

#### MEDICINE BOW NATIONAL FOREST

# Revised Land and Resource Management Plan Final Environmental Impact Statement

# Appendix L Comments and Responses

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#### Introduction

Appendix L includes either direct comments or representative comments and agency responses to the substantive comments received during the public comment period of December 2002 to April 2003. The public was asked to review the Draft Environmental Impact Statement and the Proposed Revised Land and Resource Management Plan for the Medicine Bow National Forest by April 4, 2003. The comment period for Cooperating Agencies ended on April 14, 2003. A variety of methods were used to inform the public about the DEIS and Proposed Revised Plan. These included direct mailings to interested and potentially affected individuals and organizations, news releases, newsletters, media interviews, open houses, contacts with Cooperators, contacts with other federal and local agencies, Notice of Availability publication in the Federal Register and website posting at www.fs.fed.us/r2/mbr.

The Medicine Bow NF received over 20,000 cards and letters in response to the request for comments. Approximately 16,000 cards and letters were the result of petitions or websites recommending that individuals submit a standard comment statement to us. Letters received after the comment period ended, were reviewed, but were not formally included in the content analysis process. All cards and letters are available for review at the Forest Supervisor's Office in Laramie, Wyoming. The content analysis process was conducted according to NEPA regulations at 40 CFR 1503.4 - Response to comments.

Our seven-step process included:

- 1. Log in letter or card with unique number
- 2. Enter commenter's name and address into database
- 3. Code substantive comments from each letter/card received.
- 4. Enter substantive comments into content analysis database.
- 5. Run reports containing representative comments or summarized comments according to pre-determined categories.
- 6. Using comments modify alternatives (specifically develop Alternative D FEIS), supplement, improve or modify the analyses, make factual corrections, when necessary explain why comments do not warrant further agency response.
- 7. Prepare agency responses to representative or summarized comments by citing sections in EIS, Plan, regulation, law, other sources where specific comments were handled. In some instances, the Record of Decision is cited as the location where our response to comments can be found.

Because of the sheer number of comments and issues, similar comments were combined for response. Therefore, while not every comment is listed in this Appendix exactly as written by each respondent, each comment was considered individually. Comments and responses are arranged alphabetically according to resource or topic.

#### Air

Air Comment #1	Global Warming: There is a lack of alternatives analyzing the effect upon global warming.
	There is a lack of analysis involving greenhouse gasses and carbon sequestration.

**Response:** The need to evaluate how global warming would be affected by the Revised Medicine Bow Forest Plan is beyond the intent and scope of the forest planning process.

Air Comment	Forest Fires and Air Quality: A variety of comments were received
#2	regarding forest fires and air quality.

**Response**: FEIS, Chapter 3, Air; Effects from Fire and Fuels Management provides a complete discussion of these issues. Wildfires are a dynamic natural phenomenon in forest environments. The present mosaic of forest vegetation is a result of previous large scale disturbance events of which wildfire is one of them. The Forest Service has limited ability to suppress large wildfires under certain conditions of drought, fuel build up in forested stands and weather conditions during the wildfire ignition phase.

Regardless of management area allocation, wildfires will still occur creating smoke which may have an affect on air quality. However, this affect is typically short term in nature.

Air Comment #3	Effect of Snowmobiles on Air Quality: Snowmobiles impact air quality and create noise pollution.
	Comments were received regarding snowmobiles at the Green Rock parking area on Wyoming Highway 130 and their impact upon air quality.

**Response:** The planning process has determined where snowmobile use is appropriate in the various Management Area prescriptions. Not all of the Medicine Bow forest is open to winter use by snowmobiles. It is an allowable winter use of the forest where deemed appropriate.

FEIS, Chapter 3, Air; Effects from Travel Management provides additional information related to this topic. Reference document listed in the Literature Cited section of the FEIS, titled "Report-First Year Pilot Study; February 2002; Air Quality and Snow Chemistry at a Snowmobile Staging Area in a Rocky Mountain Subalpine Forest; Robert C. Musselman; Rocky Mountain Research Station." It is not necessary to incorporate the test results from this air quality monitoring station in the FEIS. The sampling station was at Green Rock Picnic Area. This area was chosen to represent a worst case scenario by having it located very close to the snowmobile staging area. The study was designed to monitor nitrogen oxides, carbon monoxide, ozone and particulate matter at the site. The results of the study from all of the above air quality parameters indicate no violation of air quality standards.

Air Comment	Air Quality Alternatives: None of the alternatives considered is expected
#4	to substantially change existing air quality on the Forest.

**Response:** We concur with your assessment. There are no restrictions on summer or winter motorized use based upon their adverse impact to air quality on the Forest.

Air Comment #5	Directional Drilling:	Directional drilling will reduce impacts to air.
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**Response:** We concur with your assessment. Directional drilling should reduce environmental impacts to many resources including air quality.

Air Comment	Limits of Acceptable Change: The Forest Service has neglected to require
#6	Limits of Acceptable change for protecting visibility from air pollution.

**Response:** The setting of limits of acceptable change is applicable under the Prevention of Significant Deterioration (PSD) permitting process for stationary industrial sites. It is not required or applicable during the planning process for the Revision of the Medicine Bow Forest Plan. Visual impairment is not a problem in the wilderness areas. Requiring a 5% decrease in haze visibility is not needed.

Air Comment	Special Direction Standards: Standard 1 (Air) in Appendix G, which	
#7	allows flaring of gas from wells only during production testing of wells	
	should be included in the Preferred Alternative.	

**Response:** Appendix G was developed specifically as special direction for Special Interest Areas, Alternative A and Alternative F. The preferred Alternative D FEIS has been selected so these special direction standards do not apply.

#### **Aquatics**

Aquatics Comment #1	Colorado Cutthroat Trout: The Colorado River cutthroat trout is inadequately protected in the Proposed Plan. The Little Snake River drainage represents the only area where native cutthroat trout are extant in SE Wyoming.
	We also particularly applaud the adoption of Standards #15 and #16, which

We also particularly applaud the adoption of Standards #15 and #16, which is necessary to maintain Colorado River cutthroat trout populations in particular and aquatic systems in general. However, standard 15 should be changed to read, "...which contain Colorado River cutthroat trout, Preble's meadow jumping mouse, and boreal toad.

Adding to the lack of adequate protection measures is the lack of adequate monitoring. For instance, while the USFS wants to measure "To what extent is the Forest acting to link populations, assess populations and identify environmental effects to the Colorado River cutthroat trout" (MBNF Forest Plan, 4-20), the agency plans to monitor only the "number of projects and assessments undertaken to insure the survival, protection and enhancement of Colorado River cutthroat trout and its habitat".

Objective 4.b.PR (2) Providing new opportunities for recreational fisheries should be done with species that will not disrupt existing aquatic ecosystems. Within the Colorado River watershed, Colorado River cutthroat trout should be the sole trout species stocked. Forestwide, new fish species that have not previously been stocked on the Medicine Bow should not be introduced.

Near the source of the Medicine Bow River above Stillwater Park, Brook Trout have traditionally been available in reasonable quality and quantity. Over the last several years the Colorado Cutthroat Trout has made an appearance. The aggressive eradication of the Brook Trout has left a significant void in both the quality and quantity of fish and fishing.

**Response:** Colorado River cutthroat trout (populations and habitats) are afforded the highest priority and protection in the MBNF by both the FS and the WG&FD. The FS, BLM, and the WG&FD have all been working cooperatively to restore, protect, expand genetically-pure populations of CRCT in the Little Snake River enclave for many years. This species is considered a "Sensitive Species" in Region 2 (U.S.F.S.) and as such, is given special management emphasis. Cooperative efforts by the FS, BLM, and WG&FD over the past twelve years or so have expanded native habitats for CRCT by eradicating non-native trout from those habitats. Emigration and immigration by wild, genetically-pure CRCT are repopulating restored habitats in the Little Snake River drainage. Standard 15 has been edited to state: "In watersheds containing aquatic, wetland or riparian dependent TES Species..."

The Forest has been actively cooperating with the Wyoming Game and Fish Department (WG&FD) to reclaim certain Colorado River cutthroat trout streams from non-native fishes. That work is almost finished. Within the next year or so, the FS will cooperate with the WG&FD to begin assessing and monitoring population dynamics and habitats conditions. Habitat connectivity will be an important focus during the assessment and monitoring phase of CRCT conservation in the Medicine Bow National Forest.

Forest Plan (revision) objectives to protect, maintain, and preserve Colorado River cutthroat trout (CRCT) may be unnecessary and redundant given the current Regional status (sensitive) of the species and the existing Conservation Agreement and Strategy for Colorado River cutthroat trout (Colorado, Utah, and Wyoming) to which the U.S. Forest Service (R2) is a signatory. Additionally, the R2 Watershed Conservation Practices Handbook provides standards that effectively help to protect water quality and other habitat attributes that serve to protect CRCT. The Wyoming Game and Fish Department (WG&FD) will not, in the future, stock fish other than CRCT in those historical habitats in the Sierra Madre that have been restored for them; no stocking is conducted at this time because natural emigration/immigration is sufficient to repopulate streams and a CRCT brood stock has not yet been sufficiently established for CRCT in WG&FD hatcheries.

Colorado River cutthroat trout (CRCT) were stocked in the Medicine Bow River drainage by the Wyoming Game and Fish Department (WG&FD). The Medicine Bow River drainage is outside of CRCT historical range (Sierra Madre, west of the Continental Divide). To the best of our knowledge, the WG&FD has not implemented any chemical or mechanical (electrofishing) eradications of any fish species in the aforementioned drainage. The WG&FD no longer promotes stocking CRCT in streams outside of their historical range.

Aquatics	Brook Stickleback: Add brook stickleback to the list of non-native species
Comment #2	in the North Platte River. This species was documented at the mouth of
	Elkhorn Creek on July 12, 1996.

**Response:** This species has been included to the non-native fishes mentioned in FEIS, Chapter 3.

Aquatics Comment #3	Watershed Clarifications: A variety of comments were received requesting clarification on the watershed condition assessment and priority
Comment #3	watershed process; some suggestions for specific designations were made.

**Response:** The "Current Aquatic Conditions" and "Aquatic Protection and Restoration Priorities" sections of the FEIS were revised to clarify the analysis, including updated watershed boundaries and references are also provided for additional documentation on the analyses. Recommendations for specific designations were considered, but not changed since they did not meet the criteria outlined in the referenced documentation.

Aquatics	Boreal Toads: It is stated that no reproduction for boreal toads has been
Comment #4	observed since 1997, and no adults were found in 2000. To update this
	information, the Forest may want to report that very limited reproduction at
	two different sites, and an adult female at a third site, was reported by
	USFS employees in 2002.

**Response:** The most recent data about boreal toad breeding will be inserted in Appendix I (FEIS). Boreal toad reproduction was reported in 2002 and 2003 from the Brush Creek/Hayden and Laramie Ranger Districts. Both sites are located in the MBNF in the North Platte River basin.

Aquatics Comment #5	Wood Frog: Appendix I, page 105, concerning wood frog status and distribution, states that an isolated glacial relict population occupies a small area on the Medicine Bow NF. We suggest the wording as "an isolated glacial relict population occupies a number of small wetland areas on the
	Medicine Bow NF."

**Response**: The suggested rewording may better make the intended point. The sentence has been rewritten to reflect the commentor's observation.

	Some comments suggested the analysis of forest ivities on water quantity was inadequate, while others felt
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**Response:** Some revisions have been made to estimates of water yield due to vegetation management to improve the DEIS Spectrum modeling (See FEIS Appendix B). Discussions related to water yield in Chapter 2 - Maximum Water Yield Alternative, Chapter 3 - Aquatic Resources Effects from Timber Management and Effects from Fire and Fuels Management, and the Biological Assessment (FEIS Appendix I) were updated to reflect the revised estimates of water yield.

Aquatics Comment #7	Adequacy of Analysis: Numerous comments suggest that the aquatic resources analysis was inadequate in regards to range of natural variability, historic activities in watersheds, fuel accumulation in watershed and mining and road effects on water resources.
	Numerous comments suggest that the aquatic resources analysis was inadequate in regards to the effects of a variety of activities including livestock grazing, timber harvest, motorized recreation, and oil and gas development on water resources.

Comments suggest that the aquatic resources analysis was inadequate in regards to the effects of a variety of activities including timber harvest, historic tie drives, cumulative effects and the use of Best Management Practices to mitigate water resource effects.

Comments suggest that the aquatic resources analysis was inadequate in regards to the effects of a fire on water resources and Colorado River Cutthroat trout.

**Response:** The "Aquatic Resources Environmental Consequences and Effects from Fire and Fuels Management" sections of the FEIS has been updated to clarify the analysis, and provide additional references on potential effects of various activities. The effectiveness of BMPs is described in the Aquatic Resources Environmental Consequences Direct and Indirect Effects section of the FEIS.

Aquatics	Water Yield Effects: Some comments suggested the effects of water yield
Comment #8	from vegetation management on downstream species in the Platte and
	Colorado Rivers was flawed; others felt the analysis was sufficient.

**Response:** The Biological Assessment (FEIS) addresses effects on species downstream of the Forest and has been revised between the DEIS and FEIS to clarify and expand upon the analysis.

Aquatics	Watershed Protection: Numerous comments recommended enhancement
Comment #9	or protection of streamflows, watershed protection and protection of
	wetland and riparian areas be goals or objectives in the Plan.

**Response:** Protection and restoration of streamflows, watershed protection and restoration and protection of wetland and riparian areas is addressed under Revised Plan, Goal #1 (Ensure Sustainable Ecosystems). Management of vegetation to enhancement streamflows was included as a desired condition of selected Geographic Areas where any increased water yield might be stored and use for beneficial uses.

Aquatics Comment #10	Community Water Supply Protection: A variety of comments suggested additional emphasis of protection of community water supplies.
	The town of Encampment's watershed (North Fork of the Encampment River) is not addressed as a municipal watershed. The forest north of this watershed should be managed to ensure high quality water.

**Response:** Additional analysis was completed between the DEIS and FEIS to identify communities which derive all or a portion of their community water supply from water originating on the Forest (See Administrative Record Water Resources Specialist Report, Appendix C). The "Aquatic Resources Affected Environment" and selected Geographic Area descriptions of the FEIS have been updated to more clearly identify community water supplies potentially affected by management activities on the Forest. Where appropriate (e.g. Encampment River Geographic Area), objectives were included at the Geographic Area level to emphasize protection of community water supplies.

The "Aquatic Resources Affected Environment" and the Encampment River Geographic Area discussion of the FEIS and Plan have been updated to more clearly identify the Town

of Encampment community water supply and provide measures to emphasize protection of community water supplies.

Aquatics	Protection of Aquatic Resources: A variety of comments supported
Comment #11	protection of aquatic resources and/or suggested that additional protection
	measures (e.g. Forest Plan Standards and Guidelines) be developed.

**Response:** The standards and guidelines in Chapter 1 of the Forest Plan are sufficient to protect aquatic resources.

Aquatics Comment #12	Amphibians Protection: All amphibians are inadequately protected in the Proposed Plan. Since amphibian populations are declining worldwide, including SE Wyoming, we believe that removal of non-native fish, eradication of roads, reduction or elimination of pesticide use, enforced protection of wetland areas, removal of livestock, and protection of occupied habitat should be implemented by the Forest to increase population viability.
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**Response:** The Forest-wide riparian/wetland buffer standard (300-feet buffer) is three times wider than the one specified in the 1985 plan and provides unprecedented riparian/wetland protection in Region 2. The 300-feet buffer is in effect when a 100-feet buffer offers insufficient resource protection. Neither the FS nor the WG&FD have empirical data to support the claim that non-native fish are eliminating Forest amphibians. Anecdotal evidence (on-site eviscerations of brook trout) suggests that brook trout do not typically consume tadpoles or amphibian juveniles in the MBNF. Livestock grazing, pesticide applications, and road construction/reconstruction are appropriate uses of the Forest. These activities will be reviewed on a site specific basis.

Aquatics Comment #13	Effects of Livestock Grazing: Some comments suggested eliminating grazing from streamside, alpine, and other sensitive habitats and others felt
Comment #15	that there is no reason for the Final Plan to reduce grazing in any manner.

**Response:** Livestock grazing is a legal multiple-use activity in national forests. The NEPA process and allotment management plan revisions allow resource managers to suggest and incorporate actions that can afford protection to riparian areas and wetland habitats in montane, subalpine, and alpine environments. Some transitory disturbance due to grazing in riparian areas/wetlands can be expected and will be analyzed on a site-specific basis.

Aquatics Comment #14	Water Quality Standards and Guidelines: A variety of comments suggested standards and guidelines were inadequate for protection of aquatic resources and water quality.
	The Forest Service has neglected to require Limits of Acceptable change for protecting water resources from air pollution.

**Response:** The standards and guidelines in Chapter 1 of the Forest plan are sufficient to protect aquatic resources and water quality. Water quality standards and criteria have been developed by the State of Wyoming and effective implementation of Forest Plan Standards and Guidelines is designed to meet State Water Quality standards and criteria.

Atmospheric deposition has been monitored at the Glacier Lakes Ecosystem Experiments Site (GLEES) since 1986 by the Rocky Mountain Forest and Range Experiment Station.

East and West Glacier Lakes have been determined to be moderately sensitive to acid deposition. However, during the time of the ongoing study the acid neutralizing capacity and the acidity of the lakes has not changed. There has been no change in acidic deposition during this time frame also. The Rocky Mountain Forest and Range Experiment Station is continuing to study what are the defining levels to set limits of acceptable change within this research watershed. They currently cannot answer this question even with all of the sampling and analysis completed so far. It would be presumptuous of the Medicine Bow National Forest to set additional standards when research has not been able to answer the same question.

# Aquatics Comment #15 Riparian and Upland Buffer Zones: The Revised Forest Plan should include riparian and upland buffers at least as protective (and preferably more protective) than those in the 1985 Forest Plan. If the USFS feels it does not need such protections, the agency must explain why, citing the scientific studies or other sources which support the agency's position that the buffers are not needed.

**Response:** The Revised Forest Plan is at least as protective at the 1985 Plan, if not more per the R2 Watershed Conservation Practices Handbook which was developed after the 1985 plan (and amended to the plan) was released and provides standards that effectively help to protect water quality and other habitat attributes. Additionally, provisions such as the 300 ft. buffer provide more protection than the 1985 plan.

Fisheries biologists and hydrologists in the MBNF are aware of and responsive to conditions in the uplands that could affect aquatic ecosystems, riparian areas, and wetlands. Forest Plan standards and guidelines and the NEPA process provide protection mechanisms to protect upland habitats.

Aquatics Comment #16	Buffer Widths: I question why a 300' "buffer strip" is specified on pl-17 and pl-18. No justification is given. I am not aware of any studies that justify increasing the "buffer strip". Your own analysis in the DEIS says
	that there no impaired streams on the Med Bow because of vegetation
	management activities. So there is no justification for increasing the
	"buffer strip". Eliminate this standard or reduce it to 100'.

**Response:** Studies and reports (e.g. Science Findings, Pacific Northwest Research Station, issue 53/May 2003) do not preclude specific buffer widths as excessive protection for aquatic, riparian, and wetland ecosystems. We chose 300 feet as a Forestwide standard (upper limit) based on telemetry research that shows boreal toads (females) can travel over one mile in uplands adjacent to breeding sites (Colorado Division of Wildlife website). The boreal toad is the one Forest amphibian that appears to be in serious decline in the MBNF; this species is a Candidate for listing under the Endangered Species Act.

Aquatics	Protection from Mineral Development: Comments suggested additional
Comment #17	standards for protection of aquatic resources from mineral development.

**Response:** Forestwide Standards and Guidelines provide protection for aquatic resources from mineral development (Forest Plan Chapter 1). In addition there are several lease stipulations that provide protection of aquatic resources (Forest Plan Appendix E).

Aquatics	Protection from Water Development: Several comments noted the need
Comment #18	for protection of the aquatic environment from water development
	activities, maintenance of natural streamflow regimes and some suggested
	a moratorium on transbasin water diversions.

**Response:** Standard #8 is intended to implement direction to protect National Forest Service resources (FSM 2541.34). Standard #8 discusses "sufficient stream flows" to "minimize damage" and does not prescribe "natural streamflow regimes" as an objective. A moratorium on transbasin water diversion projects is not implied or warranted as a Forest Plan Standard. The Forest has the authority to authorize impoundment, storage, transmission and distribution of water under the Federal Land Policy and Management Act (FSM 2729.01). The Forest has direction to assess the environmental effects of such projects and ensure protection of the environment and property of the United States (e.g. FSM 2541.34 and FSH 2509.25). Standards 8 and 13 are intended to address, at the project level, the potential impacts of water quantity, disease causing organisms and exotic species that can be associated with water use projects.

Aquatics	Hydrologic Constraints: There is no support for the hydrologic constraints
Comment #19	applied to the timber yield model imposing a maximum disturbance of
	25% combining natural and managed activities.

**Response:** The rationale for this constraint is described in FEIS, Appendix B – Spectrum Constraints. Some modifications to this constraint were made between the DEIS and the FEIS to better reflect the available science on streamflow increases as a result of changes in vegetation. As a result of these changes in the watershed constraint the amount of timber available for harvest increased between the DEIS and FEIS (FEIS Appendix B – Sensitivity Analysis).

Aquatics Comment #20	Geographic Area Designation: Some Forest users have expressed concerns about "restrictions" to dispersed motorized and non-motorized activities in MAP 3.5 and to limited management in MAP 3.5.
	Please explain the reasoning for inclusion of the two impaired streams of Haggarty Creek and W. Fork of Battle Creek.
	The MAP description of "limited management" could be construed as preventing the active management that seems to be necessary by the Wyoming Game and Fish Department to keep this strain viable. A better MAP for this area would be MAP 5.4.

**Response:** Because Colorado River cutthroat trout (CRCT) have such a limited distribution in the MBR due to non-native trout introductions, it is necessary to provide as much protection as possible to protect remaining populations and habitats without being too restrictive of other uses. Dispersed motorized use has the potential to increase rates of erosion and sedimentation in streams and to widely spread pathogens such as the whirling disease protozoan in CRCT habitats. Limiting dispersed motorized use in certain areas can help reduce these potential threats to the species.

The inclusion of "impacted" streams (e.g. Haggarty Creek) in MAP 3.5 should not be seen as inconsistent with protecting CRCT and other species. There are existing populations of genetically-pure, wild, self-sustaining CRCT in both Haggarty Creek (downstream of Hwy

70) and Belvidere ditch; Belividere ditch diverts water from Haggarty Creek a few hundred yards upstream of Hwy 70.

Finally, MAP 3.5 designation does not preclude management of CRCT populations and their habitats in the Sierra Madre by the Forest Service and the Wyoming Game and Fish Department in any way.

Aquatics
Comment #21

Effects of Wilderness Allocation: Several comments questioned whether wilderness area designations would benefit water quality, especially due to a potential increase in risk of larger fires in a wilderness area.

**Response:** The "Aquatic Resources – Effects from Wilderness Allocation" portion of the FEIS has been revised to more clearly address the potential for water quality effects due to natural disturbances.

#### **Aquatics**Comment #22

Effects of Large-Scale Fires: Goal 1, Objective 1.a.w1 - the footnote displays the bias exhibited in the DEIS against timber harvesting by ignoring the potential effects of large-scale fires on water quality. Please add monitoring for the effects of large-scale fires on water quality.

The Forest Management Area Prescriptions did not say anything about rehab after wild fire. Why Not?

**Response:** This footnote did not intend to display a bias and it has been deleted in the FEIS. Management direction for post fire rehabilitation is provided in Forest Service Handbook 2509.13, therefore was not repeated in the Forest Plan.

#### **Aquatics**Comment #23

Effects of Abandoned Mines: Given the proliferation of abandoned mines in the Sierra Madre and Centennial area, the revised Forest Plan should provide monitoring of water quality specifically targeted toward heavy metals and acid mine wastes, and should mandate mitigation projects in all cases where mine drainage has caused a measurable increase in heavy metals or other mine wastes.

**Response:** The watershed objectives under Goal 1 – Ensure Sustainable Ecosystems provide the mechanism to monitor water quality downstream of abandoned mines.

#### **Aquatics**Comment #24

Monitoring Protocols: Most of the watershed monitoring items on pages 4-15 and 4-16 only require reporting every five years and in one case every three years. Given this timeframe, watershed problems could potentially go undetected for up to five years. Therefore, it is questionable whether this monitoring timeframe is adequate to ensure the USFS adequately protects watershed conditions.

Statements about winter activities that appear "problematic" infers that the Plans going to have a monitoring and evaluation process in place to determine "problematic". What is the priority for this and what is the definition of problematic?

Water quality (i.e., secchi disk turbidity, pH, temperature, and dissolved contaminants) and flow levels should be monitored several times each year for each Class IV stream, during peak flow, average flow, and low flow

periods... All waters on the forest should be tested on a 5-year basis, and problem watersheds should be tested annually... In addition, other stream parameters should be monitored once a year through stream surveys...Finally, censuses of aquatic insects should be done each year, with a rotation of streams that allows 3 to 5 years between sampling of the same stream...

For amphibians, the Forest Service needs to monitor population trends, habitat usage in wetlands and up to 250m away from wetlands, as well as important migration/dispersal corridors (after Maxell and Hokit 1999). Lethal levels of acid mine drainage have been established for boreal toad eggs and tadpoles by Porter and Hakanson (1976). The Forest Service should monitor water quality with regard to trace metals and acidity on a 5-year basis, particularly in areas where old mines are present.

**Response:** Monitoring protocols must incorporate intervals that allow impacts to be adequately assessed. Monitoring too frequently can be prohibitively expensive and unproductive because many impacts to aquatic environments have a lag time between when the impacts occur and when the results of the impacts are manifest in the environment. The comment that refers to clarifying terms (e.g. disproportionate) and the link between management actions and maintaining ecological values is well taken. The appropriate clarifying narrative will be used to correct the somewhat ambiguous existing language.

In this context, the word "problematic" is used to mean "causing a problem". There are no plans to specifically monitor these activities and their putative effects to aquatic ecosystems at the Forest Plan scale. It will take an interdisciplinary effort to determine the feasibility of monitoring these kinds of impacts.

The watershed objectives under Goal 1 – Ensure Sustainable Ecosystems provide the mechanism to monitor water quality. Specific water quality parameters, frequency and methods will be determined at the project level, rather than the broad-scale Forest Plan level.

Boreal toad breeding sites in the MBNF have been monitored for the presence of breeding for more than seven years. Before 2000, only one breeding site was known to exist in the MBNF. At present, there are three known breeding sites (inferred from the presence of toadlets) in the MBNF. These sites and others – if they exist and are found- will be monitored every year. As budgets allow, additional monitoring protocols to discern water quality and other environmental indices in boreal toad habitat conditions will be used to expand available data for the species.

Aquatics	Website URL: What is the URL for the Platte River Endangered Species
Comment #25	Partnership Website?

**Response:** This comment is outside the scope of the forest plan. Sometimes URLs change as websites are updated. We suggest you type the following keywords into your search engine: Platte River Endangered Species. These keywords should allow you to access the site in which you're interested, and should display related sites as well.

#### **Biodiversity**

Biodiversity Comment #1	Baseline Data: Use of baseline data for lodgepole pine from the 1940's (Jeannette Fox), use of consistent terminology for downed wood, deletion of irrelevant discussions on different climatic conditions and potential natural vegetation and consistent presentation of regeneration harvest
	(even-aged) would improve your document.

**Response:** Discussions of baseline data, different climatic conditions and potential natural vegetation have been strengthened based upon comments received. The numbers presented for regeneration harvest have been checked for consistency but may vary in places in the DEIS depending upon whether both even-aged and uneven-aged regeneration harvest are being discussed in a particular section. Terminology for coarse woody debris has been standardized to the extent possible. The baseline data from Jeannette Fox was considered in the preparation of the HRV report (Dillon, Myers and Knight 2003) but was determined not to be illuminating in the discussion of HRV (Knight 2003 personal communications). Information not determined to be essential to a reasoned choice among alternatives is not necessary to collect (FSH 1909.15 Environmental Policy and Procedures handbook).

#### **Biodiversity** Comment #2

Inadequate Analysis or Substantive Discussion: The discussion of reductions in the road system from project level decisions, the cumulative effects section and coordination with federal, state and local forest restoration programs, National Fire Plan and Healthy Forest Initiative should be more substantive and strengthened.

The discussion of how much wildfire, insects and diseases there will be is inadequate and needs to be strengthened. The discussion of cumulative effects involving these needs to be strengthened.

The analysis and discussion effects of Management Area allocations on the occurrence of wildfire, insects and diseases and the subsequent effects of those natural disturbance processes on sustainability of the forest are inadequate and need to be strengthened.

Need quantitative cumulative effects analysis in the DEIS for non-forest vegetation (3-112), forest fragmentation (3-125), and disturbances (3-134). Complete timber removal alters forest ecology...has no natural analog (including fire), and should be applied sparingly by all responsible forest managers.

There are some sections that include big game use in the title of the section but do not discuss big game use. There is a lack of discussion of the effects of grazing on other species and on the structure of grasslands and shrublands.

**Response:** The discussions of road system reductions and cumulative effects have been changed in response to comments received. Some changes in the road system could result from natural disturbances and lack of maintenance but most will occur as part of project level decisions. Only those policies that affect land management planning that have been fully implemented are addressed in the forest plan. It is anticipated that policies and initiatives will continue to be developed over the life of the plan. These will be followed as

the plan is implemented.

The discussion of the predicted amount of wildfire, insects and diseases has been strengthened in response to comments. Additional discussion of the process for determining predicted amounts of wildfire insects and diseases is included in FEIS Appendix B.

The analysis and discussion of the predicted amount of wildfire, insects and diseases was based on Management area allocations and the connection between MA goals, objective and desired conditions. This analysis and discussion has been strengthened in response to comments. Additional discussion of the process for determining predicted amounts of wildfire, insects and diseases is included in FEIS Appendix B. Suppression and control of insects has proven effective only in limited situation and can lead to more extensive outbreaks in the future. Silvicultural treatments of all types are planned in areas with active renewable resource management to reduce conditions favorable to insects and diseases.

The cumulative effects analysis in Chapter 3 Biological Diversity has been revised in response to comments. The effects of timber harvest on forest ecology are discussed in numerous sections of Chapter 3 Biological Diversity. The range of effects of the alternatives for timber harvest and natural disturbance processes such as wildfire has also been revised.

The section on the effects of management including livestock grazing on the structure of grasslands and shrublands within Chapter 3 Biological Diversity has been revised in response to comments. The titles to various sections have been checked for accuracy between DEIS and FEIS.

Biodiversity Comment #3	Use of Scientific Information: There should be increased use of scientific information and discussion of this information regarding ecosystem processes, opening sizes, ecosystem sustainability and biological diversity.
	The analysis and discussion of the effects of snowmobiles, snow compaction, soil and snow temperature and winter processes needs to be improved and use the best available science.

**Response:** There is expanded analysis and discussion of possible alternative scenarios for wildfire, insect and disease occurrences based upon new information and additional comparison to Yellowstone National Park as a proxy landscape. This analysis has been strengthened based upon comments received. Silvicultural treatments are based on Burns (1989), the best available information on pest management actions and scientific analysis of risk (Amman et al. 1977, Schmid and Frye 1976, Stevens et al 1980). The effects of natural processes including insects has been revised between the DEIS and FEIS based on comments received. The information on effects of natural processes is displayed in the FEIS Chapter 3 – Biological Diversity in sections on composition, structure and processes. The planning process considered numerous alternatives that included different management areas for some of these high risk stands. The selected alternative was based upon a balance between human disturbance processes and natural disturbance processes. All alternatives contain some flexibility in treating fires, insects and diseases in all areas. Some animal species are adapted to conditions that are created by large natural disturbance events. Some of the planned human disturbance events will mimic these large scale natural disturbance events, to provide habitat in a pattern and size that provide for viability. This is part of the overall strategy for provide for viability of animal populations across the forest.

Additional analysis about recreation and changes to natural processes has been included in FEIS Chap 3 Biological Diversity. In addition the effects on wildlife are discussed in Chapter 3 Wildlife.

#### **Biodiversity** Comment #4

Old Growth Forest: There needs to be an increase in the amount of true old growth; there are no reliable estimates of the amount of old growth forest that represents the HRV (p. 3-113); the DEIS fails to report or analyze the adverse effects of edges on old growth patches, a very significant effect that essentially makes these patches have little value as "old growth" (Marcot et al. 1986). In past timber sales on the MBNF, the agency has authorized large clearcuts (e.g., 100 acres) to purportedly create larger patches more typical of pre-settlement conditions. There are no species on the MBNF that are being imperiled or suffering population declines due to a shortage of openings or early successional habitat. So creating large young patches provides no short-term benefits. It will take a century or more for current clearcuts to become closed-canopy, mature forest. This is a ridiculous -- and indefensible -- way of dealing with the current shortage of large patches of late successional interior forest habitat. Simply leaving the forest uncut will preserve existing interior forest and allow recovery of late successional interior forest habitat in the shortest amount of time. Tinker and Baker (2000) identified old growth as very scarce in comparison to pre-settlement levels and one of the features of the MBNF that has departed most severely from the Range of Historic Variability. In order to return to the HRV, the Forest Service must increase the amount of old growth present on the Forest, rather than allowing it to decrease.

How much of the Medicine Bow NF do you intend to manage for old growth, and how many of those acres are on suitable timberlands? Is there any reason not to have all of the old growth areas in road-less areas or wilderness? The depletion of old-growth on the Medicine Bow National Forest is one of the most important threats to its ecosystem health

Protect the Medicine Bow's last remaining old-growth forests. Locate old growth retention stands as much as possible on non-timber MAs or on inoperable lands, including roadless areas. These lands may have been precluded from timber harvest due to terrain features, sensitive soils, remoteness or isolation, or high cost of logging and access. Recognize that lodgepole stands on average will continue to move toward older ages, providing an abundance of old growth lodgepole with minimum retention standards necessary. Capture the opportunity to exchange stands approaching old growth condition that are not suitable for active management for stands of old growth that can be managed efficiently.

[3.32] "There will be high percentages of old growth forests." First, how is "high percentage" defined? Second, considering the current age-class structure of the Medicine Bow forest, we have to question why this Rx wishes to retain "high percentages" of old growth? If timber harvest is allowed, scheduled and contributes to the ASQ, then "high percentages" of old growth does not seem appropriate. There needs to be clarification on

methods of logging permitted, as well as amounts of timber scheduled for removal.

[3.57] We recommend that the MBNF incorporate this MA prescription into the revised Plan and use it to identify the most desirable stands to manage for long-term old growth characteristics. Even though the MBNF does not have perfect knowledge of current old growth stands, use of this prescription would allow the Forest to more accurately calculate the acreage of suitable lands available for management as part of the forest plan revision, would allow the Forest to demonstrate how it will achieve old growth objectives, and would allow the Forest to largely avoid old growth as a project planning issue. [3.57] -allow road construction if needed to achieve desired old growth conditions. [3.57] -relax the restrictions on motorized use. Many stands already designated for old growth management on the MBNF have existing roads. The proposed General Standards 1, Recreation Guideline 1 and Transportation Standard 1 have major conflicts with each other. The intent should be on old growth characteristics, not Wilderness.

**Response:** There is new discussion of changes in old growth standards and guidelines. Changes in standards and guidelines address desired old growth patch sizes. There is new discussion of old growth HRV using Yellowstone National Park as a proxy landscape and several different natural disturbance scenarios. The discussion of edges and patch sizes has been strengthened in response to comments. The current definition/description of old growth is included in glossary. There is a discussion of the findings of Tinker and Baker (2000) in Chapter 3 Biological Diversity.

There is revised discussion of old growth including how much occurs on suitable lands suitable for timber production. The pattern and distribution of old growth contributes to its value for maintaining biological diversity. There will be an inventory of old growth as the forest plan is implemented that will help to determine the location of the old growth that will be mapped and managed to maintain old growth.

The 3.32 management area only occurs in Alternative A because it was included in the 1985 plan. The need to revise the Forest Plan was described in the AMS. The 3.57 MA was incorporated into Alternative F. In other alternatives, a more flexible approach of mapping and managing old growth is used.

#### **Biodiversity**Comment #5

Historic Range of Variability (HRV): It is not clear to me how the calculations that are made will be used; and the logic of multiplying percentages from the HRV report times the acres in all forest cover types, or in forest management areas is not clear. The need for reintroduction of fire is not clear. In other parts of the Forest Plan and the accompanying DEIS, references are made to the HRV of the aquatic ecosystems, and the animal ecosystems. Are these part of the landscape that will be returned to the HRV?

**Response:** There is expanded discussion of how calculations were made and how information from the HRV report was used in Appendix B of the FEIS. There is additional and clarified discussion of the significance of HRV in Chapter 3 Biological Diversity.

#### **Biodiversity**Comment #6

Forest Edge and Fragmentation: The analysis of the effects of roads on forest patches and edges needs to include the total area of forest, the percentage of the forest that is harvested, the percentage that is edge beside roads, and the percentage that is edge beside timber harvests. The primary source of increased edge on the forest is roads, with an additional significant effect from timber harvest units. Baker (1994) clearly identifies this adverse effect and displays maps that show that very little "interior" old growth forest remains. Scientific research has revealed that old growth forest patches smaller than about 10 acres have little ecological value as old growth and should not be included in inventories (Marcot et al. 1991). The core area of a patch is defined by the depth of edge influence. No values are given for what was assumed to be the DEIS.

Prevent continued dissection of remaining natural areas.

**Response:** The process of fragmentation analysis including the edge factors used is described in Appendix B of the FEIS. The results of the fragmentation analysis are described in the affected environment fragmentation section of Chapter 3 Biological Diversity and Appendix D of the FEIS. The fragmentation analysis included determination of patch sizes with and without consideration of roads, since different species will respond to roads differently. Depth of edge was determined based upon the similarity of adjacent patches. There is a revised guideline that addresses fragmentation.

Biodiversity
Comment #7

Riparian and Wetlands: The discussion of changes to riparian and wetlands is confusing and needs clarification. We cannot understand the significance of what was presented.

**Response:** The discussion of the affected environment and the environmental consequences to riparian areas and wetlands in Chapter 3 Biological Diversity has been expanded and reorganized in response to comments. There is additional discussion in Chapter 3 Aquatics.

#### **Biodiversity** Comment #8

Impacts of Logging: The DEIS does not adequately assess and disclose the direct, indirect, and cumulative impacts of logging, including impacts to specific fungi which need cool damp conditions provided by closed-canopy forest.

This standard should be changed to limit salvage on larger disturbances as well, to retain at least half of the disturbed area for lynx and other snagand coarse woody debris -dependent species.

**Response:** There is an expanded discussion of the effects of planned activities on key ecosystem processes including nutrient recycling in Chapter 3 Biological Diversity. NFMA calls for the maintenance of viable populations of all native vertebrate species. This was expanded to vascular plants by USDA Regulation 9500-4. (Fungi and lichens are considered non-vascular plants.) The 1982 NFMA planning regulations require that "diversity of plant and animal communities" be provided in a manner "consistent with the overall multiple-use objectives of the planning area" (36CFR 219.26).

Salvage in areas greater than 5 acres would be part of project planning and subject to other standards and guidelines for the maintenance of biological diversity.

Biodiversity Comment #9  Critical Habitat Designations: We also question the description that biodiversity will be maintained on the final habitat designations. Critical habitat designations under mandated to focus on only one species. A focus on office component for biodiversity) has not been considered.	orest by critical er the ESA are
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**Response:** The Revised Forest Plan does not designate critical habitat. The Revised Forest Plan allocates areas of the forest to Management Areas. Each Management Area has a desired condition and standards and guidelines that direct management within that area. Only the FWS can designate critical habitat and has done so for the Preble's meadow jumping mouse. The FWS may designate critical habitat for lynx at some time in the future.

Biodiversity Comment #10	Noxious/Invasive Species: The discussion of page 3-154 on wilderness management, points out that control of invasive species is difficult in wilderness areas. The Forest Plan does not adequately address the issue of
	noxious, invasive and non-native species as far as management tactics are
	concerned.

**Response:** The goals, objectives, and strategies address management tactics for noxious, invasive and non-native species. The environmental consequences of the planned management actions in terms of noxious, invasive and non-native species are addressed in both Chapter 3 Biological Diversity and Chapter 3 Invasive Species. Management tactics will be determined on a site specific basis.

Biodiversity	Potential Natural Vegetation: We don't understand the significance of the
Comment #11	discussion of Potential Natural Vegetation, since it is developed on the
	premise of no disturbance. Interesting theoretical discussion perhaps, but
	relevant to revision of the forest plan, probably not.

**Response:** The discussion of potential natural vegetation has been strengthened based upon comments received. There is expanded discussion of several different natural disturbance scenarios and significance of potential natural vegetation to future forest under those scenarios.

	Successional Processes: Does the direction or timing of successional processes overwhelm other management objectives? The DEIS fails to answer whether or not the forest plan S&Gs are expected to be adequate in preventing unwanted reductions of nutrients and woody materials. The plan relies too heavily on logging as a substitute for natural processes. The distribution and abundance [of martens and boreal owls] may be reduced where" [most of the land is managed on a 120-year rotation].
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**Response:** The direction of successional processes is an expression of how trees and stands grow. The direction of these processes is changed by human disturbances such as logging and by natural disturbances such as wildfire, insects and diseases. The range of alternatives considered different amounts of human and natural disturbances. These are displayed in Chap. 3 Biological Diversity – composition section. The rotation length is applicable only to stands that are suitable and scheduled for harvest. The selected alternative was based upon a balance between human disturbance processes and natural disturbance processes. There is new discussion of changes in coarse woody debris standards and guidelines in Chap. 3

Biological Diversity - Environmental Consequences Snags and Coarse Woody Debris.

# **Biodiversity**Comment #13

Biological Diversity: Managing for biological diversity will result in arbitrary and capricious management. The DEIS describes biological diversity with an amazingly unclear explanation of what is going to be addressed. The document and the description of Biological elements forget that man is part of biodiversity and the ecosystem.

In general there is not enough consideration for biodiversity. The revised plan should give more emphasis to protecting wildlife habitat in non wilderness areas through priorities for wetlands and critical habitat, protecting watersheds because of periodic drought, enlarging a wilderness for improved biodiversity. Goal regarding recreational use on forest function and diversity was inadequate. Goals regarding maintenance of large tracts of uncut forest that will ensure protection of biodiversity was inadequate.

**Response:** The definition of biological diversity included in the glossary and in Chapter 3 Biological Diversity is a widely used definition that has been in use for nearly 10 years. In Chapter 3 Biological Diversity Land Uses section, the effects of land uses on Biological Diversity are described. In Chapter 3 Communities section, the effects of Biological Diversity on communities and economics is described. Both of these sections have been revised between draft and final in response to comments.

Goals and strategies serve to guide the development of project level activities. The goals are derived from the GPRA Strategic Plan, 2000. The planning process considered numerous alternatives that included different management areas and associated goals and strategies across the forest. The selected alternative was based upon a balance between human disturbance processes and natural disturbance processes. The rationale for the selection of the preferred alternative is included in the ROD.

# **Biodiversity** Comment #14

Conifer Meadow Encroachment: One of the unsubstantiated assertions is that conifers have invaded open country species. I have looked at a lot of aerial photographs of the Forest and have not seen this, but the Forest should complete an actual analysis, then display the areas where this has occurred. Unsubstantiated assertions are insufficient, given the importance of this. The analysis and discussion of age class distribution and tree density seems pointless. The structural stage discussion should include changes from growth as well as changes from harvesting. Terms used to describe tree stages in the Silviculture section do not match with terms used in the Biological Diversity section for what seems to be the same forest stands. Please take a hard look at the categories used to describe larger trees, mature trees and old growth forests. Is there any consistency in the acres estimated for each category? Since all the categories represent a proxy for old growth trees, the total acres for similar categories should be equal. Are they equal? Please take a hard look at this.

**Response:** The invasion of conifer species in to meadows is a widely recognized situation on the MBNF although relatively under-documented. The discussion of conifer invasion of meadows has been revised in response to comments received. The terminology regarding

tree sizes and forest stand classification is different in the Biological Diversity section and appendix and the Silviculture section and appendix because of the different nature of the science and the effects of management on the resource. All of the terminology is defined in Appendix J – Glossary.

#### **Biodiversity**Comment #15

Unusual Plant Communities: This measure (maintain ecological values of unusual plant communities) could provide much-needed protection to many of the unique biological values of the MBNF. Does the USFS not believe that unusual plant communities or areas of high biological diversity warrant protection? Some of your strategies and guidelines regarding ecological conditions. biological diversity, threatened, endangered and sensitive species and wildlife should be made into standards to protect biological diversity.

**Response:** There is a revised discussion of the contribution of special areas to the maintenance of biological diversity. Goals and strategies serve to guide to development of project level activities while standards and guidelines serve to restrict what may occur or how it may occur. There has been a revision of strategies, standards and guidelines in response to comments.

# **Biodiversity** Comment #16

Management vs. Natural Processes: If the forest is not managed by logging and thinning, it will take a forest fire like Yellowstone to get it managed. When one reads the proposed management actions for the Plan, it becomes obvious that in most forest areas no aggressive vegetation restoration will be implemented. Instead forest health and resource sustainability will be left to chance or as constantly referenced "natural disturbance regimes", rather then maintained through active management. I support keeping the forest healthy by using sound timber harvesting practices and sound grazing practices. Restore natural processes. Even distribution of age classes has been stated to allow for sustainable even flow of wildlife habitat. If this is the case, then an Alternative that does a better job of maintaining a good age distribution will do the best job of maintaining diverse wildlife habitat. Thus, Alternative B or C will do the best job with providing diverse habitat. And Alternative C should be used in this case since it provides the best big game habitat and thus is best for those pursuing the recreational sport of hunting.

I would like to see the Forest managed in a responsible manner, especially with respect to high elevation forests and alpine tundra.

Natural process on the Forest should be allowed and encouraged to occur. As proposed in Alternative D, the Forest Service would not allow such to occur. This is concerning because "the small size of the existing areas (wilderness areas) constrains the Forest's ability to allow natural processes like fires to follow a natural course. In cases where the impacts of active management are in doubt, the only responsible approach is to err on the side of prudence; after the fact it is better to discover that you have done too much to protect a species, system, or process than too little.

I believe wilderness designation does not protect our Roadless areas,

especially from fire and disease; I believe good active management practices do. Backcountry recreation designations provide the best protection for Roadless areas and allow flexibility in future management decisions. IF, old dead trees and under brush would be removed, the fire danger would be drastically reduced. Fires are nature's way of cleaning up, but why add fuel to the fire? Allowing tree harvesting, properly managed, would enhance the beauty of our forest and help to reduce fire danger. I strongly oppose cutting timber sales from 24.1 million board feet to 17.1 million board feet. Our timber is dead or dying cresting the possibilities for more fires it will only get worse now with the disclosure of white pine beetle infestation. If the final solution 'let it die then burn' why not harvest the timber before that happens.

Restore natural processes. To keep the Medicine Bow wild and healthy, natural processes like fire, mistletoe, and pine beetles should be allowed to fulfill their roads in the Forest ecosystem. Logging and livestock grazing are entirely incompatible with protecting and restoring ecosystem health and deeply offends us. We finds areas that are logged or grazed to severely diminish our ability to physically and emotionally enjoy the natural values of the MBNF. A higher percentage of the forest than proposed in alternative D should be managed with natural disturbance processes. MBNF cannot adequately protect its natural biodiversity if over 40% of the forest is kept young and/or disease and insects are minimized. The MBNF DEIS has not shown that this is possible.

**Response:** The analysis and discussion of the predicted amount of wildfire, insects and diseases was based on Management area allocations and the connection between MA goals, objective and desired conditions. This analysis and discussion has been strengthened in response to comments. Additional discussion of the process for determining predicted amounts of wildfire insects and diseases is included in FEIS Appendix B. Suppression and control of insects has proven effective only in limited situations and can lead to more extensive outbreaks in the future. Silvicultural treatments of all types are planned in areas with active renewable resource management to reduce conditions favorable to insects and diseases. The discussion of age classes and old growth has been revised in response to comments. The selected alternative was based upon a balance between human disturbance processes and natural disturbance processes. The rationale for the selection of the preferred alternative is included in the ROD. All alternatives contain some flexibility in treating fires, insects and diseases in all areas. Some animal species are adapted to conditions that are created by large natural disturbance events. Some of the planned human disturbance events will mimic these large scale natural disturbance events, to provide habitat in a pattern and size that provide for viability. This is part of the overall strategy for provide for viability of animal populations across the forest.

Most high elevation forests and alpine tundra will have little proposed active management. Natural growth and disturbance processes will continue to operate in these areas. The effects of winter recreation on biological diversity is discussed in Chapter 3 Biological Diversity and elsewhere.

The selected alternative was based upon a balance between human disturbance processes and natural disturbance processes. All alternatives contain some flexibility in treating fires,

insects and diseases in all areas. The rationale for the selection of the preferred alternative is included in the ROD.

There is expanded analysis and discussion of possible alternative scenarios for wildfire, insect and disease occurrences based upon new information and additional comparison to Yellowstone National Park as a proxy landscape. The rationale for the selection of the preferred alternative is included in the ROD. All alternatives contain some flexibility in treating fires, insects and diseases in all areas. Some animal species are adapted to conditions that are created by large natural disturbance events. Some of the planned human disturbance events will mimic these large scale natural disturbance events, to provide habitat in a pattern and size that provide for viability. This is part of the overall strategy for provide for viability of animal populations across the forest.

# **Biodiversity** Comment #17

Preferred Alternative D: Alternative D does not meet Goal 1 of the Draft Plan. If the primary goal of the Plan is to promote ecosystem health and to sustain the forests and watersheds, why is a Preferred Alternative being chosen that will increase the instances of fire, disease and insect infestation? Fire and insects do an incredible amount of damage to our forests and destroy habitat, damage watersheds and eliminate recreation opportunities. The Plan needs to be amended in a manner that will reduce or prevent occurrences of this destruction. Management practices need to be employed that will vary the age classes of trees on the Forest. Primarily younger trees need to be regenerated since most trees are of the 100-130 year range.

Any forest plan should represent early, mid, and late seral conditions or a variety of landscapes.

The Draft Plan must meet Goal 1, which is to promote the ecosystem health and to sustain the forests and watersheds. Management practices must be used to vary the age of the trees on the Forest and to limit the destruction of fire and insects. You should be using landscape scale management to produce a diverse forest that gives you a chance to prevent losing 50,000 to 100,000 acres at a time to fire. Landscape scale patches located in most watersheds would give your firefighters a chance to stop a fire from engulfing an entire drainage.

Under Alternative D, A minimal@ (vaguely defined) timber harvest could occur on all other MAs except for Wilderness (MA 1.13), Recommended Wilderness (MA 1.2) and Research Natural Areas (MA 2.2) to meet Resource objectives, including fire management. We object to some specific resource objectives (as outlined under fires, insects and diseases section), and are concerned that there are no bounds put on how much of that part of the forest that is to be managed using natural process.

Alternative D is contrary to the primary goal of the proposed New Forest Plan: I.e. "to promote ecosystem health and to sustain the forests and watersheds." Has it ever been established that the two above stated methods of forest management, within ecosystems and watersheds, improves forest health?

Appendix L

In "renewable resource use" MA, "Stands most susceptible to insect damage and most infected with mistletoe can be harvested and replaced with mistletoe-free young stands that are less susceptible to insect damage." Similarly the Forest will remove Individual suppressed or dying trees in non-clear-cut areas (DEIS p. 1 -194). Over 5 decades under these prescriptions, 318,000 acres (approximately 30%) of the MBNF will have experienced regeneration harvest and another 140,000 acres (approx.12%) treated with prescribed fire under Alternative D. (DEIS, p.195, See Table 3-71). The DEIS analysis of impacts on birds and other biodiversity of this level of manipulation is not adequate.

**Response:** The selected alternative was based upon a balance between human disturbance processes and natural disturbance processes. The rationale for the selection of the preferred alternative is included in the ROD. All alternatives contain some flexibility in treating fires, insects and diseases in all areas. Some animal species are adapted to conditions that are created by large natural disturbance events. Some of the planned human disturbance events will mimic these large scale natural disturbance events, to provide habitat in a pattern and size that provide for viability. This is part of the overall strategy for provide for viability of animal populations across the forest. The analysis and discussion of the effect of management on age classes in Chapter 3 Biological Diversity has been revised in response to comments.

The planning process considered numerous alternatives that included different management areas and associated goals and strategies across the forest. These alternatives, their arrangement of management areas and the different disturbance processes associated with different management areas provided for a wide range of early, mid and late seral conditions and a variety of landscape conditions for analysis.

There is a revised discussion of age class changes from both human and natural disturbances and forest stand growth. There is new direction in the Plan Chapter 1 regarding patch sizes and fragmentation.

The planning process considered numerous alternatives that included different management areas across the forest. The selected alternative was based upon a balance between human disturbance processes and natural disturbance processes. The rationale for the selection of the preferred alternative is included in the ROD. Suppression and control of insects has proven effective only in limited situation and can lead to more extensive outbreaks in the future. Silvicultural treatments of all types are planned in areas with active renewable resource management to reduce conditions favorable to insects and diseases. Silvicultural treatments are based on Burns (1989), the best available information on pest management actions and scientific analysis of risk (Amman et al. 1977, Schmid and Frye 1976, Stevens et al 1980). All alternatives contain some flexibility in managing vegetation using timber harvest in Management Areas where human disturbance processes are not the dominant agent of vegetation change.

There is a discussion in Chapter 3 Biological Diversity of the structures and niches created by forest diseases that can be created by human disturbance processes. The discussion of the effects of changes in the abundance or occurrence of these structural elements on bird populations is included in Chapter 3 Wildlife.

