numerical thresholds as the authors of the INFISH did with the numerical riparian management objectives would not be based on best available scientific information as it would inaccurately assume "that the problem is well-bounded, clearly defined, relatively simple, and generally linear with respect to cause and effect" (Holling & Meffe, 1996)). While the data is useful for comparing trends of managed watersheds to reference watersheds and is a key factor and measuring progress toward achieving desired conditions forestwide, the wide variability does not provide a definitive value or range of values for aquatic and riparian characteristics that apply in all stream reaches at all points in time. While there is some comparison to how FIA data is used to derive the numerical ranges of terrestrial vegetation desired conditions for forest species composition and structural stage within natural range of variation, the tremendous variability in aquatic systems at different scales doesn't lend itself to providing useful forestwide numeric measures in the same manner. However, the qualitative descriptions of desired aquatic and riparian characteristics such as adequate thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, etc. provides sufficient detail for evaluation at a stream reach scale (planning record document, D1-0)).

It's important to note that although the numerical riparian management objectives in the INFISH have not proven effective as measurable characteristics, the 2020 Land Management Plan includes standards and guidelines to constrain management actions that affect those same INFISH riparian management objective indicators. For example, vegetation management is limited in riparian management zones to maintain thermal cover (protect stream temperatures), large wood recruitment, bank stability, and minimize sediment delivery. Similarly, the 2020 Land Management Plan includes standards and guidelines to constrain management risks related to the transportation system, grazing, recreation, and mineral and energy development.

For example, guidelines FW-RMZ-GDL-01 and 02 constrain removal of woody debris to help maintain or achieve desired condition FW-RMZ-DC-01's large wood recruitment characteristic and FW-RMZ-DC-02's slope stability and associated vegetative root strength, wood delivery to streams, input of leaf and organic matter to aquatic and terrestrial systems, solar shading, and microclimate. Guidelines FW-RMZ-GDL-03 through 08, 11 and 12, and additional standards and guidelines in the roads and trails section of the plan constrain activities to address sediment delivery characteristics of FW-RMZ-DC-01.

Conclusion

I find that aquatic ecological integrity is addressed throughout the plan as integrated desired conditions, objectives, standards and guidelines in the aquatic ecosystems portion of the plan, and the standards and guidelines in the recreation, infrastructure, and multiple uses sections of the plan. Although the objector asserts the plan inappropriately shifts INFISH riparian management objectives to the PIBO monitoring portion of the plan, the final EIS and planning record provide a detailed and reasoned explanation for the best application of PIBO reference data and how it will be used to measure achievement of desired conditions at the plan scale. Rather than "postponing the identification of ecological integrity to an unknown future time", the plan components, including the standards and guidelines that address management-caused risks, guide project activities to maintain or restore aquatic ecological integrity. Also see the issues summary for Plan Component Sufficiency.

Conservation Watershed Network

Objectors assert the selection of the conservation watershed network is unclear, and thus there is uncertainty how the network will support bull trout recovery.

Objectors' Proposed Remedies

- The record should demonstrate how the conservation watershed network was selected and how metapopulations are connected.
- Clarify whether the plan prioritizes restoration activities in the conservation watershed network or watershed condition framework priority watersheds.
- Document in the record how timber production for a "regulated crop of trees" is compatible with the desired conditions (reference conditions) for conservation watersheds.

Response

As there is a distinct difference between the identification of "priority watersheds" as required by the planning regulations from the "priority watersheds" that were identified for INFISH that have been subsequently reframed as conservation watershed networks in the 2020 Land Management Plan, some explanation is needed to clearly respond to this issue.

The planning regulations require identification of watersheds that are "a priority for maintenance or restoration" using the national Watershed Condition Framework protocol. The Watershed Condition Framework is a national protocol designed to foster integrated ecosystem-based watershed assessments; target programs of work in watersheds that have been identified for restoration; enhance communication and coordination with external agencies and partners; and improve national-scale reporting and monitoring of program accomplishments. While the process used to identify priority watersheds strives to integrate upland and aquatic conditions and generally helps target restoration activities at forest, regional, and national scales, protection of at-risk species strongholds is not the primary focus and it does not consider multi-scale conservation considerations for species.

As such, the preamble to planning regulations acknowledges the identification of conservation watershed networks are a key strategy for some places in the west where network conservation for fishes is still an option (36 CFR 219, Volume 77, No. 68, April 9, 212 Rule Preamble). Recent revisions in the Northern Region have identified conservation watershed networks to build on key watershed guidance found in PACFISH (1995) and priority watershed guidance found in INFISH (1995). Under both 1990-era strategies, key and priority watersheds are selected to protect aquatic species population strongholds. Selected watersheds provide a pattern of protection where the habitat of migratory salmonids receives special attention and treatment. Areas in good condition with strong local populations are considered anchors of good habitat and are expected to provide colonists for adjacent

restored habitat (U.S. Department of Agriculture, Forest Service, 1995; U.S. Department of the Interior, 1998). The identification of conservation watershed networks in the 2020 Land Management Plan uses similar principles.

A conservation watershed network is a designated collection of watersheds where management emphasizes habitat conservation and restoration to support native fish and other aquatic species (2020 Land Management Plan, appendix E). The goal of the network is to sustain the integrity of key aquatic habitats to maintain long-term persistence of native aquatic species. Identification of conservation watershed networks, which should include watersheds that are already in good condition or could be restored to good condition, is expected to protect native fish and help maintain healthy watersheds and river systems.

West of the Continental Divide, multi-scale analysis was used to develop the conservation watershed network, emphasizing watersheds with coldwater habitats where bull trout are most likely to persist in a warming climate (2020 Land Management Plan, appendix E). The analysis started at the scale of the Columbia River Basin and ended with HUC12 sub-watersheds within the plan area. Multi-scale analysis is consistent with guidance contained in the April 2014 Interior Columbia Basin Ecosystem Management Project Memorandum of Understanding approved by senior managers in several of the western federal land management and regulatory agencies (Environmental Protection Agency, National Marine Fisheries Service, US Fish and Wildlife Service, Bureau of Land Management, and the US Forest Service). The 2014 memorandum updated science findings from the original Interior Columbia Basin Ecosystem Management Project and guides inclusion of best available scientific information into land management plan revisions, including this one (final EIS appendix C). Importantly, the use of climate science related to bull trout vulnerability and identification long-term refugia in the face of climate change (Isaak, Young, Nagel, Horan, & Groce, 2015) was a key part of the conservation watershed network identification (bull trout biological assessment).

The process for identifying the conservation watershed network east of the Continental Divide included consideration of habitat for westslope cutthroat trout conservation populations. However, factors considered also included other restoration needs such Montana State 303(d) watersheds listed as impaired and municipal watersheds.

Although the final EIS and other content in the land management plan indicate bull trout habitat will be prioritized for restoration, the inclusion of these broader restoration needs in the conservation watershed network and the associated objectives (FW-CWN-OBJ-01 and 02, FW-CWN-GDL-02 and 03) do not differentiate priorities for restoration for at-risk species from those for 303(d) listed or municipal watersheds.

Conclusion

While the conservation watershed network is an important part of the plan that will help focus plan aquatic habitat maintenance and restoration objectives, I find it is unclear how priorities in the conservation watershed network plan components will be applied to achieve the effects described in the final EIS for at-risk species in comparison to other prioritizations associated with Watershed Condition Framework-identified priority watersheds, municipal watersheds, and watersheds with State listed 303(d) stream segments as described in the final EIS. Therefore, I am instructing Forest Supervisor Avey to clarify the final EIS to address the different purposes of Watershed Condition Framework priority watersheds and the conservation watershed network, as well as providing an explanation of how the conservation watershed network relates to priority watersheds under the INFISH in alternative A. I am also instructing Forest Supervisor Avey to 1) clarify the methodology used to identify the conservation watershed network including connectivity; and 2) clarify how plan components will be applied to support the effects conclusions for at-risk aquatic species including the determination timber production is compatible with achieving desired conditions.

Sufficiency of Plan to Provide Ecological Conditions to Contribute to Recovery of Bull Trout

Objectors contend the 2020 Land Management Plan must constitute the conservation strategy for bull trout in this planning area and the plan components neither improve the INFISH nor provide the ecological conditions necessary to contribute to recovery.

Objector's Proposed Remedy

- Withdraw the draft decision for the 2020 Land Management Plan re-consult with the U.S. Fish and Wildlife Service on the effects of the road closure violations and the 2020 Land Management Plan on bull trout. After this is done the Forest Service should write a supplemental EIS for the 2020 Land Management Plan that fully complies with the law.

Response

The 2020 Land Management Plan provides a suite of integrated plan components to contribute to conservation and recovery of bull trout. The approach builds from the 1995 INFISH strategy with modifications and improvements starting with clarification of a coarse filter-scale component (FW-RMZ-STD-01) as called for by the planning regulations at 36 CFR 219.8 and 9(a), and with support from standard and guideline refinements and integration for watershed, fish and riparian resource areas. Plan component refinements are consistent with current planning regulation requirements and address an updated synthesis of the science related to riparian management zones that builds from beneficial outcomes realized since the enactment of INFISH (final EIS appendix C, pages 6-7).

As described in the *Changes to the Inland Native Fish Strategy* issue summary, the 2020 Land Management Plan provides a greater level of clarity and focus for riparian management than the 1986 plans as amended by INFISH in 1995. In addition to the explicit application of standards and guidelines as constraints on management actions that pose a risk to aquatic resources, the creation of inner and outer riparian management zones (FW-RMZ-STD-01) refines the INFISH management approach in these critical areas. Plan components allow vegetation management activities to achieve the desired conditions of species composition and structural diversity of native plant communities, summer and winter thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, and channel migration among other things (FW-RMZ-DC-01 and 02). Both inner and outer zones require protection of aquatic resources, but greater management limitation and protections are afforded to the inner riparian management zone (2020 Land Management Plan, page 29 and table 1, and final EIS appendix C, pages 6 and 7), which has indicted is the critical area. Vegetation management activities that occur in the inner riparian management zone must restore and enhance aquatic and riparian resources (FW-RMZ-STD-02) while those in the outer riparian management zone may occur to meet riparian desired conditions, so long as they don't prevent attainment of desired conditions for wildlife and the inner riparian management zone (FW-RMZ-STD-02).

Importantly, the 2020 Land Management Plan identifies a conservation watershed network, which improves on INFISH priority watersheds. As described in the *Conservation Watershed Network* issue summary, a multi-scale analysis was used to develop the conservation network west of the continental divide and include the use of climate science related to bull trout and vulnerability and identification long-term refugia in the face of climate change. All forestwide plan components for watersheds, riparian management zones, and fisheries and aquatic habitat apply in the conservation watershed network. However, conservation watershed specific desired conditions, restoration objectives, and guidelines complement and enhance the forestwide components to contribute to recovery of threatened fish species and maintaining viable populations of aquatic species of conservation concern.

Another key aspect of the plan's contribution to bull trout conservation is the time-specific, measurable active restoration objectives. These include FW-WTR-OBJ-02 and 03 that identify restoration outcomes for watersheds,

and ground water systems where the conservation watershed network is one of the priorities. Similarly, FW-RMZ-OBJ-01 calls for improvement on at least 500 acres of riparian habitat during the life of the land management plan. Finally, FW-FAH-OBJ-01 through 03 target improvement of 50 miles of stream and flood plain and connectivity. Again, the conservation watershed network will be prioritized for where these improvements will be implemented. Improvements can be actions such as, but are not limited to, road obliteration, riparian planting, and reconstructing floodplains by removing road prisms or berms. The previous plan and INFISH did not include these focused and numeric objectives.

This integrated plan content in the 2020 Land Management Plan will continue to build on past accomplishments since the listing of bull trout in 1998 that include largescale mine site reclamation, land acquisition, road restoration and decommissioning, and aquatic organism passage improvements on both public and private ownerships (final EIS appendix C, page 15). Specifically, over the last 5 years (2014-2019), the Forest has contributed directly to considerable beneficial actions for bull trout. The Watershed Improvement Tracking (WIT) database indicates nearly $2.5 million dollars has been spent on, or committed to, actions that support bull trout with a corresponding estimate of active improvement to just over 100 miles of habitat that support bull trout on the forest (Project Record, D1_8b and 8c). These outcomes are expected to continue per the objectives in the 2020 Land Management Plan and will "contribute" to outcomes in the "appropriate" places. The plan monitoring program will continue to use the PIBO monitoring strategy to track changes in managed compared to reference watersheds over time. To date, monitoring efforts have demonstrated that management under the INFISH has led to broadscale (B. B. Roper et al., 2019; C. Thomas, Chatel, Roper, Jacobson, & Hanson, 2018) and final EIS section 3.5.6, page 81) and forest-specific habitat improvements (final EIS section 3.5.6, page 84). This is expected to continue per appendix C, page 80, of the final EIS and the bull trout biological assessment.

Objectors also assert the 2020 Land Management Plan does not adequately address road-related effects and existing road densities to the hindrance of aquatic integrity and bull trout recovery. However, the final EIS (section 3.5.3 and appendix C) acknowledges legacy effects of past management and existing infrastructure have created adverse outcomes that take time for improvement and recovery. As such, the plan includes desired conditions, objectives, standards, and guidelines for the continued management of the transportation system that are aligned with achieving aquatic, riparian, and fish habitat desired conditions. There are standards and guidelines in both the aquatic ecosystems and the roads and trails section of the plan that specifically constrain management actions to address road-related risks to riparian and aquatic resources (final EIS section 3.5.6, pages 79-84 and 92-94). In alignment with the existing 2015 Western Montana Roads programmatic biological opinion, the land management plan includes two guidelines to avoid risks to aquatic resources from putting roads in intermittent service status (closed) an installing berms or other physical barriers (FW-RT-GDL-02 and 04). In addition, previous consultation for travel plan decisions such as the Blackfoot Travel Management Plan include terms and conditions that will continue to be implemented under the 2020 Land Management Plan.

Although the objectors contend standards for road densities are necessary to support bull trout recovery, scientific information (bull trout biological assessment, page 100) indicates road condition and context, not just raw road density is the best way to way to target improvement in a constrained funding environment. The objectives in the watershed, riparian management zone, fisheries and aquatic habitat, conservation watershed network, and roads and trails sections of the plan will further address existing road restoration or maintenance needs, several of which prioritize restoration in bull trout habitat. This will guide future decisionmaking to continue ongoing implementation of previous travel plan and project decisions to decommission, relocate, or improves stream crossings on roads that pose the highest risk to aquatic integrity in the bull trout watersheds.

Objectors note that migratory bull trout numbers are declining on the west side of the planning area due to changes in climate, habitat alterations, and invasive species. However, we note that migratory bull trout in places of the upper Blackfoot such as Snowbank and Cooper Creeks (See figure 1 in appendix C) are doing better than other

populations range wide, in part because of habitat improvements made on the Forest. The final EIS (page 59) states: "The viability of the fluvial life-history form of bull trout in the upper Blackfoot River basin, which correlates well with the boundaries of the National Forest, is believed to be at low risk under current and forecasted climatic change conditions (Isaak et al., 2017). The same survey and assessment efforts put the viability of fluvial populations in the lower Blackfoot River drainage (not on the HLC) at high risk. Tributaries on the Forest are known to contribute fluvial fish to lower portions of the Blackfoot River". Overall, the Blackfoot River is an example of "all-lands" collaborative efforts to improve aquatic habitat, including habitat connections and restoration that have benefited migratory bull trout in this planning area as well as in other parts of the Blackfoot River drainage. The bull trout biological assessment (page 36) also recognizes that not all extant populations or habitat will persist (Isaak et al., 2015) and that strategic investment for listed fish is critical. The conservation watershed network approach in the 2020 Land Management Plan will help focus resources on areas where bull trout have the greatest chance of persisting.

Objector express concern that in practice, the objectives, standards, and guidelines could perpetually contribute to bull trout recovery without ever actually achieving it. The 2015 Columbia River Headwaters Recovery Unit Implementation (USFWS 2015, pages D10 - D11) describes the primary threats for bull trout in the Blackfoot and Upper Clark Fork River Core areas. Some threats, such as upland and riparian habitat and water quality are within Forest Service authority to manage and are addressed in the 2020 Land Management Plan. Additional threats off Forest Service lands to mainstream rivers and foraging, migrating and overwintering bull trout critical habitat include floodplain development and loss of complexity, chemical and thermal pollution, and non-native fish. Many of these threats, including the non-native fish present in the plan area, have a consequential effect on large migratory bull trout habitat connectivity and quality (final EIS, page 111, and USFWS 2015 Columbia River Headwaters Recovery Unit Implementation Plan). Thus, while forest management is critical to helping anchor stronghold populations by providing the ecological conditions to contribute to recovery of bull trout as required by the planning regulations, recovery within the plan area alone is not within the inherent capability of the land or Forest Service authority given off-forest threats out of Federal control (Rieman et al., 2015).

Conclusion

I have determined the 2020 Land Management Plan complies with law, regulation, and policy related to providing ecological conditions to contribute to recovery of bull trout. Furthermore, the plan includes the elements of the INFISH strategy that have proven successful at improving habitat trends as demonstrated by 20 years of monitoring, while providing an improved strategy for contributing to bull trout recovery. This is accomplished through:

- required project consistency with all plan components, not just standards
- the inclusion of standards and guidelines that constrain management actions to address specific risks to aquatic and riparian resources forestwide, rather than compelling analysis or planning, or only applying within priority watersheds
- time-specific and measurable restoration objectives
- improvements to the INFISH priority watershed network through identification of the conservation watershed network and associated plan components using a multi-scale analysis and climate science related to bull trout vulnerability to identify long-term refugia in the face of climate change.

Sufficiency of Plan Components to Support Persistence of Westslope Cutthroat Trout

An objector indicates the identification of westslope cutthroat trout as a species of conservation concern warrants upgrading the aquatic strategy in the land management plan for the portion of the forest with the species that is not subject to the INFISH.

Response

As described in the other aquatic integrity issue summaries, the 2020 Land Management Plan includes a suite of plan components to maintain and protect the integrity of aquatic and riparian ecosystems, with standards and guidelines to constrain management actions that pose a risk to achieving those desired conditions (final EIS section 3.5 and appendix D to the final EIS). The application of those components forestwide represent a substantial improvement to the 1980-era plan protections on the east side of the Forest, which will benefit all aquatic and riparian species located there, including westslope cutthroat trout.

Although Forest Supervisor Avey found it was beyond Forest Service authority and not within the inherent capability of the plan area to maintain or restore the ecological conditions to maintain a viable population of westslope cutthroat trout within the Forest boundaries, I concur with his determination that the plan will contribute to maintaining a viable population of the species within its range. Consistent with the requirements to coordinate with other land managers in providing such plan components, the plan includes multiple goals to work with other agencies and landowners to support species needs at FW-FAH-GO-02, 04, and 05.

Conclusion

I find the 2020 Land Management Plan, as supported by documentation in the final EIS and planning record, includes plan components, including standards or guidelines, to maintain or restore ecological conditions within the plan area to contribute to maintaining a viable population of the species within its range.

Grizzly Bears

Overall Background for Grizzly Bear Habitat Management on the Forest and the Northern Continental Divide Ecosystem

In 1975, the U.S. Fish and Wildlife Service (USFWS) listed the grizzly bear as a threatened species in the lower 48 States, giving the species Federal protection under the Endangered Species Act. The grizzly bear recovery plan (U.S. Department of the Interior, 1993) guides recovery efforts for the species, by describing the actions that are necessary for conservation of the species and establishing criteria for down-listing and delisting. The 1993 recovery plan (U.S. Department of the Interior, 1993) identified two requirements that must be met before an ecosystem can be delisted: 1) attainment of the population demographic parameters for that ecosystem within the monitoring period specified, and 2) completion of an interagency conservation strategy that will ensure that adequate regulatory mechanisms will continue to be present after delisting. Page 16 of the 1993 recovery plan (U.S. Department of the Interior, 1993), identified two requirements that must be met before an ecosystem can be delisted: 1) attainment of the population demographic parameters for that ecosystem within the monitoring period specified, and 2) completion of an interagency conservation strategy that will ensure that adequate regulatory mechanisms will continue to be present after delisting. On May 24, 2018, the Fish and Wildlife Service supplemented the recovery plan with three habitat-based recovery criteria for the Northern Continental Divide Ecosystem (NCDE).