# **Biodiversity** Comment #18

Desired Future Condition: We strongly support inclusion of the following language for long-term Desired Future Condition (page 1-12):A... the possibility of large-scale disturbance events, such as wildfire and insect and disease epidemics, will have increased with the passage of time. Due to the increased age of trees, and the increased presence of mountain pine beetle, large portions of the forest could be impacted, especially if climatic conditions favorable to insects and disease occur. Clarify that these large-scale disturbance processes are desirable within their natural range of variability. The Forest Service cannot provide an example of a situation where using a collaborative approach has helped to achieve a sustainable ecosystem. I recommend that "...using a collaborative approach..." be eliminated from Goal 1. The Routt plan has a much more concise list of Goals and Objectives that should be emulated.

**Response:** Descriptions of desired future conditions have been revised in response to comments. The discussion of HRV and its relationship to predicted natural disturbance processes (wildfire, insects and diseases) has been revised in response to comments. Goals and strategies serve to guide the development of project level activities. The goals are derived from the GPRA Strategic Plan, 2000. Collaborative approaches are part of the goals and objectives of the Revised Forest Plan.

#### **Biodiversity** Comment #19

Management Indicator Species (MIS): Management Indicator Species - Objective 1.c: We strongly agree with Objective 1.c. This objective should be one of the major driving forces in determining what actions the revised forest plan will try to accomplish. We ask that the new Forest Plan not only stop activities that further degrade the forest ecosystem, but also mandate active measures to restore the damage that has been inflicted on the Medicine Bow over the past century. Add strategies in addition to "identify resource damage and take measures to restore and protect areas." This strategy is not specific enough and needs to be in much stronger language that recognizes this as a major challenge for the Forest

**Response:** Strategies were revised between DEIS and FEIS in response to comments. Goals and strategies serve to guide the development of project level activities.

#### **Biodiversity**Comment #20

Aspen: Aspen is an important component of the forest. Plans for converting old aspen into younger aspen will result in losses of bird diversity. Standards for maintaining old growth aspen are too low and definitions of old growth aspen are unclear.

Why is the Forest Service proposing to "maintain aspen, even at the expense of spruce/fir or other late successional stands?" How will you do that? Under the standards for vegetative management activities, we notice on page 1-32 that the standards for management for vegetative impacts deal exclusively with livestock. We question why the plan apparently ignores wildlife impacts and does not seek to mitigate these impacts. aspen should be maintained by allowing natural fires to burn, not through artificial manipulation, and the idea that old growth should be cut down to

promote aspens is both repugnant and ecologically indefensible.

Aspen stands are old and dying, something needs to be done to address this problem.

3.56 Aspen Maintenance and Enhancement. This is completely unnecessary.

[3.56] This Rx is for perpetuation of the aspen resource on the Forest. According to the Forest's inventory data, current age class structure is predominately on the old side, i.e. 90 years plus. We contend that with the high percentage of old (90 - 100 year old) aspen stands on the Forest it will be nearly impossible to maintain this resource without regular entries which will more evenly distribute the age class structure.

**Response:** There is discussion in Chapter 3 Biological Diversity on the contribution of aspen to forest diversity. There is new discussion of changes in old growth standards and guidelines for conifers and aspen. Changes in standards and guidelines address desired old growth patch sizes. There is new discussion of old growth HRV using Yellowstone National Park as a proxy landscape and several different natural disturbance scenarios. There is an expanded discussion of potential changes to amount and distribution of aspen under the different natural disturbance scenarios.

Aspen is an important component of the forest composition. Aspen can be replaced by lodgepole pine and/or spruce/fir in the process of natural succession. This statement allows for actions such as prescribed burning that will maintain aspen composition across the forest and not mandate that in all such areas lodgepole and/or spruce/fir be allowed to replace aspen. Prescribed burning is proposed to maintain aspen composition across the forest. The predicted amount of prescribed burning for regeneration of aspen is discussed in Chapter 3 Biological Diversity.

Aspen maintenance can be incorporated into management in other Management Areas. It is a focus of MA 3.56. The standards and guidelines within this management area prescription allow for reentry into aging aspen stands as needed on a site specific basis.

#### **Biodiversity**Comment #21

Snags and Woody Debris: Exempting snag and woody debris Standards within 300 feet of all open roads affects too large a percentage of the Forest (Biological Diversity Standards 2, p. 1-19). Snag and woody debris Standards are important for a number of sensitive and endangered species. and this much area should not be exempted. Smaller areas may need this exemption, but this should not be a Forest-wide exemption. I am happy to see the retention of snags is a well supported issue by the Forest Service. The analysis and discussion of the effects of snowmobiles, snow compaction, soil and snow temperature and winter processes needs to be improved and use the best available science. This is an issue that supports wildlife and keeps nutrients in the area. Current snag densities throughout the MBNF are not given either in the BE or Draft EIS and there is no way to tell whether snag retention and recruitment standards adequately reflect the existing conditions. Also, there is no attempt to determine snag resident time on the MBNF. Given that snag density standards were lower in the 1983 Forest Plan, it is likely that snag densities are very low,

therefore necessitating a higher recruitment standard to restore snag densities. Yet, without adequate tree mortality data or estimates, or snag residence data it is difficult to see how the agency concluded the proposed snag retention and recruitment standards are adequate.

**Response:** The snag standards have been reviewed and revised in response to comments. The discussion of snags in Chapter 3 Biological Diversity has been revised in response to comments. The number of snags on the MBNF changes from day to day as trees die and snags fall, therefore only estimates of snags per acre are possible to report.

Biodiversity
Comment #22

Snowmobiles: Restrict snowmobiles from areas with sensitive biota, such as wetlands, streams, alpine meadows, etc. There is no adequate rationale for the ecological need for this restriction [snowmobiling].

**Response:** Some of the restrictions on snowmobiles are based on the effects of winter recreation on biological diversity. The effects of winter recreation on biological diversity is discussed in Chapter 3 Biological Diversity and elsewhere.

#### **Biodiversity**Comment #23

Fine Filter Analysis: The Wyoming Natural Diversity Database (WYNDD) in Laramie was contracted by Region 2 of the Forest Service to prepare a "fine filter" biodiversity analysis. Some of the areas identified as "biologically important" by WYNDD do not receive adequate protection in the preferred alternative. We believe that these areas must be protected to meet the NFMA diversity requirements, to insure viability of natives species, especially sensitive species, species of viability concern, and threatened or endangered species.

**Response:** The WYNDD fine filter analysis was completed as part of the AMS. The information in this report will be available to project planners. The National Forest Management Act requires the MBNF to "provide for the diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet the overall multiple-use objectives, and within the multiple-use objectives."

#### **Biodiversity**Comment #24

5.13 vs. 5.15: 5.13 Return the lands in the 5.15 prescription back to the 5.13 so we can have a healthy forest and sustainable timber harvest to support local economies. [5.11] Current forest conditions show an abundance of mature and over-mature trees, or late successional stages. The following statement is made, "Abundant late successional forest structure will be provided by extending the rotation ages of some stands." In an already old forest, to create more old forest is illogical as well as very poor forestry. I have requested maps that would show fire risks as discussed in the DEIS so that I could compare the risks to the management area designations and provide meaningful comment based on those risks. To date I have not been supplied maps that correlate with the information in the DEIS. I acknowledge that I have been supplied maps that illustrate some fire risk, but they do not appear to be developed with the same data as much of the analysis in the DEIS. Since I cannot provide specific comments based on the appropriate information on risks to individual management areas, all I can do is provide general comments that 5.15 is not an appropriate management designation. 5.15-Ecological Maintenance

and Restoration: Historical uses in these areas need to be maintained or increased. Move these areas to early-successional forest condition to maintain big game and livestock forage base.

[5.15] There is not enough information presented with this prescription to identify its purpose and how it differs from Rx #5.13. The HRNV of many aspects of the Forest is not well understood at this time. The Plan should maintain its intention to manage within the HRNV, but until we are clear on the HRNV, we need more specific and cautious harvest and management plans for 5.15. Vegetation Guidelines. In #6 what are acceptable spacing levels since natural variability is so wide? #7 contradicts the Integrated Pest Management guideline in stands with heavy mistletoe that occur on the forest and should not be used in these situations.

**Response:** The planning process considered numerous alternatives that included different management areas across the forest. The selected alternative was based upon a balance between human disturbance processes and natural disturbance processes. The rationale for the selection of the preferred alternative is included in the ROD. There have been changes in the amount of MA 5.15 and 5.13 and in proposed timber harvest levels between DEIS and FEIS in response to comments. The description of MA 5.15 has been revised in response to comments. There is revised discussion of HRV in Chapter 3 Biological Diversity.

# **Biodiversity** Comment #25

Monitoring: We don't think the desired future conditions in the Plan are written well enough to allow Monitoring to establish whether management has or has not been successful in moving towards the desired future conditions. On page 2-7 of the document it states that, "Biological diversity will continue to be maintained across the Forest." In order for the Agency to comply with that requirement, there has to be a significant inventory of species on the Forest. We are concerned that the Proposed Revised Forest Plan lacks a monitoring plan, opting instead for what it refers to as a "monitoring strategy." Through this strategy, the Forest Service relies on a series of "monitoring questions," "potential monitoring items," and an indication of reporting frequency to fulfill its monitoring and evaluation plan requirements. This monitoring strategy is insufficient.

1.b.ec 2 – we read achievement of Strategy 2 as more than monitoring meadow encroachment. Monitoring items should also include acres of meadows restored.

1.b.ec 9 – as we commented elsewhere in more detail, this should not be deferred. Notwithstanding that position, the measure of accomplishment should not be "acres of old growth forest inventoried", but rather should be "inventory completed". The scale should be Administrative Unit Wide rather than Geographic Areas with Active Management. Ecological Conditions 9 asks the question, "Is old growth and late successional forest being inventoried?" The answer to this would be a simple "yes" or "no." Accordingly, we do not understand how the answer to this question can provide any insight into the effects of forest management activities to ecological conditions on the MBNF.

There are also no snag or down woody debris monitoring items. Without such monitoring, it is difficult to see how the USFS can ensure any snag retention and recruitment standards and down woody debris standards can be met?

Monitoring of forest fragmentation and age class distribution of trees should be performed via remote sensing and GIS on a 5-year basis. Specific attention should be paid to fragmentation along the state boundary. Target levels within reference conditions for the Forest should be established and worked toward.

**Response:** The specific questions contained in the monitoring strategy are tied to the goals and objectives in Chapter 1 of the Plan. By formulating specific questions that are tied to goals and objectives, it allows us to monitor those items that are affected by forest management. The National Forest Management Act (NFMA) requires National Forests to do specific monitoring tasks. The level and intensity of any additional monitoring is dependent on available staffing, funding, and Forest priorities. The monitoring strategy has been revised in response to comments. Snag and woody debris monitoring would be part of project implementation and is not incorporated into Forest Plan monitoring.

The monitoring ID team will annually build, update, or validate a Monitoring Guide designed to facilitate data collection and storage on monitoring items using standardized monitoring protocols and corporate data/information storage. Monitoring methods are developed in the Monitoring Guide and may change based on changes in technology, staffing, budgets, and issues. Only standardized protocols will be used to collect monitoring item data. Protocols will be peer reviewed as needed.

Biodiversity	Ponderosa Pine Restoration: "Restoration" in ponderosa pine is ill-
Comment #26	defined."

**Response:** Restoration of ponderosa pine focuses on removing an understory that has developed in the absence of the frequent fires that were typical of this habitat in the past.

#### **Communities**

# Communities Comment #1

Effects on Albany County: Alternative D, does not support economic and social sustainability. Decreasing the area of timber harvest and decreasing the area for recreational use will result in detrimental economic and social effects for the surrounding communities, and specifically Albany County.

The Albany County Tourism Board though recognizing the need for balanced restrictions that will protect forest resources, believe that eliminating or reducing summer or winter motorized recreation will have a seriously negative impact on tourism in Albany County and therefore supports the plans with either no restrictions or with the least onerous restrictions.

The economic impact statement provided in the plan does not adequately address the effects on specifically the snowmobile and timber industries that are a critical part of the Albany County economy and social structure. If, your prediction of increased cross-country skiing use does happen, it will not provide the same economic impact to local communities.

**Response:** Timber harvest and snowmobile use have been reexamined and the analysis significantly revised in the FEIS. Employment and income effects upon the timber and tourism industries are expected to increase by 2010 for all alternatives except F. Albany County should share in the anticipated increases.

#### **Communities**Comment #2

Effects on Carbon County: The Carbon County Board of Commissioners requests the Forest Service readdress the negative economic impacts, on the local economy, created by the above reductions.

The anticipation of reduced timber harvest has already had a dramatic negative economic impact on Carbon County and more specifically Saratoga and Encampment.

There is little question that the economic viability of livestock operations is extremely important to the Carbon County economy. In this context, it is recommended that the Revised Land and Resource Management Plan for the MBNF incorporate in part, forest and related resource management strategies that will help sustain the economic viability of livestock operations in Carbon County.

The intentions of proposed special interest areas and proposed research natural areas are admirable. However, these resource management strategies create an imbalanced approach to resource management that does little to help sustain the economic viability of livestock operations. Plan orientation unintentionally ignores the overall economic viability of Carbon County communities.

**Response:** The effects of all management area allocations, including research natural areas, upon grazing, timber harvest, and snowmobile use have been re-examined in the FEIS. Grazing numbers are not expected to change under any alternative, except F. Timber harvest and snowmobile use are anticipated to increase by 2010, except in Alternative F. Consequently, employment and income effects upon the timber and tourism industries and their indirect effects throughout the economy are expected to increase by 2010 for all alternatives, except F. Carbon County should share in these anticipated increases.

# Communities Comment #3

Effects on Little Snake River Valley: The Town Council of Dixon, Wyoming respectfully requests that the United States Forest Service readdress the negative social and economic impacts on the local economy that the Alternative "D" will create by the above reductions.

The socio-economic impact on the LSRV obviously hasn't been considered.

All three of these designations, 1.2, 1.31, 3.5 preclude timber harvest, which erodes my community's economic base resulting in decreased community services and amenities where I live. These designations restrict our local opportunity to enhance our economy by expanding our winter motorized recreation industry.

**Response:** The effects of all management area allocations, including 1.2, 1.31, and 3.5, upon grazing, timber harvest, and snowmobile use have been re-examined in the FEIS. Grazing numbers are not expected to change under any alternative, except F. Timber harvest

and snowmobile use are anticipated to increase by 2010, except in Alternative F. Modification of the snowmobile experience may be realized by some recreationists, but this is not expected to change overall use by non-residents (tourists). Consequently, employment and income effects upon the timber and tourism industries and their indirect effects throughout the economy are expected to increase by 2010 for all alternatives, except F. The Little Snake River Valley communities of Baggs, Dixon, and Savery should share in these anticipated increases. Impacts on small, rural communities such as these are discussed in the Communities/Economics section of the FEIS (Chapter 3).

Communities Comment #4	Effects on Towns of Centennial and Laramie: We are discouraged by the economical hardship the plan will have for Centennial and the immediate area. Area needs all the help it can get and not "roadblocks" to further hamper its economical and recreational development.
	The limitation of recreation will definitely have a very negative impact on the economies of Laramie and Centennial, Wyoming as well as other surrounding communities.

**Response:** The effects of all alternatives upon recreation and snowmobile use have been reexamined in the FEIS. All use, including snowmobiles, are anticipated to increase to 2010, except in Alternative F. Modification of the snowmobile experience may be realized by some recreationists, but this is not expected to change overall use by non-locals (tourists). Consequently, employment and income effects upon the tourism industries and their indirect effects throughout the economy are expected to increase by 2010 for all alternatives, except F. Laramie, Centennial and other parts of Albany County should share in these anticipated increases. Impacts on small, rural communities are discussed in the Communities/Economics section of the FEIS (Chapter 3).

Communities Comment #5	Effects on Rural Communities: Alternative D does not take into consideration the low population (which has declined in recent years) or the decline in tourism to our area, nor does it consider the lifestyle of our community in respect to the Sierra Madres and the Snowy Range sections of the Medicine Bow Mountains.
	We further believe that Alternative D will have a considerable negative effect on the overall quality of life in our area which we hold in very high regard.

**Response:** The effects of all alternatives upon lifestyles and tourism have been re-examined in the FEIS. Recreational use of the forest by residents, which is a key component of quality, and similar use by non-locals, which is a key component of tourism, have been discussed in the Recreation and Communities sections of the FEIS. Modification of the snowmobile experience may be realized by some recreationists, but this is not expected to change overall use by non-residents (tourists). Consequently, employment and income effects upon the tourism industries and their indirect effects throughout the economy are expected to increase by 2010 for all alternatives, except F. Encampment, Riverside, and other parts of Carbon County should share in these anticipated increases. Impacts on small, rural communities are discussed in the Communities/Economics section of the FEIS (Chapter 3).

#### **Communities**Comment #6

Effects on Businesses Along Highway 130: The business concerns still in place along WYO 130 feel that by cutting off motorized access between Fox Park and Ryan Park/Ten Mile with the proposed de facto wilderness area between them, you're doing even MORE Economic damage.

**Response:** Recommended wilderness, backcountry non-motorized areas, and limitations to motorized travel have all been reexamined between the DEIS and FEIS. Motorized access to the forest along WYO 130 is not limited under any alternative, except F. The manner and extent in which changing management areas affect recreation use has been analyzed in the Recreation section of the FEIS. The economic implications of these changes has been analyzed in the Communities/Economics section of the FEIS. For additional detail, also see Appendix B.

#### **Communities**Comment #7

Effects on Saratoga: Governing Body of the Town of Saratoga opposes the US Forest Service Preferred Alternative D due to the negative economic impact on the citizens of the Town of Saratoga--Proposed decreased summer-motorized recreation, winter motorized recreation and timber production.

The economic impact of the implementation of the preferred Alternative is being understated especially those impacts to communities, such as Saratoga, who's revenue generation and tax base are, for a large part, dependent on the multiple-uses and recreation activities taking place on the Medicine Bow National Forest. Restricting recreational uses will effect not only the economic sector that supports these activities such as suppliers, hotels, filling stations and restaurants but will have secondary effects on the service sector as well.

**Response:** The effects of all alternatives upon timber harvest and recreational use, including snowmobiles, have been re-examined in the FEIS. Timber harvest and snowmobile use are anticipated to increase by 2010, except in Alternative F. Modification of the snowmobile experience may be realized by some recreationists, but this is not expected to change overall use by non-locals (tourists). Consequently, employment and income effects upon the timber and tourism industries and their indirect effects throughout the economy are expected to increase by 2010 for all alternatives, except F. Impacts on local sales tax revenues have also been analyzed and presented. Saratoga should share in these anticipated increases. Impacts on communities such as Saratoga are discussed in the Communities/Economics section of the FEIS (Chapter 3).

# **Communities** Comment #8

Effects on Rawlins: Rawlins is located approximately fifty (50) miles from the Medicine Bow National Forest. Its population is almost twice that of Douglas, yet is not included as a community impacted by Forest related activities and their management. Each Fall, the second largest city in Carbon County is established by the hunters within the National Forest.

**Response:** Economic impacts have been estimated for all of Carbon County. Although Rawlins was not specifically identified in the text, the impacts are inclusive. Most of the tourism impacts related to the Medicine Bow National Forest are expected to primarily affect Saratoga, Encampment, and other small communities closer to the Forest, and thus these communities have been the focus impact discussions.

# Communities Comment #9

Effects on Wyoming: I have witnessed a reduction in the development of natural resources, including loss of jobs, which have contributed to our economy, and increasingly more access restriction.

If motorized traffic becomes more and more restricted, the amount of people that travel to the Medicine Bow National Forest will decrease. This will also have a negative impact on the surrounding areas and economies of the Med Bow.

The Forest Service's emphasis on denying access and use will impact Wyoming's tourism industry, agriculture industry, and recreation industry.

**Response:** Between the DEIS and FEIS, the tourism impact estimates have been fully revised. New use estimates from statistically-reliable surveys, including snowmobiling, have replaced poorer data that were the best available for the DEIS. Growth estimates for the tourism industry have been revised, as well as expenditure patterns by tourists. All of these changes result from better, more detailed information and provide more reliable estimates of the future of tourism in the Medicine Bow area. See the Recreation and Communities section of the FEIS (Chapter 3).

#### Communities Comment #10

Effects on Wyoming Tourism: Wyoming has the opportunity to excel in the tourist trade due to its vast open spaces and rugged wilderness.

Numerous studies have shown that local economies benefit more from ecotourism than logging. More wild areas and more old growth = more people spending money in our communities.

Wildlife watching is a major draw for tourists who visit Wyoming; our wildlife is a tremendous economic resource for this state, and any process that diminishes wildlife would also diminish our economic base.

We, the undersigned business people and business owners, believe that the conservation of wildlands and wildlife should become the highest management priority on the Medicine Bow National Forest. We believe that a wild and healthy Medicine Bow is good for business because it draws visitors to our region and dramatically raises the quality of life for those living here.

This plan has the potential to hurt many businesses, owners, employees and others who rely on tourism to provide their income.

This plan would do major damage to all the recreational opportunities this land offers and in turn would damage the businesses that depend on the recreation that takes place in the area.

What a devastating economic impact alternative D would have on our economy. Recreation of every kind allows many people to enjoy the forest and provides a huge economic boost to our community.

Please continue the tradition and mandate of multiple-use, recognizing that recreation is a major part of local and regional economies.

**Response:** In recent years, tourism has contributed significantly more to the economies of local areas around the Medicine Bow National Forest than timber or agriculture. Very low timber volumes has increased the importance of tourism in the areas. For all alternatives, except E and F, timber volume and associated processing jobs are expected to increase substantially by 2010, matching the growth in tourism. Consequently, the influence of the Medicine Bow to the surrounding economies should increase by the end of this decade. See the Communities/Economics section of the FEIS (Chapter 3). The dependency subsection of this section also provides good information on the importance of all industries to the economy of each county.

Recreation and tourism are fully analyzed in the FEIS. Results of this analysis are located in the Communities/Economics section of Chapter 3. The economic analysis in the FEIS is designed to examine effects at the community, county, or multi-county scale. In response to public comments, narratives accompanying the economic analysis have been revised from the DEIS to better discuss the impacts at the community level.

Although economic impacts are realized through individual businesses, no analysis of individual firms is found in this or other NEPA documents. There are several reasons for this. First, there are hundreds of tourism-related businesses in the planning area, so an analysis of impacts upon each business would be impossible. Second, impacts on individual firms would require access to data that is typically confidential and proprietary. Third, NEPA does not require an analysis of effects upon individual firms. We understand that some firms may be affected positively and others affected negatively by Forest Service programmatic and project decisions, and that such impacts sometimes affect individuals in profound ways. However, our analyses are focused at the community or higher levels.

# Communities Comment #11

Effects on Hunting: My opinion about the forest plan is that it shouldn't go through. Every year there are more and more hunters showing up to hunt this area. If you decrease hunting many businesses will lose a lot of business. Many hunters are unable to use the forest without some motorization (try carrying an elk out), and hunting is an enormous part of our economy also.

**Response:** Hunting is an important piece of tourism for this part of Wyoming. Hunting is expected to grow and has been explicitly recognized in the recreation and economic impact analysis. See Appendix B.

#### Communities Comment #12

Effects on Snowmobiling: The winter sport of snowmobiling, which contributes over \$31 million dollars to local economies, will be negatively impacted by this plan.

Snowmobiles, as you are aware, produce a huge income for Carbon county, Albany county, and the state of WY as a whole. Restricting access from the forest, would result in a huge economic loss, which, during this time, would be a huge devastation.

I am familiar with motel occupancies since the early 80's. In those days snowmobiles were not popular. From Christmas to mid-January we had 5-7 rooms per night. The maids, cooks, waitresses, etc. were sent home early. In the last 10 years that snowmobiling has taken off, we are generally close to full occupancy. We keep track of our guests. Skiers and

snowmobilers make up the bulk of winter out of state visitations to the Snowy Range.

We bring in a least \$15,000 in to the area every winter. If it were not for the off-trail riding we would not come to Wyoming.

Snowmobiling is a huge industry in the state of Wyoming and in order to keep it that way we need to hold onto all of our available roads and acres.

The economic impact of Alternative D would be devastating to surrounding communities. Snowmobiling is the primary winter recreational use of the forest and the Final Management Plan must place its primary winter emphasis on supporting on and off-trail snowmobiling. Loss of the income from snowmobiling would be devastating to food service, lodging, recreation and rental businesses to name a few, and subsequently the tax revenue generated by these businesses.

I know there are huge user and economic issues relating to snowmobile use in the Medicine Bow. I can honestly say that snowmobiles have substantially hindered my winter recreational experience. The projected user increase in this forest is largely in favor of non-motorized use. Although short-term economic consequences of limiting motorized use on the forest may seem fierce, it would be economically beneficial to support non-motorized users requests to limit snowmachines.

The proposed increases to the wilderness in the MBNF are a major threat to my business and the employees that work for me. Snowmobiling offers the largest tourism opportunity in the valley during the months of November through April. Non-resident riders are not here to ride on the trails. Many of the areas that are proposed to be closed in the Alt D plan are some of the best riding that this valley has to offer.

It will result in changes of employment related to recreation on the Forest. With the tremendous increase in wilderness areas proposed by this plan, this Forest will become less attractive to the snowmachine enthusiast as the remaining areas become over crowded. Less snowmachiners mean less motel rooms rented, fewer restaurant meals eaten, and fewer gallons of gas and snacks sold.

The Winter sport of snowmobiling, which contributes over \$31 million dollars to local economies, will be negatively impacted by the alternative D plan.

This would have a major impact on the economies of Wyoming. I believe you could see a decline of snowmobilers by as much as 50% over the next few years do to overcrowding and unchallenging riding.

**Response:** Snowmobile use was commented upon more than possibly any other topic in the DEIS. Comments primarily concentrated on the potential reduction in use and the resulting loss of jobs and income to the local economy. All of this has been thoroughly re-examined and re-analyzed for the FEIS. The snowmobile study prepared by the University of Wyoming and new statistically-reliable data from Forest Service recreation surveys were

integral to the new analysis. Changes in snowmobile experience were also considered along with changes in use. In summary for Alternative D-FEIS, snowmobile experiences will be affected as some cross-country areas are closed, and riders are restricted in a few areas to established roads and trails. Overall capacity for snowmobiles will not become effectively constrained. Growth in the local snowmobile industry should continue as projected for Wyoming as a whole. The results of these analyses are presented in the Recreation and Communities/Economics sections of the FEIS (Chapter 3). Further details are also provided in Appendix B.

Communities
Comment #13

Effects on Motorized Recreation: Motorized recreation is a large part of the local economy.

A 30% reduction in land availability for Summer motorized use, again is devastating to Wyoming economy, you would cut deeply into the revenue received from licenses purchased for fishing and hunting along with all the supplies they use.

**Response:** Motorized recreation is indeed a very large part of the tourism economy for these parts of Wyoming. Changes in land availability do not directly translate into changes in recreation use. Only where such changes provide a constraint to current use would motorized recreation and tourism be affected. The capacity of lands across the Medicine Bow have been examined for their direct effect upon projected recreation use. Growth in recreation use was projected and used in estimating economic impacts. See the Recreation and Communities sections of the FEIS (Chapter 3) and Appendix B.

#### **Communities**Comment #14

Effects on Non Motorized Recreation: The potential positive economic impacts of non motorized users is quite real if that group could feel more comfortable coming here.

Some claim that reducing the areas that powered recreation can access will reduce the numbers of visitors to the area and impact the area economically. I do not believe this claim, since carefully limited motorized recreation will provide areas exclusively for non-motorized recreation that will attract additional people to the area while maintaining areas for motorized recreation. This type of approach is actually in use already in the Routt part of the forest where snowmobiling and skiing have been separated.

**Response:** All recreation uses were projected for the Medicine Bow National Forest, taking into consideration changes in management that could affect the motorized/non-motorized mix of uses. Generally, recreation use was not affected, although in some cases recreation experience might be. Economically, motorized recreation users spend substantially more in local areas than non-motorized users. See the Communities/Economics section of the FEIS for a discussion of these impacts, and Appendix B for more details on expenditure patterns.

# Communities Comment #15

Effects of Logging vs Tourism: Please work to insure responsible and limited logging of this area, which would help protect the watershed and sustain the much more economically important continuation of tourism.

Clearcuts are ugly, and the more there are on a forest, the less likely people are to want to visit it. This will adversely impact the tourist industry upon which local communities depend.

**Response:** The relationship between logging and recreation is complex and important to the Medicine Bow National Forest. Motorized recreation use tends to increase temporarily in areas where logging activities have created temporary roads. Once these roads are closed, summer motorized use is diminished, but snowmobile use may increase. Overall, timber activities anticipated on the forest are not expected to alter projections for recreation use. The economic impacts of both timber harvest/processing and tourism-related recreation on the forest are displayed and discussed in the Communities/Economics section of the FEIS (Chapter 3).

Communities
Comment #16

Effects on Wilderness Areas: We need to maximize the size of wilderness areas in the Medicine Bow-Routt National Forest in order to maximize highest economic use. This use is for tourists coming from all over the world to enjoy some of the most beautiful scenery in America. I have friends who come just about every year from Europe. They hike in the Alps a lot and say the Medicine Bow is second only to the Tetons as their favorite places to hike in the entire United States.

The economic implications of RNA's, modified grazing plans, wild and scenic rivers and increased wilderness areas on the local economies, businesses and ranches in the surrounding counties have not been properly analyzed in picking your preferred alternative.

**Response:** Several areas are recommended for wilderness designation under a variety of alternatives. Some of these areas are additions to existing Wilderness. Whether these areas become Wilderness is a decision made by the Congress. The same is true for other special areas, such as RNAs. The recreation and economic effects of each alternative have been analyzed and considered in this FEIS. However, site-specific analyses have not been completed here. How the recreation and community impacts were considered in the decision is discussed in the Record of Decision.

## Communities Comment #17

Effects on Timber Industry: The Forest Service is not in the business of providing business opportunities for timber companies--should be concerned with the attitudes of all Americans (not just Wyomingites) regarding the preservation of public lands.

I believe that the economics of the timber industry no longer justify the continued cost in road building and environmental cleanup inherent with clear cut logging operations.

Due to past practices of the forest Service, most saw mills on the fringes of the Medicine Bow-Routt National Forest have now closed down. This is extremely hard on local economies and if we want these communities that rely on timber sales to survive, we need increased and continuous timber harvesting to keep these mills open.

The Med. Bow should be working toward a sustainable forestry program that encourages a modest timber industry with value-added industries. The Forest should not be trying to employ the whole town of Saratoga or meeting a large-capacity mill's needs. This forest is just not productive enough for LP.

The analysis of future timber needs must also be correlated with local economic needs. Further, resource management strategies must be developed and incorporated into the plan to facilitate the long-term viability of existing and planned sawmill operations.

USFS needs to dissect the economy of the nearby forest communities and discover potential opportunities to bolster the viability of each local economy. The USFS is not responsible for securing the economic future of nearby communities, but it has a responsibility to help support local economies. The overall plan outlines a wide variety of strategies to promote resource conservation. An equal effort must be given to helping sustain existing industries and encouraging responsible economic development from the use of available timber resources.

The issue of substitution between private timber and public timber is serious but has not been considered fully in the analysis.

Communities that could potentially capitalize from the revenues created by timber production would suffer detrimental economic affects from a lowered ASQ. A decrease in land area available for forest products would decrease any chances the Louisiana Pacific mill has for re-opening. Mills that are currently in operation would have lower board feet production levels, which in turn causes limits to and loss of business opportunities. A decrease in ASQ would also limit residents from cutting firewood they use to heat their homes.

DEIS 3-627 seems to attribute the employment consequences to mill closures due to soft lumber prices and unsustainable timber supply from current sources. The discussion fails to acknowledge the effect of the failure of the MBNF to offer economically viable timber offerings. The uneven flow of offerings, offering timber with constraints, and making minimum bids that are not competitive in a global market have been major factors in mill economic viability.

The analysis must address the impact of those decisions, such as the preferred alternative reduction of wood supply to local mills, on the individual and collective health of surrounding communities, as well as the potential for those communities to develop new opportunities to utilize forest products, including small diameter material.

**Response:** A healthy, sustainable timber industry is desired by the Forest Service so that the Medicine Bow National Forest can be managed in low cost ways. In addition, the agency has long had an interest in contributing to the economic health of communities in and near the Forest. Both of these interests are pursued so that the American public can realize the many benefits of national forests in a variety of ways. Analysis of the timber program in the FEIS examines these interests by alternative. The timber demand and supply analysis has been completely revised for the FEIS. The demand for timber by local sawmills now includes a more detailed examination of mill capacity. The volatility and complexity of the industry is more thoroughly considered and discussed. On the supply side, all major sources of timber volume in the timbershed and the role that the Medicine Bow NF plays are

explored in detail. These discussions can be found in the Timber Resources section, Timber Demand and Supply subsection and Anticipated Harvest and Processing subsection of the FEIS (Chapter 3).

Although Allowable Sale Quantity varies by alternative, it is the difference between current and anticipated harvest levels that directly affects mills, their employees, and communities. This difference in harvest and processing levels is examined in detail in the Timber Resources section of the FEIS. The employment and larger economy consequences, including how various communities might be affected, are displayed and discussed in the Communities/Economics section.

Individual project level (timber sale) characteristics are outside the scope of this decision. However, utilization standards and related guidelines that shape project characteristics are included in the Plan. Some of these, such as log size, are recognized as having important sawmill implications and have been considered in the analysis of timber industry consequences.

## Communities Comment #18

Effects on Timber Related Jobs: Sustainability of jobs in neighboring communities is harmed by the actions of big logging companies. They increase mechanization to cut the numbers of employees, ... they overcut the forest because they don't have long term interest in the resource. ... Smaller, local operators should be favored by logging contracts. They would probably be more sensitive to protecting the resource. They live in the area and care about it. ... Perhaps value added industries could be started on local communities to produce more jobs from the forest resource.

Jobs in the lumber and mineral industry are much more attractive for rural development than most of the so called tourist jobs.

It is not clear how a reduction in ASQ will result in increases in employment and income in the region.

It is stated on page 3-627 that "Business decisions by timber purchasers in the years ahead will determine whether the associated jobs would be new or merely existing ones that depend upon different timber supplies." This needs clarification and a more careful examination of direct employment effects.

**Response:** Timber purchasers are constrained by the terms of timber sale contract, and as such cannot destroy or harm the forest without incurring financial penalties and/or risking their ability to compete for future contracts. The terms of typical timber sale contracts is outside the scope of this decision.

With the sale of the sawmill in Saratoga, all anticipated purchasers of Medicine Bow timber are local and/or small companies. These firms employ local residents and subcontractors who work and play in the Medicine Bow NF, making the Forest an integral part of their life and culture. The number of jobs created or sustained by timber harvested and processed from the forest is displayed and discussed in the Communities/Economic section of Chapter 3 of the FEIS

As stated in other responses, changes in Allowable Sale Quantity (ASQ) by alternative do

not affect mill production and employment. ASQ is a ceiling that may or may not be achieved during the life of the plan. More realistic harvest levels and associated processing given budget and other constraints were estimated. This information is disclosed in the Timber Resources section of the FEIS (Chapter 3). These estimates provided the basis for employment, industry, and community effects displayed in the Communities/Economic section of the FEIS (Chapter 3).

IMPLAN, as used by the University of Wyoming for estimating employment consequences of each alternative, was re-examined between the DEIS and FEIS. New information about the timber industry was collected and incorporated in the estimation process. This is explained in detail in Appendix B.

## **Communities**Comment #19

Effects on Ranching: We need to maintain viable ranching operations in order to sustain our communities and tax base. Any reduction of livestock grazing numbers in the forest plan will diminish the income for ranch families, especially the small family owned ranches.

The sector relationships among basic industries, independent basic industries, and local resident sectors are carefully portrayed. However, the relative stability of those relationships is equally important.

The document fails to fully recognize the equally important economic role of agriculture--one of the three major components of Wyoming's economy. The discussion of the Social and Economic Environment (Executive Summary, p. 6) does not even recognize the livestock industry.

The Forest Service must perform credible, scientific analyses on (1) how many ranchers are likely to sell their properties as a result of allotment reductions at the levels analyzed, (2) What percentage of ranches are likely to fold or otherwise sell even if Forest Service allotments remain unchanged, (3) what percentage of ranches without grazing allotments are likely to go belly-up or sell for other reasons, (4) what percentage of all sold ranches remain in agricultural production and passive open space versus what percentage of sold ranches are subdivided or otherwise developed (data which should be easily available from the counties), (5) what the projected demand (in terms of acres) there is for developments/subdivisions in neighboring counties, and (6) How this demand compares with the acreage of ranchlands already on the market, prior to any allotment reductions.

The loss of this leased summer range may therefore directly impact the development and use of private deeded valley land and may result in the forced sale of significant historic properties—a potentially adverse effect.

The conversion of land to non-agricultural uses from 1982 to 1997 was stated to be 9%. This figure was predicted and projected to be at least the same for the next 10 to 15 years. Has the rate of change remained relatively steady at 9%? What is that rate projected to be, given the influx of second home developments in the area? Does the USFS analyze the loss of close to 100,000 acres of private land (much of which is winter range for wildlife) over the life of the plan.

Effects on Ranching Reduction of AUMs will destroy an already suffering livestock industry. The elimination of the livestock industry will have a serious economic impact to the local community.

Reduction of grazing on federal lands will mean lost economy and a way of life to many residents in our valley.

While we appreciate the fact that the Preferred Alternative calls for no cuts in Animal Unit Months for grazing permittees, we are greatly concerned about other elements of the plan which could result in drastic cuts in AUMs and the possible elimination of grazing allotments on the Medicine Bow National Forest. These cuts would have drastic and dramatic results not only on the livelihoods of ranching families, but also upon the local economies.

**Response:** Between the DEIS and FEIS, the grazing program was re-examined to determine whether allotments would be affected. The conclusion was that allotments would not be affected under any alternative, except Alternative F. Consequently, there will not be any economic, social, or other impacts to communities from this decision, except for Alternative F. The impacts resulting from this alternative were expanded in the FEIS to not just consider immediate job and income effects, but to narratively consider wider effects to ranches, the consolidation and conversion of ranches, and the culture in small, rural communities around the Medicine Bow. Many of these effects were identified with parts of Carbon and Converse Counties. These discussions are found in the Communities section, Demographics and Economics subsections of Chapter 3.

These comments are based upon the DEIS where grazing levels were affected by most alternatives. The relationship between public land grazing and private land use is discussed in more detail in the FEIS. Many social and economic trends, such as those cited in these comments, are either 1) outside the scope of this decision or 2) will not be affected by this decision.

Consequently, there will not be any impacts to the livestock industry from this decision, except for Alternative F. Impact to the industry under this alternative has been revised in both tables and narratives to better address these concerns. See the Livestock Grazing and Communities/Economics sections of the FEIS (Chapter 3).

## Communities Comment #20

Effects on Wildland-Urban Interface: Management actions that rely on natural fire must address the risk to local communities.

The Draft Plan fails to recognize the crucial connection between wildfire risk and economic sustainability.

Placing the burden to place fire lines, perform reclamation and weed control solely on private landowners, County Government and rural fire protection is inequitable. The Forest Service should bear some of the financial responsibility for these fires that will inevitably move from thick, inaccessible wilderness area to private property.

The designation of a wilderness area near a residential area gives insurance companies an excuse not to provide fire insurance on infrastructure

because of a lack of fire control in a nearby area.

Cumulative economic effects are not estimated for changes in fire hazard due to increased wilderness designation. This information should be incorporated into the economic analysis and should encompass expected cost changes of firefighting, the net value change in damage associated with increased fire activity, and the value of forest health impacts.

Use real figures for fire suppression based on both small and large scale fires that have occurred recently on the MBNF and USFS Region 2. We strongly believe that the MBNF has not conveyed through the DEIS all the potential cost associated with fire suppression efforts.

**Response:** Modeling the probability of large fire events is not possible at the analytical scale of this forest plan. Such modeling is only possible at the site-specific or project level. Consequently, estimates for probable losses on public and private lands and for suppression activities could not be made. Fire fighting funds are not included in annual operating budgets, but involve unique appropriate levels each year for the agency. The relationship between recommended wilderness and several communities has been modified from Alternative D in the DEIS to D-FEIS. In this alternative, boundaries of recommended wilderness have been modified to recognized the potential effects on several communities, including Morgan, Friend Park, and Harris Park. Management area 1.31, which allows for emergency motorized access and fuels treatment, has replaced the recommendation for wilderness in these areas. Acres of fuel treatment across the forest is a constant 2,500 acres for all alternatives, with a priority on areas in the wildland-urban interface. The economics issue for individual projects will be analyzed at that time they are proposed.

#### Fire and Fuels

## Fire & Fuels Comment #1

Wildland Urban Interface: How does the Forest Plan revision address wildland urban interface concerns?

The "Interface problem", developers should be primarily responsible for its solution.

The rural/urban interface between private homes and Forest Service administered land needs to be addressed. The Forest service need to be more responsive to these needs and to implement thinning, controlled burns or firebreaks adjacent to private property.

The use of "firebreaks" around communities should be clarified. There is no ecological justification for fire breaks that exceed 100-200 feet, which is the width of the "home ignition zone" demonstrated by Jack Cohen's published research. Fuels reduction should be limited to areas with 1/4 mile of dwellings, and allow naturally-caused fires to burn unimpeded elsewhere in the Forest.

**Response:** The wildland urban interface and/or communities (relative to fire and fuels treatments) are addressed throughout the EIS and Revised Forest Plan. Following is a list of references in the Forest Plan and EIS where the wildland urban interface or communities are addressed: (1) Chapter one of the Revised Forest Plan, Goals in Objectives section, refer to

Subgoal 1.c, Objective #2, (2) Chapter one of the Revised Forest Plan, Goals and Objectives section, refer to Strategy b, (3) Forest wide Direction, Biological, Silviculture, Tables 1-6 & 1-7, (4) Forest wide Direction, Biological, Disturbance Processes, Fuel Treatments, Guidelines 1 & 2, (5) Chapter two of the Revised Forest Plan, Category 7, Management Area 7.1, Residential/Forest Interface, (6) EIS, Fire and Fuels section, Goal #1, (7) EIS, Fire and Fuels section, paragraph #6 and, (8) EIS, Fire and Fuels section, Affected Environment, Acres of Fuels Treatment (mechanical and prescribed burning) by Alternative, paragraphs 1, 2 and Communities at Risk Table.

A list of communities have been identified in the EIS, Fire and Fuels section, Affected Environment, Acres of Fuels Treatment (mechanical and prescribed burning) by Alternative, paragraphs 1, 2 and Communities at Risk Table. Management Area 7.1 covers the communities identified in the EIS and the only AMR for that MA is direct control (refer to the Revised Forest Plan, Chapter 2, Management Area 7.1). Some references to AMR include: (1) Revised Forest Plan, Chapter 1, Biological section, Disturbance Process section, Fire section, Standard 1 and Guideline 2, (2) EIS, Fire and Fuels section, Environmental Consequences and, (3) Chapter 2, all Management Area prescriptions.

The width of a "fire break" (sometimes referred to as a fuel break) is identified during project level analysis. The required width of a fuel break depends on its objective and is a function of topography, fuel type, modeled fire behavior (usually using 90<sup>th</sup> percentile weather observations), and spotting distance. The need for a fuel break is not only identified around homes in urban interface areas but also to protect high value areas and/or may be designed to be used as anchor point in high hazard/risk areas on the landscape.

## Fire & Fuels Comment #2

Fire Risk Hazard and Catastrophic Fire: How do the Forest Plan revision alternatives affect fire risk and hazard across the Forest?

Alternative D negatively affects the health of the forest by increasing the risks of fires.

I am greatly concerned about the build-up of deadfall and fuel loading in general. Conditions are ripe for a catastrophic fire in all areas below timberline.

We are setting up the forest for a catastrophic disaster (i.e. 2002 Hensel Fire), as we are also cutting access to these areas, a fire would not be like natures fire as we have controlled burns and now our forest floors are a time bomb.

There is no guarantee whatsoever that the Forest will seek to maximize "Prescription" even in Wilderness Areas. Proposed management actions will continue suppressing fire, and do not reveal or analyze any of the environmental impacts of this continued fire suppression.

**Response:** A Fire Risk Analysis was completed and is documented in the Chapter 3, FEIS, Fire and Fuels section, Affected Environment, Fire Risk Analysis. Under all alternatives, the current condition classes will experiences a net increase, Chapter 3, FEIS, Fire and Fuels section, Environmental Consequences section, Cumulative Effects, last paragraph.

Fire risk is basically a function of two variables on the Forest, lightning and human caused ignitions. The percentage of lightning caused ignitions varies across the Forest. In some areas lightning causes as few as 34% of the ignitions, in others, lightning is responsible for up to 90% of the ignitions (refer to the Fire Risk Analysis referenced above). It is expected that the occurrence of lightning caused ignitions will not differ among alternatives. The risk of human-caused wildfire could increase, based on the expected increase in forest visitors and anticipated growth in the urban interface.

A fire hazard analysis for the Forest was completed and is documented in the EIS, Affected Environment, Fire Hazard Analysis section. In addition, the Revised Forest Plan emphasizes the use of mechanical treatments and allows for the use of prescribed fire across the landscape. Some references include: (1) Revised Forest Plan, Chapter 1, Goals and Objectives, Subgoal 1.b, Strategy e, (2) Revised Forest Plan, Chapter 1, Goals and Objectives, Subgoal 1.c, Objective #2, (3) Revised Forest Plan, Chapter 1, Goals and Objectives, Subgoal 1.c, Strategies b, c, d & e, (4) Forest wide Direction, Biological, Silviculture, Tables 1-6 & 1-7 and, (5) Forest wide Direction, Biological, Disturbance Processes, Fuel Treatments, Standard 1 and Guidelines 1, 2 & 3.

How a wildland fire is managed under the Revised plan is referred to as the Appropriate Management Response (AMR) and is discussed and defined in the Revised Forest Plan and FEIS. Some references to AMR include: (1) Revised Forest Plan, Chapter 1, Biological section, Disturbance Process section, Fire section, Standard 1 and Guideline 2, (2) FEIS, Chapter 3, Fire and Fuels section, Environmental Consequences and, (3) Chapter 2, all Management Area prescriptions. It should be noted that even under our most aggressive suppression response, a wildland fire may be difficult or impossible to bring under containment and control during adverse weather conditions.

Site specific treatments are determined at the project planning level. Fuels treatments are targeted towards fire regimes 1 and 2 and condition classes 2 and 3. For the purpose of analysis, acres of treatment were estimated, based on our current budget level, for all alternatives, and are displayed in Chapter 2 of the FEIS, Table S-2.

How a wildland fire is managed under the Revised plan is referred to as the Appropriate Management Response (AMR) and is discussed and defined in the Revised Forest Plan and FEIS. Nowhere in the FEIS or Revised Forest Plan is the statement made that the Forest intends to "maximize" prescription control. The Forest Fire Management Plan is updated annually. However, it will take some time to determine the operational constraints to be applied to different AMR's across the Forest.

Fire & Fuels	
Comment #3	

Wildfires and Roads: The Final Plan should ensure that there is a good road system in place such that fire crews can easily access all areas of the Forest, especially those near communities and private property. The net effect of roads on burned area is incorrectly assumed to be a reduction in fire, where the opposite is more likely true.

**Response:** The positive and negative aspects of more or fewer roads was discussed in the FEIS, Chapter 3, Fire and Fuels section, Affected Environment, in the section titled Effects to Fire and Fuels from Travel Management. Roaded access to an area increases the risk of human-caused ignition, the same roads provide access for fire fighting personnel and equipment. Our fire fighting resources are identified during our NFMAS (National Fire

Management Analysis System) analysis and are in part, based on response times and values at risk.

Fire & Fuels	Wildfires and Wilderness: Wilderness designation only increases the
Comment #4	likelihood of the area being destroyed by catastrophic wildfire. Proposed
	Wilderness areas will hamper fire suppression efforts.

**Response:** Wildland fire suppression operations are more difficult in Wilderness areas. The objectives of fire management in wilderness are to: (1) permit lightning caused fires to play, as nearly as possible, their natural ecological role within wilderness, and (2) reduce, to an acceptable level, the risks and consequences of wildfire within wilderness or escaping from wilderness (Forest Service Manual 2324.2). Under the Revised Forest Plan, areas proposed for Wilderness designation will be managed to maintain the Wilderness characteristics of the area.

A fire regime and condition class analysis was completed for the Forest. The results of this analysis are located in the FEIS, Chapter 3, Fire and Fuels, under the Affected Environment section. Condition classes 1, 2 & 3 are defined in this section and acres of each identified on the Forest. Only vegetation species identified as condition class 3 have fire regimes that have been significantly altered from their historical range where the risk of losing key ecosystem components is high. This results in dramatic changes to one or more of the following: fire size, intensity, and severity and landscape patterns. The primary species identified as falling into condition class 3 on the Forest was unmanaged ponderosa pine. Minimal amounts of ponderosa pine are currently found in designated Wilderness areas or areas proposed for Wilderness designation indicating risk of catastrophic fire is low in these areas.

Fire & Fuels Comment #5	Fire Suppression vs. Natural Fire: Modern science has demonstrated irrefutably that fire suppression is ecologically unsound and ultimately counterproductive; the time has come to abandon this misguided policy in favor of a managed natural fire approach.
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**Response:** The "natural fire approach" is addressed in the Revised Forest Plan. The current terminology is wildland fire use and is referred to as prescription control in the Revised Forest Plan. How a wildland fire is managed under the Revised plan is referred to as the Appropriate Management Response (AMR). Some references to AMR include: (1) Revised Forest Plan, Chapter 1, Biological section, Disturbance Process section, Fire section, Standard 1 and Guideline 2, (2) FEIS, Chapter 3, Fire and Fuels section, Environmental Consequences and, (3) FEIS, Chapter 2, all Management Area prescriptions.

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Fire & Fuels Comment #6	Historical Range of Variability: The EIS discloses that the Forest itself is not outside the historical range of variability for fire in areas dominated by lodgepole pine, spruce-fir, limber pine or any other forest type on the Snowy Range and Sierra Madre sections of the forest, yet proposes fuel breaks and other treatments, when no such treatments are needed, based on Table 3-49. A map should be displayed showing all proposed treatment areas, which presumably would be the same as a map of condition class 2 and 3 lands plus lands identified to require treatments for other reasons. Without such a map, the environmental impacts of the proposed treatments cannot be evaluated.

**Response:** A timbered stand may be within its HRV and still have the potential to exhibit extreme fire behavior such as crowning and spotting. This type of fire behavior could be unacceptable in a wildland urban interface area. A fire hazard analysis for the Forest was completed and is documented in the FEIS, Chapter 3, Affected Environment, Fire Hazard Analysis section. Site specific treatments are determined at the project planning level. Fuels treatments are targeted towards fire regimes 1 and 2 and condition classes 2 and 3. For the purpose of analysis, acres of treatment were estimated, based on our current budget level, for all alternatives, and are displayed in Chapter 2 of the FEIS, Table S-2.

Fire & Fuels	Shrublands and Aspen outside HRV: The area of condition class 2 and 3
Comment #7	land, which is land thought to be adversely affected by fire suppression, is
	much less than the EIS suggests (p. 3-168). Scrublands and Aspen do not
	belong in condition class 2. Dillon et al. (2002) do not suggest that
	shrublands or aspen are outside their HRV for fire on the MBNF. Given the
	effectiveness of the suppression in the Rocky Mountain West, the

condition classes of at least Fire Regimes I and II appear suspect.

**Response:** Since the Draft Revised Forest Plan was released, the condition class analysis has been revised. The most noticeable change is the inclusion of unmanaged ponderosa pine in condition class 3. The table 3-168 (referred to by the commentor) in the Draft Forest Plan Revision contained some incorrect figures. The decimal percentage figures were transposed one numeric digit (i.e. 0.7 % was inadvertently changed to 7%). This has been corrected for the Final Revised Plan.

Refer to the description of condition classes 1, 2 and 3 in the Chapter 3, Affected Environment section of the Fire and Fuels report of the FEIS. The definition of condition class 2, in part, suggests that "Fire regimes have been moderately (emphasis added) altered from their historical range. The risk of losing key ecosystem components is moderate. Fire frequencies have departed from historical frequencies by one or more return intervals (either increased or decreased). This results in moderate changes to one or more of the following: fire size, intensity and severity and landscape patterns. Vegetation attributes have been moderately altered from their historical range". Scrublands on the Forest fit this definition, primarily due to an absence of fire and historic grazing practices. In fact, Knight, in his HRV report for the Forest states that "the composition and structure of non-forest cover types is affected by both natural and human-caused disturbances. Fire and hebivory in particular have been the primary historical disturbance agents in non-forest vegetation, but the characteristics of both have changed in the past century, primarily due to the introduction of fire suppression and grazing by domestic livestock" (Knight, 2000).

In his discussion of non-forest vegetation (shrublands) on the Sierra Madre unit, Knight states "Other parts of the MBNF probably experienced heavy livestock grazing as well during this time, pushing various ecosystem variables beyond their HRV". In his conclusion of the non-forested section of the HRV report, Knight stated: "In summary, intense livestock grazing in the early part of the 1900s, and fire suppression and the introduction of exotic plants in the mid 1900s, have caused changes over the years to non-forest ecosystems in some parts of the MBNF, probably pushing some variables beyond their HRV". In the publication The Sagebrush-Grass Region: A review of the Ecological Literature (Tisdale, 1981), the authors made the statement in the Fire section of the document that "Houston (1973) estimated that fire frequency in Artemisia communities in Yellowstone National Park was 20 to 25 years. Referring to drier parts of the sagebrush region, Wright et al. (1979)

theorize that the probably fire frequency would be about 50 years". Fire suppression operations have been taking place on the Forest longer than 50 years, and livestock grazing longer than that.

The largest-continuous aspen stand in the State of Wyoming is located west of the Continental Divide on the Sierra Madre range. In this area, the majority of individual aspen stands are, at varying levels, experiencing conifer encroachment from more shade tolerant species, primarily subalpine fir (Abies lasiocarpa). Without disturbance, many of the aspen stands in the Sierra Madre range will be replaced by more shade tolerant conifer species. This phenomenon is not only obvious on the Forest, but in many other areas of Colorado and Wyoming as well. Following is an excerpt from the Fire Effects Information System 2002: "Fire history: Before and during the mid-nineteenth century, fires were apparently more frequent, and larger acreages of quaking aspen and quaking aspen-conifer mixes burned. than any time since. A large majority of the quaking aspen stands in Jackson Hole, Wyoming, date from fires between 1850 and 1890 (Gruell, et. al., 1974). In central Utah, Baker (Baker, 1925) and Meinecke (Meinecke, 1929) found few quaking aspen fire-scarred later than 1885. Earlier fire scars were common and showed a 7- to 10-year fire frequency. Since quaking aspen is fire-sensitive, the fires were probably of low severity. Extensive sampling of quaking aspen in Colorado found few fire scars dating later than about 1880 (Davidson, et. al., 1959).

These data indicate that there has been a great reduction of fire rejuvenation of quaking aspen in the West since about 1900. Extensive young stands of quaking aspen are uncommon in the West (Jourdonnais, et. al., 1990, Shepperd, et.al. 1981, DeByle, et.al., 1987) Conifers now dominate many seral quaking aspen stands. Probable contributing factors are highly effective direct control of wildfires in the last 50 years, especially in the quaking aspen type (DeByle, et.al., 1987), reduction of fine fuels in quaking aspen/grass and quaking aspen/forb types due to grazing (Brown, et.al., 1986, DeByle, et.al., 1987), and cessation of deliberate burning by Native Americans (Barrett. Et.al. 1982, Gruell, 1985)". Based on the literature on on-site inspection, our aspen stands would logically fall into condition class 2.

## Fire & Fuels Comment #8

Timber Harvest and Fire: The analysis fails to address the substantial scientific literature (e.g., ICBMP, Sierra Nevada Ecosystem Project) that shows that the net effect of timber harvesting virtually everywhere is to increase, not decrease, the probability of fire. I think that the burning of the timber harvest residue is a gross misuse of the natural resources provided by the forest. More proactive language would be useful pertaining to salvage harvesting and guidelines specific to sensitive, recently burned areas.

**Response:** As stated in the Fire and Fuels Environmental Consequences section, Chapter 3, of the FEIS, Timber Harvest: "Properly designed timber harvest units can be beneficial in terms of modifying the fuel profile to allow for successful initial attack operations. Harvest units can affect fire spread across the landscape, and, if properly designed, can provide suppression forces with anchor points and safety zones". The term properly designed implies appropriate slash treatments to reduce post logging surface fire intensity, reduction of ladder fuels such as small trees, and appropriate canopy spacing.

Timber harvest residue is commonly referred to as "logging slash". How slash it treated is

analyzed and decided during site-specific project planning. The objective of the harvesting operation (i.e. silvicultural, fuels reduction) and specialist mitigation at the project level are some factors that determine how slash will be treated.

## Fire & Fuels Comment #9

Fire Regime Group and Lodgepole: The Forest Service has erroneously placed dense lodgepole pine in Fire Regime Group IV (35-100 years, stand replacement severity, DEIS at 3-163), when in fact it belongs in Fire Regime Group V (>200 years, stand replacement severity). This error may lead the agency to overestimate fire frequency and underestimate the natural stand replacement interval in closed-canopy lodgepole pine stands, which are the dominant forest type.

**Response:** Refer to the description of fire regime groups in the FEIS, Chapter 3, Fire and Fuels Affected Environment section. The table indicates that fire regime group IV is 35-100+ years. The "+" indicates that the fire return interval may be more than 100 years is some cases. Research indicates that as a lodgepole pine stand ages and in the absence of surface fires, Engelmann spruce and subalpine fir provide vertical continuity into the Rocky Mountain lodgepole pine canopy after 40 years. Newly germinated seedlings provide the vertical fuel needed for crown fire in about 125 years (Jenkins, et.al, 1996).

Seral Rocky Mountain lodgepole pine occurs in a variety of forest types, and may indicate a recent history of severe or repeated burning (Brady, 2001). In mixed conifer forests, Rocky Mountain lodgepole pine may be the only successful conifer regeneration in the early years following severe fire (Crane, 1982). Generally, a fire return interval between 20 and 125 years yields a closed-successional sequence dominated by Rocky Mountain lodgepole pine. If the fire return interval exceeds 125 years, Rocky Mountain lodgepole pine is eventually replaced by climax species (Arno, 1976). If more than 200 years have passed since previous fire, short-lived Rocky Mountain lodgepole pine is likely to be gone from the site and not a constituent of seral vegetation (Alden, 1988).

## Fire & Fuels Comment #10

Fire Hazard Rating: Current fire hazard rating underestimates those areas in the moderate, high and extreme fire danger classes. This was stated directly in the DEIS analysis as a result of parameters of tree attributes being averaged (e.g. crown height).

**Response:** The fact that tree canopy attributes were averaged was discussed as an assumption in Chapter 3, Fire and Fuels section of the FEIS. It is not practical, feasible, or worth while to attempt to calculate site-specific tree canopy attributes for a landscape level fire hazard analysis, which in this case covered in excess of 1.3 million acres. The objective of this hazard analysis was to generally describe potential fire behavior across the landscape at 90<sup>th</sup> and 97<sup>th</sup> percentile weather conditions. During project planning, canopy attributes are calculated at the site specific level, if needed, to predict fire behavior.

## Fire & Fuels Comment #11

Healthy Forest Initiative: The Medicine Bow Forest Plan is in violation of the President's initiative for healthy forests. The Draft EIS (Table 3-60) states that, at most, 4,000 acres of fuel treatment will occur annually on the Medicine Bow National Forest. The primary constraint to the level of fuel treatment seems to be historic Forest Service funding levels. We believe this level of treatment is woefully inadequate and inconsistent with the President's Healthy Forests Initiative which calls for expedited (not

historical) implementation of fuels reduction and forest restoration projects, especially in high priority areas. At the most aggressive rate of treatment, the Forest Service will only be able to treat a maximum of 8 percent of areas classified as high or extreme hazard per decade. In other words, it will take the Forest Service about 125 years to treat just high and extreme fire hazard areas.

**Response:** The Healthy Forest Initiative emphasizes fuels treatments in the Wildland Urban Interface and provides for streamlining NEPA. The wildland urban interface and/or communities (relative to fire and fuels treatments) are addressed throughout the FEIS and Revised Forest Plan. See response to Fire & Fuels Comments #1 and #2.

There was an error in the DEIS and the Table should have read 0.8%. The estimate was based on our current funding level. However, should additional emphasis be placed on treating fuel conditions, and the Medicine Bow given priority, the funding levels could change. It is difficult to predict what out-year fuels funding levels will be. That is why the future treatment level was based on our historical level of funding. Although it is estimated that only 0.8% would be treated each decade at current fire/fuels funding, it is anticipated that there will be opportunities to treat additional high hazard acreage under other vegetation management programs such as timber, wildlife, and range.

Fire & Fuels	Prescribed Burning and Sage Grouse: Recent evaluations of the effects of
Comment #12	fires on sagebrush where sage grouse may potentially occur suggest that
	prescribed burning is not recommended, as it is generally detrimental to
	sage grouse (Connelly et al. 2000, Wamblot et al. 2002).

**Response:** Prescribed burning is analyzed at the project planning level. Any concerns for species such as grouse are identified during the analysis and are mitigated. The Revised Forest Plan address grouse protection and references can be found in (1) Chapter 1, Biological section, Wildlife section, and (2) Chapter 2, Management Area Standard and Guides.

Fire & Fuels Comment #13	Fire Hazard: In the case of forest types which naturally are subjected to frequent low-intensity ground fires, such as some ponderosa pine and Douglas fir types, the perception of overstocking may be accurate. But forest types like spruce-fir and lodgepole pine, characterized by infrequent stand-replacement fires, are not overstocked, and thinning in these types
	may not achieve the objective of reducing fire risk.

**Response:** Based on the comment, it is assumed the commenter is addressing fire hazard and not risk. A fire hazard analysis for the Forest was completed and is documented in the FEIS, Chapter 3, Affected Environment, and Fire Hazard Analysis section. It is important to note that extreme fire behavior (behavior which inhibits fire suppression operations) is not limited to forest types which are associated with a high frequency-low intensity fire regime, but can be associated with moderate and low frequency fire regimes as well. Many of the vegetation types associated with the latter fire regimes (i.e. lodgepole pine) have adapted to and evolved around high intensity, stand replacing fire events. It would be incorrect to assume that fire behavior would be "less" in these stands.

## Fire & Fuels Comment #14

Prescribe Fire vs. Prescription: Forestwide Direction to create the following Guidelines should be entirely omitted: Fire: "Where feasible and appropriate, use prescribed fire throughout the landscape, including in wilderness areas, special interest areas, research natural areas, and inventoried roadless areas to accomplish resource management goals and objectives." All these areas should receive highest priority for "Prescription" and not use prescribed burning at all. They are either supposed to be free of human influences (Wilderness, RNAs) or management with an emphasis on natural processes (SIAs, roadless areas). Prescribed burning is not a natural process.

**Response:** The use of management ignited prescribed fire in a designated Wilderness area is outlined in FSM 2324.2 – Management of Fire. The intent of management ignited prescribed fire in Wilderness is either to enhance Wilderness values or to reduce to an acceptable level the risks and consequences of wildfire within Wilderness or escaping from Wilderness.

Whether prescribed fire is used as a tool in a RNA, SIA or roadless area depends on the specific goals and objectives of the area. The use of management ignited prescribed fire in an RNA (Research Natural Area) would involve the coordination and cooperation of personnel at the Rocky Mountain Range and Experiment Station.

## Fire & Fuels Comment #15

Fire/Fuels and Management Area Designation: There needs to be reclassification of several of the identified MAs to a definition more compliant with fuels treatment and fire hazard reduction. The newly classified areas should be given a wide latitude of appropriate management responses in order to maximize their effectiveness, minimizing the unnecessary restraints of wildfire response teams in wildland urban interface areas.

**Response:** Most Management Areas, with the exception of those associated with infrastructure or the urban interface, have a wide latitude of appropriate management response options, reference the Fire section of the Management Areas in Chapter 2, of the Revised Forest Plan.

## Fire & Fuels Comment #16

Fire Regime Group and Ponderosa Pine: EPA recommends the FEIS further describe the risk difference between lower, drier ponderosa versus higher, wetter ponderosa stands, as it does for spruce-fir systems, and describe what portion of those stands eligible for treatment. The DEIS lists all ponderosa pine in Fire Regime Group I (0-35 year fire interval, low severity) (DEIS 3-163). It is likely that some of the ponderosa pine is in fact more appropriately in Fire Regime Group III (35-100+ year fire interval, mixed severity). Please consider this possibility in the FEIS.

**Response:** Since the Draft Revised Forest Plan was released, the condition class analysis has been revised and unmanaged ponderosa pine is included in condition class 3. While there may be some isolated pockets of ponderosa pine that may better fit into fire regime group III, they are difficult to delineate and of minor importance when attempting to describe fire regimes across a large landscape, which in this case is in excess of 1.3 million acres.

## Fire & Fuels Comment #16

Direct Attack Strategy and Management Area Designation: No direct attack is prescribed in the following MAs: 1.2 Areas Recommended for Wilderness, 1.33 Backcountry Recreation Non-motorized with Winter Motorized, 2.2 Research Natural Areas (RNAs), and 3.31 Backcountry Recreation-Motorized. Much of the land adjoining MA 3.31 is private land and should be buffered from any fire.

**Response:** As discussed in Chapter 3, Fire and Fuels section of the FEIS, under Fire Use and Appropriate Management Response, direct control is always an appropriate response strategy where values, infrastructure, urban interface, or firefighter or public safety is at risk.

## **Forest Vegetation**

Forest
Vegetation
Comment #1

Tree Age: All species discussions should state the age of the oldest trees of that species on the MBNF. For instance, one could infer from the discussion, as it currently is, that some Rocky Mountain Juniper on the MBNF are 3000 years old.

**Response:** There is additional information about tree ages in FEIS Chapter 3, Biological Diversity. The information displayed comes from the Resource Information System database and from stand examination records. Additional information on age was not determined to be essential to a reasoned choice among alternatives and was not collected (FSH 1909.15 Environmental Policy and Procedures handbook).

## Forest Vegetation Comment #2

Effects to Vegetation: In Saratoga on February 5th, the Forest Service said that snowmobiles are harming the trees, damaging the tops. How many trees are harmed this way? How does this compare to trees rubbed by elk? How many trees are destroyed by your precommercial thinning

All offroad motorized recreational use (both summer and winter) should be prohibited in environmentally sensitive areas such as wetlands, riparian areas, and wildlife winter ranges because of potential effects on...vegetation, .... These restrictions should be enforced.

Where a decline in aspen due to overgrazing and fire suppression has been documented (we did not see any good documentation of aspen decline in the Plan), we support management efforts that restore the ecosystem. However, there is nothing in the DEIS which suggests that aspen is in need of prescribed fire or other active management.

Direct Control and Perimeter Control Strategies (Page B-71) are used on many of the non-timber Management Area prescriptions. According to these descriptions, fuel reduction is a part of these management responses. Although the analysis argues that fuels management "melds ideally" with ecosystem restoration, that is not well supported by the DEIS or Plan for many ecosystem types. The Forest has very little Class 2 or 3 forest. Spruce-fir and lodgepole pine almost certainly do not require any fuel management programs, as they cannot be considered to be impacted by fire suppression to any considerable degree. The science is now pointing to a lack of problem in ponderosa pine outside the Southwest region. The case

that fuel reduction is compatible with restoration goals has not been made for most of the MBNF.

The Final Plan should also ensure that conifer encroachment does not decrease the amount of open meadows needed for wildlife and livestock. The reduction of meadow sizes also effects big game hunters and snowmobilers who use these areas for recreation. Meadow edges should be monitored and actively managed to reduce encroachment.

The Final Plan should adopt an Alternative that will regenerate and increase aspen stands to the HRV. Without aspen management as found in an Alternative such as B, aspen stands will continue to decline. In addition to removing the aspen from the Forest, this impacts the recreational enjoyment of people who like to see the fall colors of the aspens or recreate in a deciduous cover type.

Grazing (particularly over-grazing) adversely affects many species on the Forest... prevention of aspen regeneration...(DEIS- multiple pages, Knight 1994).

What is the difference between soil and water improvement projects and restoration projects?

**Response:** The effects of winter motorized recreation are discussed in the FEIS Chapter 3 Biological Diversity, Environmental Consequences Disturbance Regimes Land Uses, Effects from Recreation Uses and Management. Snowmobile use creates snow compaction that affects the environment beneath the snow and the early season growing season for plants underneath the snow. This is a different effect than elk rubbing on trees. The number of trees effected by these impacts (snow compaction, elk and pre-commercial thinning vary from year to year.

No motorized cross country travel off designated routes is allowed on Medicine Bow National Forest. These restrictions are enforced to the best of our ability.

The goals, objectives and strategies in the plan speak to the maintenance of different plant communities including aspen. The Guideline 2 under Biological Diversity speaks to the maintenance of aspen. The Supplemental Tables in Chapter 2, FEIS estimate the application of prescribed fire to the planning area. The FEIS Chapter 3 Biological Diversity section under Composition provides estimates of the amount of prescribed fire that will be applied to aspen stands and consequences of that prescribed fire.

The management response to a fire ignition is described for each management area in the standards and guidelines for management areas. The effects of the management response to fire ignitions and amount of wildland fire that would be expected under each alternative is estimated and the effects described in the FEIS Chapter 3 Biological Diversity section.

The goals, objectives and strategies in the plan speak to the maintenance of different plant communities. The standards and guidelines limit the effects of grazing. The FEIS Chapter 3 Vegetation discusses the different non-forest vegetation communities across the forest and displays effects to those communities from the management actions displayed in the Supplemental Tables, FEIS, Chapter 2. In addition, the FEIS Chapter 3 Biological Diversity discusses the environmental consequences of grazing on the composition and structure of

different plant communities.

Ecosystem restoration projects would generally involve manipulation of vegetation to produce a desired vegetation condition. Soil and water improvement projects generally involve manipulation of soil and/or water but sometime involve manipulation of vegetation to produce desired water or soil conditions.

Forest	Prescribed Fire in Ponderosa Pine: Prescribed fire should be part of
Vegetation	ponderosa stand management. Not only will it prevent catastrophic fires
C #2	from occurring, as have those that have happened recently, it will improve
Comment #3	habitat for bighorn sheep which in turn benefits wildlife watchers and
	hunters. The Final Plan should incorporate prescribed fire to actively
	manage ponderosa pine and provide increased bighorn sheep habitat.

**Response:** Prescribed fire is part of ponderosa pine stand management. There is a revised discussion of ponderosa pine ecosystems and fire in FEIS, Chapter 3, Biological Diversity.

Forest Vegetation	3.56 Aspen Maintenance and Enhancement: This is completely unnecessary.
Comment #4	

**Response:** Aspen is an important component of the forest composition. Aspen can be replaced by lodgepole pine and/or spruce/fir in the process of natural succession. There is discussion in FEIS, Chapter 3, Biological Diversity on the contribution of aspen to forest diversity. There is an expanded discussion of potential changes to amount and distribution of aspen under the different natural disturbance scenarios. The 3.56 prescription identifies area and provides direction to actively manage this important species on the forest.

#### **Heritage Resources**

Heritage Comment #1	Mountain Ute Tribes: The agency must make a proactive effort to engage the Mountain Ute tribes and account for their concerns and comments in
	the FEIS.

**Response:** The Northern Ute Tribe has been contacted by letter and through the telephone with a request for comment on this document.

Heritage	Analysis of Traditional Cultural Properties: There is no evidence in either
Comment #2	the DEIS or the MBNF Cultural Resource Overview (High Plains
	Consultants, 1981) that the baseline analysis included survey of or
	evaluation of rural historic landscapes or traditional cultural properties
	(TCPs). The known cultural and economic history of the region–wherein
	federal grazing leases have long formed the foundation of agricultural land
	use - suggests the possibility of cultural landscapes or TCPs associated
	with the ranching industry and defined by a complex but integrated system
	of sites, structures, and buildings located on private low-elevation winter
	range and public high-elevation leased summer range.

**Response:** Part of the role of the review process is the identification of TCP's. If the commenter is aware of TCP's related to agriculture please make them known to the Forest during the review process.

## **Heritage** Comment #3

Potential Effects: P. 3-73 appears to significantly overstate the potential of threats to archeological sites and historic buildings, given the required compliance with the NHPA.

Effects of Motor Vehicles The DEIS attempts to establish a connection between use of motorized vehicles and damage to heritage resources...The causal connection between motorized use and damage to heritage resources is entirely speculative and unsupported by facts or science. Therefore, this portion of the DEIS must be revised. The DEIS fails to mention the possibility that damage to heritage resource is greatest in areas where people occur, rather than in areas where motor vehicles occur. The DEIS fails to mention that hikers have vandalized sites and stolen artifacts. Motor vehicles merely allow people to access areas of the forest that they otherwise might not see. To this extent, they provide a positive effect on heritage resources because they allow more people to appreciate them.

Under the section on the effects on cultural resources, again we find that a section titled Impacts by Livestock and Big Game Use (page 3-71) but very seldom does the discussion focus on impacts from big game, but instead focuses on livestock impacts. We feel this is a significant deficiency in the DEIS.

**Response:** FEIS, Chapter 3 has been revised to reflect these comments.

## **Heritage**Comment #4

Clarification/Correction: Another confusing statement is found on p. 3-68 (Heritage Resources). I think it may actually be an error. "Under this alternative (D) vegetation management activities and number of special interest areas would be significantly reduced." But D involves 5.15 which emphasizes vegetation management. Also, it has as many SIAs as any alternative. Hopefully this can be dismissed as an error.

Another problem is implied above, i.e., the confusing use of the synonyms "Heritage" and "Cultural" Resources. We recommend that the USFS select one of these terms and then consistently use it throughout the Plan and DEIS, which currently is not the case.

**Response:** FEIS, Chapter 3 has been revised to reflect the concerns of this commenter.

## **Heritage**Comment #5

Heritage Program Goals: We would also like to see a discussion, supported by a comparison chart, in the DEIS and/or Plan that would show how well the Medicine Bow's Cultural/Heritage Program achieved the goals of the 1985 Plan. Also, what new goals are being established by this revision and what remains unchanged from the 1985 Plan.

**Response:** The Goals/Directions presented in the 1985 Forest Plan are contained in Forest Service Manual 2360. There are no new goals established in the 2003 revision and we continue to work towards achieving the 1985 goals as funding permits.

Heritage	Heritage Guideline 5: This should be deleted; Standard 3 ap	pears to be
Comment #6	more appropriate.	

**Response:** FEIS, Chapter 3 has been revised to reflect the concerns of this commenter.

#### **Insects and Disease**

	Dwarf Mistletoe: Widely varying information is presented on the amount
Disease	of dwarf mistletoe on the forest, how risk is determined and how treatment
Comment #1	will be applied.

Response: The two displays of information on the occurrence of dwarf mistletoe in lodgepole pine come from different sources and represent different views of the situation. The recent occurrence as detectable from aerial surveys is displayed in the FEIS, Chapter 3, Insects and Disease, Incidence of insects and disease table. The information in the text is based on the overall occurrence of dwarf mistletoe in lodgepole pine from the Resource Information System database and stand examination information. The discussion of acres at risk of insect attack is included in the FEIS Chapter 3 – Insects and Disease with further discussion in FEIS Chapter 3 Biological Diversity Composition changes from Natural Disturbances. The process of analysis has been included in Appendix B – Analysis Process Insect Risk Analysis. The integrated pest management process is mandated by regulations and Forest Service Manual direction. Silvicultural treatments are based on Burns (1989), the best available information on pest management actions and scientific analysis of risk (Amman et al. 1977, Schmid and Frye 1976, Stevens et al 1980).

Insects &	Harvest Effectiveness: The amount of harvesting reported does not appear
Disease	large enough to effective deal with insect problems. The discussion of
Comment #2	Insects and Diseases is does not provide a meaningful discussion of the differences among the alternatives.

**Response:** The Supplemental tables and FEIS Chapter 3, Biological Diversity has information on the total amount of predicted harvest over the life of the plan (10-15 years) and long-term (over 200 years). Silvicultural treatments are based on Burns (1989), the best available information on pest management actions and scientific analysis of risk (Amman et al. 1977, Schmid and Frye 1976, Stevens et al 1980). The effects of natural processes including insects has been revised between the DEIS and FEIS based on comments received. The information on effects of natural processes is displayed in the FEIS Chapter 3, Biological Diversity in sections on composition, structure and processes.

Insects &	Western Balsam Bark Beetle: Why was there a large increase in the acres
Disease	of incidence for Western Balsam Bark Beetle but is it not one of the two
Comment #3	insects of major concern? The spruce beetle has a small number acres
	affected and has gone down over time but it is of top priority, why?

**Response:** The recent occurrence of certain insects is different than their overall presence and effect on the forest. Those insects discussed in detail are those that have the greatest overall presence and effect on the forest.

Insects & Disease Comment #4	Ecological Benefits/Costs of Treatments: The benefits and the costs of many intense silvicultural treatments for the prevention of some bark beetle epidemics are relatively unknown. Silvicultural thinning treatment to reduce insect risk can also affect ecological functions. The effects on soils, vegetation, habitat disruption, fragmentation and the effects of roads should be discussed.
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**Response:** Some silvicultural treatments can reduce the risk of several insects at the same time. There is discussion of soils in the FEIS Chapter 3, Soils. There is discussion of habitat disruption, fragmentation and effects from roads in FEIS Chapter 3, Biological Diversity. This discussion has been strengthened in response to comments on the DEIS. There is also discussion of the effects of habitat changes, fragmentation and effects from roads in FEIS Chapter 3, Wildlife.

Insects &	Degree of Suppression and Control: The amount of suppression and
Disease	control in the plan will result in an increase in insect and disease activity.
Comment #5	Reducing the conditions favorable to insects is a more effective approach
	than sanitation and salvage harvest of insect mortality.

**Response:** Suppression and control of insects has proven effective only in limited situation and can lead to more extensive outbreaks in the future. Silvicultural treatments of all types are planned in areas with active renewable resource management to reduce conditions favorable to insects and diseases. Silvicultural treatments are based on Burns (1989), the best available information on pest management actions and scientific analysis of risk (Amman et al. 1977, Schmid and Frye 1976, Stevens et al 1980). The effects of natural processes including insects has been revised between the DEIS and FEIS based on comments received. The information on effects of natural processes is displayed in the FEIS Chapter 3, Biological Diversity in sections on composition, structure and processes.

I	Cools: Vous abjective to increase the amount of forest and rengalands
Insects &	Goals: Your objective to increase the amount of forest and rangelands
Disease	restored to or maintained in a healthy condition with reduced risk and
Comment #6	damage from fires, insects, and diseases, and invasive species" is a
	misguided, unsupported assumption that restored ecosystems will have
	reduced risk from wildfires and diseases. We may actually have a deficit
	of fires, insects, and diseases.

**Response:** The goals, objectives, and strategies are tiered to the USDA Forest Service Government Performance and Results Act Strategic Plan, 2000 Revision. The forestwide direction combines regional goals (which apply to all National Forests in the Rocky Mountain Region of the Forest Service) with goals, objectives, strategies, standards, and guidelines specific to the Medicine Bow National Forest. Additional direction can be found in Appendices A, B, and C which reference national goals, policies, statutes, regulations, and agreements. The relationship of acres affected by fires, insects and diseases and HRV is discussed in FEIS Chapter 3, Biological Diversity. This discussion has been strengthened based upon comments to the DEIS.

# Insects & Disease Comment #7 Natural Disturbance: Your guideline of "Use preventive vegetation management practices to meet objectives and reduce risk of insects and disease. Give priority to cover types identified as a moderate or high risk." should NOT be a general Guideline as written. The Forest should be managed to support natural disturbance processes. Insects and diseases are an important part of a healthy forest ecosystem. [5.11] In Vegetation Guideline #1, we don't think that simulating natural events like the Routt Blowdown and the subsequent spruce beetle epidemic in size and pattern are really desirable.

**Response:** The allocation to Management areas where fire, insects and diseases (natural

disturbance processes) will be the major agent of vegetation change is discussed in Chapter 3 —Biological Diversity. Forestwide guidelines are applied to many different management areas. Each management area has a description of the desired future condition. The National Forest Management Act requires assessment of alternative management actions to facilitate balanced, integrated approaches to resource protections and development and implementation of sound management practices to prevent excessive losses due to pests.

Some animal species are adapted to conditions that are created by large natural disturbance events. Some of the planned human disturbance events will mimic these large scale natural disturbance events, to provide habitat in a pattern and size that provide for viability. This is part of the overall strategy to provide for viability of animal populations across the forest.

Insects &	Treatment of Lodgepole Pine and Spruce: There are areas of high risk
Disease	lodgepole pine and areas of high risk spruce that occur within management
Comment #8	areas that allow for few management actions to modify vegetation patterns.
	Proactive management actions are needed to prevent large scale insect
	problems.

**Response:** The planning process considered numerous alternatives that included different management areas for some of these high risk stands. The selected alternative was based upon a balance between human disturbance processes and natural disturbance processes. All alternatives contain some flexibility in treating fires, insects and diseases in all areas.

Insects &	MA 7.1 Residential/Forest Interface: Create designated areas for
Disease	significant timber thinning and deadfall removal to reduce fuel loading
Comment #9	near residential areas, as prescribed in the HFI. This mature growth areas
	that border forested private holdings to protect spread of disease and fire to
	the private inholdings.

**Response:** Fuel treatments closest to residential interface areas are the most effective in reducing the risk of wildfire. Coordinating treatment across property lines provides for increased effectiveness of treated areas. The planning process considered numerous alternatives that included different management areas for some of these interface areas. The selected alternative was based upon a balance between human disturbance processes and natural disturbance processes. All alternatives contain some flexibility in treating fires, insects and diseases in all areas.

Insects & Disease Comment #10	Integrated Pest Management: There appear to be conflicts between integrated pest management guidelines and allowed vegetation management and road construction in some MAs. There appears to be conflicts between integrated pest management guidelines and desired future conditions in other MAs. We suggest checking these for consistency and clarification.
	We don't think that the integrated pest management guidelines, the buffer zone concept and the coordination with adjacent landowners in MA 7.1 serve to protect the resources of the nation or meet objectives for minimizing potential insect and disease problems.
	The guideline for Integrated Pest Management, "Focus pest management activities and methods on enhancing or protecting wild river characteristics.", is not clear. We suggest it be re-written to explain what is intended, or allowed.

**Response:** These guidelines and desired conditions were changed in response to comments. The forestwide integrated pest management guidelines now apply to many MAs and will be applied based upon MA goals, objectives and desired conditions. Priorities for treatment will be areas in which the values to be protected exceed the cost of protection; for example, areas adjacent to subdivisions, recreation sites, suitable timberlands, or areas of concentrated public use.

The integrated pest management process is mandated by regulations and Forest Service Manual direction and includes response to area objectives in defining levels of pests that would receive control or suppression. Goals, objectives and strategies provide direction for project level planning. Pest populations within the wild river corridor would be considered based upon desired conditions for the area and results of project level planning.

<b>Insects &amp;</b>
Disease
Comment #11

MA 5.15 vs. MA 5.13: There are no vegetation Standards that would separate MA 5.15 from the Timber Production (5.13) MA. Standards should include allowing natural outbreaks of insects and disease to proceed without intervention.

**Response:** Standards and guidelines as well as desired conditions for MA 5.13 and 5.15 have been revised based upon comments received. Within MA 5.15 where compatible with site-specific management objectives and conditions, insects and disease may now occur at levels greater than locally restricted. Integrated pest management direction will be used to set threshold levels and determine treatments where they occur.

Insects &
Disease
Comment #12

Clarification of Locally Restricted: We would suggest re-writing the following statement "Forest insects and diseases will be present but locally restricted." The meaning of this statement is not clear.

**Response:** The statement means if forest insects and diseases expand within or beyond an area, the integrated pest management process will be used to determine if management actions need to be taken. It is unclear from the comment where the statement was found in the draft documents to determine if the wording has been clarified in the final documents.

# Insects & Disease Comment #13

Monitoring 1.c.id1: The monitoring item should be acres of suitable lands with mortality from insect and disease outbreaks.

**Response:** The monitoring items shown are potential and can be revised at the time that monitoring begins.

Insects & Disease
Comment #14

Pesticide Management: In Appendix A, we are puzzled why pesticide management (page A-1) discusses energy management.

**Response:** This was an error. It has been corrected.

#### Lands and Special Uses

# Lands & Special Uses Comment #1

Access Across National Forest to Private and State Lands: Article (3) A. Adequate Access to inholdings; (FLPMA),43 U.S.C. 1701-1782; 16 U.S.C. 3210(a). For there is no access for the reasonable use and enjoyment thereof: Provided, applicable to ingress and egress to or from the national forest system. Article (4) Multiple Use Act of 1955, the Mineral Policy Act of 1970, Title 30>Chapter 12>Sec.524. Article (5) E.O. 13272. Having left all this out of the DEIS makes the planned Management report void and of no use.

The management of NFS lands by the Final Plan should in no way interfere with the rights of other land owners (private, State, etc.) to use, utilize and access their lands whether adjacent to or included within the Forest.

No Alternative should be selected that has an adverse effect on deeded lands. Alternative B is the proper Alternative in this case since it has the potential to positively benefit deeded lands.

Access to state and other public lands is a concern of the state. We have a right to access the lands provided for the state's use pursuant to Wyo. Stat. 36-12-102. This is fundamental to our ability to manage state lands in a healthy, sustainable, and economically sound matter.

In plan D, you leave no buffer zone between the edge of the forest and private land. Therefore, private land will carry the brunt of vehicles when the public tries to gain access to the forest.

If the Forest needs 46 more rights-of-way to provide basic public access to the Forest we can assume that not even basic access is currently being provided. A map should be included to show the 46 ROWs that the Forest needs as part of the Plan implementation. Which 35 are reasonably available in all alternatives and for which alternatives are the remaining 11 are not available? If these ROWs are needed for basic access and some alternatives do not allow them, then these alternatives will not provide basic access to the Forest. Since ROWs are important for access and vary by Alternative, there should be a more complete discussion.

**Response:** Alaska National Interest Lands Conservation Act - ANILCA (December 2, 1980) is listed in the Appendix C of the Revised Plan. The Preface in the Plan describes how the direction in the Plan is integrated with laws such as ANILCA. The Plan does not restate laws. ANILCA states that the Secretary of Agriculture shall provide such access to nonfederally owned land within the boundaries of the National Forest System as the Secretary deems adequate to secure the owner the reasonable use and enjoyment thereof. Regardless of the management area applied to inventoried roadless areas, the provisions of ANILCA remain a requirement in managing access to private inholdings. We are consistent about processing applications for access when we receive them.

Obtaining public access across private land is often a complex issue that the Forest has been actively pursuing through right-of-way acquisitions and land exchanges. Since that time, nearly 77% of the access needed has been acquired, so it is not accurate to conclude basic

access is not provided. Critical access needs still exist and these cases tend to be more complex. The Access section of the FEIS, Chapter 3, Lands provides more details.

# Lands & Special Uses Comment #2

Wilderness/Roadless Designation and Access: Wilderness, recommended Wilderness and restrictive MAs such as 3.5 can have drastic effects on private and non-NFS landowners to the point that use of non-NFS land is dictated by the USFS. This is not appropriate. The Final Plan must respect the rights of private property owners. The Preferred Alternative essentially removes the rights of many property owners by restricting their access and the Plan does so without adequate compensation to the landowner or permission from the land owner.

The effects of special designations such as Wilderness are not discussed as they relate to lands and things like electronic sites. A discussion should be added about the effects of these special designations on lands, their use and changes in access to NFS lands because of these designations.

I am writing because of my concern of your plan to declare the Laramie Peak area as a wilderness area. If this plan succeeds the area will include the SW1/4 NE1/4 Sec. 3, Township 27 North, Range 71 West. I have a water pipe line permit on the above described land and this permit was issued 10/04/1995. My concern is that if the wilderness is approved what will happen to my water pipe line permit? Access is a big problem as the demands to use the Forest increase. For this reason special designations such as Wilderness and recommended for Wilderness, which eliminate access for most Forest visitors, do not allow the flexibility in future management decisions to help maintain the access that is stated as needing to be maintained.

The Forest should maintain and improve access rather than use special designation such as Wilderness, which excludes access.

Loss of access to game and fish personnel to monitor wildlife populations. If the roadless wilderness goes through in my area, I will not allow wheeled access across my private property by game & fish or forest service. If they want to get to the public land, they can walk from the nearest public road.

The contact operator has advised me that there is an existing Snotel site in the Boxelder area that may be on NFS lands. It is either in MA 4.31 area (may be mapped as non-motorized) or on private land next to NFS lands. It must be accessible by snowmobile in the winter for snow measurements. Please check your files for exact location. The legal description is the north line of Section 17, T. 30 N., R. 76 W.

**Response:** The Revised Plan cannot dictate use on private lands. The intermingled land ownership patterns that exists in some areas within the Medicine Bow National creates a complex land management situation where the actions taken by one landowner may affect the neighboring land owner. However, the proposed wilderness designations do not restrict access to the National Forest for the neighboring landowners or the public. Access to these areas will not be changed though motorized access within these areas will be restricted.

Access to private land inholdings within wilderness or proposed wilderness must be accommodated per ANILCA.

Existing special uses, like electronic sites could be accommodated in the management of proposed wilderness, though motorized access and motorized equipment for maintenance would be restricted. No new special uses would be permitted in these areas. The Laramie Peak proposed wilderness had an electronic site within it, but the Laramie Peak proposal was not included in the Revised Plan.

Wilderness does not eliminate existing access, though it does change the mode of access available, for instance non-motorized replacing motorized.

Private landowners may restrict access across their lands if no legal rights of access have been previously granted or reserved to others including the United States.

The Snotel site at Section 17, T.30N, R.76 W may remain accessible by snowmobile across private land or through the special use permit authorization if applicable.

Lands &	State of Wyoming Land Exchange: The plan does not address the
<b>Special Uses</b>	proposed land swap with the State of Wyoming. This needs to be
Comment #3	addressed in the plan.

**Response:** This a site specific project and is not within the scope of the plan. The project is currently being evaluated.

# Lands & Special Uses Comment #4

Land Swaps and Acquisitions: The Preferred Alternative should contain a recommendation/policy of supporting land trades with willing private owners to eliminate the patented claims within the existing wilderness area. (Huston Park).

Make acquisition of inholdings (particularly around Laramie Pk) a budgeting priority. Work with citizen groups (Nature Conservancy for one) and local landowners. Management for this area should also contain a recommendation/policy of supporting a land trade for State Section 36 within this roadless area.

I would like to see a minor change to the Alternative D recommendation: the Plan should contain a recommendation/policy of supporting a land trade for suitable portions of the private Sections on the east side of the Encampment Wilderness in order to protect more of these tributary drainages and result in more manageable borders.

Why shouldn't inholders sell to the public or pay fully for the public property taken or damaged?

In the section on guidelines for real estate - land adjustments, one of the items listed deals with federal ownership of lands with important or unique resources. According to the guideline, these resources can be enhanced by public ownership. We suggest that this is not the case in many instances. A good example would be the contrast between the Agency's ability to manage timber resources versus timber resource management on private lands. We suggest that public ownership of a resource in many instances

does not enhance the resource and may degrade it.

The guidelines of the Final Plan should not advocate or allow the USFS to purchase private land to increase the acres of NFS lands. The Plan should not advocate or require the purchase of inholdings or lands adjacent to the NFS lands. The USFS cannot currently manage what they have on the budget they have so why spend money that does not exist to buy land that the USFS cannot afford to manage.

Real Estate We propose adding a new Standard as follows: "3. Do not increase National Forest acreage unless County Commissioners of the County in which proposed acquisitions are located have given prior concurrence."

**Response:** It is Forest Service policy to attempt to acquire lands that contain resource values identified as important in contributing toward national forest system resource management goals and objectives as stated in the plan. The Forest Service tries to evaluate and balance the overall combination of all resource values and factors.

## Lands & Special Uses Comment #5

Utility Corridors: For some time now there has been a disagreement concerning the right of way for the lower portion of the Laramie Peak power line. The court recently ruled the powerline was abandoned to the landowner and J&L has no authority to use this right of way or line. We have looked at alternate routes, but the U.S. Forest Service has classified the area as "Roadless" except for the corridor presently used by the power line and will not grant a

change in right of way.

The statement, "The boundaries of the cut areas bordering the utility corridor will blend in with the surrounding vegetation." is very, very difficult to accomplish in forested areas. Any blending or feathering of the forested edge leads to increased possibility of blowdown and only meets objectives in the immediate foreground. A cleared line will always be visible at long range and any attempts to "soften" the straight line edges involve extensive thinning of adjacent forest areas which the utility companies have strongly objected to. If the foreground view is the objective, clarify this in the discussion.

**Response:** Proposed changes to the utility corridor in the Laramie Peak area is outside the scope of the Plan Revision.

The Revised Plan provides the following Scenery guideline for MA 8.3 Utility Corridors and Electronic Sites: Locate and design utility corridors and electronic sites to blend with the landscape and be compatible with scenic integrity objectives in adjacent management areas. As a guideline, the extent of thinning would be considered to meet the desired condition (blending in with surrounding vegetation) at the project planning level.

Lands &
<b>Special Uses</b>
Comment #6

Changes to Special Use Permits from Forest Plan Revision: If there is any change in cabin policy (such as mine on Brooklyn Lake) and procedures in the Draft Plan, I would like to be informed.

**Response:** There is no anticipated change to current special use cabin permits from the Forest Plan Revision.

## Livestock Grazing and Big Game Use

Livestock Grazing Comment #1	Amount of Livestock Grazing: A large number of comments focused on a desire to see livestock grazing eliminated from riparian areas, alpine meadows, and other sensitive habitats, particularly those needed by wildlife. Other individuals wanted all livestock grazing to cease.
	Most commenters were in agreement with the proposal to continue livestock grazing at current levels. Other commenters favored increasing the current level of livestock use. Some detailed the benefits, including providing wildlife habitat, they believe occur as a result of livestock grazing.
	Some responses questioned the intent of certain Standards and Guidelines or various statements made in the analysis, and requested clarifications.

**Response:** Livestock grazing is a legitimate and legislatively authorized example of multiple-use on the National Forests. All grazing use by domestic livestock is allowed only under a permit or other authorization that contains provisions designed to manage resources to meet desired conditions. While grazing is an example of historical and valued multiple-use of the public lands, it is certainly not the only use. And while some National Forest System acres may be managed for a single use, usually most acres are able to accommodate a variety of uses and values. The mix of goods, services, values, and uses may vary from allotment to allotment across the Forest.

Discussions in Chapter 3 of the FEIS and DEIS detail the effects of livestock grazing. The discussions attempt to point out the ecosystem benefits, including for riparian areas and big game winter ranges, that are provided on a broader scale by those individuals who hold grazing permits within the Forest boundary.

Specific measures for protecting riparian habitats and other areas are detailed in the Watershed Conservation Practices Handbook. Criteria for maintaining proper functioning condition of riparian areas and wetlands are addressed in detail. The state also has standard Best Management Practices (BMPs) for grazing activities that are also an integral part of establishing allowable and acceptable procedures for livestock grazing on public lands. In addition, the rangelands suitability analysis in the Revision addresses wetlands and fragile soils and may, at times, remove some of those areas from the acres available for use by livestock.

Elimination of grazing in an area with resource conflicts such as sensitive habitats or watershed concerns in a riparian area is one of the ways to potentially resolve a conflict. Altering the management system, changing the forage utilization levels, or modifying the season of use or even the kind of livestock are other ways that may be used to assure conflicts are resolved.

Forest-wide Standards and Guidelines set allowable forage utilization levels for riparian areas and uplands for grazing by livestock as well as grazing and browsing by big game and other wildlife. Site-specific analysis on individual allotments may establish different

requirements in order to meet resource needs on a more localized basis. These types of issues are addressed in the site-specific project analyses for individual grazing allotments. Adherence to standards and guidelines needed to meet vegetation objectives and desired conditions are required as terms and conditions of term grazing permits.

As discussed in Chapter 3 of the FEIS, most of the grazing allotments on the Forest are under some sort of improved management such as rotations or deferred systems of use and movement through pastures.

Also as detailed in the Rangeland Vegetation and Livestock Grazing and Big Game Use sections of Chapter 3, past monitoring efforts indicate that 99% of the areas grazed annually by livestock are in satisfactory management status (see the Glossary definition: "already meeting or moving toward desired condition"). Such a high level of achieving desired conditions is one of the reasons why livestock grazing was not determined to be a significant revision topic and why existing livestock use levels can be continued in the Plan.

Chapter 3 also attempted to portray benefits of livestock use including conducting proper grazing use to meet desired seral vegetative conditions, provide specific habitat needs for wildlife species, refresh big game crucial winter range, cooperate in achieving desired results in prescribed fire restoration efforts, and, in some cases, to assist in the control of certain noxious weed species. See FEIS Chapter 3, Open Space.

Lastly, the definitions for Riparian Area and Water Influence Zone have been added to the Glossary to help clarify statements made in the analysis.

Livestock
Grazing
Comment #2

Monitoring Livestock Use: There was concern expressed about the type or amount of monitoring that occurs or needs to occur.

**Response:** Monitoring is a key element in assuring that Forest-wide S&Gs for forage utilization in riparian areas, uplands, and on key tree and shrub species are met. A considerable amount of vegetation monitoring and management system monitoring occurs at the present time, but it is certainly desirable to increase the levels of monitoring even more. There are a number of scientific, peer-reviewed methods that are available for use; they can vary from the very expensive and extensive to those as simple as photopoint installations. Stubble height monitoring, for example, is based upon hundreds of research examples where certain levels of residual forage are left to assure overall watershed health throughout the year; heights are based upon the species (or mix of species) present, the time of year grazed, and existing/desired vegetative conditions.

# Livestock Grazing Comment #3

Wildlife and Livestock Use: A large number of commenters were concerned that most Management Area prescriptions, including the Standards and Guidelines, either stated or implied that wildlife needs are consistently favored over domestic livestock needs and if there are conflicts between the two that they will be resolved in favor of wildlife needs.

Numerous comments discussed real and perceived conflicts between livestock and big game. Most were concerned with reducing livestock use when big game numbers exceeded herd management objectives. Some believed livestock use should be reduced or eliminated on crucial winter

ranges to provide forage for more big game animals. Several thought that the amount of forage available for both domestic livestock and big game should be decided in the Plan. There appeared to be some confusion as to the discussions regarding forage competition between animals or forage consumption requirements. Some said there's enough forage for all uses, and saw no need to create conflicts that don't exist. One commenter suggested that since the Forest Service could only control livestock numbers and not big game numbers that any conflict between the two should result in grazing reductions. Another commenter suggested that since 99% of all rangelands were in satisfactory management status, and there was no detailed discussion regarding vegetation overuse by big game or livestock reductions that have taken place as a result of such conflicts, that the entire discussion on big game should be removed from the documents.

Response: Chapter 2 of the Plan lists each of the Management Areas. Each of the eight categories of Management Area (MA) prescriptions has a general description of that category at the beginning of that section. In general, MAs in the lower numbers have fewer facilities and more land restrictions while those in the higher numbers have more facilities and fewer restrictions. Put another way, lower categories favor amenity values (wilderness, RNAs, crucial winter range) while higher numbers favor commodity values (diverse rangelands, timber sales, developed campgrounds). Following this scale, MAs with lower numbers place more restrictions on livestock grazing to best meet other values (while still providing for livestock use in most cases). However, in the Draft Plan some of the Category 5 MAs that provide for extensive forest and rangeland vegetation management had language and direction for wildlife that was similar to that stated in Category 3 MAs; those descriptions have been changed in the Final Plan to more accurately describe the Management Area emphasis and the differences between the categories.

Chapter 3 of the FEIS contains a discussion of big game populations. Those populations have continued to steadily increase over the last 20 years in the presence of domestic livestock grazing. That section also discusses positive effects that livestock create for big game habitats. Setting aside areas for exclusive use by wildlife has not been shown to be necessary to maintain or increase big game numbers.

The DEIS (and FEIS) discussed levels and effects of livestock and big game populations, as well as mentioning dietary similarities and differences. Elk and cattle are both grazers (prefer grasses as a major component of their diets) while deer are predominantly browsers (prefer shrubs). S&Gs and allotment management plans (AMPs) specify levels of allowable use by livestock, including on shrubs, and livestock management and administration on crucial winter ranges is designed to prevent overuse on the shrubs needed by wintering big game. Livestock grazing is used to refresh winter ranges, providing more palatable forage for big game; this is often a less expensive method than the use of prescribed fire.

Although the Plan and FEIS summarize both past and present livestock grazing use, the number of permitted AUMs, as well as consideration for wildlife habitat needs, is evaluated at the site-specific allotment level during the development of the AMP's. The statement concerning rangeland management status has been corrected in the FEIS, based on the monitoring information cited, to say that 99% of the rangelands used by domestic livestock are in satisfactory management status (already meeting or moving toward desired vegetative

conditions). There are other areas – both inside and outside active grazing allotments – where utilization by big game animals may not be providing for satisfactory management status. A discussion of these areas and conditions has been added to the FEIS as well as detailing that there have been locations where competition between big game (predominantly elk) and livestock has resulted in reductions in livestock use. If improper livestock management is resulting in undesirable forage utilization levels, management of livestock will be changed, including a possible reduction in AUMs if that is needed to remedy the situation. If livestock are meeting requirements, and big game use is resulting in undesirable forage utilization levels, livestock will not be reduced. Management attempts to reduce or eliminate conflicts, and provide for the forage needs of both.

Wyoming Game and Fish Department and Forest Service personnel cooperate in managing big game herds; it is an integral partnership where the former has responsibility for management of populations and the latter is responsible for management of habitat. Communication is key in trying to manage numbers to meet both hunting demand and desired habitat conditions; the two work together to establish herd management objectives, and WG&F uses license numbers and hunting seasons to manage the herds at desired levels for the habitat. Public meetings are held regarding both hunting seasons/licenses and when a change in management objectives is proposed; grazing permittees and other private landowners have the opportunity to attend those meetings and to provide input, and are encouraged to do so.

Livestock
Grazing
Comment #4

Wilderness and Management Area Emphasis: Effects on Permittee Costs Many comments centered on the increased costs of conducting grazing operations in wilderness areas and wilderness study areas, and several voiced a fear of being forced out of business if additional wilderness areas were created. Others expressed concern with other Management Area designations as well and the resulting increased costs of doing business.

Response: Grazing by domestic livestock is a legitimate multiple-use in wilderness areas, providing that livestock grazing was permitted in that area prior to its proclamation as wilderness. The Wilderness Act of 1964 was passed subject to that caveat; it was reaffirmed by the U.S. Congress in the Congressional Grazing Guidelines of 1979. However, livestock management operations are often carried out differently in wilderness areas, such as reduced/modified access to manage livestock and improvements, or fences being reconstructed and maintained with native materials. And, generally speaking, grazing levels will not be permitted to increase above the levels present at the time of proclamation unless it is needed strictly to manage the area for its wilderness attributes (managing for desired native vegetation). With these considerations, grazing will be continued even if wilderness study areas are later congressionally proclaimed on the Forest. It is not the Forest Service's intent to attempt to prevent the right of ingress and egress along established roads by landowners with private inholdings.

A Forest-wide Standard has been added to the Plan that provides for livestock permittees to be allowed access to their grazing allotments, even if other restrictions or closures are in effect, in order to carry out proper land management according to the terms and conditions specified in the grazing permit and allotment management plan. The same holds true for other permittees as well as landowners. There is no intent, or ability, on the part of the Forest Service to force or enforce a Management Area designation, with its management requirements, on private landowners whose deeded lands happen to fall within the

boundaries of the Management Area specifically designed for management of National Forest System lands.

Very few Management Areas in the Plan, including RNAs or SIAs, specifically exclude livestock use, but management plans for these areas will often specify that grazing has to be compatible with the intent for why the area was created – such as to maintain a certain plant community type or maintaining the historic/geologic attributes of the area.

The intent of the Plan is to continue current levels of permitted livestock grazing use. However, it is possible that the costs to producers of grazing livestock on National Forest System lands will be increased in order that grazing remains compatible with the constantly-changing values and uses that are requested by the public on their public lands; that has sometimes been the case in the past. Those increased operating costs may sometimes reduce the profit margin for a ranch to the point that it is no longer possible to operate on public lands.

Livestock
Grazing
Comment #5

Effects of Permitted Grazing on Adjacent Private Land and Communities: A few commenters said the discussion of the effects on associated private lands was wordy and difficult to follow, the assumptions used were faulty, or the discussion should be eliminated altogether. Other commenters voiced approval for inclusion of this discussion in the analysis. Some expressed concern with meeting crucial big game winter range needs on private lands if grazing on the Forest was reduced or eliminated.

Some comments stated that the economic benefits of the ranching industry to the Forest and affected communities were not adequately considered.

Another suggested education efforts be conducted to explain the vital interdependence of private and public lands.

**Response:** The discussion in Chapter 3 of the FEIS concerning effects on the private lands associated with the Forest is necessary to evaluate both indirect and cumulative effects of management decisions carried out on National Forest System lands. What happens on the National Forest regarding permitted grazing use on an allotment affects the permittee's private and leased lands down below – and vice versa; management systems must be approached from a holistic point of view. For example, since the 95 grazing permittees on the Forest collectively provide for nearly seven times as much big game winter range as does the Forest, a change in management of an allotment on the Forest needs to at least consider the resultant changes that may occur on the lands owned by the permittee that provide quality big game winter range.

The assumptions used to analyze grazing operations and open space on lands owned by grazing permittees associated with the Forest have been modified and clarified somewhat, but their use as a basic comparison analysis tool has been retained. While it may have been the basic intent of Alternative F that reducing AUMs across the Forest by 25% would result in every permit being reduced by 25% and no permit being lost, there is no guarantee that, conducted on an allotment-by-allotment basis, the reductions could be implemented in such a straight-line fashion, nor is there any guarantee that every grazing permittee's operation can tolerate a 25% reduction in numbers and still keep each of them in business. The assumptions used for the analysis simply evaluate the possibility of what could result on associated private lands.

The economics of livestock grazing operations, including costs of doing business, jobs provided, value of private lands leased, etc. are discussed in detail in the Livestock Suitability Determination in Appendix B of the FEIS. It is important to note that many figures are compiled on a county (or counties) basis, but need to be recognized on the basis of application to the 95 operators holding Forest Service grazing permits. The strategy in Chapter 1 of the Plan to "Continue to satisfy the demand for livestock products through environmentally responsible grazing" is taken directly from the Government Performance and Results Act.

The idea to provide education efforts or interpretive exhibits as to the benefits of livestock grazing and the vital interdependence of public and private lands is a good one, and should be pursued. We encourage you to contact your local Conservation District board members, county extension agent, university representative, or others that could be of assistance. Perhaps some valuable partnerships could be developed here in a common goal and with numerous beneficial outcomes.

## Livestock Grazing Comment #6

AUM Levels: There was a conflict in stated AUM levels by alternative between the DEIS and the Executive Summary. It was not clear if AUMs – or allotments – were being maintained at current levels. There needs to be an explanation of how head-months (HMs) are converted to AUMs.