The following synopsis provides context and information regarding grizzly bear habitat management on the national forests, the grizzly bear recovery plan and habitat-based recovery criteria, and the Northern Continental Divide Ecosystem grizzly bear conservation strategy.

Since the grizzly bear was listed in 1975, the Forest Service has worked with the Fish and Wildlife Service and other government agencies to improve management coordination and habitat conditions, minimize grizzly bear-human conflicts and bear mortality, and increase public awareness and appreciation for the grizzly bear. This includes supporting development of the conservation strategy and habitat-based recovery criteria.

The draft Northern Continental Divide Ecosystem grizzly bear conservation strategy was released for public review and comment in 2013 (U.S. Department of the Interior, 2013). It describes the management and monitoring programs that would be needed to maintain a recovered grizzly bear population in the ecosystem. In July 2016, Fish and Wildlife Service began accepting comments concerning habitat-based recovery criteria for the Northern Continental Divide Ecosystem grizzly bear population. The final conservation strategy was made available on the Interagency Grizzly Bear Committee's website in July of 2018, with minor updates in 2019 and 2020 (Northern Continental Divide Ecosystem Subcommittee, 2020). The conservation strategy provides a cohesive umbrella post-delisting for all signatory agencies to operate under and reference, but each signatory will use their own legal process and authority to implement it.

In December 2018, the HLC NF amended both 1986 Forest Plans with the "Forest Plan Amendments to Incorporate Management Direction for the Northern Continental Divide Ecosystem Grizzly Bear Population" (U.S. Department of Agriculture, Forest Service, 2018). That direction is retained in the 2020 Land Management Plan.

Use of Best Available Scientific Information

Objectors contend that the 2020 Land Management Plan is not based on the best available scientific information and the final EIS does not adequately analyze and disclose impacts on grizzly bears and/or grizzly bear habitat.

Objectors' Proposed Remedy

- Reconsult with the Fish and Wildlife Service on the impact of the 2020 Land Management Plan and the Grizzly Amendments […] and give the public a chance to comment on this consultation.

Background

Section 219.3 of the planning regulations addresses the role of science in planning. It requires the responsible official to use the best available scientific information to inform the planning process. In doing so, the responsible official determines what information is the most accurate, reliable, and relevant to the issues being considered.

The preamble of the 2012 Planning Rule (current planning regulations) makes clear that there is range of information that can be considered to be the best available scientific information: "In some circumstances, the [best available scientific information] would be that which is developed using the scientific method, which includes clearly stated questions, well-designed investigations and logically analyzed results, documented clearly and subjected to peer review. However, in other circumstances the [best available scientific information] for the matter under consideration may be information from analyses of data obtained from a local area, or studies to address a specific question in one area. In other circumstances, the [best available scientific information] also could be the result of expert opinion, panel consensus, or observations, as long as the responsible official has a reasonable basis for relying on that scientific information as the best available" (Federal Register volume 77, no. 68, April 9, 2012).

Council on Environmental Quality regulations at 40 CFR 1502.24 require Federal agencies to ensure the professional integrity, including scientific integrity, of the discussions and analyses in the environmental impact statements.

The Endangered Species Act requires the Fish and Wildlife Service to base their biological opinion on the use of best scientific and commercially available data (16 USC 1536 (a)(2)). In addition, section 7 (a)(1) of the Endangered Species Act directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of threatened and endangered species.

Response

Numerous issues were raised by objectors based on disagreement over, and interpretation of, the best available scientific information. These objections relate to both how science informed the development of the forest plan, as well as how effects were analyzed in the final EIS.

Some objectors felt that Forest Supervisor Avey should not have relied on the Northern Continental Divide Ecosystem Grizzly Bear Conservation Strategy when developing the Grizzly Bear Amendments that were subsequently incorporated into the 2020 Land Management Plan. I have already responded to concerns about use of the conservation strategy in my response to objections on the Grizzly Bear Amendment in 2018, but would like to emphasize here that Forest Supervisor Avey considered a broad range of information sources in the development of the plan, including new peer-reviewed literature, in addition to the conservation strategy. The final EIS (section 3.14.5) includes a thorough review of the best available scientific information, including recent research and recommendations regarding influences on grizzly bear individuals, population trend, and distribution. The review in the final EIS provides support for plan components and informs analysis of their potential effects.

Objectors did raise several new issues related to the application of the conservation strategy and overall plan direction for grizzly bear. First, an objector noted that the conservation strategy was updated in 2019, however as noted above in the Overall Background for Grizzly Bear Habitat Management section, these changes were minor and were simply to correct and refine terminology and clarify intent. Second, one objector brought up the relisting of the Greater Yellowstone Ecosystem population of grizzly bears as a result of litigation. As described in my response below at in the Adequacy of Plan Direction to Contribute to Grizzly Bear Recovery issue summary, the 2020 Land Management Plan is expected to promote connectivity and genetic interchange with other recovery zones, including the Greater Yellowstone Ecosystem. The plan and final EIS analysis both recognize the importance of demographic connectivity (e.g. Z1-NCDE-DC-01; final EIS section 3.14.5) and the final EIS describes how plan direction will maintain or enhance opportunities for movement between grizzly bear ecosystems, thus contributing to recovery of the species (final EIS section 3.14.6). Third, an objector referenced a new paper (Proctor et al., 2020), but the final EIS analysis already cites an earlier version of this manuscript containing the same information (Proctor et al., 2018).

Objectors also took issue with the level of detail in the effects analysis and provided specific suggests for additional information that they would like to see included. Some of these objections are closely linked to concern about the adequacy of plan components, and the level of analysis required to demonstrate that plan components will be effective. The final EIS provides analysis in section 3.14.6 that evaluates effects of the land management plan holistically, appropriately drawing conclusions based on protections provided by the full suite of plan components in addition to designated areas and plan allocations. This is noted on page 335 of the final EIS and on page 39 of the biological assessment. Individual plan components are discussed where appropriate to support this analysis. Additional information is included in final EIS appendix D, which describes how groups of plan components collectively address key ecosystem characteristics and primary stressors (table 5). The biological assessment provides further detail on how the plan is likely to affect grizzly bears, and addresses many of the concerns raised by objections. The final EIS and biological assessment both disclose effects of motorized over-snow travel (final EIS section 3.14.6, page 337, biological assessment, pages 26 and 44), vegetation management (final EIS section 3.14.6, pages 338 and 346, biological assessment, pages 33 and 50-51), food attractants (final EIS section 3.14.5, page 319 and section 3.14.6, page 335, biological assessment “Food and Attractant Management” section), and cumulative effects on grizzly bear populations and recovery (final EIS section 3.14.6, pages 352-353, biological assessment, pages 54-55) at a level of detail that is appropriate for a programmatic analysis. Forest Supervisor Avey used the best available scientific information to evaluate vegetation conditions and potential wildlife habitat (final EIS appendix H), and some information that objectors requested, such as “actual habitat conditions”, are better evaluated at the project level using site-specific information. Project-level effects and their potential for take will be determined in consultation with the Fish and Wildlife Service during project development and analysis.

Conclusion

Many of the issues that objectors raised center on use of the Northern Continental Divide Ecosystem conservation strategy to inform plan direction in the 2018 Grizzly Bear Amendments and now in the 2020 Land Management

Plan. However, I find that Forest Supervisor Avey relied on a broad range of information sources, including new peer-reviewed literature, in developing the plan and analyzing effects of the full suite of plan components. The plan revision final EIS draws on science and analysis from the conservation strategy and 2018 Grizzly Bear Amendment Final EIS, integrates additional information, appropriately addresses effects at a programmatic scale, and demonstrates scientific integrity in the discussion and analyses as required by the Council on Environmental Quality regulations at 40 CFR 1502.24.

Adequacy of Plan Direction to Contribute to Recovery

Objectors contend the forest plan does not provide adequate protection for the grizzly bear to ensure its continued survival and recovery.

Objectors' Proposed Remedies

- Primary conservation area habitat security standards must be applied forestwide to provide for grizzly bear connectivity.
- Include temporary roads in baseline calculations of total motorized route density and habitat security when those roads may physically exist on the ground and include them in open motorized route density calculations when being used for project implementation.
- Clarify that unauthorized roads, whether their status is undetermined or some other internal label, must not be added to the road system as a matter of simply updating or improving motorized route data, even if such roads existed in 2011.
- Close the Badger-Two Medicine to mechanized travel.
- Mandatory terms and conditions in the Biological Opinions must be incorporated into the forest plans.
- Add a desired condition that states that "NFS lands be managed to improve grizzly bear habitat and connectivity in order to maintain the upwards trajectory of the population."

Background

Per the planning regulations at 36 CFR 219.9(b), land management plans must "provide the ecological conditions necessary to contribute to the recovery of federally listed threatened and endangered species".

Per the Endangered Species Act, Federal agencies are required to ensure that any action authorized, funded, or carried out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat (ESA, section 7(a)(2)). Future ground-disturbing activities authorized consistent with the forest plan could not occur without further site-specific analyses, section 7 consultation, and project decision documents.

Response

Objectors expressed a variety of concerns related to how the 2020 Land Management Plan will provide for grizzly bear survival and recovery. My response here will address the overall effects of integrated plan direction as well as specific issues related to connectivity, mechanized recreation, and livestock grazing.

Several objectors questioned the sufficiency of the Northern Continental Divide Ecosystem conservation strategy and plan direction from the 2018 Grizzly Bear Amendments. These issues are primarily due to disagreement on interpretation of the science used to inform the conservation strategy, which is discussed above in the Use of Best Available Scientific Information for Grizzly Bear issues summary. I addressed specific concerns related to how open and total motorized route density are calculated, use of the 2011 road density and secure core baseline, and associated plan components in my response to objections on the 2018 Grizzly Bear Amendments. Rather than

repeat that response here, I'd like to focus on the effects of these plan components in the context of additional plan direction and changes to land allocations that are included in the 2020 Land Management Plan.

As required by the planning regulations, the 2020 Land Management Plan includes both ecosystem and species-specific plan components designed to maintain ecological integrity and contribute to recovery of threatened and endangered species such as the grizzly bear (draft record of decision, pages 19 and 21). The ecosystem plan components promote vegetation and habitat conditions that will support a wide variety of wildlife species, while the species-specific plan components adopted from the grizzly bear amendments address key threats to grizzly bears as well as specific habitat needs. Plan components were based on the best available scientific information (see response in the Use of Best Available Scientific Information for Grizzly Bears issue summary), and their effects are thoroughly documented at the programmatic scale in sections 3.14.5 and 3.14.6 of the final EIS. The final EIS analysis concluded that the land management plan would contribute to grizzly bear recovery by maintaining, improving, or restoring grizzly bear habitat (final EIS section 3.14.6).

The final EIS and planning record demonstrate the plan direction maintains secure habitat, limits open and total road density, and mitigates effects from recreation and livestock grazing (final EIS section 3.14.6; final EIS appendix D). Analysis also shows that the plan components for zones 1 and 2 are sufficient to support the goals for these zones, including maintaining the potential for genetic connectivity between adjacent ecosystems (final EIS section 3.14.6; biological assessment sections on Habitat Security and Connectivity). The final EIS and biological opinion for the grizzly bear amendments are referenced repeatedly in the 2020 Land Management Plan final EIS, and these documents provide additional detail on how specific plan components support grizzly bear recovery.

Objectors requested additional monitoring to better track public compliance with motorized route closures designed to benefit grizzly bear and other wildlife species. While the monitoring plan already contains components to track key measures of motorized access (MON-NCDE-01 and 02), tracking incidence of illegal motorized access would provide additional information regarding plan implementation to support recovery.

One objector raised a concern about the potential for conflict between mountain bikers and grizzly bears in the Badger-Two Medicine area, which is part of the grizzly bear primary conservation area. I could not find this particular issue addressed in the final EIS, although it was discussed in the biological assessment for the grizzly bear plan amendments, which is incorporated by reference. I am therefore instructing Forest Supervisor Avey to clarify the final EIS effects analysis by summarizing information from the grizzly bear amendment final EIS and biological assessment, together with the new information from the literature provided by this objector.

Some objectors contend that plan direction for grazing in grizzly bear habitat is not adequate to prevent livestock-bear conflicts and that the effects analysis fails to capture all potential impacts of grazing on grizzly bear. I examined all suggestions for additional plan components, but my review of the 2020 Land Management Plan and final EIS analysis found the plan includes a number of measures to reduce the potential for conflict with livestock (final EIS section 3.14.6, subsection Livestock Grazing). Objectors assert the plan direction must be applied immediately rather than at the time of grazing permit renewal, however the final EIS notes that current livestock management has been compatible with an increase in the Northern Continental Divide Ecosystem grizzly bear population and has not resulted in any grizzly bear removals due to livestock conflict on National Forest System lands in the ecosystem. The final EIS discloses that while some conflict between livestock grazing and grizzly bears may yet occur, future changes to allotment management plans will serve to further diminish the threat posed by livestock grazing on Forest lands.

At the resolution meeting, objectors stressed that connectivity across the Forest and demographic connectivity with other grizzly bear recovery zones is vital to overall grizzly bear recovery, so I will respond to concerns about connectivity alongside the more general concerns about grizzly bear plan components. Objectors contend that the 2020 Land Management Plan does not provide sufficient habitat and other protections for grizzly bears to achieve

genetic and demographic connectivity between the Northern Continentals Divide Ecosystem and other grizzly bear ecosystems such as the Greater Yellowstone Ecosystem. During the objection resolution meeting, I heard that this is a key issue for some objectors who would like to see a greater emphasis on demographic connectivity as well as additional plan components beyond desired conditions. Specific remedies proposed included applying habitat security standards from the primary conservation area in connectivity areas, replacing guidelines with standards, and providing greater detail in some of the connectivity components.

I recognize that the geographic location of the Helena-Lewis and Clark National Forest between the two recovery zones means it has an important role in connecting these ecosystems, and both the final EIS and biological assessment also acknowledge that fact. As such, Forest Supervisor Avey identified areas that literature suggests are important for connectivity (final EIS section 3.14.6) and developed plan components to maintain or enhance wildlife habitat in these areas. The plan acknowledges that most of the impediments to wildlife movement occur on non-Forest Service lands, but addresses several key impediments by establishing a goal to acquire ownership and easements in the Divide Geographic Area to improve connectivity (DI-WL-GO-01) and guidelines designed to mitigate the effects of highways that could impede connectivity (DI-WL-GDL-01, UB-WL-GDL-01). These plan components are in addition to the plan components for zone 2 carried forward from the grizzly bear amendments, which help to maintain the potential for genetic connectivity with adjacent ecosystems. The final EIS section 3.14.6, "Connectivity", describes how these plan components and many other contribute to grizzly bear connectivity. Also see the Connectivity issue summary for additional discussion.

One objector asserts that terms and conditions included with the forest plan biological opinion must be incorporated into the plans as plan components. However, terms and conditions provided in the biological opinion are mandatory, nondiscretionary items, regardless of whether they are included as plan components. Thus, writing plan components to mimic them is not necessary. Although, the objector speculates on the effects of the species' delisting, that is outside the scope of this plan revision. The Fish and Wildlife Service will evaluate the regulatory mechanisms provided in the applicable land management plans at the time of delisting and determine if any additional guidance, such as programmatic terms and conditions provided plan level consultation, would need to be added.

Conclusion

Based on my review of the plan components, final EIS, and biological assessment, I find that the 2020 Land Management Plan will contribute to grizzly bear recovery by maintaining, improving, or restoring grizzly bear habitat and addressing relevant threats. The plan continues a proven management direction framework, appropriately updated with 20 years of implementation information and new research, that will continue to support grizzly bear recovery while also managing the National Forest System lands per the Forest Service multiple use mission. Plan direction is sufficient to address potential conflicts with grazing. Habitat components and new land allocations will support demographic connectivity between the Northern Continental Divide Ecosystem and other recovery zones. A biological assessment was submitted to the Fish and Wildlife Service on March 9, 2020 and consultation will be completed prior to plan approval in in compliance with the Endangered Species Act. A record of consultation with the Service is documented in appendix B of the biological assessment for all Federally listed and candidate species and designated critical habitat on the Forest (page 183). Grizzly bear survival and mortality will be monitored across both the primary conservation area and zone 1 to ensure that a healthy population is maintained.

To ensure that all relevant science has been considered, I am instructing Forest Supervisor Avey to summarize potential effects of mountain biking on grizzly bear and consider whether any changes are needed in the plan based on this review. I am also instructing Forest Supervisor Avey to add an indicator to the current monitoring plan to track illegal motorized access on the Forest.

Lynx

Objectors contend that plan direction for lynx is not based on the best available scientific information and does not provide the ecological conditions necessary to contribute to lynx recovery. Objectors also assert that the EIS analysis is inadequate and that monitoring for lynx and critical habitat should be expanded.

Objectors' Proposed Remedies

- Adopt standards - beyond the outdated lynx direction - to ensure lynx winter habitat on the Helena-Lewis and Clark National Forest is properly managed and conserved.
- Adopt standards and prescriptions designed to ensure that coniferous forest stands in the forest are given a chance to become good lynx winter habitat in the coming years and decades. The Service must also properly analyze the direct, indirect, and cumulative impacts of the revised forest plan and its vegetative prescriptions on winter lynx habitat.
- Update the lynx direction for the revised forest plan, in particular, VEG S1, to reflect the best available science, including recommendations from the 2017 Species Status Assessment and other recent literature
- Take a hard look at the direct, indirect, and cumulative impacts of motorized access on lynx and convert "guidelines" for managing lynx and lynx critical habitat into enforceable standards.
- Adopt and implement a new and effective monitoring program to conserve lynx on the Forest.
- Include a map of the WUI indicating where exceptions to lynx plan components apply.

Background

Per the planning regulations at 36 CFR 219.9(b), land management plans must "provide the ecological conditions necessary to contribute to the recovery of federally listed threatened and endangered species".

In March 2000, Canada lynx was listed as a threatened species under the Endangered Species Act due to the lack of adequate regulatory mechanisms, specifically the lack of guidance for conservation of lynx and snowshoe hare in Forest Service land management plans and Bureau of Land Management land use plans. Since its approval in March of 2007, the Northern Rockies Lynx Management Direction has provided consistent management direction for lynx habitat on National Forest System lands. The purpose of the Northern Rockies Lynx Management Direction is to provide management direction to conserve lynx habitat and promote recovery by reducing or eliminating negative effects of land management activities on National Forest System lands. The Northern Rockies Lynx Management Direction is also designed to complement the multiple-use directive for the Forest Service. The direction includes both protective and proactive measures to maintain and improve or restore lynx habitat (final EIS section 3.14.8, page 371).

In 2017 a peer-reviewed species status assessment for the lynx was completed (Bell et al., 2016; U.S. Department of the Interior, 2017b) to assist recovery planning, classification decisions, and other required determinations. On Nov. 13, 2017, the U.S. Fish and Wildlife Service completed a 5-year review (U.S. Department of the Interior, 2017a) , informed by the species status assessment, that concluded the Canada lynx may no longer warrant protection under the Endangered Species Act and should be considered for delisting due to recovery (U.S. Department of the Interior, 2017b) . The Fish and Wildlife Service stated that the habitat management direction put in place by the Forest Service and Bureau of Land Management subsequent to the Endangered Species Act listing substantially addressed the threats to lynx (ibid). The Northern Rockies Lynx Management Direction has been retained in the land management plan, including all standards, guidelines, and objectives.