**Response:** The Draft Executive Summary was in error in showing that AUMs varied between Alternatives A, B, C, D, and E (but the numbers in the DEIS were displayed correctly). The current levels of grazing use (Alternative A) are maintained in Alternatives B-E. As analyzed for the DEIS, Alternative F proposed a 25% reduction in AUMs and ending sheep grazing on the Snowy Range (vacating seven allotments). Alternative G proposed a 90% reduction in livestock grazing over 75% of the allotments, and essentially proposed to eliminate grazing use over the long run. Alternative H proposed a 10% increase in grazing use by domestic livestock and a restocking of existing vacant allotments. The Draft Plan proposed to continue grazing at current levels.

One head-month of grazing use is one head of livestock grazed for one month. When converting to AUMs (animal-unit-months), one mature cow for a month is equal to one AUM. If the cow also has a calf at-side (as most permitted livestock on the Medicine Bow National Forest do), a conversion ratio of 1.32 is used to account for the cow and calf. Accordingly, 56,000 head-months of cattle use converts to about 74,000 AUMs of cattle use (56,000 HMs times 1.32 HMs/AUM). Sheep use is generally considered at the ratio of five sheep to one cow (a conversion rate of 0.2 HMs/AUM for bands of dry ewes or 0.3 if the ewes have lambs at-side); 42,000 HMs of sheep use thus converts to 12,600 AUMs of use by sheep for statistical purposes (42,000 times 0.3).

# Livestock Grazing Comment #7

Inadequate Analysis of the Effects of Livestock Use: There is concern that the Plan did not analyze a reasonable range of alternatives regarding livestock grazing use. Others questioned why livestock grazing was not a significant revision topic. The Forest Service has failed to fully address grazing effects as required in 36 CFR 219.20 in light of resource degradation and user conflicts created by livestock and that many citizens have voiced concerns over detrimental effects of grazing.

**Response:** Forest Plan revision topics were developed as a result of extensive public

involvement including meetings, open houses, and newsletters. Revision topics are subjects in which resource conditions, technical knowledge, or public perception of resource management has created a potential need for change.

The Forest Planning Interdisciplinary Team determined on two occasions during the 1990s that livestock grazing did not warrant consideration as a major revision topic. As displayed in the DEIS and the FEIS, monitoring data over the last decade show that 99% of the rangeland acres on the Forest grazed by domestic livestock are in satisfactory management status (moving toward or already meeting desired vegetative conditions). Based upon that information, the Team reaffirmed its earlier decisions for the Revision effort. However, the Team also decided to analyze all proposed alternatives in detail for livestock grazing in the DEIS. Accordingly, in addition to Alternatives A-F, the Livestock Grazing and Big Game Use section analyzed Alternatives G and H in full – establishing a range of alternatives that varied from an increase in livestock use of 10% above current levels to a reduction of 90% from existing use (and phasing out the remaining 10% of use over time).

An additional review of 36 CFR 219.2 confirms that the capability and suitability determination for grazing and browsing animals has been provided, and the Forest Service believes that the effects of livestock grazing have been addressed. A wide range of alternatives were analyzed in full. Past monitoring shows that 99% of rangeland acres grazed by domestic livestock are meeting desired vegetative conditions and are conforming to Forest Plan requirements. S&Gs are in place to prevent degradation of resources from livestock and, with allotment monitoring and administration, resolve or prevent user conflicts.

Livestock Grazing Comment #8	Managing Vegetation to Achieve Mid to Late Seral Objectives: Several commenters expressed concern that the Forest was trying to manage all vegetation to achieve mid- to late-seral status, regardless of the
	Management Area prescription. One individual requested explanation and definitions for various management systems, and another requested that the Forest Service consider the use of grassbanks to meet resource needs.

**Response:** The Draft Plan proposed managing all vegetation, regardless of Management Area prescription, to achieve a mid- to late-seral status across the Forest. This desired condition remains unchanged in the Management Areas that provide for more pristine values – wilderness areas, RNAs, SIAs, and non-motorized backcountry. However, most of the Management Areas that focus on managing vegetation for certain desired conditions – big game winter range, aspen, general forests, and general rangelands, for example – have been changed to manage for a mixture of vegetation in all seral stages across the landscape. This change more accurately reflects HRV across the landscape – and better maintains overall wildlife habitat needs since different species require different niches across all seral stages.

The Forest Service has been making use of "grassbanks" to provide management flexibility for a relatively long time – but we call them forage reserves because "grassbanks" is a copyrighted term. Forage reserves include vacant allotments and swing pastures, and sometimes rangelands outside allotments; they are areas not planned for annual scheduled grazing use that can be used on an incidental basis for a number of reasons. A brief discussion of forage reserves has been included in the final Plan and the definition included in the Glossary.

Season-long grazing refers to a situation when cattle are placed in a pasture and remain there for most or all of the growing season; plants have a chance of being grazed more than once or possibly repeatedly because livestock do not move to another unit. Most allotments on the Forest are no longer season-long – they have had some type of improved management implemented on the area (a rotation system). Deferred rotation grazing is when cattle are moved (rotated) between two or more pastures – and entry is "deferred" or delayed in one or more of the pastures to provide for extended plant growth or even seed-set prior to grazing. Rest rotation is very similar to deferred rotation except that one of the pastures in the rotation sequence is completely rested from grazing each year (and the rested pasture is usually a different pasture each year). These grazing systems are used at the allotment level in order to help meet the desired vegetative conditions, and additional discussion has not been provided at the Forest Plan level.

# Livestock Grazing Comment #9

Management Area Emphasis and Forestwide Standards & Guidelines: Commenters were concerned that so many Management Areas limit livestock use or place unnecessary restrictions on livestock grazing, and with the anti-grazing wording contained in many of the Management Area descriptions and S&Gs. Others requested changes in the selections of Management Areas in the Final Plan, especially for the Sierra Madre area. Most of the responses were concerned with the requirements set forth in the Forest-wide Standards and Guidelines. Most, also, believed that the forage utilization requirements were too restrictive toward livestock management.

**Response:** The mixture of Management Areas varies by each of the Alternatives, so there may be changes in which Management Areas are applied on all Units, including the Sierra Madre, in the Final Plan.

It may be helpful to refer to the Table at the beginning of Chapter 2 of the Plan. It summarizes how each Management Area affects grazing. It is anticipated that very few Management Areas across the Forest will require changes that will result in losses of grazing AUMs. Coupled with the changes in MA wording -- such as managing for a mixture of seral stages across the landscape instead of managing all lands for mid- to late-seral conditions – we hope to have eliminated some of the unnecessary restrictions on livestock use in the final documents.

Chapter 1 of the Plan states that Goals are broad statements the Forest strives to achieve, and Objectives are measurable steps to accomplish Goals. Strategies are courses of action that contribute toward reaching desired conditions or goals. The same Chapter later states that Standards are actions that must be followed to achieve Forest Goals, while Guidelines are advisable courses of action to follow to achieve Goals. Many Standards contain measurable items, but many do not; both types are appropriate.

The forage utilization guidelines are based on dozens of comprehensive scientific references and are established to manage for overall watershed health; providing for certain levels of residual forage is very important in meeting many of those factors. They are not new, having been in place and used throughout the life of the 1985 Forest Plan. Key areas to be measured are established by rangeland vegetation managers, and grazing permittees are knowledgeable of, and involved in, such efforts. Riparian area measurements are often taken on sedge species on the greenline – the area immediately adjacent to the stream; they

may be taken on key individual species or across a plant community type, depending upon many factors. Many permittees assist rangeland specialists in these efforts as well. Managing to leave prescribed levels of residual forage is easier to monitor on riparian areas than to measure the percentage of forage that can be removed.

The forage utilization guidelines, both for riparian areas and uplands, are designed to continue the upward trend in rangeland vegetation that is prevalent across the Forest; their implementation has been a main reason why 99 percent of those rangelands are in satisfactory management status. They may appear to be a "one size fits all" requirement, but remember that they are Guidelines and they can be modified at the individual allotment or pasture level through the analysis process if doing so allows for meeting the desired vegetation conditions on the ground.

Livestock
Grazing
Comment #10

Bighorn Sheep and Domestic Sheep: Several commenters expressed a concern over conflicts between domestic and bighorn sheep. Some wanted sheep allotments closed in order to resolve possible conflicts. A desire to resolve concerns while still meeting the needs of the domestic sheep industry was also expressed, and one commenter said that maintaining the viability of the domestic sheep industry on the Sierra Madres should be a management emphasis.

**Response:** Standards and Guidelines (FEIS pp 3-64) have been incorporated that address the potential conflicts between domestic sheep and bighorns. They are applied to Geographic Areas that contain crucial bighorn sheep habitat as well as to those immediately adjacent to those habitats. The S&Gs also focus on needs to conduct vegetative treatments to improve habitat.

Herd management emphasis takes into account the priority management areas established by the Wyoming Game and Fish Department in their state-wide plan for bighorn sheep. The Laramie Peak herd is their highest priority for management, and the Douglas Creek and Encampment River herds are low-priority herds for management both at the Forest level and at the State level. An in-depth discussion regarding all three herds is found in Chapter 3 of the FEIS. We have placed emphasis on Laramie Peak and the Snowy Range for management of bighorn sheep habitat over the needs of domestic sheep. Current management will continue for both domestic sheep and bighorns on the Sierra Madre; active sheep allotments will be continued as at present.

It should be noted that domestic sheep have been running adjacent to, and intermingled with, all three of these herds since the time they were re-introduced nearly 30 years ago – both on NFS and private lands. To date, there have been no records of disease transmission to the bighorns or of herd die-offs that might have resulted from such a transmission. At this time, domestic sheep run on deeded lands that are within as well as adjacent to critical range for both the Douglas Creek and Encampment River herds. Application of the Standards and Guidelines to National Forest System lands will prevent contact between the two species on Forest but cannot prevent constant and recurring contact on adjacent lands, nor do they prevent possible contact on Laramie Peak if private landowners choose to graze sheep on adjacent or intermingled deeded lands.

Appendix L

Livestock
Grazing
Comment #11

Benefits of Grazing in Reducing Wildfires and Managing Vegetation: Comments focused on recognizing the positive benefits that livestock grazing provides to reducing wildfires and managing vegetation to achieve desired conditions.

**Response:** The Rangeland Vegetation section and the Livestock Grazing and Big Game Use section in Chapter 3 of the FEIS discuss the beneficial effects to wildland fire control of livestock grazing to possible reduction of wildfire frequency and/or intensity, as well as how livestock are managed to assist in meeting vegetation needs prior to and following prescribed fire treatments. That section also discusses the interrelationship between timber harvest and forage production for livestock as well as for big game animals. There is also a discussion regarding conifer encroachment into native meadows and rangelands. The new Plan places more focus on actively managing conifer encroachment to maintain native meadows and desired vegetative conditions as well as proactively managing aspen stands to guarantee rejuvenation of those stands.

## Livestock Grazing Comment #12

Rangeland Suitability: The commenter stated that the USFS failed to conduct an adequate analysis of grazing suitability and alternative uses foregone (36 C.F.R. § 219.3), failed to reduce the rangeland suitable acres as required to protect wildlife and other environmental values, thus violating NFMA, and failed to designate all riparian areas (or at least all those in less than optimal condition or poor condition) as unsuitable rangeland.

**Response:** The Analysis of Rangeland Capability and Suitability for Livestock Grazing is found in Appendix B of the FEIS, and is completed according to the process delineated in the R-2 Planning Desk Guide. A discussion of alternative uses foregone is included near the end of that Analysis. The capability of National Forest System lands to be grazed and browsed and the suitability of those lands for grazing and browsing is determined in that Analysis, as is required and defined in 36 CFR 219. Appendix B describes the method used to determine suitability.

The definition of capability in 36 CFR 219.3 specifically states that using an assumed set of management practices and given levels of management intensities is appropriate in making that determination. The delineation of Management Areas across the Forest assists in defining management practices and intensities, determines the mix of uses and values that are emphasized in each type, and may determine that additional areas are not suitable for use by domestic livestock in order to provide for that mix. The evaluation of the different Alternatives, and the mixture of Management Areas selected in each in order to meet its intent, is an evaluation of alternative uses favored and alternative uses foregone. In addition, the effects analyses (direct and indirect, and cumulative) for individual resources, designations, and elements throughout Chapter 3 of the FEIS further discuss the interactions with other resources and elements. The use of Standards and Guidelines at the Forest-wide level, the Geographic Area level, and the Management Area level complete that evaluation. It is appropriate that S&Gs are applied to management practices and management intensities in order to assure we are meeting or moving toward desired conditions.

Livestock	Recreation and Livestock Use: Commenters focused on the conflicts
Grazing	between recreation and grazing, and some questioned how and why the
Comment #13	grazing permittee is the one responsible for resolving the conflicts.
	Questions were raised as to access to public lands and penalties for private
	landowners who prevent access. Grazing permittees should be required to
	provide public access across their private lands for the general public.

**Response:** Guidelines to reduce conflicts between grazing animals and recreation users would seldom result in reduced stocking rates because those conflicts are generally in a very localized area. Examples of methods that could be used to reduce the conflict would be changing season of use slightly to have livestock away from popular dispersed camping areas during peak use periods or perhaps fencing small areas.

It is important to note that recreation use on the National Forest does sometimes increase conflicts and operating expenses for livestock operators; grazing, as well, can create positive and negative situations with recreation users. Such situations sometimes occur in the general course of multiple-use of public lands, and management efforts focus on reducing or eliminating conflicts when they arise. The costs of doing business on public lands – dealing with such things as gates being left open that allow livestock to drift to the wrong areas, for example – were recognized in the Congressional grazing fee formula, and is one of the reasons why permittees pay a lower fee to graze on public lands (and pay higher operating costs to deal with some of those conflicts) than they pay for grazing on deeded lands where multiple use may not necessarily be a high priority.

Management Areas with lower numbers, such as MA 4.3, may place more restrictions on livestock grazing to best meet other values (while still providing for livestock use in most cases), while MAs with high numbers emphasize commodity uses and generally favor livestock use to meet desired conditions and generally contain fewer restrictions.

Public land access across private land is a complicated issue that varies from area to area, especially on Forest units with large acreages of intermingled private lands (like Laramie Peak). If road rights-of-way or public land easements do not exist, the private landowner(s) may legally deny access across their deeded lands to the National Forest. Please refer to discussions and effects analyses in Recreation and Transportation sections in Chapter 3 of the FEIS for more in-depth discussions of the issue.

Livestock	Predator Control: Comments were focused on predator control activities
Grazing	to benefit wildlife and livestock interests on public lands.
Comment #14	_

**Response:** Animal damage management (ADM) on NFS lands is carried out under the provisions of an MOU with APHIS, who also conducts the NEPA efforts with input from the Forest Service. Annual coordination meetings are held and treatment reports are submitted. Most control efforts occur on active sheep allotments as per approved management methods and actions carried out by ADM trappers.

The Forest Service participates on The Wyoming Animal Damage Management Board as an ex-officio member. The Board is chaired jointly by the Director of the Game and Fish Department and the Director of the Department of Agriculture – have recently been providing funding and cooperating in several studies including effects of predators and

predator control on several wildlife species including sage grouse, antelope, and mule deer.

Livestock	Compensation for Loss of AUMs: Gra	zing permittees should be
Grazing	compensated for loss of AUMs.	
Comment #15		

**Response:** By policy and regulation, permittee compensation is only provided when that individual's investment in construction of rangeland improvements is lost because the National Forest System lands are devoted to a higher purpose – such as being withdrawn for a military installation. Compensation is not provided for loss of AUMs due to failure to follow permit and AMP terms and conditions or for a change in land management brought about by a focus on a different mix of multiple use values.

## **Minerals**

Minerals Comment #1	Locatable Minerals: This plan needs to have the term "Locatable Minerals" included in the definition and then resubmitted to the public for comment on these changes.
	Please alter the current language of the plan to include a concrete definition of the term contained there in "Locatable Minerals." This lacking definition left some concern for the status of any such activities like gold panning and recreational mineral exploration, particularly within boundaries of wilderness or special use areas.

**Response:** Locatable minerals has been defined in the glossary of the FEIS. As for mining activities within wilderness, "No person shall have any right or interest in or to any mineral deposits which may be discovered through prospecting or other information-gathering activity after the legal date on which the United States mining laws cease to apply to the specific wilderness." (36 CFR 228.15).

Minerals Comment #2	Discovery/Development of Minerals: Mr. Dan Hausel of the Wyoming Geologic Survey, led a very comprehensive and exhaustive study of the complete area under consideration and provided a comprehensive report documenting the existence of valuable mineral resources, including gold and platinum, in the area. The USFS completely ignored the report on behalf of the State and doesn't even mention it in their proposal. We would like to know why? Is it because the USFS does not want to hear the comments by the people who really count?
	Only two areas on the U.S. have significant potential for the discovery and development of platinum group metals-Stillwater, Montana, and the Medicine Bow National Forest.

**Response:** Mr. Hausel's study was mentioned on two occasions in the FEIS, Chapter 3, Minerals section, Affected Environment. We acknowledged that a high potential for discovery exists. We do not agree that a high potential for development exists. Technological and scientific advances in the industry may change that. Core drilling for samples occurs each year. No one has approached the Forest with "discovery", nor have they approached the Forest with a more comprehensive and defined sampling program. "Discovery" or development requests will be analyzed on a site specific basis as defined in

the minerals sections of Appendix A, B, and C of the FEIS.

Minerals Comment #3	Mining on Public Lands: Some commenters were against oil, gas, and mining exploration and drilling in national and state parks and forests,
	protected and scenic areas, while others support limited minerals exploration in the Medicine Bow Routt Forest.

**Response:** Mining has been a part of the Forest Service Multiple Use management direction, and is addressed through statutory direction issued by Congress.

Minerals	Small Scale Gold Mining: Minerals: Standard 1. Will this standard have
Comment #4	an impact on the existing regulations and policies for small scale gold
	mining? AKA Panning, sluicing, and suction dredging? Specifically, I am
	curious about the Douglas Creek and North Savery geographic areas.

**Response:** There will not be any additional impacts anticipated to "small scale gold mining". The U.S. Army Corp of Engineers has determined that a 404 permit is not necessary for the use of a suction dredge with an intake hose that is 4 inches or less in diameter. The Wyoming Department of Environmental Quality (DEQ) issues a letter of authorization for this activity. The Medicine Bow National Forest accepts these letters as "Notice of Intent". Site visits and equipment inspections are performed over the course of the season to ensure compliance with regulations. Suction dredging is prohibited in Class 1 streams, and those containing Colorado Cutthroat trout.

Minerals Comment #5	Recreational Mining: Given environmental catastrophes caused by heap-leach mining, we believe the Revised Plan should prohibit such mining on the MBNF. Finally, the Revised Plan should not allow mining claims to be staked for "recreational" mining activities. Under mining law, claims can only be staked for commercially valuable minerals, and recreational mining is, by definition, not done as a commercial venture.
	The term "recreational" miner is not a proper term for mining & prospecting.

**Response:** Any heap-leach mining activities that may be proposed in the future would be evaluated at the project level and would comply with the Forestwide Standards and Guidelines found in Chapter 2, Physical section.

The Forest Service does not recognize "recreational mining". All locatable mineral activities are guided by the 1872 mining law. "Recreational mining" is a term recognized and regulated by all states west of the Mississippi River. While the activity is perceived to be recreational in nature, the Forest Service strives to ensure compliance under the 1872 mining law. The State DEQ will not issue letters of authorization in these areas.

Minerals Comment #6	Forest-wide Standards & Guidelines: (Guidelines) 1-14 #3 needs to be more specific so as not to exclude mining, prospecting and exploring for
	minerals and gems.

Response: 1-14 #3 is specific to mineral materials as defined in the FEIS glossary.

Minerals	Increase Stay Limit: The day limit on the forest needs to take into account
Comment #7	being able to stay on the forest while mining & prospecting through the
	dredging season and or mining & exploring for minerals and gems.

**Response:** Under the 1872 mining law, this would be addressed in an operation plan and most likely be addressed as part of the bonded activity. If an operating plan is not submitted, all activities are subject to general forest rule and regulations.

Minerals	Noncommercial vs. Commercial Paleontological Resources Guideline 2.:
Comment #8	Delete "noncommercial". There's no reason to exclude "commercial" interests if they are capable of credible, scientific work.
	interests if they are capable of credible, scientific work.

**Response:** If commercial interests are providing scientific results and public benefit they typically fit the description of scientific institution and may be included.

# Minerals Comment #9

Protecting Other Forest Resources: The Revised Forest Plan must include a comprehensive policy replete with specific standards and guidelines that protect other forest resources if minerals development is to occur.

The proposed plan does not include special protections for riparian areas under mineral development. The deposition of mineral material, driving of heavy equipment, stockpiling of topsoil, processing or milling of mineral material, and excavation activities associated with mineral extraction should be prohibited within riparian areas. In addition, specific reclamation standards are needed guaranteeing that mined areas will be returned to a natural topographic and vegetative state following mine closure, and that adequate bonds are posted by the operator to cover all reclamation costs.

Withdrawing -- from mining, mineral exploration, and oil and gas leasing - all areas having high ecological, scenic, recreational, scientific, or other values

We believe the Plan should withdraw the following MBNF lands from further mineral exploration, claim-staking, leasing, and development, and should only allow nonmotorized access on existing claims: all areas of special value identified above, including roadless areas, potential Wilderness, potential or designated RNAs, Wild and Scenic Rivers, scenic areas, and Special Interest Areas; all ecologically important areas, including Colorado River Cutthroat Trout watersheds, Boreal Toad habitat, old growth reserves, core areas and corridors, Preble's Meadow Jumping Mouse habitat, and Special Botanical Areas; all watersheds containing (or feeding into) Class 1 waters, impaired streams, or exhibiting "a high degree of physical instability or water quality deficiencies which affect watershed health and biological diversity characteristics" (as identified by von Ahlefeldt and Speas, 1996).

**Response:** Mining has been a part of the Forest Service Multiple Use management direction, and is addressed through statutory direction issued by Congress.

The Forest Service has a statutory obligation under 36 CFR 228.8 "Requirements for environmental protection" for protection and reclamation. Withdrawals should be requested

only in circumstances where there are sensitive, unique surface resources that cannot be adequately protected under current public laws and federal regulations. There should be relatively few requests for withdrawals, because the land and surface resources ordinarily can be protected by proper provisions in the Plans of Operations.

Appendix E Modifications: In Appendix E Modifications: should come **Minerals** Comment #10 from congress not from authorizing officer, or special interest groups.

**Response:** As stated in the Forest Plan Appendix E, "Waivers, exceptions, or modifications will be considered in accordance with the requirements of 36 CFR 228.104. Requests for waiver, exemption or modification will be considered in the environmental analysis (NEPA compliance) for an Application for Permit to Drill (APD). The Deciding Officer will make a determination based on this information." National Environmental Policy Act (NEPA) compliance includes public involvement and disclosure of impacts to soils, water, wildlife and other resources.

Minerals	Why is Oil & Gas Leasing a Major Revision Topic but Not Mineral
Comment #11	Development: Why does the USFS believe "oil & gas leasing" shou
	a major revision topic but not hardrock mineral development? There
	greater interest in (and potential impacts from) mining than oil & gas
	leasing on the MBNF. In fact, a February 27, 2000 article in the Cas
	Star Tribune reported that rising platinum prices may lead to a minin
	"rugh" on the MDNE (a.g. in the Lake Owen and Mullen Creek greek

gas leasing" should be elopment? There is far ing than oil & gas article in the Casper y lead to a mining 'rush" on the MBNF (e.g., in the Lake Owen and Mullen Creek areas). The article also said BLM "has received many new filings for mineral claims near Lake Owen and Rob Roy Reservoir since September." This ignores the numerous gold and silver mining claims across the Forest. The bottom line is that there are no good reasons why mining should be given less attention in the revision process than the other revision topics.

**Response:** Forest Plan revision topics were developed as a result of numerous public involvement including meetings, open houses, and newsletters. Revision topics are subjects in which resource conditions, technical knowledge, or public perception of resource management has created a potential need for change.

While we agree there is a high potential for discovery on the MBNF, the Forest Service does not feel there is a high potential for mineral development as compared to the current potential for oil and gas development. The interest rises with the price of platinum and gold, and it occasionally will lead to increased exploration activities. The exploration has not led to interest in development. The potential does exist, but present technology and economics of development are not conducive to proposals at this time.

# **Non-Native Species**

Species Comment #1 po	mpacts of Roads: Commenters wanted to see as many roads closed as possible in order to reduce the rate of spread of noxious weeds; one also noted that the total miles of roads maintained annually (rather than a percentage of system roads) should be the basis for Alternative comparison.
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**Response:** Chapter 3 of the FEIS, as noted, discusses effects of roads and road maintenance on the possible spread of noxious weeds. The effects analysis in this section has been

changed in response to comments, to compare Alternatives according to the miles of roads maintained rather than the percentage, according to the figures for Road Maintenance displayed in the Supplemental Table 2 in Chapter 2 of the FEIS.

Non-Native	Off-Road Vehicle Restriction: Commenters wanted the Forest to enforce
Species	off-road restrictions, monitor the potential spread of noxious weeds, and
Comment #2	give thought to backcountry motorized use restrictions to reduce the
	potential for spread of invasive plant species.

**Response:** The Forest Service does enforce off-road vehicle restrictions, although it is not possible to be everywhere at all times to stop infractions; the general public can always help by reporting such infractions to a local Forest Service office.

There has been little discussion of general restrictions against all vehicles using Forest roads in order to curtail invasive species spread. There are cases in northeastern Oregon, for example, where, cooperating with the Counties, "checkpoints" are established at major access points to the National Forest – specifically, to check hunters to be sure they are carrying certified weed-free hay. The magnitude of such an effort for all Forest vehicle traffic is nearly insurmountable, therefore our focus at this point has been to educate users of the National Forest of the dangers to native ecosystems from noxious and invasive species and to enlist their support and cooperation in preventing the spread of those species.

Non-Native Species	Effectiveness of Management: Why does the analysis appear to show that NFS lands were not as well managed against the spread of noxious weeds
Comment #3	as were private lands; it was also questioned why Alternatives F and G were quite different with respect to spread of weeds.

**Response:** The analysis did not state, nor did it intend to imply, that management of noxious weed species is poorer on NFS lands than on private. Its intent was to discuss that weeds can spread in all directions; for example, vehicles can carry weed seed and plant parts up onto the Forest, while seeds from a species such as Canada thistle can be transported downstream in spring runoff and infest private land irrigation ditches.

At the end of this section in Chapter 3 of the DEIS, the Cumulative Effects section stated that Alternative G exhibited the greatest possibility for spread of noxious weeds, largely because of its focus on allowing wildfires to burn over large acreages when they occur, which has the tendency to produce bare soil conditions that are prime seedbeds for invasive species. Conversely, Alternative F was estimated to have the lowest weed expansion rates because of its substantial reduction in commodity outputs as well as motorized recreation opportunities, and a large increase in special interest areas with reduced human activity and use.

Non-Native Species	Livestock Grazing: The Final Plan should maintain current grazing acres and utilize grazing as a method of noxious weed control. In areas where
Comment #4	noxious weeds are a problem, goats should be utilized as a management method as discussed.

**Response:** The Final Plan maintains current levels of livestock grazing use. As mentioned in the analysis in Chapter 3 of the FEIS, the movements of both livestock and big game are just two of the ways in which noxious weeds can be spread. Livestock grazing is also one of the ways noxious weeds can be controlled; for example, both cattle and horses will seek out

Canada thistle (as well as other thistles) in the flowering stage and thus prevent the plants from going to seed. Goats can be and are utilized as an excellent control method for such plants as leafy spurge.

Non-Native	Management Area Designation: No more areas should be recommended
Species	for wilderness because the public "loves these areas to death" and simply
Comment #5	designating them as primitive backcountry areas would result in lower
	noxious weed infestations.

**Response:** Based upon the discussion in several areas of this section of Chapter 3 of the FEIS, the most common type of use that spreads noxious weeds is public use along the extensive road and trail system across the Forest. If the commenter's "primitive backcountry designations" includes vehicle use, the spread of weeds would likely be greater in these backcountry areas than in wilderness areas and areas proposed for wilderness; if the designation does not include vehicular traffic, the rate of spread would likely be very similar between the two.

Non-Native	Unauthorized Use: The discussion on motorized recreation use infers that
Species	legal use leads to unauthorized use or that the Alternatives allow for
Comment #6	unauthorized use.

**Response:** The discussion FEIS Chapter 3, Biological Diversity, Cumulative Effects from Land Uses, simply states that unauthorized off-road travel has a high potential to spread weeds into new areas. The analysis in the Rangeland Vegetation section of the FEIS, Chapter 3 states that unauthorized off-road vehicle travel moves rangeland vegetation to an earlier seral condition. Neither discussion means, or meant to imply, that all motorized use is unauthorized use or that there is any relationship between recreation users that adhere to travel restrictions and those that do not. Travel off designated roads can begin to establish new two-tracks and travelways; if that occurs, it can reduce rangeland vegetation in the new travelway and can create new areas of bare soil that are conducive to the establishment of noxious weed species.

Non-Native	Motorized Recreation: The document is biased against motorized
Species	recreation in stating that such use is a major source of the spread of
Comment #7	noxious weeds.

**Response:** Both the discussion on Biodiversity (DEIS 3-137) and the section on Noxious, Invasive, and Non-Native Species in Chapter 3, FEIS detail the effects that recreational activities have on the spread of noxious weeds. Reference is made as to conditions that also exist on the White River National Forest. Our current efforts regarding management of noxious weeds focus on education, prevention, and control. There is no doubt that recreation users (among others) that are aware of the impact of noxious weeds and non-native species do a great service in preventing further infestations, just as there is little doubt that Forest visitors that are unaware of noxious weed presence and the dangers they present contribute to their spread. The discussions in these two sections of the FEIS dedicate considerable discussions to other types of uses that also can and do spread noxious weeds, as you mention.

Non-Native	Effects on Native Species: The effects of invasive species and noxious
Species	weeds on native species was not adequately addressed and the Forest is
Comment #8	not aggressive enough in the "war on weeds."

**Response:** Goal 1 of the Plan, as stated in Chapter 1, is to Ensure Sustainable Ecosystems, including sustaining viable populations of native and desired non-native species. There is a large number of Objectives and Strategies stated under this Goal (and its three Subgoals) to help the Forest achieve those desired conditions. One of those Objectives is to maintain or reduce the spread of noxious weeds and to minimize new introductions. Numerous discussions in various sections of the FEIS Chapter 3 discuss effects of noxious weed species on native plants.

The Objective as worded above states the long-range "goal" of being able to maintain or reduce total noxious weed populations over the next 10 years. The Forest has had an aggressive program to control noxious weeds for many years, including whenever possible to prevent further spread or introductions. As stated in the analysis, there are currently some 36,000 acres infested by noxious weeds, and the acreage appears to be growing each year. The management of noxious weeds is very complex and multi-faceted, and the recent extreme drought has also served to further expand those populations.

The Forest Service also monitors the spread of noxious weeds. We have an Implementation Plan that incorporates education, prevention, and control efforts of weed species, as well as listing which species are the most important to control (and eradicate, if possible). There are a number of prevention efforts currently in use, including, for example, spraying the undercarriages of non-local fire control and timber haul vehicles to prevent the introduction of new or distant species.

Non-Native	Types of Treatment: The commenter suggests several methods to help
Species	control the spread of noxious weeds.
Comment #9	_

**Response:** The Forest is currently using most of these methods in the prevention and control of noxious weeds: a weed-free hay order has been in effect since 1994, an active program is in effect to identify and treat new infestations, and treating weeds in sensitive areas is a high priority. Roads can be closed, even temporarily, if that might be effective in reducing or eliminating a population in a sensitive area.

The analysis in Chapter 3 of the FEIS discusses the many ways by which noxious weeds can be spread.

## Oil and Gas

Oil & Gas	Potential Development: A variety of comments were received about the
Comment #1	range of alternatives considered in the analysis. Many expressed
	preference for more or less oil and gas leasing than allowed in the preferred
	alternative. Some were concerned that the high number of NSO acres in
	the preferred alternative reduced the projected oil and gas development in
	the planning period, and others were concerned that more acres be
	preserved from oil and gas development by making them not available for
	leasing or by applying additional NSO stipulations. There was concern
	also about sustained oil, gas, and mineral development.

**Response:** The EIS oil and gas leasing analysis applies to all federal minerals with moderate or low oil and gas resource potential within the analysis areas (272,524 acres). The remaining 921,258 acres of the analysis area mineral estate have no known oil and gas

lasing potential because they are located on uplifts of crystalline rocks, and lack sedimentary rocks. There are no areas of high oil and gas resource potential on the Medicine Bow National Forest. FEIS Supplemental Table 2, Chapter 2 displays oil and gas resource potential acres by category by alternative, displays the acreage by lease stipulation category for each alternative. Direct, indirect and cumulative effects of leasing stipulations are disclosed in the Oil and Gas, Environmental Consequences section of Chapter 3, FEIS.

For this analysis, Alternative A provides a no leasing alternative, and Alternative B provides for leasing with only standard lease terms, a maximum oil and gas leasing alternative. For all remaining alternatives stipulations were developed using the standards and guidelines in the proposed lands use plan. This resulted in a consistent set of stipulations applied across all alternatives (except A and B). Alternatives C, D DEIS, D FEIS, E, and F vary by the acres allocated to management areas, and in most cases, do not vary standards and guidelines except for those associated with management areas. For more information see the FEIS, Oil and Gas Leasing, Environmental Consequences, Resource Protection Measures. The analysis considered a range of reasonable alternatives.

Mineral production can be sustained only through continued exploration and development of new mineral resources. The Multiple-Use Sustained-Yield Act of 1960, outlines that: "Nothing herein shall be construed so as to affect the use or lands or administration of the mineral resources of National Forest lands . . ." The objectives of Forest Service minerals management are provided in FSM 2802, and discussed in the Oil, Gas, and Minerals sections of the FEIS, Chapter 3. Mineral exploration and recovery is a valid use of the National Forests, as provided by law, regulation, and policy including the Multiple Use-Sustained Yield Act. Mineral development is only one of the many resource uses. The Forest Service tries to provide a balance between protection of areas where mineral development could have unacceptable impacts to the other resources, and areas where mineral development could be accomplished in an environmentally sound manner.

# Oil & Gas Comment #2

Directional Drilling: In the analysis of land not accessible by NSO, such lands were defined as greater than 1/8 mile from the boundary of the NSO unit. This was an arbitrary distance that definitely does not reflect the current state of directional drilling technology. With current technology, drillers have successfully completed wells with a horizontal displacement of more than 6 miles, and there is an expectation that 20 miles will be the norm in 20 years (see Drilling Smarter: Using directional drilling to reduce oil and gas impacts in the Intermountain West, Attachment 12). This analysis should be re-run with a 5-mile buffer (to be conservative, rather than using the 6.5-mile maximum range shown in a handful of studies). This would more accurately characterize the area of land rendered unavailable to oil and gas extraction with current technology.

**Response:** Directional or horizontal drilling can make areas accessible for oil and gas development that may otherwise be unavailable due to resource constraints, can reduce surface impacts when more than one well is drilled from a single pad, and in some cases may help to minimize road construction. These techniques are limited by geologic structure, technology, and may increase the cost of drilling and production. Factors that increase the cost and uncertainty of a drilling proposal also reduce the chance that the prospect would be drilled. The effects analysis (Chapter 3, FEIS, Oil and Gas section) has been clarified to acknowledge the technical feasibility of directional and horizontal drilling to greater

distances and to clarify that the 1/8-mile distance was used for analysis purposes only as a reasonable approximation for the distance at which a prospect becomes economically impractical.

## Oil & Gas Comment #3

Cumulative Effects of Development on Adjacent Private Land: The DEIS (page 3-456) states, "The federal government has no authority over privately held minerals regardless of surface ownership (193,819) acres." An analysis of the potential environmental effects of exploration and development of these lands should appear in the oil and gas leasing cumulative effects section in the DEIS.

**Response:** The cumulative effects analysis in the Oil and Gas section of the EIS has been expanded to include a discussion of the potential effects of oil and gas leasing on private lands adjacent to the Medicine Bow National Forest.

# Oil & Gas Comment #4

Cumulative Effects of Stipulations: When it is determined that oil and gas resources exist in an area, land management agencies should do whatever is necessary to make sure that those resources are available for leasing and reasonable mitigation measures are placed on accessing those resources for development purposes. Discouraging development by placing too many stipulations and restrictions on accessing and producing those resources is not an appropriate land management philosophy by the agency. Cumulative impacts of stipulations and mitigation measures implemented for oil and gas leasing and development must be analyzed so as not to render a lease "uneconomic" if issued, which could be determined to be a "taking" of that valid right. An analysis of cumulative impacts of stipulations and mitigation measures applied to oil and gas leasing and development should be included in the EIS.

**Response:** The Forest Service is required to make oil and gas resources available within the confines of law, regulation and policy. Oil and gas leasing stipulations (Plan Appendix E) have been developed to implement Forest Plan Standards and Guidelines. A justification for each stipulation is included in the revised Plan Appendix E. This is mandated by the oil and gas regulations found in 36 CFR 228.102 (c)(1)(ii). These stipulations will be applied to oil and gas leases prior to them being offered for sale, become part of the lease, and limit the rights granted in the lease. Stipulations attached to leases specify restrictions, which are known to potential lessees before the lease is sold and therefore do not constitute a "taking" because the right is not granted.

An analysis of the cumulative effects of stipulations is contained in the FEIS, Chapter 3, Oil and Gas Leasing analysis, Cumulative Effects section.

# Oil & Gas Comment #5

Effects of Roadless Management: Claims of roadless area impacts are usually overestimated. Companies have already exploited most of the roadless areas they thought had much potential, and protecting the Medicine Bow's roadless lands would have no effect on existing leases. Not only will developing the minimal oil, gas and coal resources within our national forest roadless areas do little to affect our national energy situation, these roadless lands provide greater benefit to our society when left in their wild and roadless condition for current and future generations to enjoy.

**Response:** Of the area with oil and gas resource potential, 36.7 percent is in inventoried roadless areas. During the Forest Plan Revision process, alternatives were constructed that allocated roadless area acres to a variety of management areas. Due to the inherent characteristics of roadless areas, many of the roadless area acres were allocated to management areas that emphasize primitive, backcountry or non-motorized recreation opportunities. These management areas tend to preserve the roadless character through management area standards and guidelines that limit roaded activities and require NSO leasing stipulations. For a detailed analysis by alternative see the FEIS, Chapter 3, Oil and Gas, Effects from Roadless Management.

Oil & Gas	Standards and Guidelines Effectiveness: A variety of comments were
Comment #6	received recommending more or less stringent Forest Plan Standards and
	Guidelines and oil and gas leasing stipulations. This was especially true in
	the areas of hydric soils, wetlands, floodplains, steep slopes and wildlife.
	Also many comments were received regarding a variety of factual
	corrections and clarifications in the FEIS.

**Response:** The Forest Plan revision interdisciplinary team reviewed all the revised Plan Standards and Guidelines. Many corrections and adjustments were made using public comment, the best scientific information available and professional judgment. Oil and gas leasing stipulations were developed to implement the revised Forest Plan Standards and Guidelines and a justification for each stipulation, as required by law, is contained in Plan Appendix E. Factual corrections and clarifications were incorporated throughout the revised Plan and FEIS as appropriate.

Standard Lease Terms (SLT) provide the authorizing officer the ability to move a proposed location up to 200 meters to avoid adverse impacts. In addition to SLT, the following stipulations are needed to implement revised Plan Standards and Guidelines for soil protection: 1) High erosion and geologic hazard, NSO, 2) Slopes over 60%, NSO, 3) Hydric soils, CSU, and 4) Slopes 40-60%, CSU. Riparian areas, woody draws, wetlands, floodplains, and hydric soils are protected by the hydric soils CSU stipulation. On the Medicine Bow National Forest, most riparian areas, woody draws, wetlands, floodplains, hydric soils, erosion hazard soils, and steep slopes are relatively small, or narrow and linear along rivers and streams, and impacts can be readily avoided under the provisions of SLT. It is the opinion of the Plan revision interdisciplinary team that SLT plus the 4 identified soils stipulations provides adequate protection for the soil resource.

Revised Plan Standards and Guidelines for wildlife were developed using the best available information, consultation with the US Fish and Wildlife Service and the State of Wyoming Game and Fish Department. Justification for the wildlife Standards and Guidelines can be found in the Biological Assessment and Biological Evaluation in the FEIS Appendix I. To implement the revised plan Standards and Guidelines for wildlife requires 17 oil and gas leasing stipulations, three NSO, and 14 Timing Limitations (see revised Plan Appendix E). It is the opinion of the Plan revision interdisciplinary team that SLT plus the 17 identified wildlife stipulations provides adequate protection for wildlife resource.

Oil & Gas	No Surface Occupancy Waivers, Exceptions, Modifications: Appendix E
Comment #7	indicates that waivers, exceptions, and modifications to the No Surface
	Occupancy stipulations may be made (e.g., for No Surface Occupancy on
	slopes of >60E, high erosion and geologic soils, developed recreation

sites, Scenic Rivers, migration corridors, bald eagle and other raptor nest sites and associated buffers).

**Response:** As stated in the Forest Plan Appendix E, "Waivers, exceptions, or modifications will be considered in accordance with the requirements of 36 CFR 228.104. Requests for waiver, exemption or modification will be considered in the environmental analysis (NEPA compliance) for an Application for Permit to Drill (APD). The Deciding Officer will make a determination based on this information." National Environmental Policy Act (NEPA) compliance includes public involvement and disclosure of impacts to soils, water, wildlife and other resources.

# Oil & Gas Comment #8

Lack of Standards and Guidelines: Forestwide standards and guidelines governing oil and gas drilling and production have been entirely omitted from the proposed Plan. Instead of ignoring the potential impacts of oil and gas development, the Forest Service should:

Require closed-loop, pitless drilling instead of allowing disposal of toxic wastes in reserve pits;

Prohibit the location of drill sites on floodplains or riparian areas;

Prohibit the surface disposal of coalbed methane wastewater;

Prohibit the construction of new roads, and instead site drilling pads beside existing roads and encourage directional drilling;

Make a Forest-wide determination, independent of MAs, of which lands are unsuitable for oil and gas production on the basis of slope, soil stability, soil moisture, and other factors.

**Response:** The Revised Plan, Forestwide Standards and Guidelines, Minerals and Energy Resources – Leasable Minerals section has been expanded to include appropriate requirements on oil and gas drilling and production. To implement Plan Standards and Guidelines, oil and gas leasing stipulations have been developed and may be found in Plan Appendix E. In addition, Standard Lease Terms are incorporated into every oil and gas lease. To ensure protection of other energy, mineral, and surface resources, standard lease terms require compliance with all laws and regulations (BLM Form 3100-11 and 43 CFR 3000-3100).

# Oil & Gas Comment #9

Mineral Entry in Backcountry Motorized: Now why would these areas include mineral entry for oil/gas leasing, but not locatable minerals (backcountry motorized)? A mine of placer working is no more intrusive to a forest than an oil well.

**Response:** Examination of Forest Plan Table 2-2 reveals that all backcountry prescriptions (MAs 1.31, 1.33, 3.31, and 3.33) are available for location and entry under the 1872 mining laws and for mineral leasing; however, for mineral leasing, no surface occupancy is allowed. Mining activities are regulated through a Plan of Operations that must comply with Forest Plan direction including forestwide standards and guidelines. Additional information may be found in the management area prescriptions for under the Minerals heading. Since management area direction is silent for locatable minerals, forestwide direction prevails. There is additional direction for leaseable minerals and common mineral material in MA

1.31, MA 1.33, MA 3.31, and MA 3.33. Revised Plan, Appendix G-Glossary contains definitions for leasable minerals, locatable minerals and mineral material.

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Oil & Gas	Terms and Conditions of Leases: The issuance of new oil and gas leases
Comment #10	should entail careful review and should include a clause retaining the
	authority, on a case-by-case basis, to amend the lease terms if substantive
	protection and mitigation measures are incorporated into Plan amendments
	during the life of the lease. The preface to the Plan states that there are
	currently no active oil and gas leases on the Forest. Once an oil and gas
	lease has been issued, it constitutes a valid existing right, and the Forest
	Service cannot unilaterally change the terms and conditions of the lease.

**Response:** Terms and conditions for oil and gas leases are determined by regulations at 43 CFR 3000 through 3100 (see FEIS, Legal and Administrative Framework), and changing those conditions is beyond the scope of the Forest Plan analysis. A discussion of the resource protection measures available to the authorizing officer under standard lease terms is located in the FEIS, Oil and Gas Leasing, Environmental Effects, Resource Protection Measures. Appropriate stipulations as outlined in Plan Appendix E will become a part of any new leases issued.

# **Planning Process**

Planning	New Rules and Regulations: The Forest Service should not create new
Comment #1	rules, laws, or regulations because it does not enforce existing ones.

**Response:** The forest plan revision does not establish new rules or regulations. Only Congress makes laws that apply to the Forest Service or national forest lands. While it is difficult to enforce all rules, the Forest Service believes that most people will voluntarily comply with the restrictions identified in the forest plan.

Planning	Consideration of Public Comments:	How are public comments addressed
Comment #2	during the comment period?	

**Response:** CEQ Regulation 40 CFR 1503.1 requires a public comment period after preparation of a DEIS and before a final EIS is released. CEQ Regulation 40 CFR 1503.4 states that the agency (Forest Service) will assess, consider, and respond to comments either individually or collectively. 36 CFR 219.6(g) describes the required length of comment periods for forest plans. The Medicine Bow held 22 public meetings prior to the release of the DEIS and ten meetings after the release of the DEIS. The Forest Service is unable to respond to every comment due to the volume of comments received. 36 CFR 219.6(e) states that public comments can be considered either individually or collectively. Responses to public comments are found in Appendix L of the FEIS. All comments were carefully considered, although consideration is not based on the number of times a comment is received. Rather, according to CEQ Regulations 40 CFR 1503.3, comments should be specific and address the adequacy of the analysis and/or the merits of the alternatives.

Planning	Funding Priorities: How will decisions be made when there are multiple
Comment #3	parts of the Plan competing for the same budget dollars?

**Response:** The Forest Service receives an annual appropriation from Congress for each program area. The Washington Office of the Forest Service allocates the appropriations to

each Forest Service region, which allocates the funds to each national forest. The Forest Leadership Team determines the funding priorities on each forest according to forest plan direction and local needs.

Planning
Comment #4

Science and Environmental Design: The FS should use the best available science and management practices, including adaptive management, to maintain naturally functioning ecosystems.

**Response:** The Forest Service has used a wide variety of applicable information, including research from the forest and other areas. Citations within the documents demonstrate the commitment to "utilize a systematic interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts…" as stated in Section 102(2)(A) of NEPA.

# **Planning**Comment #5

Renewable Resources: Throughout the DEIS, the Forest Service consistently mistakes renewable resources for industrial commodities. For example, under this rubric, only 25.1% of the Forest is available for renewable resource use under Alternative F. DEIS at 3-194. However, recreation, wildlife, waters, scenery, and other non-commodity uses also are renewable resources. Thus, Alternative F actually allocates 100% of the Forest to renewable resource use, but only 25.1% of the forest to industrial commodity use. This misrepresentation of the facts within the DEIS is likely to mislead the public concerning the varying attributes of the alternatives and may cause bias against certain alternatives.

**Response:** 36 CFR 219.12(g)(1) directs the Forest Service to consider in detail the physical, biological, economic, and social effects of implementing each alternative, and that these effects will include at least the expected outputs for the planning period of marketable goods and services as well as non-market items, such as recreation and wilderness use, wildlife and fish, protection and enhancement of soil, water and air, and protection of aesthetic and cultural resource values. The interdisciplinary analyses in the FEIS demonstrate clearly the attention given to all renewable resources in all alternatives, whether or not the resources include removable forest products. The table and charts that refer to renewable resource use were intended to demonstrate resource emphasis areas and not to imply that wildlife, water, scenery, recreation, and other uses are not renewable resources.

# **Planning**Comment #6

Laws and Regulations: Comments addressed various parts of forest plan revision that are governed by laws, regulations, and policies:

Why are forests divided into management areas? Why not do specific resource use plans in consecutive years instead of one big plan every 10-15 years?

Do forest plans require access for the disabled under the Americans with Disabilities Act?

The makeup of the Steering Committee is biased, so how can the NEPA process be objective?

Can the comment period be extended?

The Forest Service cannot manage according to polls.

The plan must be flexible so that it can be changed if necessary.

The public should be involved in management area designations and establishing desired future conditions.

Legislation such as the Endangered Species Act and the National Forest Management Act cannot supercede the Organic Act.

Which version of the NFMA planning regulations are being used for the revision of the Medicine Bow Forest Plan, the 1982 or the 2000 regulations?

Does the revision attain the widest range of beneficial uses of the environment?

**Response:** The Forest Service has complied with numerous laws and regulations in the revision of the forest plan.

36 CFR 219.11 discusses the use of management areas in forest plans. The Forest Service Handbook includes specific direction about management areas. Management areas are commonly used throughout the Forest Service in forest planning, and they provide a good way to spatially display management direction. 36 CFR 219.10(g) states that forest plans will ordinarily be revised on a 1-year cycle or at least every 15 years.

The Americans with Disabilities Act generally applies to facilities rather than national forest lands. Information about the ADA and forest plan compliance can be found in the FEIS Chapter 3, Recreation; the Final Revised Forest Plan Chapter 1, Goal 2- Multiple Benefits to People; Plan Chapter 1, Recreation Standards and Guidelines; Plan Chapter 1, Recreation, Developed; and Plan Appendices B and C.

The Steering Committee is composed of Forest Service personnel and officially designated cooperating agencies. The Steering Committee has nothing to do with NEPA. Its purpose is to assist Plan Revision ID team by offering strategic advice and expertise, procuring funding and human resources, serving as sounding board for the ID team, and making strategic, process related decisions that are outside the scope of the ID team, but not large enough to take to the full Forest Leadership Team.

The length of comment periods for forest plan revisions is established in 36 CFR 219.6(g) and does not prohibit extension. The public involvement process for the forest plan revision is described in the FEIS Appendix A.

Polls are not considered specific or substantive comments according to CEQ Regulations 1503.3(a) and 1503.4(a) (1-5). 36 CFR 219.6(e) states that public comments can be considered either individually or collectively to determine common areas of concern and their geographic distribution considered to determine the variety and intensity of viewpoints. However, public commenting is not a vote. The Forest Service must balance local and national interests with natural resource objectives and laws, regulations, and policies. The revision did not use any polls.

Procedures for amending forest plans are found in 36 CFR 219.10(f) and in the Forest Service Directives system.

The public involvement process for the revision of the Medicine Bow Forest Plan has been extensive and included multiple opportunities to comment on all aspects of the revision, including management area development. See Chapter 1 of the FEIS and Appendix A for discussion of the public involvement process.

The Forest Service has complied with various laws during forest plan revision. Each of these laws has its own requirements and area of jurisdiction and provides the legal framework in which the forest service develops forest plans and implements projects. See Final Revised Forest plan Appendix C, "Federal and State Statutes, Regulations, and Executive Orders".

The Notice of Intent to Revise the Medicine Bow Forest Plan was published in 1999. The revision began under the 1982 Planning Rule and will be completed under the 1982 Planning Rule.

The revision of the Medicine Bow Forest Plan has focused on the wide range of multiple uses of the forest. However, all uses cannot occur on the same acre. The revised forest plan provides for the wide range of uses on the forest as a whole.

Planning	Economic Effects: Many commenters asked that the revised forest plan
Comment #7	consider the economic effects to local communities and businesses as well as the intangible values of wilderness without bias toward any particular
	group. Some advocated inclusive and cooperative economic planning with
	agencies of other jurisdictions as well as private property owners of
	surrounding areas. Others encouraged the use of PNV and evaluation of
	trade-offs or scarcity in economic analysis of alternatives.

**Response:** The socio economic analysis is extensive and can be found in FEIS Chapter 3. An adjacency analysis of surrounding areas that included economic input was also conducted. In addition, various cooperating agencies have represented local citizens on the steering committee throughout the revision process.

**Response:** The revised forest plan will continue to provide for multiple uses on the Medicine Bow National Forest according to the Organic Act, NEPA, NFMA, and the Multiple Use Sustained Yield Act. The Purpose and Need document addressed a wide variety of needs for the revision. The Forest Service based its decision on numerous factors, including public comment, purpose and need, and health of resources. Refer to the Record of Decision for the full rationale of the decision.

Planning Comment #9	Comments Not Applicable to Forest Plan Revision Process: Comments included matters that are outside of the forest plan revision process. Some of these were: shooting restrictions on Pole Mountain, the appeal process, and budget allocations.
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**Response:** The Land and Resource Management process makes six decisions:

- Establishment of multiple use goals and objectives.
- Establishment of forest-wide standards and guidelines that apply to future

- activities.
- Establishment of management areas and management area direction (management area prescriptions) that apply to future activities in each management area.
- Establishment of monitoring and evaluation requirements.
- Determination of suitability and potential capability of lands for resource production. This includes designation of suitable timber land and establishment of allowable sale quantity.
- Recommendations for designations of special areas such as Wilderness and Wild and Scenic Rivers.

Planning	Monitoring: Comments on monitoring plans included funding and their	
Comment #10	relationship to project implementations, as well as why the monitoring plan	
	in the 1985 plan was dropped rather than refined.	

**Response:** Monitoring was revised to improve consistency with the Routt National Forest and Thunder Basin National Grassland. Funding will affect the degree of monitoring from year to year. The minimum legally required monitoring will always be completed. Sitespecific monitoring requirements are beyond the scope of a Forest Plan.

Planning	Adequacy of the Analysis: Concern was expressed about the adequacy of
Comment #11	the analysis and documentation for all resources in the draft EIS.

**Response:** The analyses of effects and the cumulative effects analyses have been refined and augmented between the draft and final versions of the EIS, reflecting public and agency input.