Response

Outdated Direction

Several objectors were concerned about relying solely on the Northern Rockies Lynx Management Direction to support recovery of lynx, claiming that it is outdated and no longer consistent with the best available scientific information. This also came up during the resolution meeting and so I wanted to address how some of the more recent research on lynx was considered. The Northern Rockies Lynx Management Direction is just one part of the plan direction designed to support lynx recovery. Forest Supervisor Avey also incorporated new scientific information such as Holbrook et al. (2018; 2019), Holbrook, Squires, Olson, DeCesare, and Lawrence (2017) , Holbrook, Squires, Olson, Lawrence, and Savage (2017), Interagency Lynx Biology Team (2013), Kosterman (2014), Kosterman, Squires, Holbrook, Pletscher, and Hebblewhite (2018), Lewis, Hodges, Koehler, and Mills (2011), and Olson, Squires, DeCesare, and Kolbe (2011). These publications address many of the concerns of the objectors, and they are discussed in detail and cited in the Forest's biological assessment (pages 56-59) and in the final EIS (section 3.14.8, "Discussion regarding recent science related to Canada lynx"). Furthermore, the planning record contains a document titled "Canada Lynx -A Review of Recently Published Papers Relative to Canada Lynx Research in North West Montana" which provides a review of four new papers published from 2016 to 2018 and an assessment of how they relate to management direction provided in the Northern Rockies Lynx Management Direction. Scientists at the Rocky Mountain Research Station assisted in this review.

I would like to emphasize that the Northern Rockies Lynx Management Direction is not stand-alone management direction. Rather it provides a portion of the species-specific (fine filter) plan direction within the 2020 Land Management Plan's coarse filter/fine filter framework. The plan includes ecosystem-level plan components that address key ecosystem characteristics, including vegetation composition, structure, function, and connectivity, as well as some new plan components that specifically address lynx. Direction for maintaining lynx habitat provides a good example of how new plan components augment direction from the Northern Rockies Lynx Management Direction. The importance of providing horizontal cover for lynx has been known for some time and was incorporated in Northern Rockies Lynx Management Direction standards for young forests (standard VEG S5) as well as for multistory mature forests (standard VEG S6) (see the 2020 Land Management Plan, appendix F). Multistory forests with dense understories providing winter hare and lynx habitat are protected by Northern Rockies Lynx Management Direction standard VEG S6, with specific limited exceptions and exemptions identified and analyzed in the Northern Rockies Lynx Management Direction's final EIS (U.S. Department of Agriculture, Forest Service, 2007) and in the plan revision final EIS. As explained in the biological assessment and final EIS, the programmatic framework of the land management plan provides forestwide direction to identify, manage, and recruit mature, multistory forest to benefit lynx including but not limited to plan components for vegetation (FW-VEGT-DC-01, FW-VEGF-DC-01, FW-VEGF-DC-02, FW-VEGF-DC-04, FW-VEGT-GDL-01, FW-VEGF-DC-03, FW-VEGF-DC-08, FW-VEGF-DC-09, FW-VEGF-GDL-05). The effect of these vegetation desired conditions at both the forestwide and geographic area scales are discussed in the final EIS (section 3.14.8, pages 375-376). A forestwide desired condition for wildlife (FW-WL-DC-09) provides additional plan direction to help promote winter lynx habitat and connectivity, which were issues raised by objectors.

I recognize that some objectors would prefer to see more specificity in the desired conditions and analysis for lynx. For the land management plan, Forest Supervisor Avey analyzed the effects of the integrated plan content in the form of vegetation desired conditions together with the species-specific plan components at a programmatic scale. However, additional analysis appropriately occurs at the project level where site-specific information allows for greater detail. FW-WL-DC-09 recognizes the fact that our understanding of lynx biology continues to evolve and ensures that the most current science is considered during project development, analysis, and consultation.

Wildland Urban Interface Mapping

An objector requested a map of the wildland urban interface (WUI) to show where exceptions to certain lynx habitat standards could apply. The wildland urban interface is clearly described in the 2020 Land Management. However, a map is neither necessary nor appropriate because the precise boundary may change as community wildfire protection plans are updated. In anticipation of that, the final EIS takes a conservative approach to estimating effects by projecting the maximum acres of lynx habitat that could be subject to vegetation treatments under exceptions to the Northern Rockies Lynx Management Direction (final EIS section 3.14.8). As noted in the final EIS (page 372), even the maximum number of wildland urban interface acres that could be treated represents less than 1 percent of potential lynx habitat in the action area. Any future changes to the wildland urban interface boundary resulting from updates to community wildfire protection plans would be very small relative to the estimated potential treatment acres and potential lynx habitat acres.

Connectivity

I would also like to provide additional detail to address allegations that the 2020 Land Management Plan will not provide for connectivity between lynx populations. Several plan components address connectivity and linkage for wildlife, including FW-WL-GO-04. This forest-wide goal that interagency-identified linkage areas facilitate wildlife movement works to ensure that the best available scientific information, including that of partner agencies, is used to identify linkage areas. As described in section 3.14.8 of the final EIS (page 377), this component will be implemented in tandem with the plan components to cooperate with highway managers and other landowners to implement wildlife crossings where needed and provide for maintaining habitat and limiting transportation system impacts to threatened and endangered species (FW-RT-GO-03; see also FW-RT-DC-01; DC-04; GDL-12). These forestwide and geographic area specific plan components complement the Northern Rockies Lynx Management Direction plan components which have been carried forward into the land management plan, including standard ALL S1, objective LINK 01, standard LINK S1, guideline LINK G1 and guideline LINK G2. Implemented in concert, these plan components ensure that connectivity is provided for both within the Forest and between adjacent forests (biological assessment, pages 73, 78, 86-87)). Also see my response for the Connectivity issue summary.

Recreation Effects

Some objectors were concerned about potential effects of recreation on lynx. The Lynx Conservation Assessment and Strategy notes that if effects to lynx occur from recreation, they are incompletely understood and may depend on the type and context of activity. However it recognizes that primary impacts from recreation could include both displacement of lynx due to summer and winter motorized activity, human presence, access, and the potential for incidental trapping of lynx resulting from access to preferred habitats via allowable motorized use or development (final EIS 3.14.7, page 362).

Approximately 145,911 acres (20 percent) of lynx critical habitat would be in recreation opportunity spectrum categories where over-snow motorized uses could potentially be allowed during winter. However, the biological assessment concluded that any potential effects to lynx from winter motorized recreation that compacts snow are anticipated to be insignificant and discountable, based upon findings by Squires and others (Squires, Decesare, Kolbe, & Ruggiero, 2010; Squires et al., 2013) and Kolbe and others (2007). Recent work from Squires and others (J. R. Squires, Olson, Roberts, Ivan, & Hebblewhite, 2019) further describes winter recreation's potentially limited degree of effect on lynx, depending on the spatial juxtaposition of occupied lynx habitat and winter recreation in that habitat (final EIS biological assessment, page 93). Additionally, motorized access is managed according to travel plans. Forest plan components that guide travel management are applied when travel plans are updated, and effects to lynx and their habitats are considered and consulted on at that time. Similarly, components that guide

management of recreation facilities, sites, and permits are applied when those activities are planned or updated, and effects are analyzed at that time using site-specific information (final EIS biological assessment, page 92).

Insect and Disease

Objectors cited new research related to lynx habitat suitability in beetle-killed stands to support assertions plan direction was inadequate. However, the land management plan recognizes the importance of natural disturbance processes such as insect outbreaks and includes several plan components designed to maintain these habitats. FW-VEGF-DC-09 states that "Forest composition, structure, and pattern allow for native forest insect and diseases to occur across their native extent and affect vegetation at a scope and scale consistent with their natural endemic role". Natural insect disturbance processes are also expected to be one of the primary disturbance factors within designated wilderness (FW-WILD-DC-02), recommended wilderness areas (FW-RECWILD-DC-02), wilderness study areas (FW-WSA-DC-01), and inventoried roadless areas (FW-IRA-DC-02). Objectors were particularly concerned about salvage logging in beetle-killed stands. As noted in the final EIS, the majority of the Forest is in wilderness, recommended wilderness, or inventoried roadless areas where harvest, including salvage of beetle-killed stands, would be prohibited or highly constrained.

Although the new research was not included in the final EIS analysis due to the recent publication date (J. P. Thomas, Reid, Barclay, & Jung, 2019) or because it was an internal reporting document (D. J. Squires et al., 2017), Forest Supervisor Avey did consider an early article about this research (Chase 2016, Project Record, E2-166). At that time, he determined that the effects of beetle-kill and other disturbances on lynx habitat conditions were already considered in the EIS using other information equally or more relevant to the Forest (final EIS literature cited; final EIS appendix G, literature cited by public). However, I am instructing Forest Supervisor Avey to review the new peer-reviewed literature mentioned above and determine whether any changes to the revised forest plan are needed.

Changes to VegS1

Objectors requested that the threshold in VEG S1 from the Northern Rockies Lynx Management Direction be lowered based on information from Kosterman (2014) to ensure increases in the amount of mature forest within female lynx home ranges. This literature and the proposed threshold are addressed in the review of new science in the final EIS (section 3.14.8, pages 364-371). As noted in the final EIS, the forest structural classes used in the Northern Rockies Lynx Management Direction are based on structural stages defined by Oliver and Larson (1996) , and do not "crosswalk" well with structural classes used in Kosterman (2014) or Kosterman et al. (2018) in order to inform specific constraints in the form of plan standards. However, the 2020 Land Management Plan includes an additional desired condition describing characteristics informed by this scientific information. Biologists in the Northern Regional Office are working with research scientists at the Rocky Mountain Research Station to better interpret structure classes used in these studies and how they compare with those used in the Northern Rockies Lynx Management Direction (final EIS section 3.14.8, page 365).

Lynx Analysis Units

Objectors raised several issues about the lynx analysis, stating that the methods were flawed or that additional detail was needed in some areas. Some questioned changes to the boundaries of lynx analysis units (LAUs). The final EIS clearly describes how lynx analysis units were updated to reflect new habitat maps based on more recent data (final EIS section 3.14.7, pages 359-361). The purpose of lynx analysis units is to provide a framework for analysis, and the updates were analyzed and consulted on as part of the effect's analysis for the revised forest plan.

I also found that the results and limitations of the SIMPPLLE model used to analyze possible vegetation change over time were well-explained in the final EIS (section 3.14.8, section 3.8) and appendix H. Model output is only one component of the analysis in the final EIS and biological assessment, which include numerous references to

published literature. The final EIS conclusion that the land management plan will promote recovery of lynx is supported by a comprehensive analysis of how plan components support lynx habitat and reduce or eliminate adverse effects from land management.

An objector requested additional analysis of how plan components designed to maintain elk hiding cover would affect lynx. Elk hiding cover is defined as "vegetation capable of hiding 90 percent of a standing adult elk from the view of a human at a distance equal to or less than 200 feet" (final EIS 3.15.5, page 413)(Lyon & Christensen, 1992). Lynx habitat is defined in the 2020 Land Management Plan (glossary, page 231) as boreal forest with gentle rolling topography, dense horizontal cover, deep snow, and moderate to high snowshoe hare densities (more than 1 hare/2 hectare (0.4 hares/2 acre)). Given the difference in habitat requirements between the two species, elk hiding cover would not be a reliable indicator for lynx habitat. The final EIS does describe how collectively, the wildlife plan components are beneficial to lynx (page 376).

One objector asserts that the final EIS did not analyze the effects of livestock grazing on lynx. Livestock grazing is considered a second tier anthropogenic influence in the revised conservation strategy (Interagency Lynx Biology Team, 2013). Second tier anthropogenic influences include those that research and management experience has shown to be less likely to have substantial effects to lynx and their habitat (biological assessment, page 63), but the Northern Rockies Lynx Management Direction and land management plan nonetheless include components designed to minimize any potential effects on lynx (final EIS section 3.14.8, pages 371 and 377-378). Both the final EIS and biological assessment analyze potential effects associated with livestock grazing, although analysis appropriately focuses on how plan direction affects first tier anthropogenic influences with a greater potential to impact lynx.

Monitoring

Several objectors contend that the monitoring plan should include additional questions and indicators for lynx. My review of the monitoring plan showed that Forest Supervisor Avey has already included monitoring questions (MON-LYNX-01 through 07) that are specifically designed to monitor lynx habitat conditions to aid in persistence and recovery of lynx. Additionally, the Forest is partnering in a new regional mesocarnivore monitoring effort which will include lynx. This approach was developed with close collaboration between the Forest Service Rocky Mountain Research Station and the National Forest System (Golding et al., 2018).

Consultation

Finally, objectors assert that Forest Supervisor Avey must consult with the Fish and Wildlife Service on plan effects to lynx and lynx critical habitat. A biological assessment was submitted to the Fish and Wildlife Service on March 9, 2020. A record of consultation with the Service is documented in appendix B of the biological assessment for all Federally listed and candidate species and designated critical habitat on the Forest (page 183).

Conclusion

I find that Forest Supervisor Avey complied with the requirement at 36 CFR 219.9 to "provide the ecological conditions necessary to contribute to the recovery of federally listed threatened and endangered species", including Canada lynx, by including plan components that provide the necessary habitat conditions for Canada lynx recovery. Analysis in the final EIS and biological assessment demonstrates how plan components are designed to support lynx and lynx critical habitat. The biological assessment released with the draft record of decision and biological opinion provided by the Fish and Wildlife service on XXX satisfy the procedural requirements under section 7 of the Endangered Species Act.

I also found the 2020 Land Management Plan provides sufficient direction to provide for lynx habitat connectivity and linkage. The final EIS shows that Forest Supervisor Avey considered the best available scientific information and took a hard look at effects to lynx, lynx habitat, and connectivity.

I am instructing Forest Supervisor Avey to review the new literature on beetle-killed spruce-fir stands published by Thomas et al. (2019) to determine whether any changes in the land management plan are necessary, or whether additional analysis is warranted prior to signing the final record of decision.

Also see the *Plan Component Sufficiency* issue summary.

Connectivity

Objectors contend that connectivity areas should be identified and mapped, and that additional plan components are needed to promote connectivity. Objectors assert that because connectivity areas are described in a general manner and not mapped, there is uncertainty about the plan's effectiveness at maintaining connectivity.

Objectors' Proposed Remedies

- Include more specific objectives, standards and guidelines related to connectivity.
- We suggest that (DI-WL-GDL) 01 and (UB-WL-GDL) 01 not only state that motorized access should not be increased, but that motorized use may be decreased in areas where connectivity and/or habitat security is unacceptably reduced, disrupted, or expunged. We suggest that (UB-WL-GDL) 01 includes a mandate to promote safe wildlife passage (underpasses, overpasses, other forms of technology) across Highway 200 in areas deemed important for wildlife habitat connectivity and where forest land is located on both sides of the highway.
- Explicitly recognize the need of wildlife and plants to adapt to the current and anticipated effects of climate change, and then identify and protect connectivity on the landscape through actionable substantive plan components that are spatially explicit.
- Designate and map connectivity areas as in the new Flathead Land Management Plan.

Background

The planning regulations require ecosystem plan components that maintain or restore connectivity, which is one element of ecosystem integrity (36 CFR 219.9).

Response

While the 2020 Land Management Plan does not use the same language as the Flathead plan for "connectivity areas", it does provide direction for several locations and geographic areas that will focus efforts to promote wildlife habitat and landscape connectivity now and in the face of climate change. Plan direction seeks to promote connectivity along known or possible migration routes (see wildlife plan components for the Big Belts, Crazies, Divide, Elkhorns, Highwoods, Little Belts, Rocky Mountain Range, and Upper Blackfoot Geographic Areas) and to mitigate the impact of two high-traffic highways by enhancing habitat quality and connectivity on nearby Forest Service lands (DI-WL-GDL-01, UB-WL-GDL-01). The land management plan also contains components that target connectivity for grizzly bear and that would benefit other wide-ranging species (PCAZ1-NCDE-DC-01, PCAZ1-NCDE-GDL-04, Z1-NCDE-DC-01, Z1-NCDE-DC-02; final EIS section 3.14.6). A forestwide guideline addresses barriers caused by fencing (FW-WL-GDL-07). Section 3.13.16 of the final EIS describes how additional forestwide plan components for a variety of different resource areas will also help to maintain connectivity.

The 2020 Land Management Plan also includes monitoring questions and indicators to assess the effectiveness of plan direction for maintaining connectivity (2020 Land Management Plan, appendix B, table 14, page 14) in the

Divide and Upper Blackfoot Geographic Areas, which were identified as those most important to landscape-scale connectivity.

One objector suggests that plan component language for DI-WL-GDL-01 be changed so that it applies across the entire Divide Geographic Area. As noted above, this plan component is designed to address connectivity in an area where fragmentation is currently a concern (2020 Land Management Plan, appendix C, page 16). Desired conditions for the Divide Geographic Area and several forestwide components will support habitat connectivity and movement between habitat patches across the entire Forest (FW-WL-GO-04, FW-WL-DC-03).

Another objector suggested that a pollinator section be added to the 2020 Land Management Plan that includes standards and guidelines to provide for connected pollinator habitat along roadways and beyond. The plan already contains a pollinator section that includes a desired condition, goal, and guideline to benefit pollinator conservation (2020 Land Management Plan, chapter 2, page 45). The desired condition aims to provide connected pollinator habitat across the forest, including but not limited to roadways. Section 3.11 in the final EIS describes how integrated plan direction provides large areas of unfragmented pollinator habitat.

One objector suggested that the Forest should increase collaboration with tribes and other state and federal agencies to promote connectivity during project and transportation planning. Several goals were identified in the 2020 Land Management Plan to promote work with other agencies and partners, identify and manage for wildlife movement across ownerships, and collaborate on management and conservation strategies to conserve wildlife and prevent the need for additional listings under the Endangered Species Act. Additionally, the Forest utilizes the Montana Natural Heritage Program Element Occurrence database to share species occurrence data to promote collaboration across ownerships (Planning record: D8_1, D8_9, and D8-11).

Conclusion

I find that Forest Supervisor Avey complied with 36 CFR 219.9 in providing plan components that maintain or restore connectivity. The plan also includes components that will support connectivity for pollinators and components to promote collaboration between agencies, tribes, and other land managers.

Connectivity is an issue that is relevant for all wildlife species and connected to many different resource areas. To add clarity in the analysis, I am instructing Forest Supervisor Avey to add a Connectivity sub-section to the Terrestrial Wildlife Diversity section of the final EIS (section 3.13.6). This section should integrate information from other sections of the final EIS to provide a more comprehensive analysis of how plan direction will support connectivity.

Plants

An objector contends the plan fails to demonstrate plan components are sufficient to maintain diversity of rare plants.

Response

The ecosystem (coarse filter) plan components were evaluated to determine whether they would be sufficient to provide the ecological conditions to maintain viable populations of native plant species. Species-specific plan components were included in the land management plan where needed. Appendix D of the final EIS lists plan components that address the key ecosystem characteristics and stressors for at-risk plant species. Compliance with these plan components will ensure the effects to at-risk species would be considered during project and activity decisionmaking. Appendix B of the 2020 Land Management Plan provides species-specific monitoring to ensure that appropriate data for each species is collected to support the evaluation of the land management plan when necessary.

The plants at-risk specialist report (planning record document D5) analyzes the effects of implementation of the 2020 Land Management Plan to species currently listed as regional forester's sensitive species and those identified as species of conservation concern. It indicates the sensitive species are expected to be unaffected by project activities due to various reasons (e.g. disturbance tolerance), they occur in habitats with either infrequent project activity (e.g. alpine habitat guild), or they occur in habitats where coarse filter plan components constrain management (e.g. peatlands and wetland-riparian habitat guilds) (final EIS section 3.10.6, page 256). As noted in the response to comments, additional analysis from the botany specialist report was brought into the final EIS to ensure that effects to sensitive species were adequately disclosed (final EIS appendix G, CR101).

Additionally, the terrestrial wildlife diversity section of the final EIS (3.13) and a biological evaluation (planning record document D9A-1-3) provide evaluation of impacts of the 2020 Land Management Plan on current Regional Forester Sensitive Species. As noted in the response to comments, implementation of the 2020 Land Management Plan would support persistence of all current Regional Forester Sensitive Species in the plan area and would not result in a trend toward federal listing (final EIS appendix G, CR277).

The objector notes some contradictory statements in the final EIS regarding the effects of Forest Service policy. One paragraph in the final EIS implies a lack of agency policy for sensitive species and species of conservation concern leads to uncertainty of the plan effects. This contradicts the discussions and conclusions of the effects of plan components to maintain species diversity made throughout the other portions of the EIS and planning record.

Conclusion

I find the final EIS, biological evaluation, and planning record demonstrate the plan components will maintain species diversity as required by 36 CFR 219.9. However, I am instructing Forest Supervisor Avey to correct the contradictory information in the final EIS to clearly disclose the effects of the plan components for plan species of conservation concern.

Invasive Species

Objectors contend that the revised land management plan does not do enough to control invasive species and noxious weeds.

Objectors' Proposed Remedies

- The objector did not provide a suggestion for how plan direction for invasive species could be improved.

Background

The planning regulations at 36 CFR 219.8(a)(1)(iv) requires plan components to maintain or restore ecological integrity of terrestrial and aquatic ecosystems and watersheds in the plan area, taking into account stressors such as invasive species. In addition, 36 CFR 219.10(a)(8) requires plan components for integrated resource management considering stressors such as invasive species.

Executive Order 13112 of February 3, 1999 (Invasive Species), called upon executive departments and agencies to take steps to prevent the introduction and spread of invasive species, and to support efforts to eradicate and control invasive species that are established. As amended by Executive Order 13751, it directs actions to continue coordinated Federal prevention and control efforts related to invasive species.

FSM 2900 guidance ensures that forest management activities are designed to minimize or eliminate the possibility of establishment or spread of invasive species on National Forest System lands or to adjacent areas.

The planning regulations at 36 CFR 219.2(b)(2) states that plans should not repeat laws, regulations, or program management policies, practices, and procedures that are in the Forest Service Directive System.

Response

As acknowledged in the draft record of decision on page 50, Executive Order 13751, which amends Executive Order 13112, directs Federal agencies to prevent the introduction of invasive species and to detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner. It requires agencies to monitor invasive species populations accurately and reliably; to provide for restoration of native species and habitat conditions in ecosystems that have been invaded; to conduct research on invasive species and develop technologies to prevent introduction; to provide for environmentally sound control of invasive species; and to promote public education on invasive species and the means to address them.

As such, FSM 2900, Invasive Species Management, sets forth Forest Service policy, responsibilities, and direction for the prevention, detection, control, and restoration of effects from aquatic and terrestrial invasive species (including vertebrates, invertebrates, plants, and pathogens).

The land management plan does not repeat the policy and program direction as directed by the planning regulations at 36 CFR 219.2(b)(2). However, the plan is responsive to both the Executive Order and Forest Service manual direction. It includes components to execute an integrated pest management approach to prevent and/or decrease existing weed infestations (FW-INV-GDL) as well as preventative actions that reduce the risk or likelihood of invasive species introductions through project design (FW-INV-GDL-05, FW-INV-STD-01, FW-FAH-GDL-01, FW-VEGT-GDL-04). In addition, guidelines FW-INV-GDL-02, 03, 04 constrain invasive species control measures to ensure they are integrated with the desired conditions of other resources, while emphasizing long-term effectiveness and native plant species in guidelines FW-INV-GDL-03 and 05.

Conclusion

I find that the 2020 land management plan is aligned with Executive Order 13751 and FSM 2900. It includes plan components to control the introduction and spread of invasive species as required by the planning regulations at 36 CFR 219.8 and 219.10.

Regional Forester Sensitive Species

An objector contends that the public was not informed about the change in management of sensitive species.

Objector's Proposed Remedy

- Provide an additional comment period.

Background

Planning regulations at 36 CFR 219 published in the Federal Register April 9, 2012 in volume 77, no. 68, beginning page 21162.

Land Management Planning Directives at FSH 1909.12 and FSM 1920 published in the Federal Register February 6, 2015 in volume 80, no. 25, beginning page 6683.

Response

The policy change from management of sensitive species to management of species of conservation concern was completed with the promulgation of the planning regulations at 36 CFR 219 in May 2012. Both the regulations and the associated policy in the Forest Service directive system at FSH 1909.12 provided public notice and opportunity to comment.

The Forest provided multiple informal and formal comment opportunities on species habitat management during plan revision from assessment through the notice of availability and comment period for the draft EIS. In fact, objector's comment on this issue is recorded in response to comment CR101 in appendix G (final EIS).

In addition, the public will continue to have the opportunity to provide comment regarding the potential effects on any species during site-specific NEPA review of plan implementation.

Conclusion

The Forest Service provided multiple opportunities for public comment on land management plan policy changes, which included new regulations guiding plan development "to provide the ecological conditions to both maintain the diversity of plant and animal communities and support the persistence of most native species in the plan area". Forest Supervisor Avey has met his obligations to comply with that regulation and policy.

Climate Change

Background

The planning regulations at 36 CFR 219.8(a)(1) require plan components for ecosystem integrity taking into account system drivers such as climate change.

The planning regulations require the responsible official to identify information for a baseline assessment of baseline carbon stocks (36 CFR 219.6(b)(4)). However, they do not explicitly require plan components related to carbon.

36 CFR 219.19 provides the definition of ecological integrity as: the quality or condition of an ecosystem when its dominant ecological characteristics (for example, composition, structure, function, connectivity, and species composition and diversity) occur within the natural range of variation and can withstand and recover from most perturbations imposed by natural environmental dynamics or human influence.

Ecological Integrity

Objectors contend that the land management plan and final EIS do not use the best available scientific information related to climate change, and that the final EIS does not adequately describe the severity of potential climate change impacts or how climate change will affect the Forest's ability to achieve desired conditions. Some objectors also assert that the land management plan must do more to mitigate and adapt to climate change in order to maintain ecological integrity.

Objectors' Proposed Remedies

- Revise the forest plan to take a hard look at the science of climate change. Alternatively, issue a new EIS.
- The Forest Service needs to review its timber policies in light of climate change.

Response

Objectors raised several concerns about the efficacy of plan direction in managing for and mitigating the impacts of climate change. Some objectors assert Forest Supervisor Avey did not consider the best available scientific information and failed to treat climate change as a serious threat. However, the draft record of decision identifies climate change as an issue underpinning the need for change (draft record of decision, page 4). The 2020 Land Management Plan includes numerous components related to climate change (for example FW-WTR-DC-09, FW-VEGT-DC-01, FW-VEGT-DC-04, FW-CARB-DC-01). The final EIS includes a section on climate change (final EIS section 3.30, pages 308-320), discussions of climate change in the context of vegetation (final EIS section 3.25.6, pages 188-193) and timber (final EIS section 3.28.6, page 253), and a supplemental appendix on climate and carbon (final EIS appendix J). These sections in the final EIS cite peer-reviewed scientific literature, including a regional climate change vulnerability assessment (Halofsky et al., 2018a, 2018b). In responding to comments on the draft EIS, Forest

Supervisor Avey also considered literature submitted by the public (final EIS appendix G, pages 157-275). Collectively, these documents demonstrate that Forest Supervisor Avey did recognize climate change as a significant issue and used the best available scientific information to inform plan direction and analyze environmental consequences.

Some objectors raised more specific concerns regarding plan direction for climate change adaptation and mitigation. One objector asserts the desired conditions will not be achievable because the forest has already become a novel ecosystem due to climate change. The 2020 Land Management Plan considers the natural range of variation, along with expected future conditions, to manage for an array of vegetation conditions that are the most likely to remain resilient in the face of climate change (2020 Land Management Plan, introduction to the All Terrestrial Vegetation section). The final EIS and associated appendices describe in more detail how climate change factored into desired conditions for vegetation. The SIMPPLLE model used to simulate the effects of disturbances over time was calibrated to take into account expected increases in fire and warmer and drier conditions resulting from climate change (final EIS section 3.8.5, page 148; final EIS appendix J, page 2). The final EIS discloses a wide range of potential climate change impacts, including trends away from some desired conditions and the risks to vegetation, but describes how plan direction can help promote vegetation that is more resilient (final EIS section 3.8.6) and how timber harvest can serve as a tool to help achieve desired conditions for vegetation, climate change adaptation, and carbon storage (final EIS section 3.8.6 and section 3.30.5). The final EIS appendix H (pages 35-38) provides detailed rationale using information from the best available scientific information supporting the use of the natural range of variation as a basis for desired conditions, even in the face of a changing future.

Objectors also expressed concern about how management activities could exacerbate climate change impacts on stream temperature and cold-water fish. The 2020 Land Management Plan includes a series of plan components, including standards and guidelines, that protect vegetation in riparian management zones so that it continues to provide shade for cold water fish (see sections on Watersheds and Conservation Watershed Network in the plan, pages 14-24; final EIS section 3.5.6). The final EIS describes how the forest intends for these plan components to "provide resiliency in the face of warming climate" (final EIS section 3.5.6, page 68). This section also discusses how activities like livestock grazing can affect stream temperatures (final EIS section 3.5.7, page 98). The final EIS section on climate change also discusses vulnerabilities of cold water fish to climate change, and appendix J describes possible adaptation strategies that could be used to mitigate the effect of rising stream temperatures (final EIS appendix J, pages 4-5).

Conclusion

I find the plan contains components that address climate change by promoting carbon sequestration and ecological integrity while also taking into account potential climate change effects consistent with planning regulation requirements. Forest Supervisor Avey used the best available scientific information to develop these components, and the final EIS provides a thorough analysis of potential climate change impacts across a variety of different resources.

Livestock Grazing

An objector contends that the plan direction and final EIS analysis for grazing do not consider climate change and that the preferred alternative fails to comply with requirements to avoid unnecessary or undue degradation.

Objectors' Proposed Remedy

- Climate change must be considered in any analysis of the grazing program. The lacking vegetative baseline, analysis of livestock grazing impacts to soil carbon sequestration and global climate change must be remedied.

Response

The objector contends that the 2020 Land Management Plan's standards and guidelines are inadequate to address greenhouse gas emissions associated with livestock. The planning regulation require that the responsible official collect available information pertaining to a baseline assessment of carbon stocks during the assessment phase of planning (36 CFR 219.6). However, it does not require that plans include standards and guidelines that reduce greenhouse gas emissions associated with management activities, such as grazing. In the final EIS, the forest discusses interactions between grazing and carbon (final EIS appendix J, pages 20-21). The final EIS recognizes tradeoffs between ecosystem services provided by rangelands: "Although rangelands provide a variety of ecosystem services, such as wildlife habitat, recreation, watershed functions, carbon sequestration, and biodiversity conservation, these lands have primarily been managed for forage production and livestock grazing" (final EIS section 3.27.1). However, the final EIS analysis concludes that emissions associated with grazing in the plan area would be negligible in the context of United States and global carbon emissions due to the relatively small number of animals (final EIS section 3.30.5; final EIS appendix G, pages 129-130; final EIS appendix J, pages 20-21). See also my response to Issue Summary – Carbon Storage and Sequestration.

The objector also argues that climate change exacerbates the impacts of grazing on vegetation and may result in unnecessary or undue degradation of public lands. The planning regulations direct the responsible official to consider climate change as a system stressor and driver when developing plan components to provide for multiple uses, such as livestock grazing (36 CFR 219.10). The final EIS indicates that Forest Supervisor Avey considered impacts of climate change on forage production and grazing (final EIS section 3.27.6, pages 225-226). The 2020 Land Management Plan includes direction that would allow for changes in livestock grazing to respond to impacts of climate change on forage through site-specific prescriptions that would be identified during the allotment planning process (FW-GRAZ-STD-01).

The objector's assertion regarding unnecessary and undue degradation refers to a standard in the Federal Land Management Policy Act of 1976 that applies to the Secretary of Interior regarding lands administered by the Bureau of Land Management and thus does not apply in this context.

Conclusion

Forest Supervisor Avey complied with the requirements of the planning regulations and the NEPA when developing plan direction for grazing and analyzing the effects. The requirement to avoid unnecessary and undue degradation that the objector brings up does not apply to national forest management.

Carbon Storage and Sequestration

An objector contends that the land management plan does not adequately address the need to mitigate climate change through carbon storage and sequestration, and that the final EIS analysis of carbon emissions is incomplete.

Response

The assessment for the 2020 Land Management Plan includes a chapter on climate change and baseline assessment of carbon stocks (chapter 4, Plan Assessment) and the final EIS includes an additional forest carbon assessment that used updated methods (final EIS appendix J). The 2020 Land Management Plan includes a number of components designed to maintain resilient vegetation capable of carbon storage, including a desired condition to sustain carbon sequestration storage and potential (FW-CARB-DC-01). Vegetation plan components such as FW-VEGT-DC-01 help to support carbon storage by promoting vegetation conditions that fall within the natural range of variation and would be resilience to changes in climate and associated disturbances (see my response to Climate Change and Ecological Integrity issues summary).

One objector asserts that the final EIS must quantify agency-caused carbon dioxide emissions and net emissions from logging. The objector states that emissions from logging would be an "irretrievable and irreversible commitment of resources". The final EIS includes an analysis of total forest carbon stocks and fluctuations in carbon for the plan area (final EIS appendix J, pages 5-25). This includes an account of the lost potential storage of carbon as a result of different disturbances, including harvest, between 1990-2011 (final EIS appendix J, figure 7). The final EIS also provides an estimate of the maximum amount of forest carbon that would be lost due to harvest and prescribed burning (final EIS section 3.30.5, page 319). This analysis focuses on carbon stored in forest and non-forest ecosystems and does not quantify emissions associated with different activities related to forest management, including vehicle emissions associated with recreational use and timber harvesting, as the objector requests.

Forest Supervisor Avey responded to this concern in his response to comments on the draft EIS (final EIS appendix G, CR48h). As noted in this response, the 2020 Land Management Plan does not make any commitment or authorize any actions on the ground, and a detailed analysis of emissions associated with possible management actions would be highly speculative. The carbon and climate section of the final EIS places the contribution of the HLC NF and its role of sequestering carbon into the context of global carbon and climate trends (final EIS section 3.30.5), and concludes that the activities allowed by the land management plan are likely to increase carbon storage and reduce emissions over the long term. This conclusion is supported by a thorough analysis citing the best available scientific information, as well as the quantitative analysis of forest carbon stocks and factors influencing storage that is included in appendix J.

Conclusion

The planning record indicates that Forest Supervisor Avey considered the effects of climate change and the Forest's role in carbon sequestration when developing the plan. I find the final EIS supports a conclusion that timber harvest is an appropriate tool for achieving desired conditions for resilient vegetation conditions in a changing climate. Analysis of potential effects on carbon emissions and storage is based on the best available scientific information and contains a level of detail that is appropriate for a programmatic analysis. I find that no further analysis is necessary in response to these objection issues. To improve clarity, I am instructing Forest Supervisor Avey to add an explanation in the final EIS that expands on his comment response by noting that because the land management plan does not authorize any actions, it cannot be an irreversible and irretrievable commitment of resources.

Areas of Tribal Importance

Crazy Mountains

An objector contends the draft record of decision fails to acknowledge the significance of the Crazy Mountains to the Apsáaalookee (Crow) Tribe.

Objector's Proposed Remedy

- Add desired conditions similar to what is included in the 2020 Custer Gallatin Land Management Plan to acknowledge and protect the wild land and cultural values of this single wild landscape.

Background

The planning regulations at 36 CFR 219.4 describes the requirements for public participation during plan revision, including Tribal outreach.

36 CFR 219.10(b)(iii) requires plan components for management of areas of tribal importance. Additional guidance for assessment and development of these plan components is provided in FSH 1909.12, sections 13.7 and 23.23h.

This includes requirements for Tribal consultation and protection of confidentiality for management of areas of tribal importance.

Response

Some of the objector's issues regarding protection of the Crazy Mountains relates to the desire for the area to be assigned to a primitive recreation setting that excludes mountain bike use. See also the Mountain Biking in Primitive Settings issue summary.

Regarding recognition and protection of the area for significance to the Crow Tribe, the planning regulations require plan components to provide for the management of areas of tribal importance (36 CFR 219.10(b)(iii). The planning directives, FSH 1909.12, chapter 20, section 23.23h, provides direction on what the responsible official should or must consider in developing the plan components. The first is consideration of information in the assessment (FSH 1909.12, Ch 20, 23.23h, 1a, page 108). The second is consideration of information from consultation and collaboration with the Tribe (ibid, 1b-d).

The 2020 Land Management Plan adequately addresses the information provided by the 2014 Assessment. The assessment recognizes that "the plan area was the ancestral homeland and travel way" for multiple native bands, including the Crow Tribe (assessment, chapter 11, page 1). This is restated in the plan (page 9) and draft record of decision (page 3). Specific to the Crazies Geographic Area, the assessment recognizes that "The Mountain Crow visited its [Crazy Mountains] tall peaks and special areas for vision quests" (assessment, page 6 and appendix C, page 12). This also is brought into the plan in the description of the distinctive roles and contributions section for the Crazies Geographic Area (plan, page 140).

The objector suggests the Helena-Lewis and Clark plan and draft record of decision should recognize the significance of the area to the Crow Tribe similarly to such recognition in the draft record of decision for the Custer Gallatin 2020 Land Management Plan. Similar to the Custer Gallatin, the Helena-Lewis and Clark National Forest honored their government to government responsibilities by reaching out to the Crow Tribe as documented in the record.

Although the Forest didn't receive information from the Crow Tribe specific to their interests, there are forestwide plan components that recognize the interest of all Tribes, including the Crow, in the areas of tribal importance section of the plan as required by 36 CFR 219.10(b)(iii) (plan, page 99 and draft record of decision, page 47).

Furthermore, as also explained in the draft record of decision, "[N]o effects on American Indian social, economic, or subsistence rights are anticipated as a result of the land management plan" (page 47). This is because, whether or not the decision or selected alternative makes specific statement about tribal significance, "the Forest Service is required to consult with tribes when management activities may impact treaty rights and/or cultural sites and cultural use" (page 47).

Conclusion

I find Forest Supervisor Avey met the regulatory and directive requirements for consideration of tribal outreach. I also find the forestwide plan components for areas of tribal importance, which apply to the Crazy Mountains, were informed by the information in the assessment. Without more information from the Tribe specific to the Crazy Mountains for the Helena-Lewis and Clark National Forest, it would not be appropriate to presume the Custer Gallatin National Forest plan components should be applied here.

Badger Two Medicine Plan Components

Objectors contend that several plan components for the Badger-Two Medicine area were modified or removed from the selected alternative without explanation.

Objectors' Proposed Remedies

- Re-insert Standard 02 (RM-BTM-STD 02) from the draft Revised Land Management Plan verbatim into the final Revised Land Management Plan.
- Provide legally sufficient justification for the changes to the Badger Two Medicine plan components in the final EIS and forthcoming Record of Decision.

Background

As stated in response to comments CR14 (final EIS appendix G), the Badger Two Medicine Traditional Cultural District would be managed per the National Historic Preservation Act, the Archaeological Resource Protection Act, the Indian Sacred Sites Executive Order 13007, the American Indian Religious Freedom Act of 1978 and their implementing regulations, in addition to the forest plan components. All Federal undertakings within the Badger Two Medicine area would follow government to government consultation protocols as defined in the FSM 1500, chapter 1560 and FSH 1509.13, chapter 10, as well 36 CFR 800.2 and Executive Order 13175.

Response

Objectors contend that several plan components for the Badger-Two Medicine special emphasis area were modified or removed from the selected alternative without explanation. This includes the replacement of a desired condition (RM-BTM-DC-01), addition of a suitability determination (RM-BTM-SUIT-02), and removal of a standard (RM-BTM-STD-02).

An agency may respond to comments on a draft EIS by modifying alternatives including the proposed action, developing and evaluating alternatives not previously considered, supplement, improve, or modify the analysis or make factual corrections (40 CFR 1503.4). The Council on Environmental Quality regulations on content of the EIS do not require a detailed explanation of differences made between the draft and final EIS in response to those comments, however the rationale for changes can often be determined by reviewing the response to comments or a summary description of the changes made in each resource section of the final EIS. Although not required, it's helpful to communicate how the agency is being responsive to public input and how understanding how conclusions regarding effects have been made.