Planning	Adequacy of the Range of Alternatives: Comments questioned the
Comment #12	adequacy of the range of alternatives to satisfy the requirements of NEPA

**Response:** NFMA Regulations at 36 CFR 219.12(f)(7) state "at least one alternative shall reflect the current level of goods and services...if the current management direction continues. Pursuant to NEPA procedures this alternative shall be deemed the No Action Alternative."

CEQ Regulation 40 CFR 1502.13(a) directs agencies to "rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." Through interdisciplinary teamwork and extensive public involvement, the Forest Service developed an initial range of eight alternatives; six were analyzed in detail. All alternatives are described in detail in FEIS, Chapter 2. Reasons for not fully analyzing alternatives that were eliminated from detailed study are also presented in FEIS, Chapter 2.

Alternatives prepared for consideration in a forest plan revision must provide for a broad range of reasonable management scenarios for the various uses of the forest (36 CFR 219.12(f)). A primary goal in formulating alternatives is to provide an adequate basis for identifying the alternative that comes closest to maximizing net public benefit in an environmentally sound manner. Thus, the evaluation of the range of alternatives does not turn upon consideration of a single factor or forest activity but must consider the alternative as a whole

36 CFR 219.1(a) states "plans shall provide for multiple use and sustained yield of goods and services from the National Forest System in a way that maximizes long term public benefits in an environmentally sound manner." Net public benefits include all outputs, both positive and negative, and include values that cannot be quantitatively valued. Therefore, we must subjectively balance such qualitative benefits and costs with each other and with those that cannot be quantified.

It is not a requirement of NEPA to include every possible permutation of alternatives. This is in part to ensure that an excessive number of alternatives does not needlessly complicate the analysis. In addition, the decision maker has the flexibility to consider mixing different components of the alternatives that are described. For example, the decision maker could select one alternative but add two wilderness areas that were considered in a different alternative.

Planning	Adequacy of Defining DFCs: Desired future conditions (DFCs) should	
Comment #13	drive the development of alternatives, and the DEIS does an inadequate job	
	of defining DFCs.	

**Response:** According to 36 CFR 219.12(f), "The primary goal in formulating alternatives, besides complying with NEPA procedures, is for providing an adequate basis for identifying the alternative that comes nearest to maximizing net public benefits..." (FEIS Chapter 2, Alternative Development and Forest Plan Chapter 1, Goals and Objectives.)

The Forest Service believes all alternatives could reasonably meet the identified goals and objectives in the Forest Plan over the life of the plan.

Alternatives were developed based on themes that were designed to achieve a broad range of desired conditions. While a description of the outcome was not described as a first step, the end result was a range of alternatives that would have a variety of future outcomes. There are no regulatory requirements for developing alternatives based on desired conditions. However, the theme-based approach used by the Forest Service indirectly utilized desired conditions since each management area includes a desired condition. In addition, the regional goals, which are defined in 36 CFR 219.3 as representing a desired condition, were identified prior to alternative development.

Planning	Adequacy of Scoping: The planning process was inadequately scoped,
Comment #14	and scoping took place too long ago to be relevant.

**Response:** Although some scoping did occur in the early 1990s, additional scoping was conducted since the Notice of Intent to Revise was published in late 1999. That scoping confirmed and enhanced the results of initial scoping. In addition to scoping opportunities provided with the NOI and the release of the DEIS, citizens have had many opportunities to comment. A description of the scoping process and public involvement is found in Chapter 1 of the FEIS and in Appendix A.

Planning Comment #15	New Policies: The DEIS and draft revised forest plan do not mention new policies, rule changes, or initiatives, such as the Healthy Forest Initiative
	and Stewardship Contracts.

**Response:** Only those policies that affect land management planning that have been fully implemented are addressed in the forest plan. Stewardship Contracts do not need to be listed in the forest plan in order to be used during project implementation. It is anticipated that

policies and initiatives will continue to be developed over the life of the plan. These will be followed as the plan is implemented.

Planning Comment #16	<ul> <li>Comments on Goals, Objectives, Standards and Guidelines Addressed:</li> <li>Definitions of goals and objectives and just what they include;</li> <li>The need for alternative standards and guidelines;</li> <li>Changes in standards and guidelines from the 1985 plan;</li> <li>How timber harvest will achieve goals;</li> <li>Adding a standard to require funding of proposed mitigation prior to project implementation;</li> </ul>
	<ul> <li>The lack of specificity of goals and objectives.</li> </ul>

**Response:** Chapter 1 of the Final Revised Forest Plan includes definitions of goals, objectives, standards and guidelines.

Alternative standards and guidelines are discussed in Appendix K of the FEIS.

Some standards and guidelines from the 1985 plan were dropped because they are already agency direction and are found in Forest Service Directives, manual and handbook direction.

The project-level analyses for all vegetation management projects, including timber harvest, identify how the project addresses forest plan goals.

Funding for project mitigation is part of the overall funding for all project-level activities.

Goals and objectives have been improved in the Final Revised Forest Plan to be more specific and measurable. Standards and guidelines have also been refined. See Chapter 1.

Planning	Clarity and Complexity of Document: A variety of comments were
Comment #17	received regarding the clarity of the document, publication formats,
	glossary information, complexity of the document, and document length.

**Response:** Improvements to the final document reflect suggestions and input from the public. Every effort was made to ensure the accuracy and clarity of the documents.

## **Rangeland Vegetation**

Rangeland Comment #1	Rangeland Acres and Forage Production: The discussion of rangeland acres, where they are found, and how they are used is confusing and needs to be clarified.
	While the DEIS states several times that 99% of the Forest System acres monitored are in satisfactory condition, there does not appear to be any discussion of the types of sites or any rangeland ecology of the grazed sites
	The existing vegetation was not adequately described, carrying capacities and stocking rates were not specified, and the number of AUMs on the Forest was not displayed.

**Response:** The discussion in Chapter 3 of the FEIS rangeland section was modified in response to the comments to clarify the acres in each community type.

Discussions in this section focus on rangeland vegetation and forage production in general,

and more detailed discussions are found in the Livestock Grazing and Big Game Use section as to how the forage is used, including historic and current numbers of livestock and AUMs on the Forest as well as information on big game populations. By way of explanation:

Rangelands are found across the Forest – areas in a variety of plant community types with vegetation that might be grazed or browsed by livestock or big game;

Allotments are broad areas of land on which grazing is permitted; they contain NFS acres and usually also contain private lands as well as state lands. There are also rangeland acres across the Forest that are not located inside an allotment;

Most allotments usually contain acres that are not capable of being grazed or browsed – rock outcrops, steep slopes, water bodies, areas of wet or boggy soils, etc.;

Many allotments also contain Management Area acres that are not suitable for grazing, such as fenced campgrounds or an RNA.

Allotments also contain forested areas. If the tree stands are dense enough to achieve a 70% canopy cover, they usually produce less than 200 pounds/acre of understory vegetation; these acres will seldom be frequented or grazed by livestock (but the species present and their locations may be desirable for use by big game animals) and so are determined to be unsuitable acres for livestock use at this time (that could change in the event of wildfire or timber harvest, for example).

To summarize this section:

- There are 1,084,615 NFS acres on the Forest;
- 1,074,085 are covered with vegetation;
- 1,055,000 are capable of being grazed and browsed by livestock and big game;
- 958,000 are suitable for use by sheep;
- 895,000 are suitable for cattle use;
- 700,000 are frequented to varying degrees by livestock (410,000 acres of prime or primary rangelands and 290,000 acres of lodgepole pine);
- 510,000 are grazed to any measurable degree by livestock (about 21% or 100,000 acres of the lodgepole pine stands); this is 47% of the Forest's acres.
- 410,000 prime or primary acres grazed by livestock and on which annual monitoring takes place. These areas of primary use make up 37% of the Forest's acres.

In summary, although a high number of Forest acres are suitable for grazing and browsing by livestock and big game, most of the annual use by domestic livestock takes place on about 37% of the NFS acres.

The statement in the DEIS that livestock consume, on average, only about 17% of the annual forage production is incorrect because there is no comparison of forage production figures between different plant community types. What is correct is that nearly all livestock forage consumption occurs on the 410,000 acres of prime and most easily accessible rangelands on the Forest (37% of the total NFS acres). Also correct is that, on average, only 40-50% of the forage produced annually on these sites is used by domestic livestock; the remainder is left for plant rejuvenation and is available for use by big game and other wildlife. The discussion has been corrected in the FEIS.

Existing vegetation is displayed and described when analysis is conducted at the site-specific project level (at the individual allotment level); desired conditions are also discussed and evaluated at that time. Carrying capacities or stocking rates are also evaluated for individual allotments. The total Forest AUMs shown in the Plan are the summation of all the current permitted livestock use.

The wording in the FEIS has been modified to more clearly state that the 99% of the acres monitored are specifically those rangelands utilized by domestic livestock. A table in the Rangeland Vegetation section in Chapter 3 displays the different types and acreages of plant communities that make up those rangeland acres. Existing vegetation, generally typed to the dominant grass, shrub, and tree species present on the site, is displayed and described when analysis is conducted at the site-specific project level (at the individual allotment level); desired conditions are also discussed and evaluated at that time.

Rangeland	Livestock Use and Riparian: A definition of riparian area needs to be
Comment #2	added. How livestock use riparian areas needs to be clarified. How has
	grazing impacted the proper functioning condition of riparian areas?

**Response:** The definition for riparian area is found in the Glossary. The sentence in the DEIS that stated that "riparian areas that are characterized by wet and boggy soils are often undesirable to livestock but are used by a variety of wildlife species" is stated correctly. It does not say that all riparian areas are characterized in this way (and most of them are not); livestock do not like to make use of those riparian areas that do have these characteristics.

Proper Functioning Condition (PFC) is an inventory method that is sometimes used to assess and evaluate riparian areas. It is used during resource analysis or if an issue or concern is noticed. A diverse team of resource specialists conducts the assessment and evaluates conditions. The method of assessment is well defined, but it is not always possible to determine the exact cause(s) if an area is not in PFC. Riparian areas are analyzed on a site specific basis using this methodology and others where appropriate. When and if it is determined that livestock grazing is at least partially responsible for not meeting desired riparian conditions, management is usually changed in some way through the allotment management planning process (numbers, season of use, type of system, or requiring additional riding, for example) in order to resolve the problem and improve conditions.

Rangeland Comment #3	Managing Vegetation to Achieve Mid to Late Seral Objectives: The Forest is trying to manage all vegetation to achieve mid- to late-seral status, regardless of the Management Area prescription, and noted that healthy and productive rangelands are not necessarily those in mid- to late-seral condition.
	condition.

**Response:** Commenters were correct in noticing that the Draft Plan proposed managing all vegetation, regardless of Management Area prescription, to achieve a mid- to late-seral status across the Forest. This desired condition remains unchanged in the Management Areas that provide for more pristine values – wilderness areas, RNAs, SIAs, and non-motorized backcountry.

However, most of the Management Areas that focus on managing vegetation for certain desired conditions – big game winter range, aspen, general forests, and general rangelands, for example – have been changed to manage for a mixture of vegetation in all seral stages across the landscape. This change more accurately reflects HRV across the landscape – and

better maintains overall wildlife habitat needs since different species require different niches across all seral stages.

Rangeland	Livestock Use and Tree Regeneration: There is little DEIS discussion of
Comment #4	herbivory on tree regeneration and wonders if such use could result in a
	reduction in grazing.

Response: The commenter is correct that there is little discussion on the topic. Literature suggests that grazing is beneficial to regeneration efforts. The literature consistently shows that both cattle and sheep are effective in reducing herbaceous vegetation competition with young trees, providing for more rapid and increased success rate of reforestation efforts. Moreover, studies have consistently shown that neither animal prefers to graze on young conifers and the only evidence of such use occurring in regeneration areas is when the animals have been held in the area for long periods of time and excessive utilization has already occurred on the herbaceous species that they normally graze.

## Rangeland Comment #5

Reduction in Areas Available for Grazing: We do not need to further reduce areas of the MBNF that are available for reduction in forage allocation for agriculture.

The DEIS notes several times that grazing levels should not change on the forest as a function of this new plan, but the forest-wide standards and guidelines, and those for specific MAs, strictly interpreted, would likely lead to reduced stocking levels. Some of the standards, strictly interpreted, would effectively eliminate grazing. Guideline 3b would appear to require that 80% of streambanks be maintained in reference reach conditions, which is probably an impossible task.

Since the DEIS states that grazing levels will remain the same, ensure in the desired condition section of each of the MAs that grazing is an anticipated and acceptable use.

**Response:** Although management changes are sometimes necessary on an individual allotment basis to meet desired conditions or to accommodate other multiples uses, neither the Draft Plan nor the Final Plan propose any reductions in livestock grazing levels. Responses in the Livestock Grazing and Big Game Use section provide additional detail on this subject.

The Guideline regarding streambank stability, which comes from both the Watershed Conservation Practices Handbook and the R-2 Planning Desk Guide, has been removed from the Final Plan. It is certainly not impossible to reach and maintain this requirement for all watersheds. However, it has been removed at this time because reference reach conditions can only be determined if watersheds have been inventoried in order to make that determination. Without the Forest-wide inventory to determine reference conditions, it can be difficult to manage for 80% of an undefined quantity.

The Table at the beginning of Chapter 2 of the Plan specifies what Management Areas provide for grazing; as displayed, there are few, if any, areas on the Forest that cannot be used by domestic livestock, subject of course to meeting required S&Gs to achieve desired vegetation conditions. Many of the Management Areas also make statements as to provisions for livestock grazing. In addition, the stated objective of managing most MAs for

mid- to late-seral vegetation condition has been corrected in the Final Plan to manage for a mixture of all seral conditions in those MAs that focus specifically on managing vegetation.

Rangeland	Private Land Development: The commenter is concerned that the analysis
Comment #6	is biased against development.

**Response:** The section analyzes cumulative effects. Based upon statistics displayed by the source (American Farmland Trust) of ranchland acres that have been developed in Wyoming and six other western states over the last 15 years, the trend is evident. There is no attempt to say that there are not both positive and negative effects of such development in this section but to note that large acreages have already been developed and the trend is both continuing and escalating.

It is not the Forest Service's intent in these documents to analyze detailed contributions or effects from associated private lands. There can be little doubt that all lands contribute toward biodiversity across landscapes, regardless of who owns or manages them. Although we could possibly have made increased reference to biodiversity at the landscape scale, the intent of the analysis in this section was to draw attention to the fact that grazing permittees who operate on the National Forest also own deeded lands, and may also lease other private, state, and federal lands as well. All lands are part of their year-round livestock operation, and a change in management on any of the land ownerships generally affects the management and desired conditions on all the other ownerships.

Rangeland	Motorized Use: The commenter is concerned that the analysis is biased
Comment #7	against motorized use.

**Response:** The analysis of effects upon rangeland vegetation from travel management states that past road construction has contributed to certain effects on rangelands including loss of acres of native meadows and shrublands and has sometimes reduced or altered riparian vegetation. The statement of "Other uses sometimes worsen the situation." simply means that resultant uses of those roads, once constructed, can increase the loss or alteration of riparian or rangeland vegetation (for example, in possibly bringing noxious weeds or non-native species into the vegetation along or adjacent to the roadway).

The analysis goes on to state that unauthorized off-road vehicle travel moves rangeland vegetation to an earlier seral condition. It does not mean, nor is meant to imply, that all motorized use is unauthorized use. Travel off designated roads can begin to establish new two-tracks and travelways; if that occurs, it can reduce rangeland vegetation in the new travelway and can create new areas of bare soil that are conducive to the establishment of noxious weed species.

Rangeland Comment #8	Native Plant Seed: We suggest the addition of goals to encourage the local seed industry for genetically local material propagation.
	The Rangeland Vegetation, Guideline 1, p. 1-20: "Use of native and desirable non-native species in seedings" and the Invasive and Undesirable Plant Species Guideline 3, p. 1-36: "Use nativein seed mixtures" should be a Forest-wide Standard, not a Guideline. Exceptions can be obtained where it is impossible.

**Response:** One of the Guidelines under Biological Diversity provides for using genetically local plant species in seed mixtures where technically and economically feasible. This is an

emerging field. The Forest is currently assessing this situation (as is the entire Rocky Mountain Region) and is preparing a plan as to the use of specified seed mixtures and local genetic stock. We have done some limited genotype testing on select grass species. And we are currently cooperating with the North Park school system in growing local stock in their greenhouse.

We agree it would likely be a rare case in which native and desirable non-native species would not be used in seed mixtures and rehabilitation efforts. And we agree that exceptions can be obtained where meeting the requirement is impossible. But providing for that rare exception, by definition, would require an Amendment to the Forest Plan if it is written as a Standard; leaving it as a Guideline allows for the change to be made in the event that a site-specific project analysis would define a reason to do so.

Rangeland	Satisfactory Rangeland Condition: In Rangeland Vegetation standard #2,
Comment #9	"satisfactory rangeland status" needs to be defined in some measurable
	term. It's a good idea to manage toward satisfactory rangeland condition,
	but without defining what that goal is, this standard is an empty and
	meaningless.

**Response:** Satisfactory management status, as defined in the R-2 Rangeland Management and Analysis and Training Guide and in the Glossary, is meeting or moving toward desired vegetation conditions. The existing and desired conditions are discussed at the site-specific allotment management plan level. Tables 1-2 and 1-3 incorrectly used the old term "rangeland condition" rather than "rangeland management status" and the Final Plan has been changed accordingly.

Rangeland	Allowable Utilization: Measuring allowable utilization as a percent of
Comment #10	annual production would be a better monitoring method than measuring stubble height.

Response: The stubble height forage utilization guidelines are based on dozens of comprehensive scientific references and are established to manage for overall watershed health; providing for certain levels of residual forage is very important in meeting many of those factors. They are not new, having been in place and used throughout the life of the 1985 Forest Plan. Key areas to be measured are established by rangeland vegetation managers, and grazing permittees are knowledgeable of, and involved in, such efforts. Riparian area measurements are often taken on sedge species on the greenline – the area immediately adjacent to the stream. They may be taken on key individual species or across a plant community type, depending upon many factors. Many permittees assist rangeland specialists in these efforts as well. Managing to leave prescribed levels of residual forage is easier to monitor on riparian areas than to measure the percentage of forage that can be removed.

As noted in Tables 1-8 and 1-9, the allowable use guidelines as stated in a percentage of annual production that can be removed (one standardized method is use of height/weight curves) are used to monitor upland areas; minimum stubble heights are used to monitor use in riparian areas.

Rangeland	Effects of Salt on Riparian Use: The Forest Service has proposed to use
Comment #11	salt to draw livestock away from riparian areas. DEIS at 3-508. Placing
	salt blocks in upland areas is not an effective means of drawing cattle use

away from riparian areas. Bryant (1982) found that salt placement and alternate water sources did not influence cattle preference for riparian habitats, and came to the following conclusion: "These cattle used the salt when convenient but did not alter behavior patterns to obtain it" (p. 784).

**Response:** Specific S&Gs such as salting away from water sources are tested practices that have been used successfully for decades to meet desired resource conditions. It is true that cattle sometimes receive all their desired minerals and nutrients from the forage they graze and they will show little if any preference for salt. However, salting to draw livestock into little-used areas of available forage – such as sidehill aspen benches – helps to draw livestock out of riparian areas and assure they use the forage in areas other than where it is the most easily accessible. It is generally even more successful as a management tool when the rancher also rides and moves cattle frequently. A large number of ranchers on the Forest use salt in their operations.

## Rangeland Comment #12

Effects of Herding on Riparian Use: The use of riders to herd cattle away from riparian zones has been shown to be an effective method to achieve the restoration of degraded riparian zones. Herding livestock on a somewhat daily basis has been successful in limiting the number of livestock that visit stream bottoms and improving utilization of upland areas" (p.435). Deferring grazing until August and providing a range rider to move cattle out of the riparian zone resulted in a 377% increase in trout population, improvement in bank stability, and a 214% increase in cover (GAO 1988a). Rest from grazing can also result in the restoration of degraded riparian zones. For optimal riparian zone recovery, Case and Kaufman (1997) recommended complete protection from grazing for the first 5-10 years following livestock removal. Riparian areas can recover even while grazing by wild ungulates continues, when an area is rested from domestic livestock grazing.

**Response:** We agree. Requiring riders on allotments to assure cattle meet required standards and guidelines in riparian areas is a routine practice which also demands time and financial investment on the part of the rancher to meet the desired conditions; use of this practice seldom requires a change in allotment stocking rates, but instead assures that livestock use the forage in the areas where it is available, not just in the most easily accessible areas. A large number of Forest permittees ride frequently themselves and/or employ range riders to assist in this effort.

Meeting minimum stubble height utilization levels has proven to be effective in maintaining or improving riparian area vegetation. As you state, rest from grazing can also improve conditions; however, complete rest or extended rest periods are seldom required to effect rapid recovery. Riparian areas are very resilient, and they continue to improve even while grazing by domestic livestock continues – with proper management and meeting allowable utilization standards.

# Rangeland Comment #13

Big Game and Livestock Use: Rangeland Standard 2 and Guideline 2 modify livestock grazing forage allocation to improve conditions where big game forage and cover conditions are limiting. They point out that the deer and elk populations are over the Wyoming Game and Fish Department herd objectives in all of these southern Wyoming areas. This is in spite of

the fact that the herd objectives have been increased several times over the last twenty or so years to accommodate the population increases. The more appropriate remedy is to issue more hunting licenses to bring the populations back down to realistic levels.

**Response:** A detailed discussion on big game populations and Herd Management Objectives is found in the Livestock Grazing and Big Game Use section of Chapter 3 of the FEIS. That section also discusses the difficult and complex issue facing Wyoming Game and Fish Department personnel in trying to manage herd populations within desired habitat levels. Issuing more hunting licenses may be one option available to them; there are likely several others as well. The management of populations and issuance of licenses are outside the scope of the plan as they are part of the responsibilities of the Wyoming Game and Fish Department.

# Rangeland Comment #14

Intermingled Lands: Additionally, much of this MA is in scattered pieces, some as small as 40 acres, intermingled with private land. The effect, and perhaps the purpose, of this is to control the private land around these 40 acre plots as to time and amount of grazing. These smaller parcels should be redesigned MA 5.12, General Forest and Rangeland, Range Vegetation Emphasis (Converse County).

**Response:** It is neither the intent, nor within the ability, of the Forest Service to enforce its Management Area direction or S&Gs on adjacent or intermingled lands of other ownerships. However, if deeded lands are fenced into active grazing allotments, the Forest Service has ultimate authority and responsibility to establish stocking rates and seasons of use for the allotment. Rangeland management specialists work cooperatively with grazing permittees when they establish the levels that are needed in order to meet desired vegetation conditions on NFS lands, taking into consideration the rancher's entire livestock operation. If disagreements as to seasons and numbers cannot ultimately be agreed upon when private lands are included, the rancher has the option to fence his/her lands out of the allotment, in compliance with state law (at owner expense).

# Rangeland Comment #15

Stocking Rates: A description and analysis of stocking rates would be helpful. Holechek (2000) believes that "the selection of the correct stocking rate is the most important range management decision." A reallocation of forage could prove to be disastrous to local ranchers, which may cause increased agricultural land and winter range conversion to ranchettes, and directly reduce biodiversity.

**Response:** Stocking rates are determined at the individual allotment level, taking into account a number of things including existing vegetation conditions, desired conditions, other resource needs, topography, type of livestock, required/desired season of use, and how use of the allotment fits into the other lands involved in the permittee's operations. Changes in stocking rates can have a number of effects, including the ones you mention; coordination and cooperation is vitally important in managing allotments and livestock to meet desired resource conditions.

## Recreation

Recreation Comment #1	Roads and Recreation: There is concern over closing roads because they are needed for recreation access for elderly and disabled, tourism development is dependent on roads being open, dispersed users need roads, and roads are necessary to disperse users. Enhancing non-motorized recreation is not a legitimate reason to close roads. Forest Service is taking away opportunities by closing roads, and subsequently confining recreation into smaller areas, causing crowded conditions for recreationists and more resource damage due to overuse.
	Road corridors increase access into otherwise unused parts of the Forest, especially when a closed road corridor is used, illegally.

Response: Comments indicated a need to better understand the travel management policy on the Forest; the decision is well defined in the Travel Management section of Chapter 3 in the EIS. The plan does not take away any cross-country travel opportunities that were provided in the past, as there are none since the signing of the 2000 Travel Management [TM] decision. The Forest Plan does not prohibit the future development of trails, motorized or non-motorized, however user-defined trails are illegal and are not part of the official trail system. All roads are being analyzed in Phase II of the TM decision. Management Area 1.31 has a guideline to remove roads or convert them to trails. This Management Area was located in areas without legal motorized roads or trails that are currently posted open for public motorized use. Decisions regarding currently illegal road or trail systems will be made during Phase II of the Travel Management plan. The plan can be amended after this analysis has been completed, if needed.

There are discussion(s) in the Affected Environment, and Direct and Indirect Effects portions of the Recreation and Travel Management sections of Chapter 3 in the EIS describing both sides of the travel management and road issue, including crowding, and the need to disperse users across the Forest. The Travel Management section also provides an in-depth discussion on the roads system on the Forest, including past decisions and future plans. The Forest Roads Analysis (2002) is on file in the Supervisor's office.

The issue of closing roads is dependent on the Forest Service's other management objectives, especially the ability to pay for maintenance on these roads where they don't cause unacceptable resource damage. Providing opportunities for dispersed recreation is important, and will be taken into consideration before any roads are closed, as per the Roads Analysis Policy (2001). See the Biological Diversity, Soils, Aquatics, and Wildlife sections of Chapter 3 in the EIS for discussions on the effects of roads on forest resources.

The plan strives to balance the needs and desires of a variety of users including those with disabilities. Compliance with the Americans with Disabilities Act is discussed in the Wilderness section of Chapter 3 of the EIS, and in the Wilderness Specialists Report on record, and there's a Civil Rights Impact Analysis on file.

Recreation Comment #2	Off Road Vehicles (OHV): There is a need for more trails for motorized use; single track (motorcycle) and off-road recreational vehicle (ORV) users. The 2000 Travel Management decision closed areas that were open
	to motorized use. The State's ORV registration program means users are paying for these opportunities. There is frustration with not having a full

range of riding opportunities, and being expected to use and enjoy using old timber sale roads that may or may not be closed down in the future. Needs to be more signs and maps to show ORV users where they can go. Forest Service doesn't recognized ORV activity as a legitimate use of the Forest. Managers need to facilitate use, especially where use is occurring.

The Forest Service hasn't done a good job of monitoring and regulating ORV use. ORV use has increased with little or no forethought. Despite the 2000 Travel Management decision, there has been an increase in ORV use and four-wheel drive vehicles in the backcountry during hunting season. ORV use is inappropriate at the higher elevations of the Forest. Forest Service needs to eliminate user-created motorized trails in the backcountry.

**Response:** Both the Draft and Final (Recreation, Chapter 3) have identified the need for additional motorized trails. These are site-specific projects, not included in the Plan. Management Area descriptions have been edited as a result of the comments received on the Draft.

The Supplemental Tables in Chapter 2 of the EIS compare alternatives by activity, including trail construction and reconstruction. There are a number of references to the need for management of motorized recreation beginning with the development of trails. The Executive Orders that were referenced in these comments were incorporated into the Recreation analysis in Chapter 3 of the Final EIS, by reference, and are included in the Recreation Specialists Report on record. Managing motorized recreation is one of the Chief of the Forest Service's priorities (see Recreation, Chapter 3, EIS). There is documented abuse by four-wheel drivers, forest-wide (see the Medicine Bow Monitoring Reports 1986-2002). The Forest Plan provides for this use by allocating areas specifically to motorized recreation on trails (current and future).

Motorized recreation does create more damage than most other uses, primarily because it doesn't take many wheels to put ruts in a trail, or to create a road. For more information on damage caused by ORV use, see the Medicine Bow Plan Monitoring Reports from 1986-2002. The comments indicate that 'given trails to ride on, abuse would not occur.' The law enforcement community has been working closely with the Forest Service to enforce the regulations currently in place. It is anticipated that the decisions in the Forest Plan, and the resulting regulations will be respected so Forest Service personnel can spend less time cleaning up after illegal off-road use, and more time planning, developing, and signing trails. Among the Goals and Objectives of the Plan is the intent to work with these groups, and others, in providing and managing recreation opportunities. Environmental Education is a priority for the Forest Service, and it is the intent of the Agency that the State will assist in this effort with their registration sales.

Riding off-road-vehicles on Forest Service roads has always been allowed, as long as the vehicles are licensed or have the Wyoming OHV sticker, and the drivers have a valid driver permit. The Visitor Map published by the Forest Service has clearly identified travel management regulations, and four-wheel drive routes, highlighted in yellow. Motorized recreation is not currently allowed outside roads and trails. Any reference to the Forest plan decreasing these opportunities indicates a misunderstanding of current travel management regulations.

There were complaints about paying for ORV registration; some individuals felt they were paying for new trails on the Forest. This is inaccurate, in that no registration funds or Recreational Trails Funds can be used to pay for planning. That individuals are now required to pay a fee to ride ORVs on the Forest has little to do with the Forest Service; this is a state law, similar to the snowmobile registration law. The Forest Service helps enforce the registration rules in this legislation, and where appropriate, to provide trails for the program.

Management Area 4.31 – Dispersed Recreation Low Use was not used in the Final Plan.

# **Recreation**Comment #3

Semi-Primitive Motorized and Non-Motorized Opportunities: There is a need for more of the Forest to be classified under the semi-primitive motorized (SPM) recreation opportunity spectrum (ROS). SPM (motorized) acres should at least equal SPNM (non-motorized) acres. Survey numbers from the County Land Management (CLM) study indicating a need for more SPNM outside wilderness are questionable. There is no statutory authority to plan for an increase in SPNM. It is doubtful that there is much use of non-motorized areas; Wilderness Areas sufficed for this type of experience. Non-motorized use isn't as limited as motorized use, there needs to be areas that are only for motorized use. The Roaded Modified ROS class is not an ideal setting for motorized recreation; timber sale areas don't suffice for quality recreation. There should be an increase in the amount of the Forest designated as 3.31 Management Area along with additional motorized trails. Consider alternating years when motorized trail use is allowed. Trails used for snowmobiling in the winter should also be motorized trails for summer use. There is concern over Management Area guidelines that are directly associated with the Semi-Primitive end of the ROS (such as discourage concentrated public use). Harassment by non-motorized users is negatively affecting motorized users and decreasing tourism to area communities.

There is a need for more of the Forest to be classified under the semi-primitive non-motorized ROS. SPNM (non-motorized) acres should be greater than SPM (motorized) acres. Current use levels on and around Medicine Bow Peak clearly indicate the need for more SPNM trail opportunities. With the current amount of motorized use occurring throughout the Forest, it is difficult to get away from the sight, sound, and exhaust. Non-motorized acres should be primarily outside hearing range of motorized use. The Forest Plan should have a standard that addresses solitude. Timber sale areas don't suffice for quality non-motorized recreation. There currently is illegal ORV use occurring in areas (such as the Medicine Bow Ribbon Forest) identified as being non-motorized.

**Response:** The ROS criteria are explained in the Recreation section of Chapter 3 of the EIS. Management Area guidelines and desired condition statements were edited to provide better guidance and consideration for motorized recreation.

In addressing the statement that the acres of 3.31 are not enough to accommodate the growing number of summer OHV users, as commenters pointed out, acres are not the issue; miles of trail are the important factor for motorized users. Trail development is discussed in

responses to Recreation Comment #2. The Recreation discussion in the EIS outlines current use information, as well as expected increases over the next 20 years. The Alternatives display range of motorized and non-motorized options, and are compared in the Direct and Indirect Effects portion of the Recreation section of Chapter 3 of the EIS. Discussions on the effects of recreation on forest resources are included in other sections of Chapter 3 in the EIS

There are discussions on the Recreation Opportunity Spectrum (ROS), and on visitor use studies in the Recreation section of Chapter 3 of the EIS (Affected Environment, and Direct and Indirect Effects) that were expanded in response to these comments. In addition, there is a ROS map included with the Forest Plan that indicates areas that would be managed to achieve a SPNM condition. These maps were developed using current condition as a baseline, and the management areas in the Plan as a desired condition.

The need for more primitive settings, and opportunities for all recreation is well established within the context of comments on forest management activities, and studies (national, state, and local). This is a good example of the problem with having a predominant ROS in the roaded classification (RM). Although RM is useful for some recreation, most users want a natural appearing landscape. See discussions in the Affected Environment, Recreation and Communities sections of Chapter 3 of the EIS.

Some opportunities are well provided for when covered in snow. The Chimney Park ski trail was developed in an old timber sale area. In order for future timber sale activities to occur, an interdisciplinary team [including a recreation specialist] will evaluate the project for its effects on current recreation occurring in the area. In addition, public comment will be sought on any project that implements the Forest Plan.

# **Recreation**Comment #4

Roadless Areas and Recommended Wilderness: Fewer areas should be recommended for wilderness or classified as roadless. Any amount of recommended wilderness would decrease current recreation opportunities. Motorized and mechanized equipment including snowmobiles, bicycles, and off-road vehicles use should continue in roadless areas. Out-of-state hunters will have to hire outfitters to retrieve game from these areas.

More areas should be recommended for wilderness and classified as roadless. There is concern over the potential damage that could be done by allowing snowmobile riding to continue in areas recommended for wilderness. Motorized use in these areas is ruining the hunting experience for hunters that walk in.

**Response:** The discussions in the Affected Environment and Indirect Effects in the Recreation, Roadless, and Wilderness sections in Chapter 3 of the EIS have been edited for clarification. The ROD clearly identifies areas that were recommended for Wilderness in the Final Plan, and Appendix C of the EIS has a full discussion on each of the Inventoried Roadless Areas.

As for interim direction in areas recommended for Wilderness, these areas are to be managed to protect their wilderness characteristics and values. This includes the restrictions on motorized equipment and mechanical transport, as defined in FSM 2326. The Wyoming law regulating the use of outfitters and guides would not apply to areas recommended for Wilderness. Motorized hunting is currently not allowed off roads and trails, so off road

areas recommended for Wilderness aren't currently legal for motorized hunting (see the Travel Management section in Chapter 3 of the EIS for a discussion on the Forest's Travel Management policy).

The roadless areas on the Forest are not a formal designation, rather they are a condition. Unless specifically prohibited, motorized uses are allowed on trails and existing roads. Motorized uses may also be allowed by permit for other specific uses.

Motorized use is allowed on legal motorized trails within an inventoried roadless area. Where existing use is occurring on illegal trails, the Phase II Travel Management plan is intended to further evaluate that use at the site-specific level. The Forest Plan is not closing any currently legal motorized trail or route. An amendment to the Forest Plan could occur if the decision is to designate a trail system that exists in these areas.

Recreation Comment #5	Recreation Opportunity Spectrum (ROS): There is concern about the use of the ROS as a management tool, specifically the guideline in the Forestwide Standards and Guidelines that directs managers to disperse use
	from areas when use exceeds the ROS carrying capacity. The Forest
	Service should not discourage where Forest users go or congregate.
	'Concentrated use' should never be discouraged and use of this term should be removed from recreation guidelines in the management areas.

Response: The purpose and use of the ROS as a management tool is documented in the Recreation section of Chapter 3 of the FEIS, as well as in the Forest Service publication The ROS Book on file at the Forest office. Although there was no baseline winter ROS, the Medicine Bow National Forest recreation team has a proposed winter ROS map included with this Forest Plan. The ROS classes are associated with management areas, so changes to the map should accompany changes to management area allocations. A capacity analysis can be done, based on ROS classes, but there is no local research to verify dispersed use perceptions of crowding, space requirements, and tolerances for these conditions on the Forest. In addition, the purpose of capacity analyses has more to do with outfitted services than general public use. Managers are encouraged to pay attention to user density as a tool to encourage use in other areas when one area reaches a point where user expectations can't be met due to crowding.

Acres presented in the ROS tables (S-1 Table) are an accurate portrayal, as the ROS takes into account the 300' buffer allowed along roads and motorized trails by the Travel Management decision into the motorized acres, but eliminates acres with no motorized routes. During the winter the ROS assumes all areas identified as motorized are used by snowmobile riders.

Recreation Comment #6	Winter Non-Motorized vs. Motorized Use: There is a need for a winter recreation plan, including the establishment of a carrying capacity, motorized, and non-motorized areas, and a re-design of winter access. There is a need for more investment in managing winter use. The Forest Service needs to better regulate snowmobile use. Non-motorized users want more areas where they won't hear, smell, or encounter snowmobile riders. If the Forest Service were to build more parking areas, more snowmobile users would come and exacerbate the user conflicts. The
	riders. If the Forest Service were to build more parking areas, more

caused by snowmobiles, over conflicts between user groups, and over a definitive loss of solitude opportunities. User conflicts between motorized and non-motorized users was cited as being one of the main reasons to use or not use some areas (i.e. Green Rock picnic area) for non-motorized recreation on the Forest in the winter. The Forest Service needs to enforce a "no parking on the side of the road" rule disallowing parking down the road from Green Rock Picnic Ground. The Forest Service should designate a non-motorized corridor from the Green Rock parking lot through Libby Flats, and to include Medicine Bow Peak (or some of it) in a non-motorized ONLY use area. Non-motorized areas need to be easily accessed from parking lots - no more than 3 miles from trailheads. Some cabin owners (on roads) expressed a frustration that their winter months were no longer enjoyable because of the sheer numbers of motors in their area. Non-motorized users also feel that because there appears to be a marketing effort toward motorized users, snowmobile riders will receive more consideration when it comes to designating opportunities.

Snowmobile users want the assurance that the Forest Service recognized their activity as being legitimate (by statements in the goals and objectives in the Forest Plan). Snowmobile riders want no change to their current opportunities and there should be no change to current management, as a result of the Forest Plan. There is concern that the location of some management areas (1.2, 2.2, and 3.5) is unfair and should be MA 3.31, they will change motorized opportunities, and cause crowding in other areas. There is no reason to have non-motorized areas so far from trailheads, especially the Turpin Meadows and Bridger Peak areas. Non-motorized users never use the high country. Snowmobile riders want 'snowmobile ONLY' areas. There are world-class snowmobile opportunities available on the Forest. Many area communities are experiencing a new economic boom during the winter because of the influx of out of area snowmobile riders. Since snowmobile use is the highest use on the Forest during the winter, the Forest Service should be encouraging their use. The Forest Service need to recognize the preference for riding snowmobiles off trails. Requiring them to stay on trails would ruin their experience, and winter tourism.

**Response:** The decade-long controversy over this topic prompted the Forest Service to include management areas that respond to the need for more proactive management of winter use (1.31 and 1.33, 3.31, 3.33, 3.5, 3.58, 5.41, 8.22). Some management areas are intended for managing human use, while others are for resource protection (see the Wildlife, Biodiversity, Soils, Air, and Aquatics sections of Chapter 3 of the EIS for effects discussions). The revised Forest Plan provides clear direction for managers to monitor use and user concerns, and to make adjustments where they're needed, at any point in time. National direction on this topic is vague, as documented in the GAO Report to Congress (2000). This report was included by reference in the Recreation discussion, and is on file in the Forest office.

A capacity analysis for any dispersed recreation use is subjective, at best. The Forest Service uses capacity analyses to determine optimum user densities in discrete areas

(encounters on trails, crowding in developed areas, design capacities at trailheads or other staging areas), but where use is widely dispersed into the backcountry, perception becomes reality. Some snowmobile riders mentioned a crowding, problem on the Snowy Range (who subsequently use the Sierra Madre), but others didn't agree with that assessment. This is just an example of how crowding is a personal perception, not something the Forest Service can widely determine. There are fewer opportunities for access during the winter than in the summer, and there are more concerns for wildlife and other resources during the winter that also limit the development of this season.

Winter recreation is dependent on snow conditions, which can vary almost daily. Users asked for more Forest Service presence on the mountain during the snow season. The Forest Service will again rely on the State and user groups to help implement this plan. The Desired Condition, as outlined in Chapter 1 of the Plan clearly states the intent of the Forest Service in this regard. In addition, the Forest Service will continue to partner with these organizations to help resolve some of the controversial issues surrounding winter use, including monitoring activities. Separating motorized and non-motorized users is an acceptable method for land managers to provide an enjoyable experience for all users, even if one of the groups does not feel it's necessary.

The Forest Service heard users' concerns over areas that restrict snowmobile riding to roads and trails. They are concerned with potential crowding or congestion. Changes in location were made in the final, and where acres in MA 3.5 totaled 11% of the Forest in the Draft; they cover 10.2% of the forest in the final. There was a stated concern over accessing the west side of the Sierra Madre across Little Sandstone, and crossing from Hog Park to the Battle Highway on the south side of Huston Park Wilderness Area. The remaining 3.5 management areas, and areas recommended for wilderness will continue to eliminate this access, because there are no trails through the 3.5 areas. It is the intent of the Forest Service to work with the public and the State Trails program to provide trails across these areas, as part of implementing the Plan – See Geographic Area descriptions for these areas, Chapter 3 of the Plan. The standard relating to wheeled vehicles on snow has been changed from restricting this use on all roads to restricting it on groomed snowmobile trails.

A proposal for a new parking lot for snowmobile trailer parking is currently being analyzed. The Laramie Ranger District will be looking at potential locations for, and effects of any additional parking opportunities near the Greenrock Picnic Ground. Concerned citizens were invited to comment on this project early in the summer of this year, but comments will be welcomed until a decision is made. Whether or not this will add to the numbers of snowmobile riders has yet to be seen, however the intent is to provide an area for these users where conflicts with other users is minimized and they can get their vehicles off the highway. See Recreation, Direct and Indirect Effects in Chapter 3 of the EIS for a discussion on the potential effects to motorized use from the various alternatives to this plan. For a complete discussion on tourism and affected communities around the Forest, see the Communities section of Chapter 3 of the EIS.

The Forest Service has not, to date, been involved in any marketing effort for different user groups to come to the Medicine Bow National Forest. County Tourism Boards, the Wyoming Division of tourism, and the State of Wyoming's web site are actively involved with tourism marketing. Funds from the optional two-cent lodging tax are statutorily to be used for marketing. The State's trail program is supported by Federal Highways Recreational Trails funds, and funds from snowmobile (and now ORV) registration fees.

Displacement of users is discussed in the Recreation section of Chapter 3 of the EIS. In addition, see the discussion in comment #7 on the discrete management areas used for winter use. The Forest Plan responds to an expressed desire for a non-motorized corridor from Greenrock to Libby Flats off the highway, however the expanse of non-motorized area is slightly less than some would prefer. The main highway currently serves as a groomed snowmobile corridor on the highway.

As to the issue of locating non-motorized areas in the backcountry, the intent is to limit motorized use for other resource concerns, not necessarily to provide non-motorized area. The term 'Non-motorized' means that motorized use is not permitted. Non-motorized users may or may not be able to get into these backcountry areas, but their use density is not likely to have the compacting effect of intense snowmobile use.

The State of Wyoming Department of Transportation (WyDOT) has the responsibility for establishing parking rules along state highways, inside and outside the National Forest.

Recreation Comment #7	Ski Area Development and Expansion: There is concern over the Snowy Range Ski Area expansion plans into the currently non-motorized trail system (Libby Creek) behind the existing ski area. The proposed Green Mountain Ski Area shouldn't be allowed to expand onto FS land.  There would be no conflicts with winter plowing and snowmobile use on the Hog Park Road NFSR 550 if the Green Mountain Ski area is developed.

**Response:** The Forest Plan allocates the area for potential ski area development. The expansion of the Snowy Range Ski Area is still subject to site-specific planning and decision-making. The Forest Service's regulations on ski area expansion plans are very explicit. The Snowy Range Ski Area will need an approved master plan, and environmental documents that require full public involvement prior to completing an expansion. The Green Mountain proposed ski area is on private land, and not regulated by the Forest Service. Any further development-related proposals on Forest Service system lands would be subject to process regulations for that proposal. The Carbon County Land Use Plan identified the Hog Park Road as a recreation corridor. The Forest Service is currently working with the County to determine the role of each entity in accomplishing this goal. For more information, see the Hog Park road information in the Dispersed Use Affected Environment writeup in the Recreation section in Chapter 3 of the FEIS.

Recreation Comment #8	Developed Recreation: The Forest Service needs to upgrade some developed campgrounds so that Recreation Vehicles (RVs) can use the sites, and for sites that are under-used. There is a need for a new take-out on the Platte River. There needs to be additional snowmobile trailhead parking, warming huts, and trails. Trails of all types (non-motorized and motorized) were cited as being a need among user groups. Commenters indicated the need for ADA compliance of facilities, including cabins and trails.  The Forest Service should encourage dispersed camping in these areas
	(pack it in/pack it out, no services available).

**Response:** Winter trail development is subject to other restrictions (see the Lynx

Conservation standards and guides in the Forestwide Standards and Guidelines in Chapter 1 of the Forest Plan). Winter support facilities, just like other developments on the Forest are dependent on funding (public and private). The budget numbers in the S-2 Tables in Chapter 2 of the EIS illustrate the low likelihood that normal appropriations will be helpful for adding facilities.

There is a need to establish a point in time when a winter motorized area becomes a summer non-motorized area (MA 1.33), and when a winter non-motorized use area becomes a summer motorized use area. A forestwide guideline has been added to define the times of year when snowmobile use begins and ends, and 'summer' uses end and begin. See the glossary for an interpretation of winter and summer. For discussion about compliance with ADA, see response to Comment #1).

The comments regarding future use of developed sites will be considered in site-specific management decisions. The provision of water at these sites is regulated by the EPA for health reasons. Water wells that are not unlocked for the entire season most likely need to have some capital improvement.

Recreation	Alternative B and C: Alternatives B and C are better for snowmobile
Comment #9	riding, the state's ORV program (and out-of-state users), and funding
	dispersed recreation management.

Response: All of the alternatives provide for a variety of recreation mixes. Alternatives A and B resemble the current plan, the concerns of which are explained in the Purpose and Need statement for this Forest Plan. The merits of each of the action alternatives in terms of wildlife habitat, fuel load reductions, the state's ORV program, and dispersed recreation funding are outlined in the effects analyses of the EIS (see Wildlife, Recreation, Fire and Fuels sections of Chapter 3 of the FEIS).

Recreation Comment #10	Alternative D: There are concerns over the preferred Alternative D, including area restrictions, and changes from current opportunities. The FS
	is ignoring years of conflict and complaints, in selecting this as the preferred alternative.

**Response:** The Draft preferred Alternative was edited, based on comments. The final alternative (D-FEIS) changed the boundaries of the winter motorized and non-motorized areas, changed locations where 3.5 was allocated, specifies trail development through these areas, and does not restrict development of support facilities, where they're appropriate. The changes were made with implementation capabilities and concerns in mind. There are also numerous site-specific decisions in this list that would require additional analysis of a definite proposed action. For a full discussion on these various issues, See the roads representative comment and response #1, ORV trail concerns in #2, and winter use issues in #7 and #8.

Recreation	Alternative F: The Forest Service has mischaracterized Alternative F
Comment #11	effects to recreation. Motorized acres under Alternative F is still too
	excessive. Alternative F provides more balance between non-motorized
	and motorized use through restrictions on motorized use (year-round) and
	this alternative's proposed management of Pole Mountain.

Response: The FEIS, Wilderness and Recreation sections of Chapter 3 reflect the effects of

restricting visitors more than other alternatives. Specifically, the effects on snowmobile riding on the Forest will be a sharp decrease as users are restricted to roads and trails. Visitors wanting to ride off trail will go elsewhere. In addition, the location and amount of recommended wilderness will restrict motorized use from existing open routes that currently disperse users, and will ultimately displace them to other areas, including nearby BLM lands and other National Forests. The intent of the Forest Plan is to provide a wide variety of recreation opportunities, within the capability of the resource.

As for motorized acres we estimated in Alternative F, the ROS book explains the process of moving from a historically managed forest condition (like the Medicine Bow) to a semi-primitive non-motorized condition, and the fact that it is not easily accomplished in even 20 years. The Forest Plan estimates attainable ROS class changes during the life of the Plan (10-15 years) for each of the Alternatives. We believe the most costly change from roaded ROS classes will be in the obliteration and rehabilitation of roads. The Forest Service budget allows for only so many miles of road obliteration, and recontouring to occur in any one year. Any expectation that these areas would automatically revert to a SPNM condition is unrealistic.

Recreation Comment #12	14-Day Stay Limit: The proposed 14-day stay limit on camping will prevent 'squatting' on the Forest.
	There should be leniency in enforcement of the proposed 14-day stay limit for camping during hunting season. There is a need to develop more camping sites.

**Response:** The guidelines for stay limits have been removed. The reason for initiating stay limits on the ground are based on science. There's a problem with the continual use of prime campsites by any one group. Besides limiting other users' potential enjoyment of these areas, continual use can create resource problems with human waste management. The Forest Service needs to be able to monitor use in these sites, and where appropriate, let the site rest for a period of time. David Cole's research (USDA-Forest Service) has shown that although damage from use is curvilinear (compaction and negative effects to vegetation occur during the first few times the site is used, and can't get worse after so long), rest is beneficial to these resources, and the infiltration qualities of the soil improve with rest and rotation. If needed, stay limits can be addressed through establishment of a Special Order.

D 4	Management of December 11-1-1 The French Compile is used decimal and
Recreation	Management of Recreation Uses: The Forest Service is not doing a good
Comment #13	job of managing recreation use and enforcing rules. The fines for violating
	rules is not high enough. More law enforcement needs to be hired before
	making more rules that are potentially unenforceable.

**Response:** The separation of users with Management Areas (Chapter 2 in the Revised Plan), and the associated Monitoring plan (Revised Plan Chapter 4) is an attempt to respond to the issue of the Forest Service not managing users. It's expected that with more specific recreation direction in the Plan will help with recreation management.

In addition, the ROS is the directional tool managers use to determine the type of visitor management appropriate for any ROS class. For example, signs are most obvious along roads and in developed facilities. This type of overt management is consistent with roaded natural or rural ROS class areas, but the same level of management isn't consistent with backcountry trails. In these instances, visitor use is managed in a subtle manner. Large

group gatherings aren't permitted (when they require a special use permit) in these areas, for example (see Chapter 2 in the Revised Plan).

Recreation Comment #14	Outfitters and Guides: How does the FS determine capacity? There is concern with the proposed standard for requiring at least one guide with	
	first aid certification, stating that snow machine and ATV use should not	
	have this requirement (nor the requirement of a guide), just because they're	
	high-risk activities. There should not be any restrictions on 'group events'	
	in backcountry management areas. There is concern over the use of the	
	term "manage" with respect to special use permits.	

**Response:** The outfitter and guide standard #1 was removed since the Draft. Guideline #1 under Developed Recreation (Chapter 1 of the Plan) is a management tool used in conjunction with the ROS. Use vs. Capacity in developed areas is a good way to determine if a facility meets the needs of the general public. Capacity in the open forest area is more difficult to determine, so encounters on trails and visual contact with other campers from campsites are the typical method of determining if use has exceeded an area's capacity.

The Forest Service has an obligation to direct and, where appropriate, restrict visitor use on the Forest (FSM 2301.1). From: Forest Service Manual 2301.1 - Recreation-Use Regulation. The Organic Act of 1897, as amended (FSM 1021.11a), instructs the Secretary of Agriculture to preserve and to regulate occupancy and use of the National Forests (16 U.S.C. 473-478, 479-482, 551). Prohibitions on the use of National Forest lands are contained in 36 CFR 261 (FSM 1023.4).

The Forest Service is not required to allow all proposed guiding services. Outfitted opportunities are a benefit to the visitors, with a responsibility for providing a safe experience. National direction provides for the application, issuance, and administration of special use permits. Within this direction is the statutory responsibility to manage permits, and when necessary, discontinue them.

Recreation Comment #15	,
	What process determined that the desired condition of the trail is that of a 'non-motorized' long-distance trail corridor.

**Response:** In accordance with direction from the Chief's office and the Plan for the CDNST, the District is currently in the process of NEPA and other work to move the Trail off the motorized two-track on that segment north of the Battle Highway. A memo documenting the Forest Service's objective for the CDNST from the Forest Service Chief is on file in the office. The memo is referenced in the Affected Environment section of the Recreation writeup, Chapter 3 of the EIS. Although a special management area corridor has not been applied to the CDNST, special consideration for visual quality will be applied to the various management areas intersecting the Trail, in accordance with the Forestwide Standards and Guides (Scenery Management, Chapter 1 of the Plan).

## **Recreation**Comment #16

National Recreation Agenda: The Forest Service is not in compliance with the mission of Multiple Use (MUSYA). The FS is not managing for the 'highest and best use' (recreation) and that the National Recreation Agenda (USDA-FS) is not being implemented with the Plan.

Recreation management areas should be changed to timber management areas.

**Response:** The National Recreation Agenda, as well as the Forest Service Chief's priorities are discussed in Recreation, Chapter 3 of the FEIS. There is no statutory requirement for the Forest Service to manage for a single, highest use. The Forest Service emphasizes nonurbanized recreation, and under national direction, does not compete with private industry (FSM 2303). The Plan is intended to provide recreationists access to a variety of recreation opportunities, where and when they are appropriate. Not all recreation demands can be met on Forest Service system lands, just as not all National Forests are the same.

The 3.31 management area between Wycolo and Foxpark was changed to a timber (5.13) management area in the final plan. For information on restrictions over mineral and oil and gas exploration in areas with high recreation, visual, ecological, and other values, see the discussions in the Minerals, Oil and Gas, Recreation, Wildlife, Vegetation, and Wilderness sections of Chapter 3 of the FEIS.

# **Recreation**Comment #17

Partnerships: There are a number of opportunities to have Forest Service partnerships with communities, clubs, the State Trails program, and specific organizations to promote recreation use on the Forest. FS should provide educational signs for communities around the Forest, reminding people of their responsibility in taking care of the Forest. The FS should utilize these partners to help with maintenance, monitoring, restoration, and development of sites.