Although section 3.21.1 describes "minor wording changes" to plan components within the administratively designated areas and the addition of alternative F, neither section 3.21.27 specific to Badger Two Medicine, nor the response to comments indicate why plan components were dropped and added. In fact the effects of alternative F, which was developed in response to the comments on the draft EIS, indicates "the plan components for the Badger Two Medicine area are the same in alternatives D and F as they are in all the other action alternatives" and the summary of plan components in table 211 remains unchanged between draft and final EIS. Although section 3.21.1 indicates the changes made are within the scope of the final EIS analysis, it's not transparent how this determination was made. Additional explanation would help demonstrate the changes are not "substantive" as an objector alleges, in the context of guiding future per the land management plan and the broad array of other law, regulation, and policy that provides direction for cultural resources on National Forest System lands.

Conclusion

Although Forest Supervisor Avey acted within his authority to make changes between the draft and final EIS, I'm instructing him to provide an explanation for the changes made per objector's proposed remedy and ensure the effects described in table 211 are adjusted accordingly.

Motorized Means of Transportation in Badger Two Medicine

Objectors contend that an additional plan component is needed to make motorized recreation unsuitable in the Badger Two Medicine.

Objectors' Proposed Remedy

- Include RM-BTM-SUIT-03: Motorized recreation is not suitable in the Badger Two Medicine area, except on those routes identified in the 2009 travel management plan.

Response

Most (97 percent) of the Badger-Two Medicine area is assigned to a desired summer recreation opportunity spectrum setting of primitive with a small portion (3 percent) assigned to roaded natural in proximity to existing motor vehicle routes (2020 Land Management Plan, appendix A, maps RM-4 and RM-7). The entire area is assigned to primitive setting in winter (ibid, RM-5 and RM-7). Suitability plan components FW-ROS-SUIT-03 and FW-ROS-SUIT-05 state that motorized use is not suitable in the primitive settings (2020 Land Management Plan, chapter 2, table 15, page 65). Therefore, adding a motor vehicle suitability component to the Badger Two Medicine areas is not needed where assigned to a primitive setting.

Although the objector is concerned about "the possibility of expanding motorized use in the future", any additional site-specific motor vehicle use designations would be made consistent with the other plan components for the Badger Two Medicine area. Despite the wording change in desired condition RM-BTM-DC-01 between draft and final, desired condition RM-BTM-DC-02 states "The Badger Two Medicine is a large, undeveloped landscape that is characterized by a natural environment where ecological processes such as natural succession, fire, insects, and disease function and exist. Impacts from visitor uses do not detract from the natural setting", which would guide additional road development. In addition, a roaded natural setting allows the potential for management activities to accommodate some motor vehicle access for the exercise of reserved treaty rights should the Blackfeet nation desire that opportunity per standard RM-BTM-STD-02.

Conclusion

I conclude that the responsible official does not need to provide a "not suitable" plan component for motorized use in the Badger-Two Medicine area. However, I did note a response to comment that states, "the preferred alternative (alternative F) allocates a primitive recreation opportunity spectrum to the Badger Two Medicine area" (final EIS appendix G, CR14, page 115). This fails to mention the small areas assigned to roaded natural (2020 Land Management Plan, appendix B, maps RM-4 and 7). I am instructing the responsible official to clarify this in the response to comment.

Monitoring

Objectors contend that the monitoring plan questions and indicators for Badger Two Medicine should be modified and expanded.

Objector's Proposed Remedies

- Add a monitoring question under MON-BTM-01: "Are unauthorized trails created by mechanical means of transportation (mountain bike) present within the Badger Two Medicine?"
- Add an indicator under MON-BTM-01: "Number, mileage and extent of unauthorized trails created for mountain bike trails within the Badger Two Medicine."
- Adjust the current indicator under MON-BTM-01 to read: "Number and kind of social conflict incidents, wildlife conflict incidents, and resource damage incidents reported in the Badger Two Medicine area."

Response

The planning regulation requires the plan monitoring program's questions and indicators to inform the management of resources on the plan area, including by testing relevant assumptions, tracking relevant changes, and measuring management effectiveness and progress toward achieving or maintaining the plan's desired conditions or objectives (36 CFR 219.12(a)(2)). It is up to the responsible official to set the scope and scale of the program, such as what to monitor (36 CFR 219.12(a)(4)). Not everything has to be monitored (36 CFR 219.12(a)(2)).

The plan monitoring program includes MON-BTM-01: How do mechanical means of transportation (including mountain bikes) within the BTM affect the primitive recreation setting? In addition, there are several monitoring questions for cultural and historic resources and areas of tribal importance such as MON-CRT-01: What is the progress toward preservation and conservation of significant cultural resources? And MON-CRT-04: What consultations have occurred with Native America tribes to aid in the protection and enhancement of cultural resources?

On a biennial basis, the responsible official will make a determination that includes whether or not the monitoring program needs to be changed, which, if needed, can be done under the administrative change provisions (36 CFR 219.12(d)(2), 36 CFR 219.13(c)). Thus, if the current monitoring program proves to be insufficient, changes can be made over time.

The objector also seeks clarification of the phrase "core area," used in the indicator for the Badger-Two Medicine area. Upon review, the "core area" is not defined in either the section on the Rocky Mountain Range Geographic Area, which includes the Badger-Two Medicine area, the plan glossary, or plan monitoring program (2020 Land Management Plan, chapter 3, pages 177; glossary; and appendix B). Thus, I agree it is unclear where this monitoring question applies.

Conclusion

Given the current monitoring program addresses the objector's key concern regarding mountain biking, I don't believe it's necessary to add the proposed questions. There will be opportunities with the biennial evaluations to make that determination if changes are warranted. However, I am instructing the responsible official to either remove the reference to a "core area" or define it for clear implementation of the plan monitoring program.

Cooperation with the Blackfeet Nation

An objector asserts that the Blackfeet Nation should legally share in the responsibility for managing the Badger-Two Medicine.

Objector's Proposed Remedy

Increase cooperation and provide authority of the Blackfeet Nation to participate in management decisions in the Badger-Two Medicine.

Response

Although the Forest Service has legal tribal trust and government to government consultation obligations, the Forest Service does not have the authority to delegate or institute shared management of National Forest System lands to another entity, including a tribal government. The authority to delegate management of federal lands is reserved to Congress under the Property Clause of the U.S. Constitution.

However, the planning regulations do require engagement, coordination, and consultation with tribal nations during plan revision. The Forest began outreach to Blackfeet Nation during the assessment phase and as continued to engage and update them throughout the planning effort. As described in the draft record of decision on page 7, specific tribal comments were considered at all phases of the planning process. Of primary concern to the Blackfeet

Nation is the management of lands in the Badger Two Medicine portion of the Rocky Mountain Geographic Area. The Tribe had multiple suggestions for plan components for this section of the Forest and these were incorporated where possible. Recognition of the Badger Two Medicine as a traditional cultural district sacred to the Tribe and working with the Tribe in management of the area were the primary focus of the Blackfeet Nation's interests. This is reflected in desired condition RM-BTM-DC-01 which states: "Badger Two Medicine is a sacred land, a cultural touchstone, a repository of heritage, a living cultural landscape, a refuge, a hunting ground, a critical ecosystem, a habitat linkage between protected lands, a wildlife sanctuary, a place of solitude, a refuge for wild nature, and an important part of both tribal and non-tribal community values. It is important to the people who rely upon it, critical to the wild nature that depends upon it, and has an inherent value and power of its own." In addition, standard RM-BTM-STD-01 states, "Management activities in the Badger Two Medicine shall be conducted in close consultation with the Blackfeet Nation to fulfill treaty obligations, and the federal Indian trust responsibility. Project and activity authorizations shall be protected and honor Blackfeet reserved rights and sacred land. The uses of this area must be compatible with desired conditions and compatibility shall be determined through government to government consultation."

Conclusion

I conclude that the responsible official is correct in not establishing co-management responsibility with the Blackfeet Nation and has provided for coordination with them for future activities.

Designated Areas

Areas Recommended for Wilderness Designation

Amount and Location of Recommended Wilderness

Objections to the areas recommended for inclusion in the National Wilderness Preservation System reflected a full spectrum of positions requesting more or less recommended areas or boundary adjustments to specific areas. Some objectors contend that the rationale for not recommending an area or areas is inadequate

Objectors' Proposed Remedies

- The Forest Service must remove all recommended wilderness areas from the land management plan.
- Place a moratorium on Plan Revision until priorities are affirmed or re-established so that multiple use is the primary goal of USFS public lands management again.
- Adopt the boundaries of alternative D for recommending wilderness designation for the Middle Fork Judith and Colorado Mountain/Black Mountain areas.
- The final record of decision should protect non-motorized lands as Camas Creek Recommended Wilderness with boundaries similar to those passed by Congress or outlined in alternative D
- The boundary for the Mount Baldy-Edith area should protect the full non-motorized wild backcountry area in recommended wilderness.
- The plan should evaluate wilderness recommendation for qualifying wild lands in the Elkhorns.
- Deep Creek (LB1a) should be recommended for Wilderness designation with boundaries of alternatives B, C and D of the draft EIS.
- Identify a Special Management Area as another management option to protecting the wilderness characteristics of the Deep Creek Area while also providing more flexibility than recommended wilderness
- The Tenderfoot polygon (LB1b) should be recommended for wilderness designation with the boundaries for the Tenderfoot Polygon Primitive recreation opportunity spectrum setting of alternative F.

- Make boundary modifications for Nevada Mountain and Silver King Recommended Wilderness Areas, and recommend Arrastra Creek, consistent with the agreements in the Upper Blackfoot Working Group and Lincoln Collaborative.
- Place the northern boundary of Nevada Mountain recommended wilderness area as shown on the attached map to protect the remote wild lands of northern Nevada Mountain yet leave a significant buffer near private and mining claims at lower elevations along the road corridor.
- The Rationale section of final EIS appendix E should be revised to provide a reasoned explanation, based on credible information in the final EIS, of why these two highly qualified areas [Deep Creek and Arrasta] were excluded in alternative F.
- List Loco Mountain in the Crazy Mountains as recommended wilderness.
- Adjust the boundary of the Blackfoot Meadow recommended wilderness area to follow the boundary of the Continental Divide National Scenic Trail and allow continued bicycle use.
- Recommend wilderness for the Badger-Two Medicine area, along with the other roadless lands further south, including the Sawtooth, Bear-Marshall-Swan-Scapegoat roadless lands identified on the Forest map or what is now the Conservation Area of the Front.
- Drop Mount Baldy Recommended Wilderness Area and recognize it as a backcountry area with a primitive setting to allow mountain bike access to continue.
- Modify the boundary of the Blackfoot Meadow Recommended Wilderness Area to follow the boundary of the Continental Divide National Scenic Trail to allow continued use by bicycle use.
- Remove the Alice Creek loop from the Silver King recommended wilderness area to maintain mountain bike use.

Background

The Multiple Use Sustained Yield Act at 16 USC 529 directs and authorizes the Secretary of Agriculture to develop and administer the renewable surface resources of the national forests for multiple use and sustained yield of the several products and services obtained therefrom. In the administration of the national forests due consideration shall be given to the relative values of the various resources in particular areas. The establishment and maintenance of areas of wilderness are consistent with the purposes and provisions of this Act.

The Wilderness Act at 16 U.S.C 1131 directed the Secretary of Agriculture to review the wilderness potential of primitive areas identified by the Forest Service and to make wilderness recommendations for those lands within 10 years of enactment of the law. Subsequent state wilderness acts typically require the Forest Service to review the wilderness option of areas during plan revision.

The National Forest Management Act at 16 USC 1604(e)(1) requires plan revision provide for multiple use and sustained yield of the products and services obtained therefrom in accordance with the Multiple-Use Sustained-Yield Act of 1960 [16 USC 528–531], and, in particular, include coordination of outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness.

At 16 USC 1604(g)(3)(A) the National Forest Management Act requires 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.

Response

To begin this response, I want to acknowledge the diverse spectrum of values regarding this issue. Comments throughout the plan revision effort, the objections, and discussions at the resolution meeting demonstrate varied perspectives and passion stakeholders hold regarding the recommendation of areas for wilderness designation. Some objectors assert all areas with wilderness characteristics should be recommended for designation as a

conservation tool for wildlife, to provide climate change habitat refugia, or because they hold a passion for the untrammeled nature of a wilderness recreation setting. Other objectors point to the amount of land currently designated as wilderness to address those values and express similar passion for a broad spectrum of both motorized and mechanized recreation opportunities on the Forest. They hold values for the need to manage vegetation for wildlife habitat, to reduce risk of wildfire in light of climate change, and to contribute to economic sustainability and prefer little or no additional recommendations. Others have worked hard in local collaborative efforts to reach a compromise to recommend specific areas across the Forest.

As I indicated in the resolution meetings, my role as the reviewing officer is not to ask anyone to change their values. I appreciate that it is the expression of those values in comment, objections, and ongoing collaborative efforts that ensures Forest Supervisor Avey has sufficient information to make an informed decision. Thus, I have endeavored to review his decision in light of what I have read and heard, and evaluate not only whether he has complied with the legal and regulatory requirements, but also that he has provided a clear and reasoned rationale for his decision.

Consistent with the Wilderness Act, the Multiple Use Sustained Yield Act, and the National Forest Management Act, the planning regulations at 36 CFR 219.7 requires national forests to identify and evaluate lands that may be suitable for inclusion in the National Wilderness Preservation System and determine whether to recommend any such lands for Congress to consider for wilderness designation. FSH 1909.12, chapter 70, outlines the wilderness recommendation process in four primary steps: inventory, evaluation, analysis, and recommendation.

Consistent with the requirements in chapter 70, appendix E of the final EIS describes the identification of the wilderness inventory and then evaluates each area for wilderness characteristics using the five criteria set forth in the Wilderness Act of 1964 and FSH 1909.12, section 72.1. This appendix documents the questions and measures that the team used to address each of these five criteria to provide a consistent way to evaluate each area in the inventory for wilderness characteristics in a comparable manner. It also documents the public participation opportunities offered to acquire feedback and input on the inventory, evaluation, and analysis of the areas considered for recommendation.

Based on the evaluation and public input, the alternatives in the final EIS analyze a wide range of recommended wilderness areas. The alternatives ranged from no recommended wilderness (alternative E) to over 474,000 acres of recommended wilderness (alternative D) (final EIS section 2.7). The final EIS also describes an alternative considered but not given detailed study that recommended all the wilderness inventory for wilderness designation (final EIS section 2.7.9, page 21). Chapter 3 of the final EIS discloses the effects of plan components associated with recommended wilderness management direction specific to each of the various resources of the plan area, informing the responsible official of the management trade-offs associated with the amount and location of this plan allocation.

While the wilderness evaluation informs the responsible official of the suitability of an area for inclusion in the wilderness preservation system, the degree of wilderness characteristics does not predetermine whether an area is recommended or not. In other words, an area with high quality wilderness characteristics does not mean an area must be recommended. Nor does it mean an area with some “imprints of man’s work” cannot be recommended. Rather, the responsible official considers this information, together with the effects of the plan components that protect the suitability of the area for designation disclosed in the final EIS, *and* public engagement when exercising their discretion to recommend an area or not. Table 357 in appendix E of the final EIS provides the reasons for excluding wilderness inventory polygons, or portions thereof, from further analysis in one or more alternatives. The draft record of decision (pages 15, 25-31) discloses the factors Forest Supervisor Avey considered when making his decision to recommend the areas included in the 2020 Land Management Plan.

For objectors citing the presence of roads, mining claims, and current recreation uses (mountain bikes and snowmobiles) as evidence of man's activities that preclude an area's potential for wilderness, the planning handbook provides guidance for considering improvements that are "substantially noticeable". Appendix E of the final EIS describes how the presence of roads, evidence of mining, and other improvements was considered when evaluating the wilderness characteristics of each area considered, consistent with this guidance.

Some objectors expressed concern that recommended wilderness is the only designation that can provide adequate protection for ecological resources, and without this designation the plan components are not able to adequately protect and maintain ecological integrity or protect landscapes important for wildlife. However, the plan includes a suite of plan components and land allocations to maintain and restore ecological integrity and species diversity (final EIS section 3.6.3, pages 273). This is also discussed in the Watershed, Aquatic Species and Habitat, and Riparian Ecosystems (section 3.4.3, page 111); At Risk Plant Species (section 3.5.3, pages 154-155); Invasive Species (section 3.9.3, page 330); and Wildlife (section 3.10, pages 380-382, 440-441, 469-471, 512-517, 535-537, 554-556, 584-587) sections of the final EIS.

Objectors at the resolution meeting described the work being done to achieve collaborative agreement in support of seeking Congressional designation of additional areas not recommended in the 2020 Land Management Plan, such as Camas Creek and Mount Baldy. Some discussed local support for a different boundary location for the Nevada Mountain Recommended Wilderness Area. Their objections sought the inclusion of their collaborative proposals in the final plan in support of their efforts. As indicated in my response to the Geographic Area Recreation Opportunity Spectrum Setting Changes issue summary, Forest Supervisor Avey's decision incorporates many areas included in the collaborative proposals. And as objectors acknowledged at the resolution meeting, Congress could designate the additional areas included in the collaborative proposal regardless of the plan recommendations.

Other objectors alleged the Forest seems to value commercial outfitters more than general public recreation access, asserting the recommendation of the Mount Baldy and Silver King areas were made for exclusive zoning for commercial use and clients. I found no evidence in the record to support this allegation. The wilderness inventory and evaluation documentation (final EIS appendix E) demonstrate the areas have sufficient wilderness characteristics to support recommendation. Review of the plan components does not reveal any management direction to give outfitter and guides preferential treatment over all public use.

Conclusion

I find Forest Supervisor Avey has appropriately followed and documented the wilderness evaluation process as outlined in Forest Service Handbook 1909.12, chapter 70 (final EIS section 3.22.2 and plan appendix D). His decision is within his discretion to provide for the multiple use management of various resources and areas of the Forest. The draft record of decision provides a clear explanation of the rationale for which areas were recommended as wilderness. The process used to develop and analyze the plan components met the requirements of the planning regulations at 36 CFR 219.1, 7, 8 and 10. Analysis in the final EIS describes how a wide range of alternatives was considered and how plan components provide for ecological, social, and economic sustainability.

However, while the Nevada Mountain Recommended Wilderness Area boundary was very similar to one of the local collaborative agreements in several alternatives of the draft EIS, the northern boundary was modified between the draft and final EIS reducing the number of recommended acres for this area in the preferred alternative. Objectors at the resolution meeting described the collaborative efforts to identify a boundary that excluded the wildland urban interface adjacent to private lands, as well as areas with active mining claims and requested the final decision match their agreement. Although the decision rationale describes boundary modifications in the preferred alternative for all recommended wilderness areas in general terms, I am instructing Forest Supervisor Avey to provide additional specificity rationale for the selected areas boundaries where different from the draft EIS alternatives.

Big Snowies Wilderness Study Area

Objectors contend the boundaries for the Big Snowies Recommended Wilderness Area fails to protect wilderness character and potential of the area.

Objectors' Proposed Remedies

- Various boundary adjustments to include specific trails in the recommended wilderness areas or expand the area by 10,000 acres.
- Recommend the entire wilderness study area.
- I suggest collaborating with the mountain bikers, snowmobilers, and others to build a second loop trail that takes off and returns to Crystal lake.
- Include a goal: "A sustainable system of trails from Crystal Lake to the West Crest and Dry Pole Creek are linked and improved to provide high-quality non-motorized recreation outside the wilderness protected zone".

Background

The Big Snowies and Middle Fork Judith are two Wilderness Study Areas originally identified in the Montana Wilderness Study Act (PL 95-150, S393), passed by Congress in 1977. The Act states "wilderness study areas designated by this Act shall…be administered by the Secretary of Agriculture so as to maintain their presently existing wilderness character and potential for inclusion in the National Wilderness Preservation System." In accordance with the Act, the areas were studied to determine "their suitability for preservation as wilderness and report these findings to the President." The existing 1986 Lewis and Clark Forest Plan did not identify these areas as recommended wilderness, but the Forest has continued to manage them to protect their wilderness character as it existed in 1977 and maintain their potential for inclusion in the wilderness preservation system, awaiting a Congressional decision.

Response

Although the 1982 legislative EIS did not recommend designating the Big Snowies Wilderness Study Area, the wilderness evaluation conducted for plan revision identified changed conditions in the 35+ years since the original study. The evaluation and public input led Forest Supervisor Avey to include the area as recommended wilderness in the proposed action. Alternatives in the draft EIS evaluated different recreation access suitability, either making motorized and mechanized recreation suitable or not suitable in recommended wilderness areas. Based on public feedback in the daft EIS comment period, he developed alternative F. This alternative indicates mountain biking and motor vehicle use are not suitable in recommended wilderness areas. However, to maintain most of the currently authorized recreation access in the Big Snowies, Forest Supervisor Avey modified the recommended wilderness boundary to keep most trails open to mountain biking and areas designated for snowmobile use in a plan allocation where those uses would still be suitable (final EIS appendix G, CR101, and draft record of decision, page 14). This allocation is identified as the Grandview Recreation Area and includes plan components to maintain the primitive character of the area while offering motorized and mechanized transportation access (final EIS section 3.21.31 and 32, pages 131-134).

Most objections on this issue are related to the western boundary location that leaves trails near Crystal Lake and the Ice Caves outside of the recommended wilderness area (within the Grandview Recreation Area), and thus suitable for mountain bike use. Their primary concern was the potential for mountain bike and hiker/equestrian use conflict.

I appreciate the good discussion objectors and interested persons had during the objection resolution meeting about current conflicts, trail conditions, rider preferences, and estimations of current uses on the trails in this area. I think it demonstrates there are opportunities to collaboratively address site-specific modifications to the trail

system or authorized uses during implementation of the plan. It's important to note that just because the area is suitable for mountain biking, it doesn't mean individual trail use authorizations can't be adjusted to address recreation use conflicts if needed over time. Perhaps there's an opportunity during plan implementation to accommodate objector's suggested remedies of building a second loop trail. However, Forest Supervisor Avey's reasoning for the boundary location at the programmatic scale is sound and consistent with the decision he has made forestwide for other recommended wilderness areas and their suitable uses.

Conclusion

In consideration of the review provided for the previous issue summary regarding the areas recommended for wilderness, and including the boundary discussions at the resolution meeting, I find Forest Supervisor Avey has acted within his discretion to recommend a portion of the Big Snowies Wilderness Study Area.

Management of Wilderness Study Areas

Objectors contend the plan components for wilderness study areas fails to provide adequate guidance to maintain each areas potential for inclusion within the National Wilderness Preservation System.

Objectors' Proposed Remedies

- Recommend both wilderness study areas for wilderness designation.
- Prohibit mountain biking.
- Various modifications to existing desired conditions and standards such as:
    - Striking the reference to the 1977 wilderness character in the second desired condition.
    - Modifying standards to state direction such as: "Within wilderness study areas, maintain each area's potential for designation within the National Wilderness Preservation System, until the area is either designated as a wilderness area or removed from the Study Act".
- Add underlined text to suitability statements such as "Within the Grandview Recreation Area, mechanized means of transportation (such as mountain bikes) <u>will be evaluated to determine suitability</u> on FS established roads and trails <u>to ensure</u> the total amount, <u>location and effects</u> of mountain bike use maintain "presently existing wilderness character and potential for inclusion in the National Wilderness Preservation System.
- Exclude new oil and gas leases.
- Do not allow chainsaws.

Background

Planning regulations at 36 CFR 219.10 (b) (iv) requires plan components for the "Protection of congressionally designated wilderness areas as well as management of areas recommended for wilderness designation to protect and maintain the ecological and social characteristics that provide the basis for their suitability for wilderness designation."

FSM 1923.03 – Policy "Any area recommended for wilderness or wilderness study designation is not available for any use or activity that may reduce the wilderness potential of an area."

R1 Supplement 2300-2008-1 at 2329 (3) (d) provides direction related to mechanized use within the wilderness study area indicating mountain bikes may be allowed on trails that had established motor-bike use in 1977, or on non-motorized trails as longs as the aggregate amount of mountain bike and motorcycle use maintains the wilderness character of the wilderness study area as it existed in 1977 and the area's potential for inclusion in the National Wilderness Preservation System.

Response

Aside from failing to recommend the wilderness study areas in their entirety for wilderness designation and/or making modifications to various plan components, objectors' primary issue is the suitability of mountain bikes in the portions of the study areas not recommend for wilderness designation. Similar to my response in the Amount and Location of Recommended Wilderness issue summary, I recognize there are diverse perspectives regarding whether and to what degree mountain biking affects wilderness characteristics or the potential for an area to be designated by Congress. Given the decision Forest Supervisor Avey has made regarding management of recommended wilderness areas, I understand why folks seek clarification regarding how that relates to management of wilderness study areas.

For example, objectors cite the decision to recognize mountain biking as not suitable in recommended wilderness areas to preserve wilderness characteristics is rationale for why the same is needed in the wilderness study areas. Objectors assert "it seems the [Forest] is claiming, without explanation, and without precedence, that allowing a new non-conforming use in the Middle Fork Judith [and Big Snowies] wilderness study area does not affect wilderness character or potential for Wilderness designation".

First, I'll note mountain biking is not a "new" non-conforming use in wilderness study areas. Mountain biking is a recreation use that is allowed anywhere on national forest system lands, unless prohibited under an order per 36 CFR 261 after site-specific NEPA decisionmaking. Northern Region manual guidance indicates mountain bikes in wilderness study areas may be allowed on trails that had established motor-bike use in 1977, or on non-motorized trails as longs as the aggregate amount of mountain bike and motorcycle use maintains the wilderness character of the study area as it existed in 1977 and the area's potential for inclusion in the National Wilderness Preservation System.

Regarding the effects of plan components, the final EIS indicates mountain bike use has the potential to affect the undeveloped nature and primitive recreation characteristics of recommended wilderness areas, and a reduction in the use would improve the wilderness characteristics of solitude and primitive recreation experience. It also discusses the effects of increasing recreation demand and pressure as population increases, concluding that a determination mountain bike use is not suitable would avoid or minimize potential effects to wilderness characteristics (final EIS section 3.21.8). In consideration of these effects and public input, Forest Supervisor Avey indicates his decision that mountain biking should not be suitable in recommended wilderness areas is because he determined that "this use is inconsistent with a future wilderness designation". He states "this decision preserves the wilderness characteristics, including the sense of remoteness and the opportunities for solitude in recommended wilderness…"

The final EIS section 3.22.8 indicates motorized and mechanized means of transportation would be suitable within the Grandview Recreation Area portion of the wilderness study area, so long as these uses do not affect the wilderness character within the wilderness study area, *as it existed prior to 1977*. Motorized over-snow uses would continue to be authorized and mountain bikes would be allowed *so long as the aggregate amount of mountain bike use maintains the wilderness character of the wilderness study as it existed in 1977* [emphasis added here]. These recreation uses would be monitored to ensure the area's potential for inclusion in the National Wilderness Preservation System. Forest Supervisor Avey has made a distinction in how to manage the Grandview Recreation Area portion of the wilderness study area within his discretion under the law.

Although likely similar to the effects within the Grandview Recreation Area, the effects of the FW-WSA-SUIT-08 is not specifically described in the wilderness study area section of the final EIS, so effects to the Middle Fork Judith are not as clearly defined.

Other suggested plan components edits would not be appropriate as the plan should not repeat law, regulation or policy or compel agency action, as cited elsewhere in this response (36 CFR 219.1(b)(2) and FSH 1909.12, section 22.13). Many of objectors' suggested plan components repeat what is required in the Montana Wilderness Study Act or are not written to "place design or operational constraints on projects and activities". Project and activity decisionmaking must comply with the law, thus repeating those requirements in plan components is not necessary. Adding requirements to evaluate the suitability of a use is also not consistent with the definition of suitability plan components (36 CFR 219.7(e)(1)(v) and 219.15(d)(4).

As to leasable minerals, 36 CFR 228.102(b)(2) indicates wilderness study areas are legally unavailable for leasing. Thus, neither the standard included in the plan, nor the suggested remedy are needed.

Although uncommon, Forest Service policy allows limited use of chainsaws within designated wilderness if needed and justified (FSM 2326). Thus, it is unnecessary to holistically prohibit the use of chainsaws in wilderness study area. Plan components indicate timber harvest is unsuitable in wilderness study areas, but the use of chainsaws for restoration activities and administrative work such as clearing trails is suitable per FW-WSA-SUIT-04. However, the final EIS does not describe the expected extent of that activity nor its effects to the wilderness study area.

Conclusion

I find Forest Supervisor Avey has provided plan allocations and direction consistent with the Montana Wilderness Study Act for the Big Snowies and Middle Fork Judith. However, I am instructing him to provide additional explanation in the record of decision how mountain biking and administrative chain saw suitability in wilderness study areas complies with the requirement to maintain the areas' potential for wilderness designation.

Protection of Wilderness Characteristics in Areas Not Recommended

Objectors contend the plan fails to protect the wild character of various areas that were not recommended for wilderness designation.

Objectors' Proposed Remedies

- Suggestions to recommend additional areas.
- Choose alternative D.
- Add the following desired condition to the South Hills Recreation Area emphasis area: (DI-SHRA-DC-03) The undeveloped wilderness and primitive character of the Black Mountain, Jericho Mountain and Sweeney Creek areas are maintained.
- Evaluate mechanized use on the non-motorized parcels of the Tenderfoot/Deep Creek Roadless Area to determine suitability and effect on wilderness character. Look for opportunities to manage some areas for wilderness characteristics and others for mechanized use.

Background

The land management planning regulations require identification and evaluation of lands that may be suitable for inclusion in the National Wilderness Preservation System and a determination of whether to recommend lands for wilderness designation (36 CFR 219.7(c)(5)). The planning regulations also require that management of areas recommended for wilderness designation protect and maintain the ecological and social characteristics that provide the basis for their suitability for wilderness designation (36 CFR 219.10(b)(iv)).

For lands in the inventory and evaluation that were not recommended for inclusion in the National Wilderness Preservation System or as a Wilderness Study Area, the decision document must briefly identify or describe what management direction is provided in the plan for those lands.

Response

As documented in appendix E of the final EIS, the Forest conducted a comprehensive inventory and evaluation of lands that may be suitable for wilderness designation. Alternative D included the highest recommended acreage, encompassing many of the areas described in the objections, including those in the South Hills, Tenderfoot, and Deep Creek areas.

The planning regulations only require plan components protecting "undeveloped wilderness and primitive character" or naturalness for those areas that were recommended in the draft record of decision (alternative F) and designated wilderness. The mere presence of wilderness characteristics or an area's inclusion in the wilderness inventory and analysis does not convey or require a particular kind of management, such as the protection of the wild character of the area, if the area is *not* recommended.

As disclosed in the response to comments on the draft directives for the planning regulations, it is Forest Service Policy that the wilderness inventory process "does not impose any limitations restricting the discretion of the responsible official with respect to the management of areas in the inventory, apart from the evaluation of the area for wilderness in plan revisions. Consistent with the planning regulations and other applicable laws, regulations and policies, a full range of management options may be considered for these areas in land management planning."

As required, the draft record of decision describes the plan direction that applies to areas of the wilderness inventory that were not recommended for wilderness designation on pages 28-31.

Conclusion

While I recognize appendix E describes the high degree of wilderness characteristics in many areas Forest Supervisor Avey has chosen not to recommend for designation, I refer the objectors back to my response regarding the Amount and Location of Recommended Wilderness for a description of the factors he considered in his decision. While I recognize the value objectors described for the wilderness quality of areas such as the Tenderfoot-Deep Creek area during the resolution meetings, providing plan components to maintain those characteristics is not a requirement of law, regulation, or policy. I find Forest Service Avey has met the regulatory requirements for consideration of wilderness resources in the plan area, including the handbook requirements for inventory, evaluation, analysis, and recommendation.

Management of Recommended Wilderness Areas

Background

Per the planning regulations at 36 CFR 219.2 (b)(1) a land management plan provides a framework for integrated resource management and for guiding project and activity decisionmaking on a national forest, grassland, prairie, or other administrative unit. At (2) it indicates a plan does not authorize projects or activities or commit the Forest Service to take action. A plan may constrain the Agency from authorizing or carrying out projects and activities, or the manner in which they may occur. Projects and activities must be consistent with the plan (36 CFR 219.15). A plan does not regulate uses by the public, but a project or activity decision that regulates a use by the public under 36 CFR Part 261, Subpart B, *may* be made contemporaneously with the approval of a plan, plan amendment, or plan revision [emphasis added here].

The planning regulations at 36 CFR 219.7 direct that "specific lands within a plan area will be identified as suitable for various multiple uses or activities based on the desired conditions applicable to those lands. The plan will also identify lands within the plan area as not suitable for uses that are not compatible with desired conditions for those lands."

36 CFR 219.15(e) describes consistency requirements for resource plans within the planning area. Any resource plans (for example, travel management plans) developed by the Forest Service that apply to the resources or land areas within the planning area must be consistent with the plan components. Resource plans developed prior to plan decision must be evaluated for consistency with the plan and amended if necessary.

Chapter 70 of FSH 1909.12 at section 71.4 states "when developing plan components for recommended wilderness areas, the responsible official has discretion to implement a range of management options. All plan components applicable to a recommended area must protect and maintain the social and ecological characteristics that provide the basis for wilderness recommendation" as required by 36 CFR 219.10(d)(1)(iv).

Suitability for Motorized and Mechanized Means of Transportation

Objectors contend that removing motorized and mechanized means of transportation in areas recommended for wilderness designation contradicts an August 2019 letter of direction from Regional Forest Leanne Marten and is not supported by sufficient analysis in the final EIS. Some objectors allege the draft record of decision approves the site-specific prohibition on motor vehicle and mountain bike use in recommended wilderness areas, contradicting the final EIS description of the programmatic effects of the plan.

Objectors' Proposed Remedies

- Review this action and at a minimum complete site-specific analysis of the impact of the current use of motorized and mechanized use in these areas of recommended wilderness before making the decision to remove these uses.
- The language removing motorized and mechanized use in areas of recommended wilderness in the HLCNF plan must be removed and their use must be allowed to continue.
- The Land Management Plan should identify important mountain bike routes within recommended wilderness areas and marking them as recreational corridors to guide future Congressional designation, setting limits of seasonal use and perhaps using a permit system if needed.

Response

The planning regulations at 36 CFR 219.7(e)(1)(v) require the responsible official to identify the suitability of lands within the plan area for various multiple uses or activities based on the desired conditions applicable to those lands. Suitability identifications may be made after consideration of historic uses and of issues identified during the planning process. Management of motorized and mechanized uses in areas recommended for wilderness designation was identified as a significant issue that drove alternative development for the EIS.

The draft record of decision indicates that motorized and mechanized uses would be not be suitable in areas recommended for wilderness designation per the suitability plan component FW-RECWILD-SUIT-01. This will guide future, site-specific travel management decisionmaking within recommended wilderness, but the plan approval decision does not in and of itself close the areas to motorized and mechanized transportation. Land management plans provide direction for the Forest Service, not the public, therefore, the plan alone cannot prohibit public uses such as biking or snowmobile use. Where a plan identifies an area as not suitable for an activity such as mechanized transport (e.g., mountain biking), the plan has no immediate effect on the public (FSH 1909.12 chapter 21.8). Although a project or activity decision such as designations or prohibitions for motor vehicles or mechanized use by the public under 36 CFR Part 261, Subpart B or C, *may* be made contemporaneously with the approval of a plan revision, Forest Supervisor Avey did not choose to do so with this decision.

The draft record of decision describes the programmatic nature of the plan decision (page 10) and indicates site-specific NEPA decisionmaking to address travel management designation inconsistencies with the land management plan's suitability direction will be initiated within 3 years after plan approval (page 27). Thus, consistent with the

regulations, the plan includes the broad, programmatic decision regarding suitability in these locations, and the draft record of decision specifies that site-specific planning and environmental analysis would be conducted at a later date to regulate such use. Section 3.21.8 (effects of alternative F) and appendix K describe the effects of the programmatic decision.

In addition, a description of the nature of the decision and the relationship between the suitability decisions and future travel planning was documented in the response to comments. Page 100 of appendix G states "Based on this analysis as well as public comments, in the 2020 Land Management Plan, both motorized and mechanized means of transportation would not be suitable within [recommended wilderness areas] in the preferred alternative F. These changes in suitability may be reflected in a future site-specific decision and would reduce the amount of motorized and mechanized recreation access in each [recommended wilderness area]" at (CR 201). Page 101 states: "Site-specific analysis in compliance with the NEPA will need to be conducted in order for prohibitions or activities to take place on the ground, in compliance with the broader direction of the 2020 Land Management Plan" (CR16). However, there are some locations in the supplemental response to comments document in the planning record that aren't as clear in their description that may have contributed to objectors' misunderstanding.

I issued a letter in April of 2019 to clarify the National Forest Directive System is the only Forest Service policy guiding land management planning in the Northern Region. This letter stated that "Any regional memos, letters, or supplements guiding Land Management Plan revision dated before January 30, 2015 are superseded" (Project Record, C46). That clarification did not dictate the decision space for management of recommended wilderness or any aspect of plan revision, it simply provided clarification that only the regulations and 2015 directives provide plan revision policy in the region. The planning regulations require plan components "to protect and maintain the ecological and social characteristics that provide the basis for their suitability for wilderness designation" (36 CFR 219.10(b)(iv)). However, as described in section 74.1 of FSH 1909.12, chapter 70, the responsible official has the discretion to meet the regulatory requirement by including plan components that continue existing uses, alter existing uses, or eliminate existing uses. As such, the final EIS evaluated a range of alternatives with plan suitability that would guide site-specific decisionmaking to either continue or eliminate existing uses.

Some objectors indicate the effects analysis is insufficient to support the decision because there must be "proof of physical damage to the land must be provided to remove recreational uses". However, the regulations require plan components to protect both ecological and social values of a recommended area, both to address existing effects and prevent future effects. Evidence of physical damage is not required. Section 3.21.8 of the final EIS and appendix K describe the effects of the programmatic direction and informed Forest Supervisor Avey's decision to choose alternative F.

Objectors also mentions the plan decision "does not follow the agreed upon approach" described in the *2001 Off-Highway Vehicle Record of Decision and Plan Amendment for Montana, North Dakota, and Portions of South Dakota* (often referred to as the tri-state off-highway vehicle decision). That decision amended the 1986 Helena and Lewis and Clark Land and Resource Management Plans to prohibit motorized wheeled cross-country travel, while deferring "[off-highway vehicle] use on individual roads and trails" to site-specific planning. Since that plan amendment decision in 2001, the Forest Service promulgated the 2005 Travel Management Rule requiring site-specific designation of motor vehicle use (36 CFR 212 subparts B and C) and the 2012 Planning Rule codifying the three levels of Forest Service planning as national strategic planning, national forest system unit planning (i.e., the plan revision effort), and project or activity planning (e.g., travel management decisionmaking) (36 CFR 219.2). Consistent with both the travel management rule and the tri-state off-highway vehicle decision, the Forest completed the site-specific travel management decisionmaking designating roads and trails for motor vehicle use prior to the revision effort. And as described in above, this plan level decision describes broad motor vehicle use suitability but does not include the site-specific decision to change current motor vehicle designations.

Conclusion

I find Forest Supervisor Avey acted within his discretion to include plan components indicating motorized and mechanized transport are not suitable in recommended wilderness areas. In addition, he provided the required information about addressing the inconsistency between the current motorized and mechanized public use authorizations in recommended wilderness areas and the land management plan's suitability determination after plan approval through future site-specific decisionmaking.

However, there are some inconsistencies in how the action is phrased in the supplemental response to comments planning record document that appear to have contributed to objectors' misunderstanding of the scope of the decision. Therefore, I am instructing Forest Supervisor Avey to ensure all descriptions of the plan decision effects to current travel plan decisions are consistent throughout the planning record.

Timeliness of Addressing Travel Management Plan Inconsistencies with the 2020 Land Management Plan

Objectors are concerned about the timeframe for updating the Forest's travel plans consistent with the revised suitability plan components for recommended wilderness areas.