**Response:** These are all good suggestions for Forest Service officials. In addition, there has been an increase in the number of partnerships, nationally and locally. This effort is becoming more important as funding levels aren't increasing to keep up with added use pressures. These suggestions are part of implementation of the plan and are outside the scope of the plan revision.

# **Recreation**Comment #18

Hunting and Fishing: Hunters should be able to drive off road in order to retrieve game. Closing roads decreases hunter success rates.

It frustrating finding 'motorized hunters' in areas that law abiding hunters hike into. There needs to be more motorized use restrictions so that wildlife stays on the Forest, longer during the season.

Current opportunities for fishing should be maintained. There is concern that the objective of restoring and protecting aquatic ecosystems would mean that non-native fish (the best for fishing) would be selected against.

**Response:** Roads play an important role in managing the Forest. The Travel Management and Recreation sections of Chapter 3 of the FEIS provide a discussion on their importance to recreation and other access needs, and the Wildlife, Soils, and Aquatics sections discuss the effects of roads on those resources.

Driving off road to retrieve game is not allowed outside a 300' buffer of any open road or motorized trail, anywhere on the Forest, without a valid disability permit from the State (Travel Management Decision, 2000). The Forest Service will not obliterate or otherwise close any legitimate motorized route without full disclosure and public input in accordance with NEPA. These are site-specific decisions that will be made in Phase II of the Travel Management plan, completed in the annual program of work.

According to the Routt Forest Plan, increased road density actually decreases hunter success. There is a misconception that more roads would bring hunters closer to the big game, but the use of those roads runs the game off the Forest onto private land earlier in the year (see Livestock and Big Game discussion in Chapter 3 of the EIS.)

Regarding non-native fish, there are no plans or even discussions between the Medicine Bow National Forest and the WG&FD to "phase out" stocking non-native fish in Forest lakes. The lakes that are stocked by the WG&FD were at one time, fishless; there are no trout native to the North Platte basin.

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Recreation	Recreation Fees: Wanted to see other users charged more (non-motorized	
Comment #19	wanted motorized charged for env. damage; motorized wanted non-	
	motorized charged for the use of their trails). Some users said they'd pay	
	more for more enforcement of rules, and better maintenance.	

**Response:** A more in-depth discussion on the fees charged by the Forest Service, and the fees charged by State Statute are included in the Recreation section of Chapter 3 of the FEIS.

ATV or ORV, and snowmobile registration fees are charged by the State Trails program. Receipts from these fees are available for the Forest (and all other Forests in the State, along with other public entities) to apply for through a grant program, for maintenance projects, however they are not available for planning.

The authority for admission and recreation-use fees is contained in the Land and Water Conservation Fund Act of 1965, as amended (Pub. L. 93-303, June 7, 1974) (78 Stat. 897, as amended; 16 U.S.C. 460l (4) to 460l (11m); 23 U.S.C. 120 (note)) and implementing regulations at 36 CFR Part 291 (FSM 2330).

The Forest Service is able to use fees for maintenance and upgrades with the Recreation Fee Demonstration authority thanks to the Omnibus Consolidated Recissions and Appropriations Act of 1996 (Public Law (Pub. L.) 104-134). This Act authorized a fee demonstration test between 1996 and 1998. The time period of the test was extended through fiscal year 1999 by Pub. L. 104-208 (Consolidated Omnibus Appropriations Act for Fiscal Year 1997); additional provisions related to the fee demonstration test are set out in Pub. L. 105-83 (Interior and Related Agencies Appropriations Act for Fiscal Year 1998). In this fee demonstration test, the Forest Service may apply 80 percent of fees, plus up to 15 percent of the cost of collection, to the National Forest site where the fees are collected; the balance of the remaining 20 percent is distributed to fee demonstration activities at the discretion of the Regional Forester.

Recreation	Mountain Biking: Mountain bikers want more trail opportunities, and
Comment #20	they want the FS to recognize their sport as legitimate.

**Response:** The designation of additional trails is dependent on funds available for the planning and development. Besides funding available, the Forest Service relies on volunteer

organizations to help with projects such as these. The Laramie District of the Forest has a partnership with a local (Laramie based) bicycle organization (BikeNet) that has taken the lead on several volunteer efforts on the Forest, including the Rails to Trails project. For those individuals sharing trails with mountain bikes, the International Mountain Bicycling Association (IMBA) has outlined an accepted set of trail etiquette whereby bicyclists yield to horses and pedestrians (from IMBA).

## **Recreation**Comment #21

Noise: The noise from motorized use was cited as one of the most important issues for non-motorized users. Most of these commenters wanted designated quiet areas, and areas where they can watch wildlife and birds out of earshot of motors. Some were in favor of a noise standard in the Plan (developed sites). Some commenters felt that noise is not a legitimate concern, and that if people want quiet they should go to the Wilderness Areas.

**Response:** Noise is a very real issue, both psychological and physical. At certain levels, continuous noise can cause lasting damage to an individual experiencing the effect. In addition, noise is a disturbance for users who are not making the noise. Noise is the reason the ROS requires Semi-primitive areas to be a certain distance from roads, and a certain size. This issue was considered in the delineation of motorized and non-motorized areas in the final revised plan. Noise is best managed inside developed areas where other users are obviously disturbed. The Forest Service employs volunteer hosts to help manage for the comfort of all users inside the boundaries of these administrative sites. The only noise standard in the final plan is 70 dbh around oil and gas drilling pads.

## **Recreation**Comment #22

Alternative A: These comments are primarily in favor of the current plan; they don't want to see their favorite activities affected by the revision.

**Response:** Direction in the revised plan provides clear management direction for a wide range of activities and setting opportunities. The effects of the Plan on recreation are discussed in Chapter 3 of the EIS, Recreation and Wilderness sections. The objective of the revision is to improve opportunities for recreation in an age of increasing use and new activity requirements, while providing for traditional forest recreation. With the demands on the Forest Service for everyone's own recreational pursuits, including special trails of varying levels of difficulty and length, there is the possibility of negatively affecting someone's preferred activity. It is expected that unauthorized activities will be affected by this plan.

## Recreation Comment #23

Libby Flats: Individuals commenting on Libby Flats were concerned over motorized use in the area. They want more restrictions placed on this area during hunting season (especially), and would like to see it designated year-round nonmotorized (or at least during the winter).

**Response:** The final allocation for this area is an extension of the 1.31 (Semi primitive non-motorized) to the west of the Snowy Range RNA, bounded by the 3.31(Semi primitive motorized) on the southwest edge of the geographic area. These prescriptions provide both motorized and non-motorized recreation opportunities in this area, summer and winter.

# **Recreation**Comment #24

Mapping of Motorized and Non-Motorized Areas: This category includes concerns by users over being able to determine if an area is motorized or non-motorized, based on the new Plan. They want the Forest Service to

make sure management areas are well defined on the ground. Attention to was made to the mislabeling of a trail along FSR 452.

**Response:** Easily identified boundaries are important, especially in the winter. Direction is provided for marking trails through management areas (MA 3.5) where motorized use is not allowed off designated routes (see Geographic Areas, Chapter 4 in the Revised Plan). The snowmobile trail maps will provide clear information on boundaries; for example, areas south of Huston Park Wilderness Area are non-motorized to the west of the road into Colorado. As is true in all cases, where users aren't sure of their location, they shouldn't venture off the marked trail in that direction.

During the summer, since motorized use is not allowed off roads or trails (marked for that use), users should not have problems "accidentally" venturing into non-motorized areas with a motorized vehicle.

Recreation	Recreation Budget: The forest budget estimates in the Plan were	
Comment #25	questioned – commenters felt recreation should have the highest budget,	
	since it's the highest use of the Forest.	

Response: Recreation has never been well funded; it wasn't a line item in the Chief's budget request until 1946. Recreation is just one program in an age of decreasing budgets, and there are many more competing budget interests. Roads, wildlife, vegetation management, watershed management, overhead and administrative costs, rangeland management, fisheries management, and facilities management all require their own budgets. The estimates in the Supplemental Tables (Chapter 2 in the FEIS) are based on an average of the most recent 3-years' budget. See also the introduction to this chapter, and Appendix B in the FEIS for a full explanation of the process.

Recreation	Conflicts Between Uses: Some users said there are none, others said	
Comment #26	they're the reason they don't go to different areas on the Forest anymore,	
	and still others want the Forest Service to eliminate all conflicts	

**Response:** The Final plan is intended to respond to users' complaints over incompatible recreation activities. Eliminating conflicts on the Forest is a lofty goal for the Forest Service. Non-motorized areas have not replaced legal motorized areas in the final plan allocations. See the response to comments in this section, numbers #1 through #8.

Recreation Comment #27	Effects on Other Resources: This broad category includes all concerns over the effects of recreation on soils, aquatics (including wildlife and water), vegetation, and wildlife. This also includes comments by individuals who don't believe there is any effect from winter motorized
	use.

**Response:** There are discussions on the effects to various resources from recreation in the FEIS, Chapter 3. In addition, there is a complete bibliography at the end of the FEIS that references the information contained, therein.

Recreation	Visitor Numbers and the County Use Plan: Comments in this category	
	included support for and objection to the use of the County Land	
	Management study.	

**Response:** The final product of any scientific study depends on the objectives for that study,

Appendix L

and on the variability. The findings as reported in the Draft were valid for the time they were collected. The Recreation section of Chapter 3 in the FEIS provides a comparison of different studies, and their use in this analysis. In addition, the questions regarding the meaning of Wilderness are discussed along with other studies in the Communities of Interest section of Chapter 3 of the FEIS.

Recreation Comment #29	Future Demographics: These commenters felt that since the population is aging, there should be more opportunities for them to drive around the Forest, and that nonmotorized opportunities should be minimized. These individuals also felt that the plan misrepresents the amount of damage done by motorized recreation. They feel the Forest Service hasn't worked with
	users in order to understand their needs.

**Response:** The numerous editorials included in these comments were considered, if not applied. The revised plan provides direction for more motorized recreation opportunities, where they are appropriate. Forest Service personnel work with a number of user groups, but more likely they work with the groups that invite their participation.

Recreation	Cow Creek Management Area Allocations:	This area should not be year-
Comment #30	round non-motorized.	

**Response:** The final plan shows the area will be managed with a mix of management areas emphasizing wildlife, range, and non-motorized in summer, with winter snowmobiling. The 1.33 Management Area allows for administrative use of the existing two-track for fence mending, salting, and other necessary allotment management activities.

Recreation	Big Sandstone Management Area Allocations: The management area	
Comment #31	allocation in this area should be a mix emphasizing livestock management,	
	motorized recreation, and big game hunting.	

**Response:** Sandstone and Stemp Springs are in Management Area 3.5, with a provision that snowmobile routes would be marked for passage through these areas. The 3.5 management area allocation in Sandstone would allow for motorized use (on roads) during the non-snow months, and for snowmobile riding across the area during the winter on a designated route (that has yet to be designated).

Daguation	Dannack Mauntain Managament Area Allegations: The managament area	
Recreation	Pennock Mountain Management Area Allocations: The management area	
Comment #32	allocation in this area should promote semi-primitive recreation through	
	either a non-motorized or recommended wilderness management area,	
	rather than deer and elk winter range.	

**Response:** Pennock was not recommended for Wilderness (see Roadless, Chapter 3 in the FEIS). The area was identified as a critical habitat area, and non-motorized. No new motorized trails will be developed or designated.

Recreation	Bear Mountain Management Area Allocations: The management area
Comment #33	allocation in this area should continue to allow winter motorized use.

**Response:** The final plan allows for motorized access across the area in order to provide for this currently permitted use.

Recreation	Pole Mountain Motorized: There is concern over current motorized uses	
Comment #34	off roads on Pole Mountain. There is support for current efforts to develop	
	trails (year-round) and environmental education programs.	

**Response:** Motorized use in this area is not legal, and so current efforts to monitor and rehabilitate the area is the best management available, beyond peer pressure and other information efforts to the motorized community.

Recreation	Curtis Gulch Motorized Corridor: There is concern over the proposed
Comment #35	motorized management area outside the corridor.

**Response:** The revised plan allocates motorized use to the existing corridor, bordered by a Research Natural Area.

Recreation	Deep Creek/Bridger Peak/Mowry Peak/Bear Mountain Management Area
	of the historic aspects.

**Response:** The non-motorized portion of Bear Mountain does not currently have roads or trails. The area where these four-wheel drive roads exist is in a 3.58 Management Area, which means motorized use in the area will be restricted to designated routes, year round.

### **Research Natural Areas**

RNA Comment #1	Why does the Plan propose Research Natural Areas? Some respondents said there is no need to designate RNAs because current management meets all goals and objectives to maintain the Forest's integrity.
	Other respondents requested create more RNA's be created to represent all types of ecosystems found on the Medicine Bow. One respondent listed the types of ecosystems that need to be represented; those types are: lodgepole pine, spruce fir forest, ponderosa pine forest, Douglas fir forest, aspen forest, krummholz forest, gambel oak forest, shrublands, moraines, montane rivers, kettleholes, alpine and montane lakes, beaver pond complexes, other wetland types, ribbon forest, alpine glacier-scree-tundra-and meadows, subalpine meadows, and geologic types including granite and sandstone outcrop.
	Another attempt to end run congress and make a wilderness area without calling it that. There was an incident of fencing off and signing area as an RNA near Little Brooklyn Lake without reason.

**Response:** National Forest Management Act (1976) regulations at 36 CFR 219.25 state that forest planning shall provide for the establishment of research natural areas (RNAs). We are directed to identify examples of important forest, shrub land, grassland, alpine, aquatic and geologic types with special or unique characteristics, types of scientific interest and importance that are needed to complete a national network of RNAs. The Chief of the Forest Service has delegated the Regional Foresters authority to establish RNAs.

FEIS-Chapter 3- Research Natural Areas section describes the regulations at 36 CFR 219.25 and the Forest Service direction at FSH 4063 includes procedures for establishing and

managing RNAs. Also see Appendix F in the FEIS, which describes how potential RNAs were recommended and inventoried.

The project record contains detailed descriptions, maps and photos of inventoried RNAs. The Rocky Mountain regional office and Rocky Mountain Research Station guides National Forests in which representative RNAs should be considered for establishment on that forest. A November 1993 memo from the Regional Forester and 1993 regional direction and matrix define what specific ecosystems occur on the MB and if designated would contribute to the regional and national network of RNAs. This is discussed in the FEIS – Chapter 3 – Research Natural Areas. Most of the ecosystems listed by commenters are contained in that guidance paper.

Regarding a sign near Brooklyn Lake restricting snowmobiling; the Laramie district recreation staff will be notified and asked to remove the sign and permit snowmobiling unless there is site-specific resource protection issue that precludes removal.

The purpose and objective for establishing RNAs is different than wilderness so selecting and managing RNAs is not an end run on Congress to create a Wilderness Area. There is no need to establish a protective buffer around RNAs. If protective measures are needed, the Forest Supervisor may issue an order describing restrictions on use and those restrictions would be applied only to the areas within the RNA and would be consistent with the specific Establishment Record that describes the purpose of the individual RNA.

RNA boundaries have been modified as necessary and do not contain classified roads. Since off road travel is prohibited, there should be no need to prohibit summer, motorized recreation as a means of retaining the area intact. Snowmobile use is prohibited in the two RNAs that are located within Wilderness Areas (Platte Canyon and Savage Run) and will be monitored in LaBonte, Battle Mountain, and Brown's Peak as it has in the Snowy Range RNA over the last several years. If snowmobile use or any other use results in conditions that would preclude the area from remaining an RNA, the Forest Supervisor has the authority to restrict it.

## RNA Comment #2

More vs. Less RNAs: RNAs should not be reduced in size and number. but instead, should be increased and new ones created. RNA's for fire dependent forest types should be expanded to the largest possible size. Examples include East Fork Encampment RNA, which should be expanded to include the entire Coon Creek inventoried roadless area. The following areas would make excellent RNAs: Snowy Range, Libby Flats, Deer Creek and Strawberry Creek inventoried roadless areas; Deep Creek, Labonte Canyon, and Snowy Range Med Bow Peak and Browns Peak, Eagle Rock and Lodgepole creek on Pole Mountain, and all reference areas in Baker 1994 and all types from the Von Ahlefeldt and Speas (1996) Those include: Ground moraine, Ribbon forest, East Fork Encampment River, Standard Park Bogs, Threemile, Platte Ridge and Canyon, Many Ponds, Sheep Mountain, LaBonte Canyon, Big Bear Canyon, Old Maid's draw, Battle Mountain, Deep Creek Douglas creek, Upper Pass Creek. Some respondents supported the addition of as many as 13 new RNAs to the existing Snowy Range RNA.

While others do not support any increase in RNAs.

**Response:** The East Fork Encampment RNA was inventoried as a potential RNA and recognized as having already provided extensive research and monitoring data as the control watershed for the Coon Creek Research and Monitoring study. It was not included as a candidate RNA in any revision alternative. There was past tie-hacking within the area, likely conflict in managing as an RNA because of active grazing, and there are better areas to represent high elevation forested ecosystems.

The inventoried roadless areas listed by the commenter (Snowy Range, Libby Flats, Deer Creek and Strawberry Creek) do not necessarily qualify to be potential RNAs. The criteria used for selecting potential RNAs is in FEIS, Chapter 3, Research Natural Areas. Criteria for roadless is listed in FEIS, Chapter 3, Roadless Areas.

Deep Creek (now called Big Sandstone), Labonte Canyon, and Browns Peak were considered for RNA designation in at least one alternative and LaBonte Canyon and Browns Peak are designated in the Preferred Alternative D-FEIS. Medicine Bow Peak, Eagle Rock and Lodgepole Creek were not. Medicine Bow Peak is a Special Interest Area because although it is a special ecosystem, it has heavy recreation use and would not be suitable as an RNA. The reference areas from Baker and Von Ahlefeldt were given full consideration as potential RNAs with (Ground moraine, Ribbon forest, East Fork Encampment River, Standard Park Bogs, Threemile, Platte Ridge and Canyon, Sheep Mountain, LaBonte Canyon, Old Maid's draw, Battle Mountain, and Deep Creek (Big Sandstone) all included in at least one revision alternative. Platte Canyon LaBonte Canyon and Battle Mountain were selected as RNAs in the preferred Alternative D-FEIS.

The Forest Service inventory considered 16 potential RNAs. Alternatives A – F in the Draft EIS considered anywhere from no new RNAs in Alternatives A, B and C to a maximum of 10 RNAs in Alternative F. The analysis disclosed information on 14 separate RNAs across the alternatives. Alt D-FEIS, the preferred alternative includes five new RNAs. These five were included in a modified alternative prepared between draft and final after receiving public comments on the RNAs in the DEIS. They are intended to contribute to the regional network of RNAs as well as respond to public input.

RNA Comment #3	Why is there only one RNA included in Alternative D? Why is Brown's Peak a potential RNA if what it offers to the RNA program is unknown? What are the major and minor plant communities in Brown's peak? The DEIS provides no insight into the process of potential RNA selection and rejection of specific RNAs. If only one representative RNA is established for each type on the Forest, a human caused disturbance could alter the RNA and eliminate its natural and scientific values. There should be two
	RNAs established for each type on the forest.

**Response:** RNA inclusion in alternatives was based on the theme of alternative. Alternative D had a recreation theme so management area mapping emphasized recreation management and special interest areas and gave little attention to RNAs. This was not a balanced alternative prior to the final, a more balanced D-FEIS was mapped.

Browns Peak was discussed in Appendix F of the DEIS, but not sufficiently in Chapter 3 of the DEIS. The FEIS, Chapter 3 and Appendix F were enhanced between draft and final to provide the reader with additional information about Brown's Peak.

The major and minor communities include alpine skree, high elevation mosses and lichens

and Engelmann Spruce and Subalpine fir.

The process for potential RNA selection is discussed in both the FEIS, Chapter 3 and Appendix F. The Forest Service inventoried 16 potential RNAs, graded them on quality relative to one another and after discussion with the research community included six potential RNAs in the Notice of Intent to revise the Plan. The public commented on those RNAs, submitted additional RNAs (Brown's Peak) for consideration and then, based on public input and the types of ecosystems missing from the Region 2 matrix of RNAs, the preferred alternative includes five new RNAs. This set of RNAs works toward completing the regional matrix while minimizing redundancy with already established RNAs on other Forests.

Management direction for selected RNAs is MA 2.2. This direction minimizes human disturbances and allows natural processes to occur. Prior to consideration for RNA selection, each area was analyzed for management conflicts such as human caused disturbances and not recommended for selection if conflicts that would prevent these areas from serving as RNAs could not be overcome. Therefore, management direction in MA 2.2, combined with the exercise of eliminating those areas with management conflicts should preclude the need for establishing two representative areas for each type.

RNA Comment #4	Use of RNAs: No roads, no timber harvest, no motorized, no development. RNAs should be mapped as MA 3.31. RNAs should have a buffer around them to protect them from inadvertent encroachment. Snowmobiles and other motorized recreation should be excluded from all roadless RNAs. Management of these areas should discourage all human use.
	Another attempt to end run congress and make a wilderness area without calling it that. There was an incident of fencing off and signing area as an RNA near Little Brooklyn Lake without reason

**Response:** While some management direction for MA 3.31 is consistent with direction in MA 2.2 (RNAs), mapping Research Natural Areas as Backcountry Recreation, year round motorized would not be appropriate. Category 2 is specifically established for mapping areas that conserve representative or particularly rare and narrowly distributed ecological settings or components. This is not consistent with backcountry, motorized recreation. In addition, unlike MA 3.31, travel is generally non-motorized in Category 2.

RNA Comment #5	RNAs Effect on other Uses: RNAs will have a negative effect on grazing allotments, timber and recreation opportunities. Describe how many areas would allow grazing and when. Will allotment boundaries need to be
	changed as a result of this?

**Response:** See FEIS, Chapter 3, Research Natural Areas, Direct and Indirect Effects for livestock grazing, timber management and recreation opportunities. By establishing LaBonte Canyon RNA, 233 acres of suitable timberland are removed from consideration for timber production. Since there are no areas on the Laramie Peak Unit of the Forest mapped for timber production in the selected Alternative D-FEIS and planned for scheduled sale or harvest, these 233 acres would not have been scheduled for timber production even if no RNA had been selected. Alternative D-FEIS modified boundaries of RNAs to ensure that opportunities for grazing in active allotments would not be altered. No change in grazing

opportunities is anticipated.

RNA	Plan is Inconsistent: Who actually conducted the inventory for candidate		
Comment #6	RNAs; was it Wyoming Natural Diversity Database or The Nature		
	Conservancy?		

**Response:** There was an error in the draft document. The Nature Conservancy contracted the inventory. Corrections have been made to the final documents.

### **Scenic Resources**

Scenic Comment #1	Impacts on Forest Landscapes: There were a number of comments on scenic impacts on forest landscapes by timber harvest and associated road
	construction. The current clear-cut areas and road cuts are scars that reduce
	the value of this asset. The level of reclamation for the logging industry
	seems to be considerably less than that required for the general public.
	One solution might be to remove the initial view of clear cut areas from the
	Forest's main roadways. Rather than remove virtually all the trees to a
	roadway's right-of-way, create a one hundred yard 'green belt' along each
	edge. One of the more ubiquitous visual intrusions are linear features
	imposed on landscapes by humans. Linear features, as most currently
	relevant to the MBNF, are roads and timber unit boundaries.

**Response:** Recent clearcuts and new constructed roads contrast with the surrounding landscape due to the presence of slash, and disturbed soil. Temporary roads would be obliterated and revegetated after the completion of harvest activities. Revegetating cut and fill slopes of permanent roads also would minimize scenic impacts. In several years, the new vegetation on disturbed ground would reduce scenic impacts. Pre-Forest Plan stripcut pattern continues to dominate in part of Snowy Range Area. The stripcut pattern has not been used since the early 1970s and is not allowed on National Forest land. When a new vegetation management project is proposed within the old stripcut area, the linear edges of stripcut would be rehabilitated and designed with irregular edges to better blend in with the surroundings.

Scenic Comment #2	Scenery Management System: There were a number of comments on Scenery Management System, Existing Scenic Integrity and old Visual Management System. The entire discussion on Scenic Integrity, Scenic Attractiveness, Landscape Visibility, Scenic Classes, and Scenic Integrity Objectives is very confusing. Why doesn't the discussion of Existing Scenic Integrity consider forest fires or insect epidemics as deviations from the valued landscape character?
	The ESI analysis is based on valuation of natural characteristics and the scenic impacts proliferated by human caused deviation. Undiscussed in this entire visual analysis is the human caused, indirect influence to vegetation as a result of fire suppression.
	The current state of the landscape is rated using existing scene integrity (ESI), a qualitative ranking system based on "human caused deviation of form, line, color, and texture of the landscape character being altered" MBNF, 2002a. One of the shortfalls of the ESI analysis is that it fails to

define and recognize cultural attributes.

**Response:** The revised Forest Plan is using the new Scenery Management System (SMS) for managing scenic resources on National Forest System land. The new system includes better integration of aesthetics with biological, physical and social/cultural resources and puts more emphasis on sustainable ecosystem management. The process of developing SMS through inventorying and analyzing existing landscapes can be difficult to understand by the general public without displaying the SMS map. The Scenery Management System map and handbook are available for review by anyone who would like to better understand it in the Laramie Supervisor's Office.

The Existing Scenic Integrity (ESI) rates human alterations of landscapes. Natural-caused events such as wildfires, windthrows, insects and disease are not considered human alterations. The effects of fires on stands are described in Environmental Consequences on Scenic Resources – Effects from Insects and Disease, and Fire and Fuels Management. It is true that past fire suppression had created some changes in stand density, composition and structure. Fire suppression had been used in high recreation areas to protect scenic and recreation values. Some natural fire-caused landscapes may have short-term impacts on scenery but can result in improved scenic quality with increased vegetative diversity. For example, aspen stands would be reintroduced after the fire and can provide more high quality and diverse scenery. Scenic impacts of large area through natural events or humans would depend on the locations, distances and viewpoints.

Cultural attributes were considered in the Existing Scenic Integrity (ESI). The effects on ranching landscape and developments are described in Environmental Consequences on Scenic Resources – Effects from Livestock Grazing and Big Game Use.

Scenic	
Comment	#3

Standards and Guidelines: The first scenery standard should be amended to include the following: "Management activities that are inconsistent with the scenic integrity objective will be prohibited unless a decision is made to change the scenic integrity objective. A decision to change the scenic integrity objective will be documented in a project-level NEPA decision document."

**Response:** Each Management Area Prescription is assigned adopted scenic integrity objective(s). Adopted scenic integrity objectives are under guidelines. Deviations from guidelines will be analyzed during project level analysis and documented in a project decision.

### Scenic Comment #4

Maintaining Scenic Values: Some sensitive areas should be set aside for scenic value. Maps of the preferred plan appear to show some diminished status of the Wyoming Hwy 70 to Hog Park road. This seems to indicate that the scenic or recreation corridor is no longer a high preference in the total plan. I believe that this is wrong and that the USFS should take all steps to encourage economic activity by touting the road as a scenic corridor and including some upgrades in future planning. Restore the Scenic corridors along Highway 230 to the plan so logging cannot come all the way to the roadway.

**Response:** There are several Management Area Prescriptions that emphasize on maintaining or protecting scenic values in sensitive areas. The scenic resources will be

considered and analyzed within primary travelway corridors when resource management activities are planned within or adjacent to it. Some road corridors were improved for public safety, for example, Wyoming State Highway 230 was widened in the late 1980s to improve sighting distance and maximize the warming effects of sunlight on melting ice and snow on the road surface during the winter.

Scenic Comment #5	Management Area Direction: We don't believe this Rx is necessary or appropriate. It duplicates the S&Gs in Rx #4.22, but is written in a manner that sweeping "vistas" may include restrictions on many other Rx areas. It has many conflicting statements and S&Gs. Highly unlikely that a full range of multiple use activities will be compatible with maintaining a landscape that has a "predominately natural appearance and be relatively undisturbed".
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**Response:** MA 4.22 is allocated in Alternative A only and MA 4.2 is allocated in all other alternatives. The desired condition for MA 4.2 includes natural appearing landscape with relatively undisturbed or slightly disturbed by human activity. Some landscapes such as the alpine tundra located within the Libby Flat area will be relatively undisturbed by management activities while lodgepole pine forest near Ryan Park would be slightly altered by humans. Insects and disease outbreak will be generally allowed at endemic populations but not at epidemic populations. Epidemic populations would begin to impact scenic quality in a larger landscape scale.

Scenic Comment #6	Natural Disturbances: Statements such as listing "visual quality" as a goal and later stating that "A relatively high level of disturbance is accepted (by whom?) as the landscape moves closer to the Historic Range of Variability (HRV)" seems to be mutually incompatible.
	6. Scenery: Meet the adopted scenic integrity objectives of Moderate in all areas.

**Response:** Natural disturbances such as wildfires, windthrows, insects and disease have historically played a role in natural landscape appearance changes and created several characteristic landscapes on Medicine Bow NF. In some management areas, natural disturbances would be generally allowed to influence vegetation composition, structure and function unless the scenic quality is threatened. For example, in MA 4.2, mature large trees located within high use recreation use areas that have high scenic values would be protected from beetles by spraying a labeled insecticide that kills beetles to prevent infestation.

MA 5.15 is assigned scenic integrity objective of Moderate within the foreground of arterial and collector roads and primary trails and scenic integrity objective of Low in the middleground and background zones. In the middleground and background zones, there would be some large created openings that mimic large natural disturbed pattern i.e. wildfires, insects, windthrows etc.

### Soils

**Response:** See Soil discussion in FEIS, Chapter 3 for more complete discussion of soil health.

Soils	Clearcutting Effects on Soils: Clearcutting is ugly and it diminishes the
Comment #2	integrated aspect of the Forest by creating unnatural openings and by
	taking out the nutrients of the heartwood of the forest which fire would
	naturally otherwise leave to form new soils.

**Response:** With the possible exception of potassium the forest floor is the major biomass compartment accounting for retention of nutrients. There is a major contributing role of forest litter, which will offset the removal of bole wood from the site. The amount and type of ash remaining after fire depend largely on the amount of fuel consumed and the severity of the burning. The availability of nutrients left after burning can range from lost of nutrients to being available. A variety of vegetative treatments can be utilized under the plan providing for nutrient release to the soil.

# **Soils** Comment #3

Grazing Effects on Soil: The discussion on effects on soils from livestock grazing and big game animals, beginning on page 3-82 focuses exclusively on livestock grazing. The document utilizes the "Eastside Forest Health Assessment (Johnson, Clausnitzer et al. 1994)" to imply that livestock grazing has caused the greatest degree and extent of disturbance in the western United States. The key word utilized by this assessment is "perhaps". Kendall Johnson's Rangelands through Time present and entirely different picture of historic grazing impacts. By utilizing only one source for a statement of livestock disturbances on soils, the DEIS is deficient.

"An analysis of desired vegetation condition and soil standards on the Forest showed that some of the rangelands are not meeting forest plan direction. This indicates that soils may be exceeding allowable soil loss limits in some locations" (page 3-82, emphasis added). The document does not provide information as to whether this condition, if it actually exists, is a result of grazing (as inferred by its inclusion in this section) or can be attributed to natural conditions.

**Response:** Johnson and Clausnitzer was one document but not the only one. As you have stated and K. Johnson also stated that perhaps livestock grazing in the 1800's had caused the greatest degree and extents of disturbance. Areas that are not meeting forest plan direction are handled through allotment management planning, which analyze the effects on a site-specific basis.

Soils	Frost Effects on Soil: Pesant (1987) determined that frost penetrates more
Comment #4	deeply beneath snowmobile trails and melts more slowly.

**Response:** We agree with your statement. See Soil section in FEIS, Chapter 3 for more discussion.

Soils Comment #5	Off-Road Use Effects on Soils: All off road motorized recreational use (both summer and winter) should be prohibited in environmentally sensitive areas such as wetlands, riparian areas, and wildlife winter ranges because of potential effects on soils, These restrictions should be enforced.
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**Response:** The Road Analysis Process is a tool that is available to analyze the effects of roads and recommend management options that range form upgrading the road to closure. See Soil section in FEIS, Chapter 3 for more discussion.

Soils	Motorized Use Effects: It seems as if the motorized recreation community
Comment #6	impacts the resource twice. Once in the "recreation" discussion and again
	in "Travel management". The travel management categories are often a
	repeat of the recreation category with respect to motorized use. Travel
	Management should discuss roads rather than the actions of motorized
	recreationists.

**Response:** Changes have been made in the FEIS, Chapter 3, Soils section to clarify this.

Soils Comment #7	Wildfire Effects on Soil: Since the impacts of wildfire on soils can be greater than prescribed fire and other treatments, an Alternative must be selected that does the most to maintain healthy soil. From the description, the Preferred Alternative does not adequately address this issue as well as A, B, or C. The Final Plan should minimize fire impact on the soil resource by minimizing catastrophic fire.
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**Response:** No matter which alternative is selected, the Forest should do what it can to minimize the risk of catastrophic fire. Please see soil section in FEIS for more discussion on wildfire effects to soils.

Soils Comment #8	Non-motorized Effects on Soil: Impacts from indiscriminant hiking or dispersed camping should be compared to the impacts from OHV use. Since the impacts are negligible at the Forest wide level, site-specific projects should be performed to mediate damage rather than imposing large
	scale or Forest-wide restrictions.

**Response:** All forms of recreation (both motorized and non-motorized) have potential for impacts to the soil resource. During project level analysis, impacts can be analyzed and the proper steps can be implemented to correct the problem. See soil section in Chapter 3, FEIS for more discussion.

Soils Comment #9	Road Use Effects on Soil: While obliteration of two track roads may have long term beneficial effects on soil and reduce open road density, closing or obliterating these roads will have a negative effect on recreation. Road closure seems to be a goal of the Plan regardless of whether or not there is
	a recreational value to the road that out weighs potential soil impacts.

**Response:** Before any roads are closed, the road analysis process is done to determine what to do with particular road. If a road has high recreational value and has soil and water problems, the solution may be to fix the problem and keep the road open to the public. We do need to keep the amount of open roads in balance with our road maintenance dollars.

Soils Comment #10	Recreation Effects on Soil: Since effects from recreation use would be similar in all alternatives, there is no justification or need for large scale restrictions on current recreation activities such as off-trail snowmobiling.
	An Alternative should be implemented in the Final Plan that protects recreation opportunities, like Alternative B.

**Response:** This might be true if the soil resource was the only resource that is involved. There are different effects from recreation but no one alternative stands out as more or less impact to soils.

Soils	Sedimentation from Grazing: Grazing (particularly over-grazing)
Comment #11	adversely affects many species on the forest by siltation of streams,
	etc.(DEIS-multiple pages).

**Response:** During Allotment Management Plan analysis sedimentation of streams is one of the issues we analyze and changes or mitigations are built into the management plan on a site-specific basis.

Soils	Uneven-aged Management:	Effects on Soil Statements that greater soils
Comment #12	losses are related to uneven-a	ge management is not always true.

**Response**: We agree with your statement. It was not our intention to imply that soil losses are always greater with uneven-aged management, but to point out that all types of management may have issues that need to be dealt with. See Soil section of FEIS, Chapter 3 for more discussion.

Soils	Timber Harvesting Methods: In the soils analysis on p 3-84 the
Comment #13	description of timber harvesting is incorrect for mechanized logging. Our
	crews typically fell the timber with a Timbco and then delimb the tree at
	the stump. We do very little whole tree skidding.

**Response:** Changes have been made to the soil section. The description of timber harvesting was for information only and did not affect the analysis done for the FEIS.

Soils Comment #14	Cumulative Effects to Soils The DEIS purports to show cumulative effects on soils in Table 3-21. However, this table shows the range among alternatives of the levels of various activities that could affect soils. It is not a cumulative effects analysis. A proper analysis would attempt to model the effects of various activities on soil productivity, including erosion, compaction, etc. Other than the "erosion index" in Table 3-10, there is no quantitative analysis of these effects in the DEIS.
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**Response:** Changes have been made to the cumulative effects section of the soil section in the FEIS.

Soils Comment #15	Clearcut Effects to Soil: It is terrible to think of clearcuts the approximate size of 100 football fields on the forest. What would the erosion be like?
	Clearcut logging is harmful and should not be used on the Med Bow. Harmful properties include erosion,, [decreased] moisture
	Will you continue to allow up-down slope harvest rather than "contour" cutting? Please do notthat causes severe erosion.

**Response:** No matter what type of timber harvesting is done, erosion control and mitigation measures are included in every timber sale. During the site specific analysis, the actual soil types are analyzed and layout and mitigation measures are applied.

## Soils Comment #16

Protection of Soil: In the DEIS, the argument is made that uneven-aged methods create more soil compaction than clearcutting, presumably because uneven-aged harvest requires multiple entries with heavy skidding and loading equipment. DEIS at 3-80. The use of wheeled rather than tracked machinery can reduce compaction. However, on easily-compacted soils, heavy machinery use should be avoided altogether, regardless of harvest type. In these cases, horse logging or other lower-impact methods should be employed in all cases as a matter of Forestwide standard.

**Response:** There are many tools available to minimize the amount of compaction from a timber sale. Using designated skid trails are very effective in keeping within the soil protection standards. Also ripping the main skid trails after harvesting is an effective tool. See soil section in Chapter 3, FEIS for more discussion.

## Soils Comment #17

Site Preparation Methods: In the "Effects from Timber Harvesting and Road Construction" subsection of the "Soil" Section, the Forest Service has failed to disclose and evaluate the environmental impacts of postlogging site preparation treatments such as tractor walking and roller chopping. In previous comments, BCA has called attention to several scientific studies highlighting the negative impacts of these practices. The agency's failure to evaluate the effects of these practices constitutes a failure to take a "hard look" at this source of impacts and thus is a violation of NEPA.

**Response:** The potential impact of various site preparation methods is a site-specific question that is best done at a project level analysis. With the different soil types and method of post harvesting it would be difficult to make any generalization regarding site preparation. None of the alternatives described a certain method that needed to be analyzed at the forest plan scale.

## Soils Comment #18

Soil Crusts: Biological soil crusts typically consist of complex communities of bacteria, blue-green Algae, micro fungi, green algae, mosses and other bryophytes, and lichens (Belmar et al. 2001). Fungal hyphae can be important components of biological soil crusts (States et al. 2001). Wyoming biological soil crusts in several sites were found to be dominated by lichens (States and Christensen 2001). Biodiversity Conservation Alliance's own records for the Medicine Bow indicate the widespread presence of soil crusts dominated by mosses in the Pole Mountain unit; we expect that upon detailed survey, they will be found abundantly in the Laramie Peak unit and in the sagebrush steppes along the foothills of the Sierra Madre as well.

**Response:** We agree with you regarding the importance of biological soil crusts. The extent and distribution of these areas are best handled during the allotment management plan where we can determine what changes need to be done to protect the biological soil crust.

### **Special Interest Areas**

SIA Comment	Proposing Special Interest Areas (SIA):	Why does the Plan propose
#1	special Interest Areas?	

**Response:** Legal authority for proposing and managing Special Interest Areas comes from regulations (36 CFR 219.11 c and 36 CFR 294.1) and Forest Service directives in the Manual at Title 2360. There are areas of national forest land other than wilderness or wild areas, which should be managed principally for recreation use that retains the natural condition.

SIA Comment #2	Research of SIAs: Regarding special interest areas, we believe such areas should be maintained and further increased in the future to provide for
	research on forest ecosystem function.

**Response:** Special Interest Areas are not intended to serve as research areas like Research Natural Areas. Their purpose is to provide opportunities for public use and interpretation of natural conditions or unique features in nature. Opportunities for special interest areas include geologic, zoologic, historical, scenic, and combinations of those features. In Alternative D-DEIS, potential RNAs were considered for SIA designation. If they had been selected as SIAs, management in those areas would not be consistent with RNAs but rather as Special interest areas.

SIA Comment	Geographic Areas vs. SIAs We do not understand what is special about
#3	South Savery, North Savery, Bow River, Snowy Range East Front, and
	Middle Fork. They should be managed like they were in the old plan.

**Response:** The areas listed appear to be Geographic Areas rather than proposed Special Interest Areas. The Geographic areas are watersheds or groups of watersheds that contain a variety of management areas and not just a single management direction. Geographic areas serve as the basis for conducting analysis and estimating how forest management and uses affect the local and adjacent environments. The Forest is mapped into 27 geographic areas ranging in size from 12,000 to 120,000 acres.

#4 re	Process for Recommending SIAs: What is the process used for recommending Special Interest Areas, allocating them to alternatives, and conducting an analysis. We recommend that you consider special designations in areas first determined to be economically or otherwise not
recommending Special Interest Areas, all conducting an analysis. We recommend designations in areas first determined to leasible for other uses. Selection of areas	reasible for other uses. Selection of areas for special designation is more subjective. Thus, the burden to justify the need is greater.
Ir D O th	Some respondents support the effort to add and protect additional Special interest Areas ranging in specific areas and numbers in Alternative D-DEIS, which had the most special interest areas.  Other respondents do not support any additional Special Interest areas as here are enough in Wyoming already. It would be wrong to exclude them from use in any way.

**Response:** Special Interest Areas can be recommended and established outside of the forest planning process, but generally, through public involvement and disclosure during the planning process, it is an ideal time to consider and establish them. It would be inconsistent

with regulation (36 CFR 294.1) to only consider establishing special interest areas in areas that are not feasible for other uses. Since they have unique features that are believed to be valuable and provide recreation opportunities to the public, they should be considered at a level consistent with other uses on the Forest. There are 27 potential special interest areas considered in this process, with 13 allocated to Management Area 2.1-Special Interest Areas in the preferred Alternative D-FEIS. Allocation of 13 is consistent with public comment on the draft EIS and with the expected increase in recreation use over the life of the revised plan.

SIA	Comment
#5	

Use of SIAs: MA 2.1 Special Interest Areas. These areas will be used to exclude anyone from an area not specifically interested in those special interests. An example is the area of Centennial Ridge, which is being proposed as an SIA due to historical value. This is one of the most highly mineralized areas in the forest and as soon as this designation is applied, prospectors will not be allowed to prospect in it. Withdrawn from mineral entry. The writing is on the wall. The setting in MA 2.1 has subjective phrases that could be defined to include almost anything. Terms like emotional significance, public popularity, fairly large area and inspirational activities should be removed. The historical uses that have been in place for years should be allowed to remain.

**Response**: The Medicine Bow National Forest provides for many uses across the 1.1 million acres. Not every use is permitted to occur on every acre, but in the case of SIAs, human use, particularly for interpretation, education and inspiration is encouraged. Standard #1 under Minerals talks about withdrawal for mineral entry when it is necessary to protect the values of the SIA. Since Centennial Ridge has historic value due to mining, it is logical that current day entry for mining would be compatible and actually enhance the recreation experience. The Revised Plan recognizes this very activity of current mining occurring on Centennial Ridge under Management Area 2.1m-Centennial Ridge.

For the majority of Special Interest Areas established in the preferred Alternative D-FEIS, traditional use of the areas will continue. White Rock Canyon and Kettle Ponds are the only two areas that may have had some acres allocated to timber production and contributing to the allowable sale quantity of timber in the past. Timber harvesting may still continue in those areas if compatible with the values in the SIA, but not for the purposes of timber production alone.

<b>SIA</b> Comment
#6

Vedauwoo SIA: Recreationists of the Bow proposed the Vedauwoo area and surrounding rock formations as a public proposed SIA for geologic reasons to the planning team early in 2002. Why was this never included in any alternatives, especially C as requested?

**Response:** Vedauwoo has been allocated to MA 8.21- Developed Recreation for many years. Public use has been and is expected to continue to be intensive. The area is a popular site renowned for rock climbing. It draws climbers from within the country as well as internationally. The recreation area is also a developed picnic and camping area that has been modified substantially from a natural state to one with facilities and trails. In Chapter 2 of the Revised Plan, Category 8 states that "Ecological conditions are likely to be permanently altered by human activities beyond the level needed to maintain ecological processes and landscapes with natural appearance." It would be very difficult if not

impossible to convert this area from an intensively used and modified area to an area that complies with activities encouraged in MA 2.1, which are interpretive, educational and inspirational. The Vedauwoo area is special and it does provide unique geologic formations, but the area has already been modified extensively and current and expected future use would be incompatible with management direction in MA 2.1.

## Threatened, Endangered and Sensitive Species

# TES Species Comment #1

Bald Eagles: Bald Eagle standards should be modified to provide protection of a foraging area, winter roosts, and the definition of active nests. Exact locations of nests must be provided and surveys must be conducted prior to activities. The waivers in the Oil and Gas Stipulations should be dropped.

The proposed [bald Eagle] standards appear to set a maximum distance within which these protections may be applied, but do not mention a minimum area to be protected. The Forest Service's determination that "All alternatives provide added protection from new or increased disturbance at known nest sites" seems overly optimistic, since these protections are purely optional.

**Response:** The standards suggested by the US Fish and Wildlife Service (FWS) have been added. The "foraging area" standard addresses concerns about protection of large trees and snags within ½ mile of rivers and lakes within a 2.5 mile radius of an active nest. A map of generalize locations has been provided; data is gathered by the State of Wyoming, which prefers not to release exact locations, a policy which the Forest Service honors. The waivers in the oil and gas section are included because of the unique timing of oil and gas leasing; unlike most projects, there may be a long interval between granting of the lease and the beginning of on-the-ground activity. The waiver exists to avoid having to protect a nest site that was present during analysis but may have fallen with its supporting branches, or been unoccupied for more than 5 years (in the case of the Bald Eagle).

Compliance with these standards is not "purely optional." Buffers may be decreased if there is a reason (like a major ridge blocking sight and sound) to conclude that activities that are closer will have no more effect on the animals than ones at the usual buffer, but the norm will be to use the buffers in the plan. The term "line of sight" has been removed from the standard.

# TES Species Comment #2

Canada Lynx: There are no lynx on the MBNF and never have been. Why do you have so many standards and objectives for a non-native species? These standards should be dropped if the Southern Rockies population is determined to be "insignificant."

The LAU mapping was inaccurate and arbitrary. Lynx habitat is omitted and too much of the mapped area is steeper than lynx prefer. There is no connection to the lynx habitat in mountains to the south- roads and logging should be prevented there.

Standards for lynx should be dropped because of: reduced opportunity to salvage small fire and bug infestation; the adverse effects on silviculture of lodgepole pine; and possible eventual closure of forest roads. Other

comments urged making these standards stronger by prohibiting salvage on large areas as well as those under 5 acres; preventing activities that would move an area from habitat classification as "denning" or "foraging" to "other"; and removing the exemption for winter logging from the snow compaction standard.

The Roe Report reveals that almost every conclusion in the documents here related to the Canada lynx is incorrect. For instance, there is evidence that lynx are "indifferent" to human presence, don't require a great degree of habitat connectivity (as they have been known to traverse ski slopes), and are not put at a competitive disadvantage vis-à-vis other predators by snow compaction. Therefore, the Forest Service must review the Roe Report and incorporate its findings into the Draft Plan.

Transplanted lynx in Colorado have been found in poor condition and having large home ranges, suggesting that food supply may be a significant issue (Warren, 2003).

**Response:** As explained in the Biological Assessment (BA), though there is limited evidence of lynx on the MBNF in the nineteenth and early twentieth centuries, there is good evidence of high lynx abundance in the early 20<sup>th</sup> century on the adjacent Routt NF. The Forest Service has concluded that the lynx is a native species and, given its threatened status, needs protection. The Forest Plan can be amended at any time if it is determined that direction is not based on the best available science. Lynx have been verified on the Forest in 2003 (see BA for details).

The lynx mapping was not "arbitrary." Mapping was done using methods agreed upon by Region 2, in coordination with the Wyoming Field Office of the U. S. Fish and Wildlife Service. Selection was based on cover type, and included all degrees of steepness in large blocks- there was no selection or bias against level areas. The different processes on the Routt and the Medicine Bow that led to the Lynx Analysis Units (LAUs) not lining up were reconciled in 2002. Dry lodgepole was excluded from LAUs but could be included in linkage areas, which were mapped provide connection to the mountains to the south. Lynx have been shown to move readily through forests with past logging and narrow, unpaved roads. Logging and roads may be limited in linkage areas (consistent with the lynx direction in the Plan), but there is no need to "prevent" these activities and features. (See BA for more detail).

The Forest Service believes that the lynx standards in the Plan provide adequate protection for the lynx and are consistent with the needs of other species and with the "coarse filter" approach to ecosystem management. Protection of some small areas of burned or insect-killed forest provides for the needs of other species that use this habitat. Winter logging differs from other compaction-causing activities because it is short-term. The temporary nature of logging projects means that effects on snow compaction are limited to a few years.

The "Roe Report" is not a research paper or a peer-reviewed review article. It is a report on the ecology and behavior of lynx and application to ski areas and their management prepared by a private contractor. There is very little difference in the literature used or the summary of results between this report and the lynx assessment in the Biological Assessment in the EIS. Both note the lack of information in many areas, the lack of avoidance of forest roads,

the anecdotal nature of reports of lynx tolerance of human presence, and the permeability of managed landscapes to lynx. Roe et al. do not suggest that there is evidence refuting the hypothesis that compaction leads to competition. Rather, they argue there is no evidence supporting this hypothesis. Though Roe's interpretation is that the hypothesis is unfounded, both Roe and the BA acknowledge the lack of evidence one way or the other.

The lynx released in Colorado early in the augmentation program suffered heavy mortality from starvation. After release methods were modified, holding the animals until they were in better condition, survival improved greatly. The production of three litters of lynx kittens in 2003 is an encouraging sign of the potential for the lynx population to recover in the Southern Rockies.

## TES Species Comment #3

Preble's Meadow Jumping Mice: There are no Preble's meadow jumping mice (PMJM) on the Laramie Range and/or there is no distinct Preble's subspecies. The Fish and Wildlife Service has never identified a PMJM in Wyoming.

The standards on Preble's should be modified and standards added to provide monitoring of vegetation after burning, and revegetation if needed. The BA also makes the questionable assertion that "shrub vegetation will recover in a few years" after prescribed fire (p. I-19). Shrub growth is slow, and recovery can take decades (Harniss and Murray 1973; Pendleton et al. 1995; Belnap 2002). In fact, fire has been shown to be effective in controlling sagebrush while mechanical and chemical treatments have not (Watts and Wambolt 1996; Wambolt et al. 1999).

Grazing is not bad for PMJM habitat, as evidenced by the fact that, where the species is found in Wyoming, the land has been grazed. The conclusion of "likely to adversely affect" is therefore not warranted, though some individuals may be killed in fires.

The BA mentions overgrazing as a threat to this species, but the Forest Service fails to analyze how overgrazing has impacted the riparian areas within Preble's habitat, and says only, 'The effect of grazing on Forest Service land is not known' (p. I-19). This is irresponsible, given the vast body of literature that discusses the impacts of grazing on riparian areas. Ensuring that grazing does not compromise the health and integrity of riparian areas, and reducing grazing pressure and implementing restoration practices in areas that have been compromised, must be fundamental aspects of any range program, and the BA must be able to point directly to these standards and discuss their relationship to Preble's management. Better analyze the impacts of grazing, and provide Preble's habitat with meaningful protections from overgrazing.

The standard for avoiding Preble's habitat as the site for new recreation facilities, trails, and roads should be (a) strengthened or (b) dropped as not justified without evidence of harm and a site-specific study.

MAP 3.5 is used for a large portion of the western Laramie Peak unit. For what reasons was this done? We assume the Preble's Meadow Jumping Mouse but nothing could be found to support this.

Intense recreational use of the Pole Mountain Geographic Area is part of the desired condition according to the draft plan: "Dispersed motorized recreation opportunities will dominate this area (90%), with backcountry nonmotorized opportunities occurring on 9% of the area. The area will continue to be an important and highly used recreational area on the forest" (p. 3-26). Standards, and Guidelines only discuss fuels reduction and removal of military ordnances. While the plan does mention that "grasses and shrubs will continue to be the dominant cover type" (p. 3-26) here, it is clear that the management direction for this area is directly at odds with the standards and guidelines designed for Preble's conservation: "In suitable habitat within the range of the Preble's meadow jumping mouse, avoid placing new recreation sites, trails, or roads within the riparian zone. Existing roads in designated critical habitat will be reviewed for possible closure or relocation" (p. I-12); and "Within suitable habitat for the Preble's meadow jumping mouse, survey for occupancy or apply the following restriction to prescribed burns: do not remove shrub or grass cover for more than 1/3 mile within each mile along linear riparian zones" (p. I-12).

Recreation is also emphasized in the Laramie Range Geographic Areas with PMJM populations. The recovery of this species and its habitat is not mentioned as a goal and not special standards are included. The area includes campgrounds, trails in PMJM habitat, and heavy recreation, especially in hunting season in some areas. While Desired Condition does call for a mixture of riparian seral stages, the objectives include reconstructing the Elkhorn Creek trail and enhancing fisheries along Deer Creek.

**Response:** The Fish and Wildlife Service (FWS) has identified Preble's using genetic tests at two sites on the Forest; these sites were designated as Critical Habitat. See BA for habitat identified by the FWS. The PMJM standards and guidelines have been modified in cooperation with the FWS. The statement in the BA refers to riparian shrubs in PMJM habitat, rather than sagebrush, which the Forest Service agrees does not recover quickly.

As stated in the BA, there is no evidence that grazing which meets Forest Service standards for retention of vegetation harms the PMJM. The BA clearly states that the adverse effect determination is based on the effects of prescribed fire, not grazing. The assumption in assessing the effects of the new Plan is that the Standards and Guidelines will be met, and Forest Service employees conscientiously monitor forage utilization and have livestock removed when allowed utilization has been reached.

Under the Endangered Species Act, an adverse effect call does not mean that species' viability is decreased; the determination is based on effects to individuals. If there is a threat to adults or nests from an activity done or permitted by the Forest Service, the determination is "may affect." Since prescribed fire in Preble's habitat is likely, the determination is "likely to adversely affect" because of short-term risk of mortality, even if the burning enhances habitat in the long-term.