Objectors' Proposed Remedies

- The final record of decision should include the concurrent decision to prohibit mechanized and motorized means of transportation in recommended wilderness areas.
- Alternative to a concurrent decision to regulation public uses, the final record of decision should commit to implementing the decision to prohibit mechanized and motorized recreational use in recommended wilderness area within a 2-year timeframe, and also issue an interim closure order to prohibit those uses within 6 months of the final record of decision.
- The final record of decision should adopt unambiguous standards using the Kootenai National Forest language that mechanized and motorized use is not allowed.

Response

As described in the preceding issue summary, Forest Supervisor Avey has committed to initiating site-specific planning to address travel management plan inconsistencies with the 2020 Land Management Plan within 3 years. However, some objectors are concerned "that timeframe will allow non-conforming uses to embed and further erode wilderness character" and assert that "issuing an order prohibiting motorized and mechanized uses in recommended wilderness areas concurrently with the plan revision would be the most straightforward and efficient way to implement the suitability plan component of the revised plan".

Due to the programmatic nature of the plan decision, the analysis in the EIS reflects the broad and general impacts for the plan components that identify the suitability of lands per 36 CFR 219.7(e)(1)(v) both in terms of uses that are suitable as well as those uses that are not suitable. Although appendix K describes the miles of roads or trails and acres of areas where motorized and mechanized access that would be inconsistent with land management plan suitability, the site-specific effects of prohibiting those uses are not addressed.

The final EIS and draft record of decision indicate motorized and mechanized use is currently limited in recommended wilderness areas. However, should the responsible official determine those uses are "directly causing or will directly cause considerable adverse effects on public safety or soil, vegetation, wildlife, wildlife habitat, or cultural resources associated with that road, trail, or area" before addressing the travel plan inconsistencies, he may issue a temporary, emergency closure (36 CFR 212.52(b)(2)). As there is no evidence the limited existing uses are

causing these adverse effects, it would not be appropriate for Forest Supervisor Avey to issue an interim order at this time. However, he may issue one in the future if needed.

As to the objector's concern regarding the need for a standard in addition to a suitability plan component to prohibit mechanized transport and motorized use in recommended wilderness areas, if a plan identifies certain lands as not suitable for a use, then that use or activity may not be authorized (36 CFR 219.15 and FSH 1909.12 chapter 22.15). A plan is direction for the Forest Service and suitability plan components are an appropriate component to use when a plan is guiding what activities a forest can or cannot authorize the public to do.

Although objectors pointed to the 2015 Kootenai National Land Management Plan as an example of where the Forest Service has used standards to prohibit mechanized transport and motorized use, the 2015 Kootenai National Land Management Plan was developed under prior planning regulations. Those regulations did not define suitability plan components, so the Kootenai used standards to achieve a similar purpose as the Helena-Lewis and Clark's suitability plan components.

Conclusion

I find Forest Supervisor Avey has acted within his discretion to approve the 2020 Land Management Plan based on the programmatic effects described in the final EIS and defer the regulation of public uses to site-specific decisionmaking guided by the land management plan direction.

I concur with Forest Supervisor Avey's determination that the suitability component, together with the suite of other desired conditions, standards, and guidelines will meet the regulatory obligations under to protect and maintain the ecological and social characteristics that provide the basis for the recommended areas to be considered for wilderness designation.

Inventoried Roadless Areas

Objectors assert plan direction for inventoried roadless areas should be modified.

Objectors' Proposed Remedies

- Change the recreation opportunity spectrum setting for the Castle, Box Canyon, and Highwoods inventoried roadless areas to semi-primitive non-motorized use.
- Exclude motorized recreation from inventoried roadless areas within the Little Belts geographic area.
- Suitability statement FW-IRA-SUIT-02 should be modified to make motorized transportation unsuitable in inventoried roadless areas.
- Revise a standard to read, "Management activities shall follow direction found in the 2001 Roadless Rule (36 CFR 294 Subpart B, published at 66 Fed Reg. 3244-3273) and subsequent guidance provided through litigation See Roadless Rule Litigation page."
- Add a fourth suitability FW-IRA-SUIT-04 to read: "Inventoried roadless areas are maintained as an inventory of wildlands and lands eligible for potential Wilderness designation."

Background

The 2001 Roadless Area Conservation Rule (Roadless Rule) established prohibitions and permissions on road construction, road reconstruction, and timber harvesting on 58.5 million acres of NFS lands across the United States. This includes approximately 1.5 million acres of inventoried roadless areas on the Forest. The intent of the Roadless Rule is to provide lasting protection for inventoried roadless areas within the National Forest System in the context of multiple-use management (36 CFR 294 Subpart B, published at 66 Fed Reg. 3244-3273).

Response

Neither of the objectors that suggest plan components for inventoried roadless areas need to be adjusted provide rationale for why the current plan direction is inadequate. In addition, neither objections demonstrate the link to prior substantive formal comments, nor does a review of their previous comments substantiate a link or indicate why there is a need for adjusting the plan components.

Conclusions

I find the plan direction is consistent with the requirements of the 2001 Roadless Area Conservation Rule, and additional consideration of the proposed plan components is not warranted.

Continental Divide National Scenic Trail

Background

The National Trail System Act (Public Law 90-543, as amended through Public Law 116-9, March 12, 2019) and (*United States Code*, Vol. 16, sections 1241-1251). The National Parks and Recreational Land Act of 1978 amended the National Trails System Act by adding five trails to the System, including the Continental Divide National Scenic Trail.

Section 3(a)(2) of the act says national scenic will be…"located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass."

Section 7(j) of the act states, "Potential trail uses allowed on designated components of the national trails system may include, but are not limited to, the following: bicycling, cross-country skiing, day hiking, equestrian activities, jogging or similar fitness activities, trail biking, overnight and long-distance backpacking, snowmobiling, and surface water and underwater activities. Vehicles which may be permitted on certain trails may include, but need not be limited to, motorcycles, bicycles, four-wheel drive or all-terrain off-road vehicles."

Section 7(a)(2) of the act states, "Development and management of each segment of the National Trails System shall be designed to harmonize with and complement any established multiple-use plans for the specific area in order to insure continued maximum benefits from the land."

Section 7(c) indicates campsites, shelters, related public use facilities, and "other uses along the trail, which will not substantially interfere with the nature and purposes of the trail, may be permitted..."

FSM 2353.44b provides management direction for the Continental Divide National Scenic Trail (Trail)

The Continental Divide National Scenic Trail Comprehensive Plan (September 2009) provides a uniform Trail program that reflects the purposes of the National Scenic Trail system, and allows for the use and protection of the natural and cultural resources found along the rights-of-way and located route on lands of all jurisdictions (page 2).

36 CFR 219.7(d) states that "every plan must have management areas or geographic areas or both. The plan may identify designated or recommended designated areas as management areas or geographic areas." Management area is defined as "a land area identified within the planning area that has the same set of applicable plan components" 36 CFR 219.19. 36 CFR 219.10(b)(1)(vi), the planning regulations require land management plans provide for appropriate management of other designated areas or recommended designated areas in the plan area.

Regulatory Framework

Objector asserts the final EIS and draft record of decision fail to adequately address the regulatory framework for the Continental Divide National Scenic Trail (Trail).

Objector's Proposed Remedies

- Change the text describing the National Trails System Act of 1968 (PL 90-543) as amended.
- Add the National Trails System Act as amended and the Continental Divide National Scenic Trail Comprehensive Plan (FSM 2353.01d – CDNST) to the list of regulatory framework in the final EIS.
- Address regulatory consistency with National Trails System Act as amended to the record of decision. Describe how the plan provides for the nature and purposes of the Trail.

Response

Objector alleges the description of the National Trails System Act, as amended is factually inaccurate, but upon review I find the quoted text is copied verbatim from the bill summary authorized by the Congressional Research Service of the Library of Congress. This summary is appropriately included in the general summary of all Federal Laws (section 3.3) and in the administratively designated areas section of the final EIS (section 3.21.2). However, neither describe the key statutory requirements for national scenic trails such as the Continental Divide National Scenic Trail. Given the different statutory and regulatory requirements for Congressionally designated and administrative trails, sections 3.21.2 and 3.22.2 should each describe the respective requirements.

One of the requirements of the National Trails System Act is the development of a comprehensive plan for national scenic trails. Thus, both the trail comprehensive plan *and* the land management plan guide project and activity decisionmaking for the Trail. Section 7(a)(2) of the Trails Act indicates, "Development and management of each segment of the National Trails System shall be designed to harmonize with and complement any established multiple-use plans for the specific area in order to insure continued maximum benefits from the land". Thus, the land management plan and comprehensive trail plan must be compatible. If not, either the land management plan or the designated area plan must be amended to achieve this compatibility (FSH 1909.12, section 24.3). Given this important and unique relationship, a discussion of the compatibility of the two plans and a determination of whether the land management plan decision would result in a need to update the Trail comprehensive plan should be included in the record of decision.

The objector contends that section 7(a)(2)'s requirement to "harmonize" trail and land management planning is not applicable to a land management plans approved after the passage of the National Forest Management Act. They assert this is because the National Forest Management Act requires the land management plan address the comprehensive planning and other requirements of the Trails Act in order to form one integrated plan. However, the National Forest Management Act requirements for one integrated plan at 16 USC 1604(f) is specific to its statutory requirements, not the Trails Act requirements. Nothing in the National Forest Management Act amended or superseded the Trails Act. Thus, as required by the planning regulations at 36 CFR 219.10(b)(1(vi), the 2020 Land Management Plan includes "appropriate management of other designated areas", but does not replace or address all the requirements of the Trails Act that are addressed in the 2009 comprehensive plan.

As such both statutorily required plans provide relevant management direction, page 91 of the land management plan references the 2009 Trail comprehensive plan stating, "Management for the Continental Divide National Scenic Trail is outlined in the latest Continental Divide National Scenic Trail Comprehensive Management Plan".

Conclusion

I am instructing Forest Supervisor Avey to add a description of the regulatory framework the National Trails System Act of 1968 (PL 90-543), as amended, provides for the Continental Divide National Scenic Trail in section 3.22.2 of the final EIS and page 91 of the land management plan. In addition, I am instructing him to include a description of the compatibility of the 2020 Land Management Plan with the 2009 Continental Divide National Scenic Trail

Comprehensive Plan and indicate if any updates to the comprehensive plan would be needed upon approval of the land management plan.

Inadequate Plan Components

Objectors assert the plan components do not protect the nature and purposes of the Trail and the plan must include a management area for the Trail.

Objectors' Proposed Remedies

- A supplemental final EIS should remove the discussion that 8,935 acres of suitable timber overlap of lands where harvest could be permitted within one-half mile of the Trail. A supplemental final EIS should also eliminate the description that there is 49,437 acres where harvest could occur within the corridor, since the figure is based on incomplete recreation opportunity spectrum setting definitions and data, which has resulted in timber harvest modelling errors.
- Establish a Trail Management Area (aka National Trail Management Corridor) with an extent of at least one-half mile on both sides of the CDNST travel route and along high-potential route segments.
- Modify the Trail management corridor direction by adding a provided list of plan components and eliminating proposed plan direction that may conflict with them.
- A map of the Trail management corridor, with established recreation opportunity spectrum classes, needs to be part of the land management plan. (FSH 1909.12 parts 22.22 and 24.43)
- A map of the Trail management corridor, with established scenic integrity objectives, needs to be part of the Land Management Plan.
- The Trail should remain a quiet trail and no exceptions should be made to the area to allow for motorized special events on the Trail.

Response

Objectors cite failure to establish appropriate scenic integrity objectives, recreation opportunity spectrum settings, and a management area for the Trail as reasons the plan is inadequate. In addition, objectors assert the trail corridor should not be suitable for motor vehicle use, mountain bikes, timber harvest, oil and gas leasing, and grazing.

Congress designated the 3,100-mile Trail in 1978 (2020 Land Management Plan, page 91). Approximately 273 miles of the Trail are located on the Forest. The Trail Comprehensive Plan, published in 2009, defines the nature and purpose of the Trail and "sets forth direction to guide the development and management..." (2009 Continental Divide National Scenic Trail Comprehensive Plan, page 1).

The Trails Act requires selection of the right-of-way for national scenic trails. Pending selection of the right-of-way, Forest Service Handbook requires that a corridor be designated to preserve the values for which the trail was established until the alignment of the trail is finalized and a right-of-way is selected and published. The 2020 Land Management Plan presents the Trail as a linear feature, with a one-half-mile scenic corridor on either side, crossing other designated areas and other plan allocations. Although a mapped trail corridor is required by Forest Service Handbook 1909.12 section 24.43(1)(c) as a spatially identifiable area where plan components apply, neither statute nor regulations require a management area allocation for the trail corridor. The 2020 Land Management Plan includes plan components that apply specifically within the Trail corridor, as well as other relevant plan components such as those associated with recreation opportunity spectrum settings, scenery integrity objectives, cultural resources, and other forestwide plan direction. The only activities excluded from the corridor are surface occupancy for oil and gas or geothermal energy leasing activities and common variety mineral extraction as set forth in standards FW-CDNST-STD-01 and FW-CDNST-STD-02. The Forest provided additional clarification on this topic in

various responses to comments on the draft EIS as indicated in the response to comments (appendix G, CR186-188, and sections 3.22.9 and 3.22.10 of the final EIS.

Although, other multiple uses in the plan area are not prohibited in the corridor, plan components provide management constraints to minimize their impacts in order to provide for "high-quality scenic, primitive hiking and horseback riding opportunities and to conserve natural, historic, and cultural resources along the Trail". This includes desired conditions, objectives, and guidelines addressing the trail's location, facilities, recreation settings, scenic integrity objectives, timber harvest, and fire management.

Some objectors assert these plan components are not sufficient and activities like timber harvest or motorized and mechanized (mountain bikes) recreation access should be excluded from the trail corridor. As described in the final EIS at section 3.22.10, much of the trail lies within recommended wilderness or inventoried roadless areas or, where timber harvest would be prohibited or very limited. In those segments where timber harvest would be suitable, harvest could be used to improve the scenic quality by creating vistas, mimic vegetation structures that would be created by natural disturbance and promote healthy vegetation. And I agree with the point one of the interested parties mentioned during the resolution meeting about timber harvest as a tool to minimize safety concerns in areas with epidemic levels of insect and disease mortality. When conducted per the plan components to provide for high scenic integrity, mitigate visual effects, and locate temporary roads and skid trails, timber harvest would not "substantially interfere with the nature and purposes" of the trail.

Although the purpose describes hiking and horseback riding opportunities, policy in the 2009 comprehensive plan states, "bicycle use may be allowed on the [Trail] (16 USC 1246(c)) if the use is consistent with the applicable land and resource management plan and will not substantially interfere with the nature and purpose of the [Trail] (page 15 of the 2009 comprehensive plan).

Finally, although motor vehicle use is allowed along some segments of the trail that are currently aligned with roads per the original designation and consistent with the Trails Act, the plan includes an objective to reroute the trail (FW-CDNST-OBJ-01) to contribute to achieving desired conditions for non-motorized recreation settings. Permitting motorized special events along the trail would not comply with Trails Act and does not need to be repeated as plan direction.

Conclusion

Upon review of the record, I find that the responsible official developed plan components that provided adequate plan direction consistent with the nature and purposes of the Continental Divide National Scenic Trail and is compatible with the 2009 Comprehensive Plan. However, to ensure clear communication of the location of the trail corridor and where plan components apply, I'm instructing Forest Supervisor Avey to clearly describe the trail corridor in the land management plan and the final EIS, and add the corridor to the designated area map. Also see issues summaries for the recreation opportunity spectrum for related concerns.

Inadequate Analysis

Objectors assert the effects analysis is inadequate.

Objector's Proposed Remedies

- Supplement the final EIS to address this oversight [descriptions in the affected environment and specific resource relationships with timber harvest, vegetation management, etc.].
- Discuss the status of the Beaverhead-Deerlodge National Forest plan direction for the Trail.
- Replace the plan components with those proposed by objector.
- The extent of the Trail corridor should be of substantial width to provide for carnivore north-south connectivity through Divide and Upper Blackfoot Geographic Areas of the forest.

Response

The objector cites deficiencies in several sections of the final EIS beginning with the affected environment, indicating it fails to adequately describe how current uses are affecting the nature and purposes of the trail.

40 CFR 1502.15 requires federal agencies to "succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration" in an EIS. The affected environment section of the final EIS includes a table describing the trail length and geographic area locations of each segment of the trail on the Forest (final EIS section 3.22.9, pages 151-152). Although, this information is sufficient for the programmatic review, a planning record document indicates the final EIS would be updated to "include additional activities that are taking place within the Trail corridor" (supplemental response to comments planning record document, page 119) in response to the objector's comment on this issue. Thus, I recommend that the responsible official add a succinct description of the environment of the area to supplement the current mileage location description. However, as per 40 CFR 1502.15, this "shall be no longer than is necessary to understand the effects of the alternatives".

Objector alleges the environmental consequences section is inadequate because they do not believe the plan components, allowed management activities, and recreation opportunity spectrum settings protect the qualities and values of the Trail. The final EIS discusses how vegetation management and timber harvest would be guided by national recreation trail management in sections 3.8.6, 3.9.6, and 3.28.6. Section 3.13.6 acknowledges the presence and management of the trail to attract forest visitors would have mixed effect on wildlife, which may not be fully compatible in terms of citing the Trail as a connectivity corridor as objector suggests. Section 3.22.9 discloses the effects of the land management plan direction on the Trail. See the response above regarding the sufficiency of the plan components.

Lastly, the objector contends the cumulative effects description is deficient because it did not discuss the status of the Beaverhead-Deerlodge National Forest Trail plan direction in response to an appeal instruction on their plan revision in 2009. The cumulative effects in section 3.22.17 indicates management on of designated areas, including the Trail, is complementary to the adjacent national forest land management plans. A review of the Beaverhead-Deerlodge plan direction's combability with the 2009 comprehensive plan is outside the scope of the what is necessary for the programmatic review of the Helena-Lewis and Clark's land management plan revision. In addition, this issue was not raised during the public comment period for the draft EIS, therefore is not eligible for review in objections.

Conclusion

Although I find the final EIS provides sufficient detail at the programmatic scale to inform the responsible official's decision that the plan components provide for the appropriate management of the Trail per the National Scenic Trails Act, I recommend that Forest Supervisor Avey add a succinct description of the affected environment of the Trail to provide context for the how the plan components provide for the nature and purposes of the trail. However, as per 40 CFR 1502.15, the descriptions shall be no longer than is necessary to understand the effects of the alternatives.

Regional Forester's Guidance

An objector asserts the Regional Foresters' formulation and adoption of Trail plan component development guidance was not in compliance with section 14(a) of the Forest and Rangeland Renewable Resources Planning Act (16 USC 1612(a)) and 36 CFR 216 processes.

Objector's Proposed Remedy

- Replace the plan components with those proposed by objector.

Background

36 CFR 216 ensures that Federal, State, and local governments and the public have adequate notice and opportunity to comment upon the formulation of standards, criteria, and guidelines applicable to Forest Service programs.

Response

The regional guidance is not a rule for purposes of the Administrative Procedures Act, which requires notice, comment, and publication for rules of general application. Nor is it a "standard, criteria, or guideline" requiring notice and comment under 16 USC 1612. Rather, the regional guidance is supervisory guidance from the regional foresters that are "recommended" for forest plan components designed to "assist" plan revision. The regional guidance only requires that the template be used as a basis for discussion with the public and allows flexibility to make adjustments based on comment and the unique circumstance of the particular forest.

Conclusion

The record demonstrates the Forest considered the guidance in developing plan components for the proposed plan, offered opportunities for public comment on those components during scoping and public review of the draft EIS, and responded to those comments in the final EIS. Although the objector has offered alternative plan components, as discussed in the preceding issue summaries, the final EIS demonstrates the plan complies with the requirements in both the National Trails System Act and the planning regulations.

Continuous Mountain Bike Experience

An objector contends indicating mountain bike use is unsuitable in recommended wilderness would be disruptive to bicycle riders seeking a continuous trail ride on the national scenic trail.

Objector's Proposed Remedy

- The Nevada Mountain Recommended Wilderness Area must be modified with a corridor shown for the Trail, or a boundary modification allowing for a future bypass trail to be constructed. At very least give bicyclists a "back door entrance" to the Trail.
- Keep the Electric Peak Recommended Wilderness Area open to bicycle recreation until such time that adequate bypass trails for the Trail have been sufficiently established.

Background

The 2009 Continental Divide National Scenic Trail indicates the nature and purposes of the Trail are to provide for high-quality scenic, primitive hiking and horseback riding opportunities and to conserve natural, historic, and cultural resources along the Trail corridor.

Response

An objector contend that the Forest should have made an effort to accommodate bicycle use on the Trail where it passes through recommended wilderness either through identifying bicycle corridors or identifying by-passes around the recommended wilderness areas. The objector discussed their concern about "continued fragmentation" of the route for mountain biking.

However, bicycle use is not part of the nature and purposes of the Trail, which is to provide "primitive hiking and horseback riding opportunities" (page 4 of the 2009 comprehensive plan). Rather, bicycle use is allowed "if the use is consistent with the applicable land and resource management plan and will not substantially interfere with the nature and purpose" of the Trail" (page 15 of the 2009 comprehensive plan). Although, there are some segments of the 3,100 miles of the Trail that allow mountain biking, there are many that do not, particularly where the Trail passes through designated wilderness and national parks. Thus, identifying 16 miles of the Continental Divide

National Scenic Trail (final EIS appendix K) on the Forest as not suitable for mountain biking, does not represent a substantial fragmentation of the Mexico to Canada route.

Although it doesn't fully address the objector's values associated with mountain biking on the national scenic trail itself, I appreciate the ongoing collaborative work to identify and develop bike routes in areas that are suitable that objectors and interested persons described at the resolution meetings. Although not specifically articulated in the plan as goals or objectives for Nevada Mountain and Electric Peak, management direction allows the opportunity for the construction of bypass routes lands around the recommended wilderness areas. The land management plan will support continued collaborative efforts as exemplified in the work accomplished to date, similar to what is described in the goals for the Grand View and South Hills Recreation Areas (SN-GVRA-GO -01 and DI-SHRA-GO-01).

Conclusion

Indicating mountain biking as not suitable along portions of the Continental Divide National Scenic Trail is compatible with the management direction established in the 2009 comprehensive plan, and consistent with the management of many other segments of the Trail.

Elkhorns Wildlife Management Unit

Objectors contend that plan direction for the Elkhorns Wildlife Management Unit will not provide adequate protection for wildlife.

Objectors' Proposed Remedies

Objectors suggested several remedies aimed at increasing protections for wildlife and emphasizing wildlife habitat as the management priority. These included:

- Additional plan components to improve wildlife security and connectivity, wording changes to existing plan components, and changing guidelines to standards.
- Adding suitability components to make the entire Elkhorns Wildlife Management Unit unsuitable for oil and gas leasing and exploration and to make timber harvest unsuitable in the roadless area.
- Recommend the entire roadless component of the wildlife management unit for wilderness.
- Protect the "primitive core" of the Elkhorns by making it unsuitable for motorized and mechanized recreation. Use the Elkhorns core boundary from alternative C in the draft EIS.
- Designate the ingress of Tizer Lake Road as a primitive recreation opportunity spectrum setting.

Background

The Elkhorns Mountains were designated as a Wildlife Management Unit by the 1986 Helena Forest Plan, to be managed to "maintain viable populations of species associated with existing ecosystems", particularly those requiring "seclusion" (U.S. Department of Agriculture, Forest Service, 1986). The draft record of decision maintains that designation in the 2020 Land Management Plan. The Elkhorns Wildlife Management Unit encompasses the entire Elkhorns Geographic Area, which includes portions of both the Helena-Lewis and Clark and the Beaverhead-Deerlodge National Forest. The Elkhorns Wildlife Management Unit is managed cooperatively with the Bureau of Land Management, Montana Fish, Wildlife and Parks, and the Natural Resources Conservation Service.

There are numerous trailheads and dispersed recreation opportunities throughout the Elkhorns, including several dispersed nonmotorized trails and primitive camping areas. The area is used primarily by hunters, but other uses such as hiking, mountain biking, trail running, driving for pleasure, and wildlife viewing are also popular. There are grazing allotments present across most of the geographic area, and some mineral production that is primarily occurring via small mining operations.

The central portion of the wildlife management unit, referred to as the “Elkhorns core”, is within an inventoried roadless area that provides seclusion for wildlife from many human activities. In total, 47 percent of the Elkhorns Geographic Area is in an inventoried roadless area.

Response

Objectors expressed a great deal of interest in management of the Elkhorns Wildlife Management Unit, including a range of different views on management priorities and plan direction. Many objectors provided specific suggestions for changes in plan components, suitability, recreation settings, and the boundaries of different land allocations. I recognize that this is a special area to many, and that different people value different aspects of the Elkhorns Wildlife Management Unit. The objection resolution meeting was a valuable opportunity for me to gain clarity on certain objection points, and I appreciate the robust discussion on this topic and potential remedies.

Generally speaking, objectors argued that the land management plan does not do enough to recognize the unique character of the Elkhorns or protect wildlife. Some objectors would like to see additional restrictions on mountain biking, timber harvest, and mineral development, and felt that direction from the 1986 Helena Forest Plan provided greater protection for the area.

I took a close look at the new and modified plan components objectors provided, as well as the current plan direction for the Elkhorns Wildlife Management Unit and for wildlife more broadly. My response to Elk and Big Game Habitat provides more detail on how the 2020 Land Management Plan supports elk and other wildlife species across the broader plan area. Plan components for the Elkhorns Geographic Area, which is synonymous with the Elkhorns Wildlife Management Unit, explicitly recognize wildlife values (EH-WL-DC-01) and establish wildlife habitat as the management priority (EH-WL-GDL-01). Section 3.21.24 in final EIS describes how the plan will promote wildlife habitat within the area and mitigate threats from other multiple uses that objectors were concerned about.

The intent of new plan components suggested by objectors would generally be met under the umbrella of existing plan direction. It is important to note that future management actions must comply with all relevant plan components, including desired conditions, guidelines, and forestwide components that provide more comprehensive direction to support wildlife across the entire plan area. As noted in the final EIS, this full suite of forestwide and geographic area-specific plan components will restore, maintain, or improve wildlife habitat within the Elkhorn Wildlife Management Unit (section 3.21.24, page 117). The final EIS further explains that the plan components are designed to meet the intent of original management direction included in the 1986 Helena Forest Plan, which many objectors were concerned about. Some of the direction is found in forestwide plan components and it was not necessary to repeat these in the Elkhorns Geographic Area (final EIS section 3.21.24). However, geographic area specific plan components indicate the area is not suitable for timber production and timber harvest is only suitable to provide for other resource values. In addition, the final EIS notes that plan components in conjunction with the inventoried roadless area make timber harvest in the wildlife management unit unlikely (section 3.21.24, page 117). The Elkhorns is currently not open to oil and gas leasing, and the draft record of decision (page 38) discloses that oil and gas decisions are not included in this forest plan revision.

Many of the objections about the Elkhorn Wildlife Management Unit centered on how to protect the “Elkhorns core”, and so I’d like to address these concerns in some detail. Mechanized recreation was the key issue for many, with some arguing that mountain biking should not be allowed in the core area, while others felt that mountain biking is compatible with wildlife protection and described how the Elkhorns provides a unique backcountry biking experience. Some objectors contend that mechanized recreation should not be suitable in any primitive recreation opportunity spectrum, which would include the Elkhorns core. For more on this, see my response at Mountain Biking in Primitive Settings.

During the resolution meeting, I heard from a couple of objectors that part of the concern about allowing mechanized use in the Elkhorns core relates to the potential for unauthorized use, either by e-bikes or by mountain bikers traveling unauthorized trails. Objectors felt that it would be difficult to enforce the rules without banning mechanized travel entirely. Another objector pointed to how the 1986 Helena Forest Plan divided the Elkhorn Wildlife Management Unit into different management areas and felt that something was lost in "homogenizing" the management direction. Objectors pointed to the unique wildlife values of this core area and a desire to preserve and recognize those values in the land management plan.

Concern about wildlife habitat in the core of the Elkhorns was identified as a key issue during scoping and was addressed in various ways across the alternatives (final EIS section 2.6.1). Alternative C included plan components that would not allow mechanized uses in this area (final EIS section 2.7.5, page 17; draft record of decision, page 40), and some objectors would like to see this direction included in the 2020 Land Management Plan. Alternatives D and F would allow mechanized use to continue but provide added protection by allocating this core area to a primitive recreation opportunity spectrum.

The final EIS presents analysis comparing the alternatives related to mechanized use in the Elkhorns core in section 3.21.24, pages 119-120 and 122. The analysis concludes that restricting mountain biking is unlikely to have a detectable effect on wildlife habitat because foot and equestrian travel could still occur, and because mountain biking only occurs in the summer months when most wildlife species are not as vulnerable. Instead, the plan focuses on restricting winter access for over-snow vehicles to reduce recreation impacts during the time of year when species such as elk are most vulnerable to stress (section 3.21.24; see also section 3.13.6 and section 3.15.6 for a more general discussion of recreation and wildlife habitat).

Determining that mountain biking is suitable in the Elkhorns core area at this time does not preclude the possibility of a site-specific closure order for the area if mechanized use results in impacts that are not compatible with achieving desired conditions for the area, including impacts associated with unauthorized uses. The 2020 Land Management Plan includes monitoring components that address mechanized recreation and wildlife habitat security in the Elkhorns (2020 Land Management Plan appendix B, page 15 and 17), as well as a two goals to work collaboratively with other agencies to monitor wildlife habitat and populations and recommend changes in management when necessary (EH-WL-GO-02 and -03). Appendix C (page 16) includes restricting recreation opportunities as a potential management strategy.

I would also like to address the boundary of the "Elkhorns core", which we discussed during the resolution meetings. Objectors pointed out that the boundary of the Elkhorns core area analyzed in alternative C of the final EIS was different from the boundary that was shown in the draft EIS. The area allocated to a primitive recreation opportunity spectrum in alternatives D and F, which is the same area referred to as the Elkhorns core in alternative C, also changed. As noted by objectors, I could not find an explanation for this change in the planning record.

Conclusion

I find that the 2020 Land Management Plan provides management direction for the Elkhorns Wildlife Management Unit that is consistent with the purpose of this area and will support native wildlife species while maintaining opportunities for hunting and other types of recreation per the Forest Service multiple use mission. However, based on conversations at the resolution meeting, I feel that it would be beneficial to take a closer look at the northern boundary of the area allocated as the Elkhorns core in alternative C and as primitive recreation opportunity spectrum in alternatives D and F. To provide a more informative comparison with any decision to modify the boundary in alternative F, I am instructing Forest Supervisor Avey to bring boundaries for alternatives C and D from the draft EIS in the final EIS. The final record of decision should provide rationale for the final boundary determination.

In addition, the objections and discussions at the resolution meeting lead me to believe that some of objectors' concerns are related to the change in plan format from the 1986 forest plan to the framework in the revised plan. Therefore, I am also instructing Forest Supervisor Avey to provide a crosswalk between the 1986 plan direction for the Elkhorns Wildlife Management Unit and the 2020 Land Management Plan. This should help communicate how the land management plan components provide comparable direction to the 1986 plan.

Significant Caves

An objector alleges the final EIS fails to address significant caves.

Response

The final EIS discloses the Forest has over 80 known caves including 10 that are designated as "significant." Caves on National Forest lands are managed by law and regulation including the Federal Cave Resources Protection Act of 1998 and Cave Resources Management codified at 36 CFR Part 290. Both are referenced in the regulatory framework for geology, minerals, and energy section of the final EIS. 36 CFR 290.4 provides for the "Confidentiality of Cave Location Information" which provides guidance for the protection of cave resources. Thus, specific information about significant caves is not disclosed in Plan documents. As indicated in response to comments CR122 (appendix G, final EIS), the Federal Cave Resources Protection Act of 1988 provides for protection and preservation of caves on Federal Lands and does not need to be repeated in the Plan. However, there are several desired conditions, standards and guidelines throughout the plan that provide additional guidance for cave management.

Conclusion

I find Forest Supervisor Avey has provided the appropriate amount of information regarding significant caves in the final EIS.

Summary of Instructions

Overall Scientific Integrity

Include a summary explanation in section 3.2 of the final EIS to provide clear documentation of what constituted the best available scientific information. I am also instructing him clarify how that information it was used to reach the final plan decision.

Coordination with Other Planning Efforts

Summarize the reviews from the environmental consequences' sections of each resource area in an appendix to the EIS. In addition, section 2.4 of the final EIS should be clarified to describe the extent to which any inconsistencies remain and how the plan provides for opportunities to resolve or reduce conflicts.

Timber Harvest Suitability in the Elkhorns Geographic Area

Incorporate a portion of the suggested rewording of the plan component EH-TIM-SUIT-01 as follows: "The Elkhorns Wildlife Management Unit is not suitable for timber production. However, timber harvest is suitable to provide for other multiple use purposes when compatible with wildlife values and habitats."

Oil and Gas Leasing

Clarify and differentiate the effects to leasable minerals management based upon the no surface occupancy plan standard for recommended wilderness areas versus the effects of future Congressional designation.

Geographic Area Recreation Opportunity Spectrum Setting Changes

Correct the assigned recreation setting in the Nevada mountain area between Gould-Helmville and South Fork Poorman Creek consistent with his rationale to remain consistent with current travel plan decisions.

Mountain Biking in Primitive Settings

Clarify the text description of how the national recreation opportunity spectrum protocol and manual direction was used in the final EIS.

Outfitter and Guide Permitting

Add clarification why a comprehensive capacity analysis was not conducted for the plan revision by providing additional explanation in the alternative not considered in detail section of the EIS.

Elk Habitat

Review Lowrey et al. 2019 and determine if it would lead to any changes in plan components.

Wolverine

Clarify how plan allocations that affect access might influence potential mortality from incidental trapping.

Changes to the Inland Native Fish Strategy

Identify the purpose and intent of the supplemental response to comment planning record document, and any clarify or correct any response that is unclear or unfinished.

Conservation Watershed Network

Clarify the final EIS to address the different purposes of Watershed Condition Framework priority watersheds and the conservation watershed network, as well as providing an explanation of how the conservation watershed network relates to priority watersheds under the INFISH in alternative A.

Clarify the methodology used to identify the conservation watershed network including connectivity.

Clarify how plan components will be applied to support the effects conclusions for at-risk aquatic species including the determination timber production is compatible with achieving desired conditions.

Adequacy of Plan Direction to Contribute to [Grizzly Bear] Recovery

Clarify the final EIS effects analysis by summarizing information from the grizzly bear amendment final EIS and biological assessment, together with the new information from the literature provided by this objector.

Summarize potential effects of mountain biking on grizzly bear and consider whether any changes are needed in the plan based on this review.

Add a monitoring indicator to track illegal motorized access on the Forest.

Lynx

Review the new literature on beetle-killed spruce-fir stands published by Thomas et al. (2019) to determine whether any changes in the land management plan are necessary, or whether additional analysis is warranted prior to signing the final record of decision.

Connectivity

Add a Connectivity sub-section to the Terrestrial Wildlife Diversity section of the final EIS (section 3.13.6). This section should integrate information from other sections of the final EIS to provide a more comprehensive analysis of how plan direction will support connectivity.

Plants

Correct the contradictory information in the final EIS to clearly disclose the effects of the plan components for plan species of conservation concern.

Carbon Storage and Sequestration

Add an explanation in the final EIS that expands on response to comments by noting that because the land management plan does not authorize any actions, it cannot be an irreversible and irretrievable commitment of resources.

Badger Two Medicine Plan Components

Provide an explanation for the plan component changes made per objector's proposed remedy and ensure the effects described in table 211 are adjusted accordingly.

Motorized Means of Transportation in Badger Two Medicine

Clarify a portion of the area is in a roaded natural recreation setting in the response to comment.

Amount and Location of Recommended Wilderness

Provide additional specificity rationale for the selected recommended wilderness area boundaries where different from the draft EIS alternatives in the final record of decision.

Management of Wilderness Study Areas

Provide additional explanation in the record of decision how mountain biking and administrative chain saw suitability in wilderness study areas complies with the requirement to maintain the areas' potential for wilderness designation.

Suitability for Motorized and Mechanized Means of Transportation [in Recommended Wilderness Areas]

Ensure all descriptions of the plan decision effects to current travel plan decisions are consistent throughout the planning record.

Regulatory Framework [for the Continental Divide National Scenic Trail]

Include a description of the compatibility of the 2020 Land Management Plan with the 2009 Continental Divide National Scenic Trail Comprehensive Plan and indicate if any updates to the comprehensive plan would be needed upon approval of the land management plan.

Inadequate Plan Components [for the Continental Divide National Scenic Trail]

Clearly describe the trail corridor in the land management plan and the final EIS and add the corridor to the designated area map. Also see issues summaries for the recreation opportunity spectrum for related concerns.

Elkhorns Wildlife Management Unit

Bring the draft EIS boundaries for alternatives C and D forward in the final EIS for a clear comparison of effects. The final record of decision should provide rationale for the final boundary determination.

Provide a crosswalk between the 1986 plan direction for the Elkhorns Wildlife Management Unit and the 2020 Land Management Plan. This should help communicate how the land management plan components provide comparable direction to the 1986 plan.

List of Eligible Objectors and Interested Persons

Eligible Objectors

Ted Anderson
Lisa Bay
Jodi Bishop
Clifford Bove
James Bradley
Stacy Bradley
Sara Buley
Maryalice Chester
Phillip Clemens
Emily Cleveland
Dave Colavito
Camille Consolvo
Sarah Corse
Pat Dauggard
Teresa Denney
Michele Dieterich
Joseph Donohoe
Mary Frieze
Mark Good
Patrick Grace
Randy Gray
Janice Grosfield
Jake Gunther
Peter Guynn
William Hallinan
Hank Hudson
EA Andy Johnson
Charley Karinen
Curtis Larsen
Ashton Loomis
Clint Loomis
Jennifer Loomis
Jody Loomis
Jeff Lonn
Megan Marolf
JS Mercenier
David Murion
Harvey Nyberg
Connie O'Connor
Lance Olsen
Harold Phillips
Gail and John Richardson
Tom Ross
Dave Sedlock
Michael Sedlock
David Sheets
Anthony Smith
Thomas Stark
Patti Steinmuller
Dan Struble
Leonard Walch
Greg Warren
Sean Warren
Gordon Whirry
Randy Williams
Zack Winestine
George Wuerthner
10 Mile / South Helena Forest Collaborative
Alliance for Wild Rockies
Capital Trail Vehicle Association
Cascade Conservation District
Center for Large Landscape Conservation
Citizens for Balanced Use
Defenders of Wildlife
Elkhorn Restoration Committee
Elkhorn Working Group
Fort Shaw Irrigation District
Glacier-Two Medicine Alliance
Great Falls Trail Bike Riders Association
Greenfields Irrigation District
Helena Hunters and Anglers Association
Last Chance Back Country Horsemen
Montana High Divide Trails Collaborative
Montana Logging Association
Montana Mountain Bike Alliance
Montana Wilderness Association
Montana Wildlife Federation
National Parks Conservation Association
Native Ecosystems Council
Showdown Montana Ski Area
Sierra Club
Sun Mountain Lumber
Sun River Watershed Group
Teton Conservation District

The Wilderness Society
Upper Blackfoot Working Group
Western Watersheds Project
Wild Earth Guardians

Interested Persons

Brian Ash
James Bradley
Dave Colavito
Bill Hallinan
Gayle Joslin
Rick Kerr
Michael Korn
Stuart Lewin
David Mari
Charles Morris
Denny Palmer
Joshua Rhynard
East Glacier Holdings, LLC
American Forest Resource Council
Capital Trail Vehicle Association
Glacier-Two Medicine Alliance
Golden Valley County
Lincoln Rural Fire Department
Montana Bicycle Guild
Montana Department of Fish, Wildlife and Parks
Montana Department of Natural Resources and Conservation
Montana Wilderness Association
National Parks Conservation Association
The Pew Charitable Trusts
Southwestern Crown Collaborative
Two Medicine Family
Western Watersheds Project
The Wilderness Society
Winter Wildlands Alliance

Citations

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