The Forest Service does not agree with the assumption that PMJM habitat on the Forest has

been "overgrazed." Literature on the effect of grazing on riparian habitats is available, but this is a different question from the effects of grazing on PMJM. The Forest Service acknowledges that overgrazing can be detrimental to riparian species, and has selected two bird species as MIS to provide information on this issue. The relevant standards in the Selected Alternative are referred to in the BA in the FEIS. The MBNF is initiating a study on the effects of burning and grazing on the PMJM and its habitat.

The discretionary language is retained because there may be times when a road has to enter the riparian zone, for example to allow legally required access to private land on the opposite side of the creek to which there was no reasonable alternative route. Roads, trails, and concentrated recreation destroy cover by altering vegetation, increase disturbance, and allow direct mortality (road kill). See BA for further detail. Removal of system roads and established trails will be done through NEPA.

The MA allocations in many cases were made to address the general theme of the alternatives rather than based on locations of particular species. This area does not contain Critical Habitat for the Preble's meadow jumping mouse. Potential habitat (habitat that looks suitable but Preble's presence has not been confirmed) occurs Gunnysack Cr and tributaries and on nearby Box Elder Creek (District records). The same standards apply to Preble's wherever it occurs on the Forest.

Although recreational use is an emphasis of the Pole Mountain Geographic Area, most of the sites where Preble's have been caught (Lodgepole and North Crow drainages) are in either a range allocation (5.12) or a winter range allocation (5.41). The sites in Middle Crow and South Crow are in MA 4.3 (dispersed recreation), though not in the areas of most concentrated use. The Forest Service does not see any conflict between the GA desired condition description and the Preble's MJM standards you have listed.

Recreation objectives do not override the Forestwide Standards and guidelines for the PMJM. No separate direction is necessary at the level of the GA since these Forestwide standards and Guidelines apply everywhere on the MBNF where the PMJM or suitable habitat exist. The Forest Service agrees that existing campgrounds have removed habitat, and trails have reduced habitat quality by fragmenting riparian habitat and increasing disturbance. However, as noted in the BA, the PMJM is nocturnal and is hibernating during hunting season. The Standards and Guidelines will direct future development of campgrounds, roads, and trails to mitigate existing and avoid new adverse impacts in the PMJM.

## TES Species Comment #4

Mountain Plover: The fact that mountain plovers may be declining in numbers could be caused by agency actions to limit the low seral areas available. There very well could be some, as yet unidentified species, that requires low seral habitats, which the Agency's activities will be impacting.

By its own admission, the Forest Service's assessment that mountain plovers do not occur on the Medicine Bow National Forest is at odds with that of the Fish and Wildlife Service. The BA states that suitable habitat is also absent from the Forest. However, no information is presented to corroborate these statements. "

**Response:** The Forest Service agrees that a distribution of seral stages provides for the most species needs (see Desired Condition in Chapter 1 of the Plan). However, as pointed out in

the Biological Evaluation (BE), there is no suitable large flat area on the MBNF that provides suitable mountain plover habitat.

The FWS includes in its letter species that may be in the area, but they do not claim to have data on which to base their selection of included species. They leave the judgment of which species are (or are likely) to be present on the MBNF to the Forest Service, which is more familiar with the habitat types on its land. The "species list letter" includes species the FWS believes should be addressed: it is not a statement that the species occurs on Forest Service land. As pointed out in the BE, there is no large flat area on the MBNF that provides suitable mountain plover habitat.

TES Species Comment #5	Black-tailed Prairie Dog: The Forest Service must consult with Fish and Wildlife about potential suitable habitat sites for black-tailed prairie dogs
	and address these in the plan before making a no effect determination. We note that the Wyoming Game and Fish Department is in the process of
	inventorying black-tailed prairie dog colonies, and should be consulted as well.

**Response:** The Forest Service has consulted informally with the FWS for over 2 years and the species is included in the BE. Because the Black-tailed prairie dog is a candidate species, the report on the species in the BE was sent to the FWS in an appendix to the BA. The FWS does not "consult" on candidates, but reviews the Forest Service assessment and may comment on it. Neither the FWS nor WDGF has reported black-tailed prairie dogs on the MBNF. See "candidate species" appendix 3 in the BA or the BE for further detail.

TES Species Comment #6	Disturbance Buffers: The raptor buffer standards should not necessarily allow buffers to be narrower if there is a barrier to "line of sight." The ¼ mile buffer for disturbance for several species is too narrow.
	Buffers should be larger than suggested for the Ferruginous Hawk.
	The disturbance buffers for grouse leks, crane breeding areas, and bighorn lambing areas are "inadequate" or the "buffers are too wide."
	The Forest Service should provide buffers around bat caves. We request the USFS develop buffers to protect caves and abandoned mines that currently support or could support Townsend's big-eared bat.

**Response:** The ½ mile disturbance buffer was a typographic error that appeared in the Draft Plan. It was always the Forest Service intention to have this distance be ½ mile, consistent with the Utah FWS raptor management recommendations (Romin and Muck 1999). The "line of sight" provision has been dropped. The buffers were made consistent with the recommendations of the Wyoming Game and Fish representatives on the team that developed this Plan.

There is little land on the MBNF that is likely to have caves, mostly on the Laramie Peak Unit. No timber harvest is scheduled in this unit. On other parts of the Forest, bats may inhabit inactive mines. The location of these is known and surveys for bats would occur during project level planning.

# **TES Species** Comment #7

Northern Goshawk: In the Northern Goshawk nest protection standard, the date has been made later and the buffer has been increased without justification.

The Northern Goshawk standards seem overly restrictive. Is there science to support these?" The wildlife standard #6 on pl-28 imposes new time restrictions for goshawk nests without any justification. Eliminate this standard or reduce the time restriction back to July 31, similar to the Routt standard...The same standard also enlarges the restriction to 1/2 mile from the existing 1/4 mile) for concentrated intense activities. No justification is provided for the distance change. ...Reduce this distance standard back to the no more than 1/4 mile distance that has been used for the recent past.

The USFS seems to have entirely ignored goshawk foraging habitat.

Northern Goshawks use more than one nesting habitat on the forest- why is this not taken into account.

The PRP proposes a 200 acre region for goshawk Post Family Fledging areas (PFAÕs), yet the USFSs Region 3 Goshawk Guidelines indicate that the goshawk needs 400-500 acre PFAÕs. The Northern Goshawk standards are inadequate. The PFA should be 500 to 1000 acres, not the 200 in the Plan. There is no protection of foraging habitat. What is the source of these standards?

Squires and Ruggiero (1996) found that northern goshawk on the MBNF used nest sites that were typically on flatter terrain. Yet, there are no standards to ensure that potential goshawk nesting habitat on flatter terrain are protected.

The goshawk standards are unclear and there is no direction for management within post-fledgling areas (PFAs).

Has the USFS completed any monitoring of the northern goshawk on the MBNF? Did this monitoring data factor into the analysis?"

The BE entirely fails to disclose the existing condition of goshawk habitat in the MBNF and the direct, indirect, and cumulative impacts to this habitat. For instance, in the BE, there is no discussion of habitat distribution and the MBNF Forest.

There is no discussion of habitat distribution and the MBNF Forest Plan provides no requirement that goshawk habitat, especially nesting habitat, be well-distributed throughout the MBNF. The protection of nest sites, while necessary, cannot ensure that the goshawk and its habitat are well-distributed and the population is viable. Additionally, it is unclear how nest sites will be protected. Does the USFS mean active or historically active nest sites or will the agency actually survey for potential nesting habitat and protect potential nest sites? We request further clarification.

P 3-243 – paragraph 2 lists several species associated with old growth. Surprisingly, northern goshawk is not listed, despite the fact that the

MBNF has proposed northern goshawk as a Management Indicator Species for old growth (see p H-14).

The guideline to regenerate older aspen stands near clearcuts to provide future goshawk nests is incomprehensible. The older aspen stands provide potential nesting habitat today; is the Forest Service committing to destroying all possible goshawk habitat in a given area once the logging gets going, to make absolutely certain that the viability of goshawks in the immediate area is eliminated in the present so that it can be enhanced 100 years [in the future].

**Response:** The Northern Goshawk standard protection date was moved to August 30 based on research by Squires on the MBNF showing that fledglings stay very close to the nest for the first 3 weeks after fledging and on observations of immatures near the nest in mid-September on the Routt NF. Those were unusually late, so August 30 seemed to reduce the risk enough to provide adequate protection at most sites. The buffer was increased to conform to the buffer used in the raptor management guidelines by the Utah Field Office of the FWS, which was used as a reference for buffer width for all raptors.

The R3 recommendations give added direction for each cover type, but the MBNF elected to use direction based on spatial patterns like those created by natural processes, rather to meet conditions correlated with habitat selected by any individual species. Like most birds, goshawks do not select habitat by plant species, but by structure. Whatever the habitat, they select closed stands with interlocking crowns for nesting, open forest for foraging, etc.

The standards for goshawk and other raptor species have been reworded. Rather than set management direction for individual species, the Forest Service has chosen to manage based on knowledge of how natural processes function in systems similar to those on the MBNF. The Plan contains objectives, guidelines, and MA direction for managing to move toward a pattern and structure more similar to that created by natural processes.

Extensive monitoring has been conducted on goshawk nest locations for more than a decade. This information is the source of most of the goshawk locations obtained from district records and the Wyoming Natural Diversity Database and is the source of the "status and distribution on the Medicine Bow" section of the goshawk analysis in the BE.

Existing nests will be protected wherever the birds have chosen to place them. If fewer than 3 nests are located in a territory, additional stand(s) meeting criteria for good nesting habitat will be protected. Criteria are not defined in the Plan but are left to the biologists input at the project level, and would include slope.

More detail has been added to the description of known nest sites and distribution of goshawks on the MBNF. The Forest Service's management for species viability includes the concept that habitat be "well-distributed", and this does not need to be specified in standards for each species. The protection of nest sites is one part of the MBNF's additions to the Revised Plan that benefits goshawks; others include increasing retained old growth in lodgepole to 15% (from 10%), higher retention standards for snags and downed wood (essential for many prey species), and objectives to move toward a spatial pattern more similar to that created by natural processes.

The goshawk is not dependent on large blocks of old growth. However, some of the habitat

components they use are associated with mature or old forest. The final Plan has clarified the species' use as an MIS.

In a natural fire that replaced the lodgepole, inclusions of aspen would have burned at the same time. When the aspen was old enough to provide nesting habitat, the adjacent lodgepole would be likely to have thinned out enough to provide adjacent foraging habitat. If the aspen is not regenerated at the same time as the lodgepole, it is likely to have succeeded to conifers by the time the lodgepole is again good goshawk foraging habitat. (Stands in this setting are not likely to be climax aspen.) The intent of this direction is to keep the aspen located in or near lodgepole "synchronized" with adjacent forest.

# **TES Species** Comment #8

Flammulated Owl: The flammulated owl is inadequately protected in the Proposed Plan. An overall increase in mature ponderosa pine habitat, retention of snags and cessation of pesticide use (if applicable) would benefit this poorly understood species.

**Response:** Much of the mature ponderosa pine on the Forest has burned recently. Snag and old growth standards have increased over the 1985 Plan. Pesticide use requires site specific NEPA analysis. See BE for the habitat needs of the species and FEIS, Chapter 3, Biological Diversity for cumulative effects.

# **TES Species** Comment #9

Boreal Owl: The boreal owl is inadequately protected in the Proposed Plan.

All areas known to have had active boreal owl nests in the past 6 years are located in MAs 5.15 and 5.13 in the Preferred Alternative. We would like to see some of these areas reclassified as MA 3.5 or 5.11 in order to protect this sensitive species." ...

Areas around nest boxes and other known nests, as well as areas where males have been heard calling in the winter should be protected from logging pressures. Male boreal owls are highly philopatric; even though they do not use the same cavity or nest each year, they remain in the area and are severely impacted by reduction in mature spruce-fir habitat. Areas of known boreal owl breeding, located mainly between Rob Roy and Fox Park, west to Savage Run Wilderness, and east to Albany, are mostly classified as MAs 5.13 and 5.15, as are areas of known boreal owl nesting on Road 329 and Sand Lake Road. All snags in calling areas should be protected...

There is no protection of nest sites mentioned in the EIS. Boreal Owls begin nesting very early in the season and may be disturbed during nesting by snowmobiles. Additionally, known nests are not given protection from timber harvest activities."

The Upper and Lower Douglas Creek Geographic Areas are important low-relief areas that are primarily classified as 5.13 and 5.15 MA, but which retain large amounts of old-growth (albeit fragmented) and mature spruce/fir habitat. This area supports the highest abundance of boreal owls on the Forest (based on nest box monitoring results and calling surveys).

**Response:** Forest Service management should provide for maintaining biodiversity on its

managed land, rather than relying on special reserves. The Boreal Owl lives in forest types that experienced stand-replacing fires and the species is expected to have some ability to adapt to dynamic landscapes. The increased retention of snags and old growth, the provision for recruitment snags, the protection of riparian snags, and the desired increase in security areas in the Revised Plan should provide habitat for the long term protection of Boreal Owls.

TES Species Comment #10	Sage Grouse: Standards should include "no surface occupancy" and a prohibition on structures that could proved perch sites for raptors and other avian predators on grouse.
	A definition of an "active" lek is needed.
	What if a sage grouse lek occurs within ½ mile of the Forest boundary? Will the buffer requirement still apply?
	We question the claim that the MBNF is of little importance to the sage grouse. While there may be no leks on the MBNF, the USFS does state that sage grouse occur on the MBNF.
	Natural or prescribed burning of sagebrush is seldom good for sage-grouse. This assessment recommends that fires within sage-grouse habitat be avoided in most cases, and should be allowed only after careful study of each local situation.

**Response:** The large buffers (e.g., two miles for the Sage Grouse) and dates are designed to provide protection not only for the lek but for adjacent nesting habitat. Oil and gas potential is low on the MBNF and the expected development during the life of the Revised Plan (10 to 15 years) is 2 wells. If a sage grouse lek is known within 2 miles of the MBNF, the disturbance buffer will apply.

An active lek is apparent and could reasonably be expected to be occupied in the future. A lek that is unoccupied may still classified as active dependent on presence of sage grouse in the area.

Wyoming Game and Fish, the agency that manages populations of these animals concluded the MBNF is of little importance to sage grouse. The inclusion of standards to protect leks and nesting habitat will cover potential future leks and breeding. Potential effects on sage grouse will be considered in planning for all projects.

Prior to burning, proposed prescribed fire will be assessed for effects on grouse and other sensitive and game species.

benbitive and 5a	<b> </b>
TES Species Comment #11	Columbian Sharp-tailed Grouse: The USFS claims that no alternative will have any impact on the Columbian sharp-tailed grouse. It is difficult, if not impossible, to find any support for this statement and indeed, existing research suggests the USFS made a flawed assessment.
	The USFS proposed no measures to protect the sharp-tailed grouse and its habitat from livestock grazing and other disturbances.
	Given the small size and vulnerability of the sharp-tailed grouse on the MBNF, it is entirely likely that the population is not currently viable. However, this did not seem to factor into the analysis in the BE or the

development of the MBNF Forest Plan.

On what basis or evidence is the following statement made: "There may be additional undiscovered leks near the northern boundary near Tullis and near Dexter Peak". Additionally, the statement alludes to the idea that there are already undiscovered leks. If this is the case how can key areas be quantified?

**Response:** In both the DEIS and FEIS, the Forest Service conclusion in the BE is "may adversely impact individuals." The wording of the effect in the FEIS Chapter 3, Wildlife, Game Species section has been changed to clarify that this section is not using the specific terminology used in outcomes for sensitive species. The sharp-tailed grouse is protected from human disturbance by limitation on activities in a buffer around its breeding sites. In the open habitats occupied by this species, grazing by native ungulates would have occurred. Effects of grazing on the species will be considered in setting the time and utilization for grazing allotments.

The Forest Service does not know of any of its activities called for in the Plan that would reduce viability of the sharp-tailed grouse. Some species are subject to threats beyond Forest Service control. The outcome for sensitive species and the associated viability determination are based on the Forest Service "action" being proposed, in this case the revision of the Forest Plan.

The statement was made based on information from the district biologist that sharp-tailed grouse have been seen in the area, but there is no known local lek. The best available information was presented, along with a statement indicating where uncertainty lies.

# **TES Species**Comment #12

Effects of Past Logging: The USFS's assertion that the spatial and temporal impacts of past logging represents natural processes is ludicrous at best and we can find no justification for such a claim. We request the USFS seriously and fully address the impacts of past logging with special emphasis on Coon Creek – as it relates to the historical and present-day extent of goshawk nesting habitat.

In lodgepole, logging has targeted older stands. Since some of this would have burned, the acres of mature forest may not be below HRV." BE, p. I-77. This statement is very flawed. While fires and other natural disturbances may have destroyed mature or late successional lodgepole pine forest, fires did not build roads and did not create hundreds of clearcuts and strip cuts.

Lewis' Woodpecker- confused re burning and "restoration" (if it involves logging will be detrimental)

Cumulative effects of off-forest logging

**Response:** The Forest Service agrees that an assertion "that the spatial and temporal impacts of past logging represents natural processes" would be incorrect, but does not know where this occurred in the document.

The first sentence of the Wildlife section on "Spatial Pattern on the Landscape" (DEIS p. 2-236) says "On the Medicine Bow National Forest, the spatial distribution of patches of forest

of different age that has been created by timber harvest is different from that created in the past by natural processes." This is followed up by a section on "Changes in landscape pattern from HRV (historic range of variability)" that cites literature on the differences in patterns found in four comparative studies and concludes that similar differences from HRV pattern occur on the Medicine Bow. In the analysis of effects of pattern on wildlife, the DEIS identifies groups of species likely affected by the changes in pattern and suggests actions that would move the forest towards conditions like those created by natural processes. It seems apparent that this is not consistent with the "assertion" cited in this comment. The biodiversity section of Chapter 3 also addresses fragmentation.

The Forest Service would certainly not claim that the pattern in Coon Creek is similar to HRV. This pattern was designed as part of an experimental harvest looking at the effects of such a pattern on water yield. This pattern of numerous, very small clearcuts does not at all represent conditions created on landscapes by natural processes, but this was a one-time experiment and is unlikely to be repeated.

## TES Species Comment #13

Inadequate Analysis: Inadequate data and analysis are provided for the smooth green snake, tiger salamander, dwarf shrew, ringtail, common loon, osprey, merlin, greater sandhill crane, golden-crowned kinglet, and fox sparrow.

We request the USFS fully analyze and assess the direct, indirect, and cumulative effects to the American dipper., Indeed, there is ample evidence that suggests this species may not be viable on the MBNF.

...there are many other species of concern on the MBNF. The animal species of concern include the following: red tree squirrel, ruby-crowned kinglet, cavity nesters, riparian birds, hermit thrush, browned-capped rosyfinch Black Bear—addressed as game Black-backed Woodpecker, Flammulated Owl, Primary and secondary cavity nesters, Riparian Songbirds, Ptarmigan --- sensitive, and possibly other insect and mollusk"... "Virginia Warbler"

The analysis of indirect and cumulative effects is inadequate.

To the extent that the Forest Service conducted an analysis for a given species, it virtually always ignored key factors such that the analysis almost certainly overstates habitat availability and potential impacts to life history needs (e.g., disturbance impacts not related to habitat quality). For example, by concluding that the Revised Forest Plan will provide sufficient habitat solely on the basis of the availability of a given forest type, it overlooks that other key habitat needs will render much of that "available" habitat useless for the purposes of assuring viability.

What happens when your predators (lynx, marten, weasels and wolverines) eat your other threatened species?

**Response:** Since the Draft EIS was prepared, biologists at the Regional Office have recommended changes to the Regional Sensitive Species List. These recommendations include dropping the species in this comment. The rationale for dropping some species and for adding others is included in the Administrative Record.

The Forest Service is not aware of any research focused on the viability of the dipper on the Medicine Bow NF. The methods for selecting species that were analyzed individually is in FEIS, Appendix B and Chapter 3, Biological Diversity.

The cumulative effect sections have been expanded in the FEIS. Every effort was made to determine the threats to the species, including disturbance and loss of habitat components within the general habitat type (like forest cover type). Determinations were seldom, if ever, based only on availability of a cover type. Rather the analysis was focused on factors relevant to the species being considered.

<b>TES Species</b>	Candidate Species: The Yellow-billed Cuckoo, Black-tailed Prairie dog,
Comment #14	and boreal toad must be addressed as Candidate species.

**Response:** These species have been added to the BE and the analyses have been sent to the FWS for review.

TES Species Comment #15	Habitat Connectivity: The analysis does not demonstrate that the connectivity pattern is adequate for the American marten, wolverine, and boreal owl.
	The failure to adequately consider the effects of habitat fragmentation and an increasing emphasis on fuel reduction and pathogen suppression activities further flaws the analysis.
	In terms of protecting potential marten connectivity habitat, the Proposed Revised MBNF Forest Plan seems to rely entirely upon Biological Diversity Guideline 8, which states, "Maintain and manage habitat to retain connectivity typical of that created by natural processes unless detrimental to threatened, endangered, proposed or sensitive species." BE, p. I-9.

**Response:** Martens move through perforated landscapes like those on the MBNF (O'Doherty, pers. comm. 2003). However, they may be sensitive to a combination of habitat loss and spatial pattern and have been selected as an MIS for this reason. Boreal Owls forage along edges and are not known to be sensitive to fragmentation. Wolverine are now believed to be extirpated in the Southern Rockies and are not sensitive to fragmentation of age class of timber. They are habitat generalists and range widely in areas with low or moderate human disturbance. Except for breeding females, wolverine or their tracks have been found in backyards, on snowmobile play areas, and near highways (areas that they visit at night).

Fragmentation effects on animals is considered in Chapter 3, wildlife. Fuel reduction projects will be limited in extent to areas near at-risk communities. Pathogen suppression is not expected to increase under the selected alternative: more effects of insects and disease are expected in this than in the current situation.

Connectivity is addressed in Subgoal 1.b strategy d, Biological Diversity Guidelines 1, 4, and 5, Silviculture Guideline 1 and the objectives and desired condition of MA of 5.15.

TES Species Comment #17	Northern River Otter: The northern river otter is inadequately protected; information presented is inadequate to support the assumption of an increasing population. Monitoring for the species is inadequate. Otters
	need protection from livestock grazing.

**Response:** The DEIS noted the lack of past inventory and did not state that the otter population is increasing, only that there are promising signs because of recent increasing trend in observations of pairs and breeding. (See BE, "The otter population seems to be increasing, perhaps as animals disperse from re-introduced populations in Colorado. However, there has not been continuous monitoring that would detect any changes in population or in area used.") The Forest Service considers the livestock and aquatic standards in the Revised Plan adequate to maintain water quality and bank structure and thereby provide for the otter.

# **TES Species** Comment #18

Effects of Winter Use: "...we request that the USFS fully address the impacts of winter human activities to the wolverine and fully protect the wolverine and its habitat from these activities..." "...the USFS provides no mitigation to protect potential wolverine den sites and really makes no attempt to adequately address this impact through the Proposed Revised MBNF Forest Plan."

Snowmobiles adversely affect TES species – lynx, wolverine, marten, hare, pika, dwarf shrew, pygmy shrew. Should have done comparison of subalpine wetlands and compaction.

It seems the potential for "winter recreation" impacts to habitat the pygmy shrew, no matter how small, appears to be significant. Indeed, even the USFS questions whether the shrew is currently viable and further believes that populations may be declining. Given this situation, it is difficult to see how impacting individuals could maintain a viable population. We request the USFS fully explain how impacting individual pygmy shrew and their habitat would not jeopardize the viability of the shrew. We further request that "winter recreation" not be allowed in pygmy shrew habitat.

It is stated that you are protecting primarily threatened and endangered species. Here is another prime example where the purists are creating hype to convince the public. Show me actual data that proves that motorized or mechanized activity on your national forest directly effects the survival of these species, or any other wildlife for that manner.

**Response:** The plan provides for habitat for wolverines except for breeding females. Only elimination of all human use (motorized and non-motorized) on the Forest (from at least mid-winter to mid-spring) would be likely to create conditions suitable for breeding. Management will contribute to the viability of the Southern Rockies population (if one occurs). The suitable habitat on the MBNF is too small (given the large home range size of wolverines) to ever have supported an independent viable population of the species.

The effects of snowmobiling on wildlife are addressed in FEIS Chapter 3, Wildlife, Snow Compaction and FEIS, Appendix D.

TES Species Comment #19	White-tailed Ptarmigan: The white-tailed ptarmigan is inadequately protected in the Proposed Plan.
	"In our communications with Clait Braun (former CDOW biologist and the world's leading authority on white-tailed ptarmigan), it has come to our

attention that ptarmigan may still be present on the Snowy Range. "...the last time I looked I found white-tailed ptarmigan north of the Snowy Range highway towards Brooklyn Ridge. While it is possible they have been extirpated, it is not likely. Densities of white-tailed ptarmigan in the Snowy Range appear to be low as much of the habitat is low elevation and marginal. Again, I have not specifically measured densities but ptarmigan winter pellets are (were) not uncommon if one knows what to look for and where to look" (Clait Braun, pers. comm.). The Forest Service is still operating under the assumption (as we have been) that this species was extirpated from the Medicine Bow. See page I-132. However, in light of this new information, the agency should include measures in the Final EIS that would allow for surveying and habitat protection."

The USFS must do everything possible to ensure no more ptarmigan habitat is degraded or destroyed and ensure that opportunities for restoration are not foregone.

Response: In the Forest Service's communication with Dr. Braun in spring of 2003, Dr. Braun stated that he had not been to the Snowy Range since about 1980. He did not know why the ptarmigan would not still be there, but he had no evidence that the species was present after the dates when it seems to have disappeared there. He mentioned that the species is not hard to find, not only because of the presence of winter pellets but also because of the presence of feathers and other sign. Since no sightings have been reported in over two decades, it seems quite certain that the species is no longer present. The status is further addressed in the BE, in Appendix I. The Forest Service is pursuing having the area designated as an "Important Bird Area" in the Audubon network (primarily for the Browncapped Rosyfinch), which will attracted experienced birders to the area and increase the likelihood of detection of the species if it is present.

### TES Species Comment #20

Standards and Guidelines for Snags are Inadequate: How many snags do Boreal Owls need? What size snags will be retained for Pygmy Nuthatches. Will retained snags be large enough for these species? Will soft snags be retained for Lewis's Woodpecker. Will the characteristics of retained snags provide adequate nest sites for Brown Creepers?

Adequate snag retention standards, especially ponderosa pine snag retention standards, that adequately protect the fringe-tailed myotis seem to be crucial to ensuring the species' viability. The USFS must ensure that snag retention standards are adequate to protect the fringe-tailed myotis.

**Response:** As explained in the Wildlife sections of FEIS Chapter and of Appendix B, the process adopted by the Forest tries to minimize habitat standards designed to meet the known habitat needs of each individual species. Instead, Forest direction is based on estimates of habitat parameters that would have been created by natural processes. For example, rather than specifying more soft snags where there are Lewis's Woodpeckers, the standard recommends retaining a range of stages of rot. Rather than specify the size of ponderosa pine at a large diameter, the size is set at smaller diameter that meets many species needs, with the qualifier "retain the largest available." Most of the specific direction for sensitive species is related to human disturbance; the intensity and type of this disturbance is a new factor, not present at current levels and in current forms over the

evolutionary history of native species.

# **TES Species**Comment #21

Old Growth Forest: [Dillon and Knight say reduced large trees at high elevation...boreal owl]. "... how is the USFS going to ensure more large trees come into existence at high elevation forests?"

We are supportive of the planned overall increase in the amount of habitat structure stages 4a-5@ (p. 3-110) of high-elevation spruce/fir forest by allowing mature stands to develop old-growth features (however, see above concern about aggregation of these categories) This habitat type is very important to many species on the Forest, including boreal owls, brown creepers, golden-crowned kinglets, American martens, Canada lynx,

**Response:** The level of old growth protected in spruce-fir has been increased from a minimum level of 10% in the 1985 Plan to 25% in the Revised Plan.

## TES Species Comment #22

Species Viability: "Does the USFS not believe that providing for species viability should be a mandatory duty? If so, we ask the agency to fully explain why the mandatory, non-discretionary duty to ensure species viability does not apply in this case."

To do an assessment of viability, the Forest Service must have an estimated population and distribution of reproductive individuals; an estimate of the size of a "minimum viable population" (MVP); an estimate of the habitat needed to support MVP; and the needed distribution of the habitat needed to allow interaction of individuals. The analysis lacks this information, therefore the viability determinations are not supported. Several courts have concluded that "the viability regulation requires the agencies to look to species populations – not merely to habitat for hypothetical populations." Seattle Audubon Society v. Lyons, 871 F.Supp. 1291, 1316 (W.D. Wash. 1994), aff'd sub nom Seattle Audubon Society v. Moseley, 80 F.3d 1401; see also, Sierra Club v. Glickman, No. 9:85-CV-69, slip op. (E.D. Tex., August 14, 1997) at 52-53.

Several species addressed in the BA or BE have a population that is too small to be viable, yet the Forest Service is not doing anything to increase numbers on the Forest. The Forest Service should manage to create habitat to support a viable population on the MBNF.

The agency assessed the impacts of the MBNF Forest Plan only in terms of contributing to the viability of the species in the Southern Rockies. Yet, viability is measured on the MBNF – not the entire Southern Rockies. Therefore, the USFS needs to assess the ability of the MBNF Forest Plan to ensure the viability of the species on the MBNF

Because the Medicine Bow and Routt National Forests are continuous habitat for a variety of species, many species, including the wolverine, should be managed at a level larger than the Medicine Bow National Forest.

**Response:** The Forest Service's obligation to provide habitat for viable populations of species is required by law (NFMA), not decided at the Plan level. Nothing in the revised

Plan suggests that the MBNF is abandoning this objective. Subgoal 1.b says "Provide ecological conditions to sustain viable populations of native and desired non-native species" and is followed by 5 objectives and 15 strategies that support this goal.

There are many ways to do viability assessment. (Discretionary Review Decision Tenney, 2000). The method selected for this analysis focuses on identification and mitigation of threats and their extent (see FEIS, Chapter 3, Biodiversity and FEIS Appendix B). The information listed in this comment is not available for most species. It is not feasible to collect data that is adequate to determine population size for every native and desired nonnative species. The Forest Service manages for viability by managing habitat and monitoring population of selected management indicator species.

The comment appears to assume that all these species were abundant on the MBNF in the past and had declined due to habitat alteration or destruction. However, for many of the species, their habitat was never widespread on the land now inside the boundary of the MBNF. For species using grassland and cottonwood, for example, the boundaries of the Forest exclude most of these habitats. The small amount of potential habitat for these species suggests that the populations would never have been independently viable, but part of a larger interbreeding population.

For some species with large home ranges (like lynx and wolverine), the area occupied by each individual would limit the number of reproducing individuals on the MBNF to a number too small to be independently viable. Even if all the suitable habitat on the MBNF were occupied, the population would be too small to be self-sustaining in the long term. It would have to be part of a larger interbreeding population, as it doubtlessly was in the past. Even in the past, there would not have been a "viable" population on the area now within the boundaries of the MBNF.

On the other hand, populations of other species have been (or may have been) reduced from past levels, often with concurrent reduction or alteration in their habitat. In those cases, direction on habitat management of features known to be essential to these species (like snags, downed wood, and old growth) has been adjusted from that in the 1985 Plan to better protect these species.

In most cases, viability is assessed at the scale of the "planning area," i.e., the National Forest. However, for some species that occur only on the periphery of the Forest or have large home ranges, there is not enough habitat on the MBNF to support an independently viable population. In those cases, the contribution of habitat on the MBNF to the viability to the larger population was used.

1	Conservation Strategies: The Forest Service should develop conservation strategies for Sensitive and at-risk species and adopt both these conservation strategies and other federal recovery plans as management
	standards.

**Response:** This objective is addressed in Subgoal 1.b strategy i (for federal threatened, endangered, proposed, and candidate species) and in Subgoal 1.b, strategy l (for sensitive species and species of local concern).

TES Species	Population Data: "The failure to utilize quantitative population size data
Comment #24	and distribution data is compounded by the fact that such quantitative

population information is available. Indeed, nearly every sensitive species listed in Appendix I exists within the MBNF, clearly indicating that quantitative population data and distribution data is available, but that the FS simply avoided gathering such information for the development of the Proposed Revised MBNF Forest Plan."

**Response:** The comment fails to distinguish between data that is "available" and data that "could have been collected." The Forest Service does not have the data suggested nor were we able to find such detailed and local information from WYNDD or the WGF Database. Available data from district records, past monitoring, the WYND database, the WGF Wildlife Observation database and other sources were used in describing the current local status of threatened endangered and sensitive species in the BA and BE.

<del>U</del>
Extirpated Species: The biological diversity of the MBNF can never be fully restored and protected until extirpated species are re-introduced to the landscape. The Revised Plan should therefore include direction and a timetable for the re-introduce and recovery of the Greenback Trout (Pole Mountain unit), Lynx, Gray Wolf, and Grizzly Bear. The Wolverine, Fisher, White-tailed Ptarmigan, and River Otter may also be extirpated, but
there are recent sightings of these species in or near the MBNF so small remnant populations may still exist

**Response:** There is no requirement that all native species, even federally listed species, be introduced throughout their historic ranges. The Fish and Wildlife Service is the lead agency for reintroductions of federally listed species (grizzly, wolf and lynx). Lynx have been located on the MBNF in 2003, dispersing from the population augmentation in Colorado. Reintroduction of the wolverine to the Southern Rockies is under consideration by an interagency team. Otters are breeding on the MBNF and are expected to spread with the recovery of the beaver. White-tailed Ptarmigan may disperse naturally from the healthy populations in the adjacent mountains to the south.

TES Species	Sensitive Species List: "Since the Regional Forester's Sensitive Species
Comment #26	List is being updated, which version will the Plan follow? If the list
	changes during the life of the Plan, will the Plan be amended? The Final
	Plan should address the current list only"

**Response:** The new list was issued by the Regional Forester in November 2003 and has been used in the Final Plan and FEIS, Appendix I.

TES Species	Pika:	Is the pika on Medicine Bow Peak a distinct species?
Comment #27		

**Response:** We know of no suggestion that these pikas form a separate species. Relations with other pikas are addressed in the "Species of Local Concern" section of Appendix I.

TES Species Comment #28	Rare Plants: Autumn willow, Hall's fescue, Colorado tansy aster and Rabbit ears gilia are adversely affected by domestic stock grazing. This information is substantiated in the DEIS and its literature sources.
	In addition, the draft EIS also states that the determination for Ute's Ladies- tresses is "No effect" based on no individuals ever being found on

the Forest. However, if suitable habitat for this species exists and surveys have not been conducted then potentially disturbing activities could potentially "adversely affect" this plant in as yet "undiscovered" populations. The Service recommends surveys prior to project implementation to search for undetected populations of this plant.

Ute ladies' tresses (Spiranthes diluvialis) The BA reads as if there is no suitable habitat for this species on the Forest, but the habitat description suggests otherwise, as does the fact that the Forest Service cites three surveys for it that have been conducted on the Forest. Orchids are notorious for disappearing from an area only to reappear years later because they had entered dormancy or were present in the seedbank, and it may be premature to assume that this species is absent from the Forest solely on the basis of these surveys. The BA also mentions that WYNDD does not possess records for Sprianthes diluvialis on the Forest, but the species was not described until 1984 and was still not even known from Wyoming at the time of listing eight years later. Future surveys could discover this species on the Forest, and suitable habitat must be protected. The Forest Service states, "If the species is eventually found on the MBNF or potential and suitable habitat is identified, the Forest Service will consult with the U.S. Fish and

Wildlife Service" (p. I-43) without establishing that suitable habitat does not exist. The Forest Service must specify whether suitable habitat exists and develop concrete protections for this habitat. Even if suitable habitat is not identified on the Forest, the Forest Service must better address how Forest management will affect downstream populations. See our comments on North Platte and Colorado River above, with the added caveat that Spiranthes diluvialis populations occur in closer proximity to these other listed downstream species, and are likely to be even more affected by changes in hydrology on the Medicine Bow National Forest.

The draft EIS states that there are "no known populations" of Ute ladiestresses or Colorado butterfly plant on Forest Service property to be managed under direction of the Forest plan. The Service suggests stating whether or not "suitable habitat" exists on the Forest for these species and specifying in the Biological Assessment where the suitable habitat is located. If suitable habitat does exist on the Forest then additional information would be necessary in order for the Service to make a "not likely to adversely affect" determination for activities which may disturb or destroy these plants. The Service suggests surveys be conducted in suitable habitat for these species prior to project implementation. Should a population be found, then all project-related activities would be halted and consultation with the Service would be initiated.

The Rabbit Ears gilia, the clustered lady slipper and Hall's fescue are inadequately protected in the Proposed Plan. For all protected plant species, it is important that intensive surveys are done and known populations protected from all disturbance due to logging, road-building, grazing, herbicide spraying, and invasive species propagation. There are

no standards in place that explicitly protect sensitive plants and their habitats from the impacts of logging, road construction, livestock grazing, and other potentially harmful activities (e.g., spring development). This is of significant concern as the BE discloses that several sensitive plant species could be adversely impacted by logging, road construction, livestock grazing, and other activities. While the USFS apparently believes that project-level decision making will adequately protect sensitive plants, this is not the purpose of a programmatic document. It is the USFS's job to prepare and implement a programmatic land and resource management plan every 10-15 years. Within this plan, the agency must develop standards and guidelines that protect species diversity and viability in accordance with the NFMA and NFMA implementing regulations.

**Response:** The effects of domestic stock grazing on Autumn willow, Hall's fescue, Colorado tansy aster and Rabbit ears gilia are discussed in Appendix I – Biological Evaluation – Sensitive Plants.

The analysis and discussion of Ute Ladies Tresses and Colorado Butterfly Plant in Appendix I –Biological Analysis has been revised in response to comments and based on new information that became available between DEIS and FEIS.

Chapter 1 of the Plan has standards and guidelines that have been revised in response to comments. Clustered Lady Slipper is no longer a Region 2 Sensitive Species. The analysis of sensitive plant species has been revised in response to comments and based on the new 2003 Regional Forester's Sensitive Species list and other new information that was developed as part of the process of determining species appropriate to include on the 2003 Regional Forester's Sensitive Species list. A list of plant species of local concern has been developed to address those plants species that are not included on the 2003 Regional Forester's Sensitive Species list but that may have a viability concern on the MBNF.

### **Timber**

### **Timber**Comment #1

Clearcutting: How many clearcuts have successful regeneration? It seems like the numbers of clearcuts are excessive. Why is the June 1992 policy from the chief calling for a reduction in clearcutting not addressed? Clearcuts left such a mess that no large animal or human can access the area for several years because scrap is knee high. Clearcuts do not help to protect trees from disease and insects.

The preferred alternative must include a greater reduction in down timber and additional clear cuts to regenerate a younger series of tree stands.

How can clearcut units exceed 40 acres? Why are clearcuts greater than 40 acres considered since smaller units are more compatible with other uses?

The new forest plan ...should not propose clearcutting between existing clearcuts; this method is not supported by research as a proven way to restore the Forest, either ecologically or scenically.

How will snag and log standards be met in post-clearcutting stands?

Response: Reference FEIS, Chapter III, Timber Resources, Timber Production for

historical data relating to past harvest. Also, please reference the FEIS, Chapter III, Timber Resources, Harvest Methods for a discussion of past and current levels of clearcutting. The revised Forest Plan eliminates clearcutting in spruce/fir timber types which are shade tolerant. Clearcutting is an effective tool for managing lodgepole pine and aspen. There is a wealth of research on this topic. The Medicine Bow National Forest includes a large portion of forested vegetation comprised of lodgepole pine and aspen which are shade intolerant species which require large fires in natural conditions to regenerate. Clearcutting is a proven harvest method that can be used to create openings for regeneration and growth of intolerant tree species such as lodgepole and aspen. While clearcutting is not the only option for these species, it is often identified as the optimum method. The National Forest Management Act of 1976 directs the Forest Service to use clearcutting when it is determined to be the Optimum method to meet land management objectives.

Clearcutting is an effective method of managing lodgepole pine ecosystems particularly when timber stands are infested with mistletoe and regenerating shade intolerant Lodgepole pine ecosystems. Clearcutting is an effective management tool for replacing mistletoe infected stands with mistletoe free stands. In many stands the level of mistletoe infection is heavier than just a few trees, in most cases the vast majority of trees are infected. Mistletoe infection has a significant effect on tree growth and development. Heavily infected trees suffer significant height and diameter growth reduction, and reduced vigor that trees are predisposed to drought induced mortality, or bark beetle infestation. Bark beetles migrate from tree to tree through winged flight. Decades of bark beetle research indicate that large diameter trees, overstocked stands are the most susceptible to beetle infestation and mortality, not juxtaposition to remote areas. The Forest Plan identifies clearcutting as an appropriate silvicultural tool for timber harvest. Actual harvest methods are identified during project specific analyses.

The June 1992 policy on Ecosystem Management, which also identified an objective to reduce clearcutting on the National Forests, describes the specific conditions where clearcutting would be allowed. The two conditions which apply primarily to the Medicine Bow National Forest are item #4) To rehabilitate lands adversely impacted by events such as fires, windstorms, or insect or disease infestations, and item #5) To provide for the establishment and growth of desired trees or other vegetative species that are shade intolerant.

Reference Forest Plan, Chapter 1, Forest-wide standards and guidelines, Silviculture. Timber harvest operations are required to leave sufficient down & woody debris to protect soil productivity, wildlife habitat, and other resource objectives. Some treatment of slash does occur to prepare the site for natural regeneration and/or to reduce fuel hazards. In addition, a variety of scenery standards and guidelines designed to minimize visual impacts from timber harvest have been included. These are located in the Revised Forest Plan, Chapter 1 Forest-wide Standards and Guidelines, Scenery.

A variety of harvest levels were considered in the DEIS and FEIS. These activities must be balanced with other resource needs on the forest. The 40 acre limit is not a maximum limit. 36CFR 219.27(i) provides guidance for variance in the 40 acre limit. Rationale for exceeding this limit is generally due to the need for meeting other resource objectives. The Medicine Bow has harvested stands greater than 40 acres in the past based on these regulations.

Reference the Revised Medicine Bow Forest Plan, Management Area

Prescription 5.15 – Forest Products - Ecological Maintenance and Restoration. The

intent of this management area is active management which mimic historical events including wildfire. The implementation of large clearcuts and the impacts on the various resources mentioned will be implemented into site specific NEPA analysis.

In some cases, removing unharvested areas between existing clearcuts is a way to create a more homogenous landscape especially with respect to scenic quality. In other cases, the results could have adverse effects for other resources. However, Restricting vegetation treatments at the Forest Plan level is not appropriate. Project level NEPA analysis a more appropriate level for directing site specific actions.

Reference FEIS Chapter III, Timber Resources, reforestation and harvest methods. The Forest Service uses timber sale contracts to specify protection of snags and retention of down logs in clearcut units.

Timber	Silvicultural Methods: More discussion is needed on appropriate
Comment #2	silvicultural methods.

Future cuts should be made solely for the health of the forest, not to sustain a timber industry, or to obtain funds to run forest programs or build or repair roads. Timber harvest should be limited to that which is in the interest to the forest and not in the interest of the lumber mills.

Timber harvest should be scheduled to improve the health of the Forest and to support local communities, economies, and businesses.

How can exceptions to CMAI regulations be exempted?

Why doesn't the Forest Service use more selective harvest treatments?

Does the Forest Service plan to do any salvage logging?

What is the backlog of precommercial and commercial thinning?

Response: Reference FEIS Chapter III, Timber Resources, reforestation and harvest methods for a discussion on silvicultural treatments in lodgepole pine and spruce-fir ecosystems. Please refer to FEIS, Chapter III, Timber Resources, Allowable Sale Quantity and FEIS Chapter III, Communities. Timber sales are land management tools that help Forest Service land managers meet the goals and objectives outlined in Forest Plans. Timber sales are designed to help maintain healthy, vigorous forest timber stands, achieve wildlife habitat objectives, manage fuels, and achieve other multiple-use management objectives. Reference the FEIS, Chapter III, Biological Elements, Biological Diversity for a discussion of the importance of biodiversity to maintain a full variety of life in an area. Maintenance of a variety of habitat structural stages is essential for biological diversity. Harvesting on the forest is always designed in the best interest to the forest. Lumber mills provide a needed tool for carrying out treatments to the forest which would otherwise be impossible if the Forest Service had to pay to carry out these projects.

The exemptions to culmination of mean annual increment (CMAI) were established by the National Forest Management Act of 1974 and published in the Code of Federal Regulations

36 CFR 219.16 (a)(2)(iii), and Medicine Bow Revised Forest Plan, Chapter 1, Biological Resources, Silviculture. Exceptions may be considered if it is reasonable to expect that overall multiple-use objectives would be better obtained.

Reference FEIS, Chapter III, Timber Resources, Harvest Methods for a discussion on silvicultural treatments in lodgepole pine. Individual tree selection is appropriate

for uneven aged stands (multi-aged, multi-storied) of shade tolerant species (tree species that regenerate and develop in shade) that are free of disease and insects whose life cycles are sustained in multi-storied stands. The lodgepole pine (a very shade intolerant species) on the Medicine Bow NF grows in stands that are generally even-aged, single-storied, and infested with dwarf mistletoe (a tree parasite that spreads very easily from taller trees to seedlings & saplings). The long term health and vigor of lodgepole pine is greatly enhanced through even-aged silvicultural treatments (clearcuts and shelterwood systems) that allow lodgepole pine stands to develop in full sunlight, in even-aged stands, free of mistletoe infected trees.

Salvage logging is generally not a planned output. As situations arise such as unforeseen natural events such as wildfire or blowdown, portions of these areas may be salvaged if deemed viable from economic and resource protection objectives.

Precommercial thinning is important for maintaining stand health and vigor. The precommercial thinning backlog on the Medicine Bow is several thousand acres. The Med Bow NF plans to thin approximately 1000 acres annually depending on resource constraints.

### **Timber**Comment #3

Allowable Sale Quantity (ASQ) is Too Low: Considering that the forest has an annual growth that exceeds 50 million board feet we would like to see the amount of timber available for harvest increased from its current level.

The MBNF fails to recommend the steps necessary to assure that offered volume is packaged to be profitable, favorable to local communities, and at volumes and even flow to allow purchasers to remain in business, and encourage new uses of National Forest wood products. With the mill closure, the timber numbers are insignificant. Even if the maximum ASQ were sold, the timber numbers would not even support a mill one-half the size of the mill located in Saratoga. It appears that, at least, 31 MMBF are needed to

support the needs of Bighorn Lumber and the proposed mill in Encampment.

Please analyze and display timber volume offered, in addition to the timber volume sold to more accurately understand the supply and demand relationships.

Please analyze and discuss the SPECTRUM estimate of the ASQ when the model is constrained by experienced budgets. Why can't the model harvest enough timber to produce and even distribution of age classes

2.c.tp1& tp2 – The monitoring question should be modified by deleting "but not exceeded". We understand that ordinarily the MBNF cannot

exceed the decadal ASQ; however, the NFMA provides exceptions to the decadal limits, and the MBNF forest plan should not be more restrictive than the requirements of the NFMA. 4-27 Monitoring Question Timber Products 1 & 2 should be changed to: "How can the Forest assure that, over the life of the Plan, the total Allowable Sale Quantity (ASQ) is met but not exceeded?"

Why do some prescriptions contribute to ASQ and others do not? Why is aspen harvest excluded from ASQ? Does Management Area 3.56 preclude mechanical treatments?

**Response:** The ASQ is considered a ceiling and certain conditions may arise where standards and guidelines may limit what volume is actually available during site specific project Implementation. Reference Chapter III, Timber Resources for information on growth on the forest. Not all of the annual growth can be harvested because much of this volume includes small sapling and pole size trees. Reference FEIS Chapter 3 Timber Resources, Harvest Methods, and Timber Supply and demand. In addition, the Forest Plan includes a strategy to provide for an steady flow of products from the forest. Economic factors related to communities and businesses is addressed in the FEIS Chapter 3 Communities Section.

The future demand and supply is difficult to project based on historical trends. The demand and market for timber is a complex mix of site specific and local situations and International supplies. In-depth analysis of timber supply and local mill capacity was completed for the FEIS. Local mills can process up to 48 MMBF annually by running one shift with the Saratoga mill or by running two shifts without the Saratoga mill. Other than Alternative F, reasonably anticipated total timbershed supply would range from 36 to 41 MMBF – enough volume to keep most, if not all mills in production. Although unlikely, full ASQ levels would result in total timbershed supplies between 49 and 57 MMBF. These levels would require some mills to run double shifts. Detailed mill information, such as this, was included in the analysis. Please reference the FEIS, Chapter III, Timber Resources, Anticipated Harvest and Processing for a discussion on mill capacity, and impacts of various levels of harvest.

As described at 36 CFR 219.27(c)(2), the sale schedule, or ASQ, does not prohibit, salvage or sanitation harvesting of timber stands which are substantially damaged by fire, windthrow, or other catastrophe, or which are in imminent danger of insect or disease attack. Such timber may either substitute for timber that would otherwise be sold under the plan or, if not feasible, be sold over and above the planned volume. The ASQ is a ceiling which may not be exceeded averaged over a 10 year period. It is intended to ensure that scheduled timber harvest can be achieved on a sustainable basis. Estimates of TSPQ are displayed in FEIS Chapter 2, supplemental tables.

The ASQ associated with experienced budget and desired condition budget levels are displayed in FEIS Chapter 2, Supplemental Tables. It should be noted that while the model is very sensitive to budget levels, the primary purpose of an ASQ is to identify a level of harvest based on biological capability on the land to produce sustainable levels of timber harvest. ASQ is not a goal or objective, but simply an upper limit. The actual harvest depends on site-specific project analyses as well as budget levels which can vary from year to year. Please reference the FEIS, Chapter III, Timber Resources, Cumulative Effects.

Spectrum Runs have been modified in response to concerns.

These strategies are consistent with NFMA direction. While ASQ may be exceeded in any given year, it may not be exceeded for the planning period. The NFMA references to additional volume above ASQ is what we consider the Total Sale Program Quantity (TSPQ). This additional volume is the result of unscheduled harvests, generally on unsuitable lands from unplanned events such as blowdown or harvest on unsuitable lands for other resource objectives. The forest completes annual reports of timber harvest for tracking ASQ. These are documented in the annual monitoring report.

The theme and desired future conditions for non-timber emphasis management areas is generally not consistent with more intensive land management for commercial forest products. Other resource objectives are emphasized. Timber harvest can still be utilized to achieve those objectives, but they do not contribute to the ASQ.

Aspen was not considered a commercial species during the Plan Revision. Markets for Aspen are virtually non- existent. However if aspen stands need to be treated to meet Resource objects, that volume if offered and sold would not contribute to the ASQ, but Toward total sale program quantity, which includes volume harvested from unsuitable lands. Management area 3.56 does not preclude managing aspen with mechanical treatments. Management direction for 3.56 allows vegetation management (including timber sales) to meet resource objectives other than commercial timber production. Aspen is not a commercially viable timber species on the Medicine Bow National Forest. If in the future aspen became commercially valuable, the Forest Plan could be amended.

### **Timber**Comment #4

Allowable Sale Quantity (ASQ) is Too High: Too much timber is being removed from the forest. Concerns for habitat needs of wild animals. especially lynx, should be fully addressed in deciding upon the appropriate ASQ. Because the partially completed Timber Demand and Supply Study indicated a lower harvest level, the preliminary conclusion in the draft document that the Forest can sustain 17.7 mmbf per year, even while adding more than 60,000 acres of new wilderness, substantially increasing the amount of protected old growth, and otherwise promoting ecological sustainability is not understandable. The fact that many more board-feet were produced in the past from fewer acres indicates that trees available for logging must have been much bigger in the 1950s and 1960s than the present. The decrease in big logs is an indicator that timber harvest in recent years has proceeded at a rate that is unsustainable in terms of the production of big timber. Please explain the justification for not examining the entire timbershed for the Medbow – which extends into Colorado -when discussing timber demand and estimating future stumpage prices? Why were the MedBow methods inconsistent with the methods used to estimate stumpage supply and demand on other national forest in the same timbershed? How can the forest state with certainty that "if the Forest offers timber with profitable log sizes and species, it will be sold and harvested? Averaged over a ten-year period, TSPQ must be less than ASQ.

The following constraints were ignored in doing the ASQ calculations including: a) goshawk nest stand, PFA, and foraging area restrictions b) hiding and thermal cover restrictions c) protection of important calving,

birthing and migration corridors d) road buffers and other visual quality/scenic integrity restrictions e) 20-year re-entry restrictions on logging areas that have recently been logged f) restrictions on logging in semi-primitive recreation areas g) riparian area buffers (with buffer distance based on upland slope) h) restrictions on logging steep slopes (e.g., +40% grade) that are stable i) watersheds at or near threshold of concern; stream channel stability restrictions j) cultural and historic site buffers k) losses due to fire, blowdown, beetles, etc. (perhaps 0.5-1% of the sawtimber otherwise suitable for logging is lost to such things each year) l) CMAI restrictions (courts say CMAI applies to all stands and logging methods) m) regeneration/restocking failures. Please conduct a spatial analysis of the SPECTRUM solution to reduce the uncertainty associated with estimating harvest levels without considering the spatial problems with implementing the solution.

**Response**: The allowable sale quantity is identified based on sustainable biological levels. Effects on wildlife habitat are discussed in the FEIS Chapter 3, Wildlife. The Timber Demand and Supply Study (TDSS) was not a suitability analysis conducted under the direction required for a Forest Plan revision. It utilized different methodology and was conducted for other purposes. The study itself was not completed and the figures released were an estimate based on an incomplete analysis. The study made many assumptions to simplify the analysis process in its effort to test FORPLAN's (a linear programming model) solution that affected the incomplete results. Details on these assumptions are located in the administrative record. Timber harvest objectives in the 1950's and 1960's were focused on maximizing timber production. This often resulted in targeting the largest trees available. In recent years, the Forest Service has implemented broader objectives designed to address wildlife habitat, old growth and other stand structure conditions. This approach results in lowered volumes. A thorough demand and supply analysis covering the timbershed was completed for the FEIS. Given the volatility of the timber industry, several scenarios were examined. Please reference the FEIS, Chapter III, Timber Resources, Timber Supply and Demand. Marketability of timber is dependant on many factors beyond log size and Species.

Reference the FEIS, Appendix B, Timber Suitability and SPECTRUM Modeling. A) An estimate of impacts from goshawk standards was included. B) the Revised Forest Plan does not have restrictions for hiding and thermal cover nor are any required. C) calving areas and migration corridors do not reduce harvest levels, but are addressed as needed during site-specific project analysis. D) scenery constraints were included in the SPECTRUM model, F) recreation areas are not part of the suitable timber base,) G) Riparian areas were removed from the suitable base. H) steep slopes were removed from the suitable base. I) Watershed constraints were included in the SPECTRUM model, J) large cultural resource areas were removed from the suitable base. Isolated sites such as cabins are small and generally unforested. K) Loss of timber to insects and disease was addressed in the Forest Vegetation Simulation modeling which reduced stand volume based on experienced mortality. Unforeseen losses from large scale fires or blowdown do not need to be accounted for since these areas will regenerate and other areas can be treated if needed. I) CMAI was included in the SPECTRUM model. M) The Medicine Bow NF has few natural restocking failures, and when they occur can be hand planted. These acres do not represent a loss in volume.

Reference the FEIS, Appendix B, Forest Planning Model. The SPECTRUM model is not a

spatial model. It is a theoretical estimate of sustainable harvest levels calculated using a complex system of data layers which combine to form Analysis Units. It is well beyond the scope, and the ability of the model, as well as a Forest Plan, to try and design future projects over a 200 year modeling horizon. Too many factors based on local site-specific conditions exist to consider such an undertaking.

### **Timber**Comment #5

Harvest Of Old Growth: A ban should be instituted on logging any old-growth forest until a better understanding of the old-growth HRNV and existing amounts of old-growth are obtained. We do not agree with adding an old growth constraint in the SPECTRUM model to force old growth into roaded areas. additional analysis to determine (a) the percent of old growth that would be located in ??? The Draft Plan Fails to Deduct Old Growth from the Suitable Timber Base. All old-growth spruce/fir should be protected from logging with no further conversion of spruce-fir to lodgeple pine forest.

We also did not find discussion of how old growth is desired to be spread across the landscape. Is the desire to have equal amounts in each watershed? What is the rational for doubling the percentage of old growth acres for retention for Spruce/Fir from Alternative A?

I am concerned that the amount of spruce-fir forest type included in MA 5.13 and 5.15 conflicts with the overall goal of increased mature and old-growth spruce/fir forest.

**Response:** Please reference DEIS, Chapter III, Timber Resources, Cumulative Effects, Habitat Structural Stages table. Alternative D-FEIS increases in approximate amounts of old growth on suitable lands from 8% in decade one to 27% in decade five. Reference Chapter III, Timber Resources, Effects from Old Growth, page 28. Old growth must be well distributed over the Forest, in some areas it will be necessary that some portion of these areas be included on suitable lands.

Reference FEIS Appendix B, Timber Suitability Analysis. Adjustments for old growth were incorporated into the SPECTRUM model rather than in the suitable base. This approach is consistent with planning regulations and with the process used in development of the 1985 Forest Plan. Removing old growth from the suitable base would require extensive inventory and analysis. The Forest Service believes that making this type of allocation at the programmatic planning level would not adequately allow for consideration of site-specific conditions. In addition, identifying specific stands for old growth management, would limit future flexibility in managing this important resource. For example, if a catastrophic fire occurred in an area allocated for old growth management, the Forest Service would be required to amend the Plan in order to reallocate a replacement area.

Reference FEIS Chapter 3, Biological Diversity, Old growth. The majority of suitable lands on the forest are lodgepole pine. Analysis indicates that these levels varied between 15 and 60 percent of the forest. Current levels of old growth on the forest are also within this range as are minimum standards for maintaining old growth which are described in the Forest Plan, Chapter 1, Forest-wide standards and guidelines, Biological Diversity.

The Forest Service is not converting spruce/fir stands to lodgepole. In many lodgepole stands, the reverse occurs, where lack of management allows a lodgepole stand to gradually

convert to spruce/fir stands. Maintaining all spruce/fir in an old growth condition would result in the majority of the spruce/fir stands being increasingly susceptible to insect and disease mortality and wildfire. Maintaining biological and timber stand diversity is necessary for maintaining healthy, diverse spruce/fir ecosystems.

### **Timber**Comment #6

Below-Cost Timber Sales/Program: What is the below-cost for logging on the Forest in 2000 through 2002? Given that the LP mills in Olathe and Walden, Colorado are now closed (despite predictions of success by Rideout) and that the LP mill in Saratoga, Wyoming is now for sale, it seems reasonable to suggest that the cumulative demand estimated by Rideout and used in developing NF plans in Colorado and Wyoming is too high. If cumulative stumpage demand in overestimated, each national forest in the timbershed will receive lower prices that estimated in recent forest plans. A major assumption used by planners to estimate future revenues for the timber program was that all timber sales will have interested bidders, that all sales will sell, and that all sales will generate revenues. Unsold sales are by definition below costs, as sale preparation costs are incurred by the Forest Service without generating any revenue. Given the large uncertainty behind stumpage price estimates, please complete a sensitivity analysis of the impact on estimated stumpage revenues. In order to more accurately estimates financial revenues from the timber program, and to reduce financial risk and uncertainty, we request that stumpage prices be estimated separately for each species.

We strongly oppose including a constraint that requires revenues to exceed costs in all decades for any portion of the timber sale program. We request that the MBNF run a series of sensitivity analyses on all modeled constraints.

Response: The Medicine Bow National Forest harvests low value species (lodgepole pine and Engelmann spruce. Natural resource laws governing the management of national forest resources does not require generating a positive cash flow. The TSPIRS report used to track timber harvest revenues and costs is no longer required by Congress. This is because the Forest Service is managing for resource objectives rather than profitability. In-depth analysis of timber supply and local mill capacity for the FEIS revealed that the scenario you suggest is not consistent with current or potential conditions. Local mills can process up to 97 MMBF annually by running two shifts. The most optimistic harvest levels in the timbershed top out at 57 MMBF (Alternative A). Given recent budget constraints, these harvest levels are highly unlikely. Assuring sufficient timber supplies to keep local mills running at single-shift production has been a more realistic concern in recent history. Even if temporary surpluses of local timber volume develop, prices for timber and lumber are controlled more by national and international markets than local conditions.

It is correct that all timber sales are not sold. Sales that are not sold are reviewed to improve their financial desirability such as required road construction/reconstruction, product mix and market conditions, and contract requirements/restrictions. Many times sales are proposed that benefit other resources such as fuel reduction/management, wildlife habitat, range management, and visual quality. The marketability of timber sales is complex with a vast number of situations limiting salability, poor quality timber with logging season limitations, a mix of products (sawlogs and POL) that a mill cannot process profitably, or a

poor local market due to a large volume of imported timber. Many project-specific conditions cannot be predicted at the Forest planning level. However, where sale conditions can be estimated, they are included in the analysis. Because of this, the assumption that volume offered will be sold and harvested is reasonable.

Reference Appendix B, Forest Planning Model, Sensitivity Analysis. Variance in stumpage values were tested and found to have little impact on timber outputs. Please reference FEIS Appendix B, Forest Planning Model, Costs and Revenues in the Spectrum Model. The revenues for sawtimber harvest on the Medicine Bow National Forest are based on a 5 year average of Forest harvest values. These stumpage values reflect a mix of commercial species harvested and are an approximation of anticipated species available for future harvest on the Medicine Bow National Forest. Since these values represent actual harvest information from the Medicine Bow National Forest, separating species values in the SPECTRUM model will not produce an estimate with any more accuracy. The stumpage value of timber is dependant on many factors ranging from the quality of timber, local and international markets and the selling value of finished products. In addition, you should not that the purpose of these analyses is to compare and contrast the relative effects of the different alternatives. It is not intended to display an absolute prediction of market outcomes.

The constraint that requires revenues to exceed costs in all decades was removed because it is not current Forest Service policy to implement an above cost program. Sensitivity analyses of all model constraints were conducted and the results are displayed in the FEIS Appendix B, Forest Planning Model.

Timber	Timber Merchantability: Are seven inch logs technically feasible for
Comment #7	lumber production? How can the forest state with certainty that "if the
	Forest offers timber with profitable log sizes and species, it will be sold
	and harvested?" Why aren't timber products other than live sawtimber
	scheduled?

Response: Reference the FEIS Chapter III, Timber Resources, Timber Supply and demand. The minimum diameter utilized for production of lumber is dependant on the capability of each mill. Forest Service utilization timber sale contracts (Medicine Bow NF) state that the minimum diameter for sawlogs is 7.0 inches at D.B.H. At the time the DEIS was published, both Big Horn Lumber and Louisiana-Pacific mills utilized 7 inches as the minimum milling piece Since the DEIS was printed in 2002, a mill capable of utilizing small diameter (5 inches or less) logs has re-opened in Encampment Wyoming. Marketability of timber is dependant on many factors beyond log size and species. There is generally no need to schedule other products since they include limited volumes and are often included as components of sawtimber sales.

Timber Comment #8	Timber Land Suitability: Conduct PNV and SEV analyses as part of the timber land suitability process.
	Alternative D suitable land timber management areas is 140,000 acres less than alternative A.
	No suitable land listed for harvest in roadless areas, yet 144,000 acres do exist.
	What is the difference between suitable, and suitable and scheduled. How

were lands determined tentatively suitable identified? The USFS's decision to make critical changes in its classification procedures was never published for public review or comment.

Will you allow timber harvest in areas in which wood productivity has been estimated to be 20 cuft/A/year or lower? Can timber harvest occur on lands that are not identified as suitable for timber production? How are financially inefficient lands identified? Why are lands classified with "Inadequate Response Information different from the 1985 Plan? How were lands Not Capable of Producing Industrial Wood determined and why is it different from the 1985 Plan.

**Response:** Medicine Bow National Forest costs of production and timber revenues were included in the SPECTRUM timber harvest modeling. Present net value (PNV) was used as an objective function so that the model selected the most cost efficient lands for harvest. Soil expectation value (SEV) is not required in the planning process, nor is it appropriate. SEV examines the production potential of land starting and ending with bare ground. No timber lands analyzed in the suitability process are currently in bare ground condition. In addition, the Forest Service is required by law to reforest all harvested lands managed for timber purposes.

Suitable lands are those lands which have been identified as meeting a variety of regulatory requirements for producing timber. The Forest Service followed manual and handbook direction for determining timber suitability which is not a decision subject to NEPA review. The process for determining timber suitability is described in detail in FEIS Appendix B, Timber Suitability Section. These lands form the basis for estimating the ASQ in the SPECTRUM model. Based on suitable lands and a variety of constraints, the model utilizes some, but not all of these potential acres to estimate the ASQ. These acres are "scheduled" by SPECTRUM over a 200 year period designed to provide an estimate of a sustainable harvest level . Some of these acres may receive more than one treatment as the model tracks different harvest types. These acres are identified as "suitable and scheduled". Since only suitable acres may be scheduled, the suitable and scheduled acres are always less than suitable acres. It should be noted that these only represent modeled estimates and do not in any way indicate that these acres will actually be harvested.

If timber is harvested off lands with poor productivity (20cuft/ac/year or lower) it will be to meet other resource objectives such as wildlife, fuels, range mgt, etc. The amount of land allocated to management areas which contribute to the ASQ and are hence considered to be suitable varies by alternative. Reference FEIS Chapter 2, Supplemental Tables. Timber harvest can occur on lands not suited for timber harvest, if it is to meet other resource objectives. Volume harvested on unsuitable lands does not contribute to ASQ, but does contribute to total sale program quantity. Financially inefficient lands generally include inaccessible or isolated areas, or areas with road construction limitations. These areas were primarily identified at the District level based on input from local specialists. The data available in 1985 was not as detailed as the data being used in this Revision nor was it developed using GIS. Many of the acres identified in the 1985 Plan with inadequate response information are now split out into other categories within the suitability analysis. Lands Not Capable of Producing Industrial Wood is made up of areas with species with limited commercial product potential such as cottonwood and mountain juniper.

### **Timber**Comment #9

Reduce the Suitable Timber Base: The Suitable Timber Base Should be Reduced to Reflect the Agency's Experience that planning process overestimates actual harvest from timber sales.

The Draft Plan Fails to Deduct Acreage that Contains Hydric Soils or soils that may be irreversibly damaged by Logging Activities. How were soils with unstable slopes and highly erosive soils determined? Did the suitability analysis consider soils with rock content greater than 25%?

Why doesn't the Medicine Bow NF eliminate logging on - (a) tree stands on elevations over 9,200 feet; (b) tree stands below 7400 feet, and southwest slopes like the Bighorn NF?

Why didn't the Medicine Bow NF remove TES habitat from the suitable base? Northern Goshawk, Eagle, and Raptor Nesting Sites and Buffer Zones should be excluded from the Suitable Timber Base.

How were lands identified as administrative sites and why is this different from the 1985 Forest Plan?

**Response:** Actual harvest volumes can differ from planned harvest volumes due to a variety of site-specific conditions. These differences can be high or low. However, timber suitability is related to lands suitable for timber production rather than a volume estimate. During the suitability analysis, the intent is to identify specific lands where timber could reasonably be expected to be a management emphasis.

Reference FEIS Appendix B. Timber Suitability Analysis. Hydric soils were removed during the timber suitability process. The first step in this process was removal of non-forested cover types. Because the vast majority of these hydric soils support willow and other wet vegetation, most of these areas were removed in this step of the process. The next step was the removal of riparian and wetland areas. While not all riparian areas are hydric, this process identified the forested areas that support hydric soils. Please note that any additional areas identified during site specific project analysis that fall into this category would be removed from consideration whether or not it is specifically mapped in this programmatic analysis. The Forest Service followed a procedure outlined in a paper by Gordon Warrington that used GIS and soil data to identify areas of concern. A landslide hazard map of Wyoming was entered into GIS and those hazards that were identified by their susceptibility to mass movement and were grouped by slope. These areas were removed. It should be noted that non-forested areas and Wilderness areas were already removed from the suitable timber base and those acres were not counted in the 6,600 acres removed for irreversible watershed damage. Soils with rock content greater than 25% were not removed based on this factor alone. In general, any soils with this level of rock content would have been removed based on regeneration limitations, steep slopes, or other factors. During project analyses, any isolated areas with high rock content which would potentially have regeneration problems would be identified at that level.

The Medicine Bow NF has had adequate natural regeneration results in areas under 10,000 feet. The Medicine Bow NF does not have any suitable timber occurring below 7,400 feet. Areas of spruce/fir above 10,000 feet were removed from the suitable base. A review of the last 15 years of monitoring reports indicates that 95% of all regeneration harvests have been

restocked within 5 years. Occasionally natural regeneration does not occur within five years for a variety of reasons such as climatic conditions, or inadequate site preparation. In these cases the Forest Service has the option of seeding or planting.

TES habitat such as known nest sites are not practical to remove from timber suitability because they can change over short time frames as nest activity can change for any given year. In addition, new nests are identified frequently. The Forest Plan includes standards requiring projects to protect these areas when they are identified during site-specific project analysis. To account for the potential volume which may be reduced during project analyses, a post modeling estimate was made and the ASQ from the SPECTRUM model was reduced accordingly. Habitat for riparian species is accounted for by removing these areas from the suitable base. Other habitats such as old growth dependent species are accounted for in the SPECTRUM modeling process. As specific areas are identified during site-specific project analyses can be protected at that level.

As is true with many of the variables analyzed between 1985 and the present, changes have occurred in ownership, and updated survey information. Some of the Administrative sites are very small, but were identified with more acres in 1985 because of limited site information.

Timber
Comment #10

Fuels Treatments: You should state what mechanical methods will be used to reduce fuels and display this information. How will harvest on unsuitable acres for fuel reduction be limited so the entire forest is not harvested? You need to consider harvesting where you have a chance of reducing fire risk.

We suggest that the Forest Service grant to members of the Aspen Country Homeowners' Association and adjacent neighbors firewood removal permits to remove by hand and non-motorized transport dead tree fall and other litter up to 100 feet inside the forest area bordering their private and collectively owned property.

**Response:** Reference FEIS Chapter III, Timber Resources, Allowable Sale Quantity; and FEIS Chapter III, Timber Resources, Harvest methods. The S-2 tables in FEIS Chapter 2 include harvest acres combined to include harvest that contributes to ASQ and harvest for other objectives which may occur on lands not classified as suitable. Where harvests occur on lands suitable for timber harvest they will contribute to the ASQ. Where these treatments occur on lands not suitable for timber production they will not contribute to ASQ.

Harvest in Management Areas which are not suitable for timber production, include criteria for harvesting (especially adjacent to private land; to curtail imminent threat of insect attack; enhancing a scenic view from a prominent overlook, to maintain wildlife habitat diversity or maintenance of existing facilities). In addition, these site specific projects will be subject to NEPA which will require an evaluation of proposed project and the potential effects. In addition, Forest-wide standards such as maintaining old growth habitat, watershed condition, and wildlife security areas will ensure that the entire forest is not harvested.

Communities at risk have been identified and these areas will receive special considerations with respect to reducing fire risk. In addition, the Revised Plan includes a subgoal to maintain forests in a healthy condition with reduced risk and damage from fires, insects and diseases, and invasive species.

Private land owners living adjacent to the Forest can legally cut and remove dead timber from the National Forest under the provisions of a personal use permit. Personal use firewood permits can be obtained at Medicine Bow National Forest District Offices.

Timber	Timber Program Funding: The Forest's budget constraint should be based
Comment #11	on current levels of timber sale program funding. We recommend
	requesting adequate funding to offer the full ASQ within 5 years.

**Response:** Experienced budget levels were developed using a three year average. Desired condition budget levels for timber activities were adjusted based on planned budget needs for program implementation. Both levels are displayed in FEIS Chapter 2 Supplemental tables. Budget requests are made based on planned outputs and Regional availability of funds. Funding is a key factor in the amount of volume offered. However, site-specific project conditions also effect the amount of timber actually offered.

Timber	Watershed Recovery: We don't agree with 100-year recovery for current
Comment #12	disturbances factor in the watershed constraint

**Response:** Recovery rates were adjusted to 80 years which is based on current research described in FEIS Appendix B, Forest Planning Model and Hydrology sections.

Timber Comment #13	Wildlife Security Areas: The discussion on Security Areas doesn't even mention that the draft forest plan contains a Guideline that requires 20% of the MBNF to be designated as Security Areas. Further, there is no
	discussion about the effects or implications of the proposed Security Area designation on other resources. We recommend you include a full
	discussion of both the need and the consequences of designating 20% of the MBNF as security areas. The Effects on Timber Resources should discuss the effects of wildlife.

**Response**: Reference FEIS Appendix B, Forest Planning Model and FEIS Chapter 3, Timber Resources. The specific percentage requirement of this standard was dropped because many of these acres will overlap with other management objectives such as old growth which are already accounted for in the SPECTRUM model. In addition, these areas will be identified during project specific analysis and cannot be predicted at the programmatic planning level.

Timber Comment #14	Scenic Standards: The acreages that will be excluded by Forest-wide scenic standards or SPECTRUM must be subtracted from the suitable timber base. The Effects on Timber Resources should discuss the effects of the proposed Scenic Integrity Objectives.
	Harvest units should adjoin existing roads rather than being hidden out of sight to minimize edge effect.

**Response:** Reference FEIS Appendix B, Forest Planning Model and FEIS Chapter 3, Timber Resources. Forest-wide scenic standards are designed to guide site specific project design and layout. These areas can not be subtracted from the suitable base at the programmatic level. The process for identifying lands suitable for timber production based on regulations is described in FEIS Appendix B, Timber Suitability. To account for the potential effects of the scenery standards, a constraint was built into the SPECTRUM model.

A sensitivity analysis of the scenery constraints in the SPECTRUM model was conducted and found to be not a binding constraint.

The Forest Service is required to meet Scenic Integrity Objectives with vegetation manipulation projects. Locating harvest units adjacent to some roads may not meet this scenery management guideline, please reference Revised Forest Plan, Chapter I, Social, Scenery Management. In addition, a forest-wide guideline to maintain or improve edge to interior ratios has been added to the Revised Plan in an effort to minimize these situations.

Timber	SPECTRUM Costs: Logging costs including road construction are too
Comment #15	high and can be reduced using temporary roads. We don't understand how
	the cable, helicopter and tractor logging costs were calculated.

**Response:** Please reference the FEIS, Appendices, Appendix B, Forest Planning Model, Costs and Revenues in the Spectrum Model for revised costs. All costs used in the SPECTRUM model were based on experienced historical costs on the Medicine Bow NF. The Forest Service has always tried to minimize road construction costs by utilizing temporary roads wherever possible. Reference the FEIS, Appendix B, Forest Planning Model, Costs and Revenues in the Spectrum Model. Tractor logging costs were based on historic data from the Medicine Bow NF. Because helicopter and cable logging has not occurred on this forest, estimates were made by adjusting the costs of these activities from other Forests to account for local conditions. Helicopter costs were developed based on estimates from the Routt Divide Blowdown salvage operation on the Routt NF.

Timber Comment #16	MA 5.15: The 53% constraint in MA 5.15 has no scientific justification. If Management Area 5.15 is for renewable resource use, why is it being used to exclude renewable resource use by protecting habitats from that use?
	Many areas have too much management area 5.15 and should be 5.13. The theme description for MA 5.15 is ambiguous and not distinguished from 5.13?

**Response:** Reference FEIS Appendix B, Forest Planning Model, The constraint for MA 5.15 has been modified to more accurately reflect potential effects of this constraint. It focuses on the amount of snag recruitment planned in the area and represents an accurate description of the percentage of non-harvested islands left in clearcut units. The revised number is 20%, which includes 4% already reduced during the vegetation modeling process. Management Area 5.15 is designed to maintain or restore ecological conditions from a landscape consideration. This means that timber harvest is not the only objective for these areas.

The mix of management area 5.15 and 5.13 was considered at different levels in different alternatives based on the overall alternative theme. Reference Forest Plan, Chapter 2, Management Area 5.13 and 5.15. There are a number of key differences between management area 5.13 and 5.15. While both provide forest products which contribute to the Forest's ASQ, there are a number of key differences. 1) Management area 5.15 has a stronger emphasis on mimicking the landscape patterns which occur as the result of natural processes. 2) 5.15 includes the consideration of treating timber stands which are less than CMAI to address the high levels of this age group on suitable lands. 3) There is an emphasis on closing non-essential roads to enhance wildlife security areas. 4)Burning for site

preparation is favored over mechanical means. 5) Clearcut units maintain large islands of unharvested material to mimic natural fire disturbances.

Timber	Alternative F: Please explain why all 271,780 acres of the suitable timber
Comment #17	base for alternative F were placed in Management Area 5.4?

**Response:** This alternative was developed to emphasize core and corridor linkages as well as primitive non-motorized recreation opportunities. The Forest Service utilized a Regional list of Management Area prescriptions with clear direction on which Management Areas will contribute to ASQ e.g.(considered suitable). Harvest for other objectives which do not contribute to ASQ is permitted in most other Management Areas.

Timber Comment #18	RMRIS Database: Please analyze and report the various dates at which time (year) data in the RIS Database were collected. For example, what percent of the data was collected more than 10 years ago? What percent of the data was collected more than 15, 20 or 5 years ago? Please discuss what year the data used to estimate age class distribution was collected. Has the data been ground truthed?  If, as we understand it, forest inventory plots that land on roads are included in the inventory, then subtracting acreage for roads is "double dipping".
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**Response:** The Rocky Mountain Resource Information System (RMRIS) oracle data base has been in use since the early 1980's. The RIS data base contains site specific information for a variety of vegetative and land characteristics. New data is recorded into the data base as funding and time allow. Planning regulations require that the Forest Supervisor provide the best available data for the planning effort. Additional inventories or studies may be performed as deemed necessary. Age of data is not a critical factor with the majority of data used from the RIS database. Species covertypes for most species are relatively constant. Also most structure stages, except for very young stages, are long-term in nature and are certainly accurate for at least 20 years. Refer to Revised Plan Preface, page viii for discussion on field survey information.

If forest inventory plots land on roads, the plots are not included and are moved to include the appropriate stand boundary.

Timber	Riparian Buffers: How are streams delineated for the purposes of the 100'
Comment #19	buffer? The Forest Service has apparently included no buffer around lakes.
	Were wetlands removed from the suitable base?

**Response:** Riparian areas were based on areas containing riparian vegetation rather than a specific stream classification scheme. These areas are identified on the ground during site specific project design. This does not represent a change in strategy. The Watershed Conservation Practices Handbook has utilized a 100 foot buffer since the late 1990's and projects have been identifying these areas on the ground since that time. The exact location of these areas occurs at the site specific project level. For calculating the ASQ, these acres were removed from the suitable base.

Reference FEIS Appendix B, Timber Suitability Analysis. In the DEIS, the riparian areas that includes lakes and large ponds were inadvertently not buffered. They have been included in the FEIS for Alternative D-FEIS. In addition, a recently acquired GIS coverage

of wetland areas from the US Fish and Wildlife Service was also included. Because most of these areas were already identified as non-forested, which is the first step in the suitability process, there is not a large increase shown as a result of adding these areas.

Wetland information from the US Fish and Wildlife Service were added between draft and final. Most of these acres were already accounted for in the riparian areas used in the DEIS and in areas removed at the beginning of the suitability process based on non-forested habitat. Site-specific analyses will identify and protect any riparian or wetland areas encountered based on forest-wide standards and guidelines.

Timber	Northern Goshawk: The Forest Service has made no effort to estimate the
Comment #20	effects of the goshawk standard.

**Response:** Reference FEIS Appendix B, Forest Planning Model and FEIS Appendix B, Timber Suitability Analysis. The presence of goshawk nests does not effect timber suitability. Because active status of goshawk nests changes over time, and because all nests are not specifically identified, it is difficult to estimate the effects of the standard. For these reasons, it was not possible to model these sites in Spectrum. However, to account for potential reductions from these areas, a post modeling analysis of potential impacts on harvest levels was completed and is described in FEIS Appendix B, Forest Planning Model.

Timber	Road Decommissioning: The Effects on Timber Resources should discuss
Comment #21	the effects of the proposed decommissioning of over 700 miles of roads.

**Response:** Reference FEIS Appendix B, Forest Planning Model and FEIS Chapter 3, Timber Resources. Road decommissioning is targeted at user created roads, roads which are poorly constructed and causing resource damage, or lack funding to maintain. The Forest Service believes that with over 2,000 miles of roads on the forest, that access for future timber harvest will not be affected by road decommissioning.

Timber	Canada Lynx: Why is there no discussion about the effects of Lynx
Comment #22	Vegetation Standard #4 and #5?

**Response:** Reference the FEIS, Chapter III, Timber Resources, Effects from Lynx Amendment Standards and Guidelines. These standards were also addressed on page 3-572 of the DEIS.

Timber	Charter Forest and Stewardship Contracts: Why does the Forest Plan not
Comment #23	consider management opportunities such as Charter Forest or the New
	Mexico Model for Community Partnership for Restoration of National
	Forests and stewardship contracts?

**Response:** Charter Forests and the New Mexico Model for Community Partnership for Restoration of National Forests are legislative proposals that have not been passed into Federal law. Implementation of these proposals at this time would be premature. When the Draft Revised Forest Plan was printed, these were proposals not available for implementation, other than limited pilot authority for stewardship contracts. Since the printing of the draft, new direction to implement stewardship contracting and categorical exclusions has occurred and these tools will be utilized where applicable. The rule changes discussed for categorical exclusions are designed for small scale project NEPA analysis. Stewardship contracting is a tool to help implement site specific projects.

# Timber Comment #24 Rotation Ages: analyze alterna periods -- such methods such a

Rotation Ages: The DEIS failed to rigorously explore and objectively analyze alternatives that limit all logging on the Forest to long rotation periods -- such as 150, 200, 250 years, or based on non-traditional harvest methods such as "new logging" or "green logging". Standards should be included to insure partial cuts are conducted in a manner that minimizes their ecological impacts including limitations on amount of canopy removed and reentry periods.

Response: Reference FEIS Chapter 2, Alternatives, and FEIS Appendix K, Management Direction not used in the Forest Plan. Alternative F included longer rotations as described above. It should be noted, that the Forest Plan does not preclude the implementation of longer rotations to meet site specific management goals and objectives. Management of old growth stands is an example of site specific needs for longer rotations to meet forest management direction. The rotation ages discussed in the Forest Plan and used in the Spectrum model are generally experienced on the Medicine Bow for commercial stands within the suitable timber land base. The rotation age for individual stands is dependant on the stand achieving culmination of mean annual increment as directed by the National Forest Management Act. Rotation age is also dependent on management emphasis for a particular stand. Rotation age is a timber stand based (not individual tree) determination of when the stand matures. The maturation of a stand is generally when a stands growth rate declines and becomes increasingly susceptible to insect and disease mortality.

Specific amounts of canopy removed under partial cut vary tremendously based on site-specific conditions. Limiting the percentage of basal area removed would unduly limit treatment options. The Forest Service is required to develop site-specific timber prescriptions prior to harvest which are then incorporated into the project level planning process.

Timber	Logging Restrictions: Logging companies need the ability to log an area	
Comment #25	without unreasonable restrictions.	

**Response:** Restrictions and constraints implemented into timber sale contracts are needed to meet federal law regulating national forest resources. Each restriction is reviewed for its impact on timber sale viability and economics.

Timber	5 Year Regeneration Standard: How can there be exceptions to the 5 year
Comment #26	restocking requirement? Has the forest met the five year restocking
	requirement in the past especially at high elevations?

**Response:** The exemptions for the five year restocking requirements stated in the Revised Forest Plan Chapter I, Biological Resources, Silviculture, Standard 4 are consistent with 36 CFR 219.27 (b)(2)and (c)(3). The five year restocking requirement applies when trees are cut to achieve timber production objectives. In some cases permanent openings may be created for wildlife habitat improvement, vistas, recreation uses and similar practices. Therefore restocking the area may not be desirable.

The Medicine Bow National Forest Monitoring reports for the past 15 years indicate that the regeneration harvest treatments are certified as stocked within 5 years on approximately 95% of the area. This includes areas restocked at high elevations. Areas that are not adequately reforested are usually scheduled for hand planting or seeding to ensure adequate

reforestation. Please refer to the FEIS, Chapter III, Timber Resources, Reforestation.

 nber mment #27	Wilderness and Inventoried Roadless: Additional Wilderness will create an unhealthy forest condition.
	Why do some roadless areas have timber management areas in them which is inconsistent with the Roadless Area Conservation Rule?

**Response:** Please reference Wilderness, DEIS, page 3-433 which references the Wilderness Act of 1964. Not all acres on the forest can be managed for timber production. Forest health from a timber production standpoint would avoid high levels of insects and diseases. However, these pathogens are an important part of the forest ecosystem and need to be present in some areas for overall biological health of the forest.

During development of the Revised Forest Plan, the Roadless Area Conservation Rule has been delayed from implementation. Consequently, the Forest Plan focused on developing alternatives based on local issues and needs. This included a wide range of alternatives which considered varying levels of consistency with the proposed Rule. Should this rule take effect, it would automatically over-ride any management activities which would be inconsistent with the rule.

Timber	Non-Timber Production Mas: Why are so many areas designated for
Comment #28	management areas that don't contribute to timber production?

**Response:** The Forest Plan was developed to meet a variety of resource needs. Timber production is certainly an important consideration, but wildlife habitat, recreation, and water quality are also important. The Revised Plan strikes a balance among these and other resource objectives.

Timber	Timber Sale Schedule: The Forest Plan should display an accurate timber
Comment #29	sale schedule. Why isn't the public allowed to review the five year action plan?

**Response:** A timber sale schedule as referenced in 36 CFR 219.16 is often confused to mean a list of proposed sales which will occur over the life of the plan. As defined in 36 CFR 219.3, a Sale Schedule is "The quantity of timber planned for sale by time period from an area of suitable land covered by a Forest Plan." The ASQ, or "sale schedule, is described in the Record of Decision, the FEIS, Chapter 2, Supplemental Tables, and the Forest Plan, Appendix H, Supplemental Tables. Predicting specific sales at the Forest Plan level is not practical since this is a programmatic document.

The five year action plan is an internal planning document that has no legal authority or obligation to contract a timber sale. It's strictly an informational plan used by the Forest service to schedule NEPA documents, resource surveys, plan outyear work, and inform the public of upcoming timber sale proposals. When the Final Revised Medicine Bow National Forest Plan is approved, proposed timber sales on the five year action plan will be compliant with the Revised Forest Plan.

### **Travel Management**

## Travel Management Comment #1

User created roads: There is conflicting language about the future of user created travelways. The documents should state that the user created roads will be considered for inclusion into the road or trail system and not just automatically decommissioned – SEE DEIS PAGE 3-405. Often the user created route provides a needed access or recreational opportunity that was not available on the Forest. The document biases discussion towards the idea that only motorized users are responsible for "user created routes" all user groups contribute to these routes.

**Response:** User-created routes (unclassified roads) will go through a site specific analysis in accordance with the 2000 Travel Management Decision. See EIS – Travel – Affected Environment – Unclassified Travelways and EIS – Cumulative Effects – Effects from Travel Management.

# Travel Management Comment #2

Closed Roads: The number of miles of road that the USFS is claiming for the MBNF is deceiving since 17% or 431 miles of the 2,592 miles "advertised" are currently closed and cannot be used.

**Response:** The closed roads are a part of the long-term transportation system for the Forest that are closed when not needed for resource management.

## Travel Management Comment #3

Douglas-Esterbrook Road Correction: Douglas-Esterbrook Road is not a designated Forest Highway. It is WY Highway #94 from Douglas to Milepost 17, and then from that point on to Esterbrook, it is Converse County Road #5, Esterbrook Road. No portion of this road is under Forest Service jurisdiction. Additionally, the third sentence in the next paragraph refers to no other formal agreements between the Forest and any Wyoming Counties. The agreement referred to on the previous page is between the WY DOT, Forest Service and the Federal Highway Administration (US DOT??). Counties are not mentioned as participants in the referenced agreement. Also, Table 3-237 should be labeled as County road and bridge expenditures (as opposed to budgets).

**Response:** The Douglas–Esterbrook Road is listed by the Wyoming State Department of Transportation as a Federal Highway. See EIS-Travel-Affected Environment-Forest Highways. The road is not under Forest Service jurisdiction, but is eligible for Forest Highway funding because it provides primary access to the Forest.

### Travel Management Comment #4

Questionable Statements: "These roads could be decommissioned by a variety of techniques including conversion to non-motorized trails". This statement should be changed so as not to prevent the conversion of roads to motorized trails: "These roads could be decommissioned by a variety of techniques including conversion to motorized or non-motorized trails."

Optimum vs. Potential Minimum The term "optimum" should revert to the phrase "potential minimum". Optimum from what perspective? Money? Effort? Certainly not recreation use! Optimum also leads people to think that it is the best scenario since given the chance everybody wants an optimum solution not a poor one.

**Response:** The wording has been changed.

Travel	Phase II Travel Management: The Draft Plan needs to be revised to
Management	include a statement that the Forest Service will amend the Forest Plan
Comment #5	during Phase II of travel management should any legitimate motorized
	routes be placed inside of nonmotorized management areas.

**Response:** Regulations already require that an amendment would be needed, so no addition to the plan is necessary.

Travel	Effects Analysis: The DEIS does not adequately assess and disclose the
Management	direct, indirect, and cumulative impacts of roads. The DEIS references
Comment #6	numerous studies on road impacts, but this cannot be a substitute for an
	analysis of the impacts of roads on the MBNF. Merely listing numbers of
	miles of roads does not constitute analysis either.

**Response:** Each resources area discusses the impacts to those resources in the Effects sections of each resource.

Travel Management Comment #7	Sage Creek Road Realignment: There are currently plans to upgrade and perhaps realign the Sage Creek Road, and Alts. F and G would prohibit realignment. DEIS at 3-394. More information is needed on this proposed realignment so that the public can become informed on the issues at hand and a meaningful analysis of alternatives can be anticipated within the Forest Plan MAs. BCA does not necessarily oppose the realignment of the road if this realignment avoids roadless areas and is moved from sensitive areas to areas more hardened to the potential impacts of the new road grade.
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**Response:** In Alternative F, the realignment could cross Management Areas 1.2, 3.24, 4.2 and 5.4. It could also pass adjacent to the Big Sandstone Inventoried Roadless Area. We do not yet have a proposed alignment, so there was not a good method to adjust the MA designations in Alternative F to accommodate the possible realignment. An amendment to the plan would have been necessary under Alternative F if the new alignment passed through MAs which prohibit new construction.

Travel Management Comment #8	Decreased Roads/Alternatives F & G The Forest Service asserts that Alternatives F and G will "show significant decreases in the Forest transportation system" because they contain more proposed wilderness and backcountry non-motorized prescriptions. DEIS at 3-401. These MAs
	almost exclusively occur in areas that are currently roadless, and any new designation would merely prevent the proliferation of future roads rather than closing roads which exist today.

**Response:** These alternatives have a greater percentage of the forest in management areas that stress a roadless character, thus more roads would likely be closed in these alternatives.

Travel	Access: Public access concerns include access for private inholdings,
	access for special use permits and range allotments, and private access
Comment #9	where access for the general public is not available.

Response: These concerns are addressed in the EIS-Travel-Access Needs; EIS-Lands-

Special Uses-Access; and Forest-wide Real Estate-Right-of-way-Standard 1 and Forest Subgoal 2.c. Strategy i.

Travel	[Goal 4] Strategy 3: Why and how much? Since travel management is
Management	being handled under a separate planning effort, this strategy should be
Comment #10	deleted.

**Response:** This strategy reinforces the travel management decision and process.

Travel	Strategies 1 and 2: Given MBNF statements about a huge road
Management	maintenance backlog, meeting these will require either additional funding,
Comment #11	fewer roads or lower standards. Strategy 6 only anticipates 20% of bridges
	maintained to standard within 5 years, so are these 3 strategies compatible?

**Response:** These strategies give a priority to managers in addressing the backlog of deferred maintenance needs.

	Road Density: Comments received indicated a desire to include road
Management	density numbers to manage the transportation system.
Comment #12	

**Response:** Subgoal 1.b. Strategy r. provides for wildlife security through decommissioning roads identified in future site-specific analyses rather than at the forest scale. There are many reasons for reducing road density other than wildlife concerns. These include: soils, water, non-motorized recreation and road maintenance costs. Analysis of both the resource needs and resource costs of individual roads is best done with site-specific analyses. A road density formula can be part of this multidisciplinary analysis, but it might not best serve the needs of the resources when applied at too broad a scale.

### Travel Management Comment #13

Future Site-specific Analysis: It is difficult to imagine just how the Forest Service can issue a revised forest plan, basically ignoring the location of motorized routes, while promising to designate these routes later. The forest plan revision can thus become a ruse to the closure of legitimate motorized activity.

Many comments were received regarding motorized access to the Forest. These concerns are grouped together here because they will primarily be addressed through the previous Travel Management decision (2000) and the subsequent site-specific Travel Management EAs. These concerns include:

- Keeping travel on designated routes
- Length of time to complete the analyses
- Lack of adequate maps
- User-created routes
- Future ATV trails
- Off-road use
- Requiring NEPA decisions for changes in access
- Coordinate with the State on travel decisions
- Justifying the need to decommission roads
- Leave roads open

Build no new roads
No net gain in miles of road
Balance access with wildlife needs
Close more roads

**Response:** Roads will be analyzed with the Travel Management EAs that will include public involvement before a determination is made whether to add a road to the transportation system, decommission the road, or convert the road to a trail. All resource areas will be considered in determining whether or not a road will be part of the transportation system. See EIS-Travel-General Effects, para 2; EIS-Travel-Roads Analysis; EIS-Travel-Identification of the Potential Minimum Road System; EIS-Travel-Effects from Management Area Prescriptions; EIS-Cumulative Effects- Effects from Travel Management Decision; and Subgoal 4.a. Strategy a.

# Travel Management Comment #14 Level 2 Roads: Draft Plan, Chapter 1, Administrative, InfrastructureTravelways, page 1-45. Under standard #2, we suggest adding "unless a documented decision states that level 2 road use interferes with necessary big game harvest objectives". This will allow local flexibility in road management for overcoming difficulties in achieving agreed-upon hear unit objectives.

**Response:** This standard wording is from the R2 Desk guide. No change to the wording has been made.

Travel Management Comment #15	Temporary Roads: Use temporary roads for 80% of single use needs. This will reduce costs and increase viability of timber sales for purchasers, and reduce long term effects on ecosystems. It should also yield more timber in the yield model as revenue must exceed costs in the solution chosen. This approach should significantly improve ecosystem components adversely affected by the presence of roads. These may
	include sedimentation, big game security, fragmentation, lynx habitat.

**Response:** Temporary roads are used where and when appropriate on a site-specific basis, considering costs, resource objectives and resource protection. See FEIS, Chapter 3, Travel-Effects from Timber Management.

Travel Management Comment #16	Seasonal Restrictions: Guideline 1 for Infrastructure-Travelways, regarding the management of motorized use by seasonal restrictions, must be revised. Draft Plan at 1-46. First, seasonal restrictions must be as short as is absolutely necessary, as defined by the scientific and factual need for those restrictions. Further, the term "unacceptable" must be defined in scientific terms or replaced with the phrase, "unavoidable and irreparable" because to some any evidence of human passage is "unacceptable"
	because, to some, any evidence of human passage is "unacceptable."

**Response:** This standard wording is from the R2 Desk guide. No change to the wording has been made.

Travel	Roads Effects on Soil and Water: Road related impacts are one of the
Management	most serious causes of aquatic degradation and aquatic species decline on
Comment #17	the Forest. Yet the DEIS and proposed Plan fail to comprehensively and
	programmatically address this issue through forest and management area

level standards and guidelines. Road construction is not presumptively prohibited in roadless and lightly roaded areas and there is no direction concerning the use of watershed analyses to ascertain whether immediate, obvious internal threats exist from road-related sources to sensitive and atrisk aquatic resources. We also incorporate by reference and have attached the report by Cindy Deacon Williams entitled, "Summary of Scientific Findings on Roads and Aquatic Ecosystems".

**Response:** Soil and water concerns are addressed when closing roads or prior to new construction on a site-specific basis.. See EIS-Travel-Effects from Aquatics and Soils; EIS-Travel-General Effects, para 4; Forest-wide Standards and guidelines under Physical-Soil and Physical-Water and Aquatics.

Travel	Closure of Unneeded Roads: We support the closure of unneeded roads in
Management	the Barrett and Pole Mountain GAs, but question the decision not to do this
Comment #18	in every GA.

**Response:** Unneeded roads will be closed in all Geographic Areas; see Forestwide Guideline under Administrative-Infrastructure-Travelways-Guideline 4. The emphasis in these particular Geographic Areas is due to the high number roads and their impacts on other resources.

	Proposed Rock Creek Wilderness: New wilderness and roadless areas would decrease motorized access to the Forest.
Comment #19	

**Response:** The proposed Rock Creek wilderness area would not close any additional roads. The area to the northeast of Rock Creek is designated motorized because it is accessible from the northeast to the general public during hunting season through an agreement with the State Game and Fish, local landowners, and the Forest Service. Most of the inventoried roadless areas have no existing motorized use that would be closed in Alternative D. See EIS-Travel-Cumulative Effects from Travel Management Decision, last para. See Subgoal 2.c. Strategy i.

Travel	Deep/Jack Road 830: R20601 serves as essential safety, escape cover and
Management	travel corridor for elk, especially during fall hunting season and habitat
Comment #20	effectiveness of this area has diminished since construction of the
	Deep/Jack road 830. Road 830 should be closed during elk season and
	during elk spring calving.

**Response:** This road is currently closed from May 15 to June 15 for spring calving. (Snow closes the road before May15.)

Travel	Guideline 1 & Transportation Standard 1: Guideline 1 and Transportation
Management	Standard 1 have major conflicts with each other. The intent should be on
Comment #21	old growth characteristic, not Wilderness.

**Response:** This MA is not part of the Final Plan.

Travel	Road Decommissioning: Transportation Standard 1 should be changed to
Management Comment #22	state that "As funding allows decommission and re-vegetate identified
Comment #22	unneeded travelways only after a designation decision is made". If the area reverts back to its previous MAP without Wilderness designation taking
	place the travelways should be once again available to the public.

**Response:** Through implementation of the Travel Management Decision (2000), any decommissioning will be included in a documented decision. If needed, the plan will be amended if an area reverts back to its previous Management Area Prescription. There is no need to add a standard to cover this.

Travel	5.15 Forest Products: Standards and Guidelines for Management Area
Management	Prescription 5.15 (Forest Products – Ecological Maintenance and
Comment #23	Restoration Emphasis) must be revised. Draft Plan at 2-89 – 2-91.
	Guideline 1 for Infrastructure should be stricken as it is vague and over-
	broad. Id. At 2-90. The term "non-essential" is not defined.

**Response:** The wording has been changed in the revised plan.

Travel	Guideline 1 "All guidelines suggesting that legitimate activities should be
Management	discouraged are entirely inappropriate and should be stricken. See
Comment #24	MA3.31 "Guideline 1 for Transportation. [MA 3.31]

**Response:** The guideline is clear that only after analysis and where needed will the activity be discouraged.

Travel Management	Monitoring Closures: 4.a.se4 – since Roads Analysis does not make decisions, the Monitoring Question should be "Have roads that have been
Comment #25	identified for closure/decommissioning in project NEPA decisions been
	closed/decommissioned?" and the Potential Monitoring Items should be
	"Miles of road identified for closure/decommissioning in project NEPA
	decisions, and miles of roads closed/decommissioned".

**Response:** Monitoring items have been revised in the revised plan and this item has been modified.

Travel Management Comment #26	Monitoring/Closure of Off-trail Routes: The regulations require vehicle use be monitored and areas or trails be closed to address conflicts36CFR 295.5 Alternative D fails to take action to close areas where cross-country motorized travel has had a negative impact on the Forest. The Forest Service must address off-trail motorized travel in winter months, as
	required by Presidential Executive Orders and Forest service Regulation.

**Response:** Monitoring for Subgoal 2.a. will address off-road vehicle use. The Travel Management Decision (2000) closed all areas to off-road travel unless they are designated open. Further site-specific analyses will address individual roads.

Travel	Parking Lots: There is a problem, it would be in the parking lotsthey are
Management	unorganized and too small. Your plan should allow for improvements.
Comment #27	

Response: See EIS-Recreation-Affected Environment-Winter Trails and Trailheads. Site

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specific analysis for individual proposed site changes will be completed following completion of the plan.

Travel	Maintain Existing Road/Trail Systems: The focus should be on
Management	maintaining the existing road and trail systems in good health (ie, the 3,000
Comment #28	miles of roads on the Medicine Bow) so as to allow the forests to be used
	by everyone in an environmentally conducive manner.

**Response:** See Chapter 3, FEIS-Travel-General Effects-Maintenance and Reconstruction. Maintenance is dependent upon budgetary changes.

Travel	Conveyance to Counties: Plan does not indicate what roads would be		
Management	eligible for conveyance to the counties under RS2477.		
Comment #29			

**Response:** See Chapter 3, FEIS-Travel-Cumulative Effects from RS 2477.

Travel	Enforcement of Restrictions: The Revised Plan must also ensure there		
Management	will be adequate funding and personnel dedicated to monitoring and		
Comment #30	enforcing motorized travel restrictions to put an end to the illegal		
	construction of roads and trails across the Forest.		

**Response:** Motorized use is restricted to designated roads and trails. See Revised Plan, Chapter 2, Forest-wide Administrative-Infrastructure-Travelways- Standard 2. The Travel Management Decision(2000) also restricts motorized use to designated roads and trails. For law enforcement concerns, see Chapter 3, FEIS-Recreation-Affected Environment.

Travel Management Comment #31	Closures in IRAs: We do not support the closure or decommissioning of any roads in inventoried roadless areas for any reason, and we do not support changing the status of any roads in any inventoried roadless area from classified to unclassified for any reason.
	Decommission and obliterate roads bisecting roadless areas.

**Response:** Currently inventoried roadless do not have any classified roads in them. See Chapter 3 FEIS-Roadless Areas for discussion on roads in roadless areas.

### Wild and Scenic Rivers

		Why does the Plan propose Wild and Scenic River
Scenic Rivers	designations?	
Comment #1		

**Response:** Section 5(d)(1) of the Wild and Scenic Rivers Act of 1968, as amended requires that "in all planning for the use and development of water and related land resources, consideration shall be given by all Federal agencies involved to potential wild, scenic and recreational areas." Through Section 5(d)(1), the Forest Service is required to assess rivers under its management jurisdiction and determine whether any rivers are worthy additions to the National System.

The Forest Service Handbook 1902.12 (Chapter 8) directs the Forest Service, during forest plan revision, to evaluate rivers for inclusion in the National Wild and Scenic Rivers System. There is also a Forest Service Washington Office (11/21/96) guidance letter regarding the

Land and Resource Management Plan revision process and wild and scenic rivers assessment process.

Guidance to USDI and USDA agencies on how to consider Wild and Scenic Rivers eligibility, during forest planning is found in, Department of the Interior and Agriculture Interagency Guidelines for Eligibility, Classification and Management of River Areas.

### Wild & Scenic Rivers Comment #2

Additional Candidates: Respondents asked us to consider adding the North Fork and the West Branch of the Little Snake River to the proposed list of W/S rivers.

In addition to the recommended W/S rivers in D-DEIS of the North Platte and the Encampment River, I recommend the following rivers for inclusion: The Roaring Fork of the Little Snake for alpine bogs, North Fork of the Little Snake and Solomon Creek for the timbered valleys and pure strains of Colorado Cutthroat trout, Big Sandstone Creek for aspen dominated forest and outstanding beauty and Colorado River Cutthroat trout. The Forest Service erred in its determination that they did not hold outstandingly valuable characteristics. In general, Wyoming rivers are greatly underrepresented in the national W/S river system and only the Clark's Fork of the Yellowstone in Wyoming is protected as a W/S river.

**Response:** Both the North Fork of the Little Snake and the West Branch North Fork Little Snake were inventoried and considered eligible for designation. They were each considered and analyzed in Alternatives E and F which primarily emphasized protecting existing roadless character and emulating natural landscape (Alt. E) and providing non-game wildlife habitat and allows natural processes to occur at high levels (Alt. F). 9.36 miles of the North Fork was considered for scenic designation. 7.72 miles of the West Branch was considered for scenic designation. See FEIS-Appendix E (Wild and Scenic Rivers) for an individual analysis of each of these potential rivers.

The Roaring Fork of the Little Snake River was considered eligible and allocated to wild designation in Alternatives B, E and F. Solomon Creek was considered for scenic designation Alternative F. Big Sandstone was considered for wild designation in Alternative F.

Wyoming does contain a Wild River; the Clarks Fork of the Yellowstone River which is 20.5 miles long and located on the Shoshone National Forest. This river was designated in 1990. The Selected Alternative D FEIS recommends two rivers (Encampment River and North Platte) for designation as Wild and Scenic Rivers. There would be approximately 23.5 miles of wild and approximately 4 miles of scenic river added to the Wyoming W/S river system if these rivers were officially designated.

# Wild & Scenic Rivers Comment #3

Wilderness vs. Wild & Scenic: Instead of being recommended for wilderness, some of the inventoried roadless areas might be equally well protected as wild and scenic rivers or RNAs. For example: French Creek, Middle Fork of the Little Laramie River, LaBonte Creek.

WSA designation just creates more useless land that is off limits to 99% of America. We also do not need the North Platte and Encampment River designated W/S because they are already in Wilderness Areas and therefore are already protected.

**Response:** Roadless areas that contain rivers and potential wild or scenic rivers are not necessarily interchangeable. The roadless area inventory process is based on whether or not an area has classified roads contained within it. The wild and scenic rivers inventory determines if a river is free flowing and possesses one or more outstanding remarkable value(s). The Eligibility and Classification process identified streams to study from the following categories: 1) Rivers listed in the Wild and Scenic Rivers Act, 2) Rivers listed in the National Rivers or Outstanding Rivers List, and 3) Rivers Identified during scooping for the Plan revision. French Creek North and South were contained in the American Rivers list showing statewide significant recreational fisheries, but they did not meet the free flowing and remarkable values tests for eligibility or classification. (See Administrative Record).

Wilderness designation is the not the same as Wild and Scenic River Designation. The authority and purpose comes from two separate laws. Wilderness recommendation criteria focus on an entire area and the study includes a capability, availability and needs analysis (See FEIS-Appendix C). W/S river recommendation focuses with the study including whether or not the river is free flowing and if there are outstanding remarkable values associated with it (See FEIS-Appendix E). And management of Wilderness Areas is not the same as management or protection of Wild and Scenic Rivers (See Chapter 2 of the Revised Plan, Management Areas 1.13, 1.5, and 3.4).

Wild &
<b>Scenic Rivers</b>
Comment #4

Future Water Storage Projects: W/S river designation might compromise possibility of future water storage projects. There is concern that proposed W/S rivers are only marginally qualified. There is also concern that there may be impacts to grazing.

**Response:** While potential for future water storage projects is possible, it is unlikely. There is a 1400-acre power withdrawal on the North Platte River in the canyon that starts at Six Mile Gap and goes to the Colorado-Wyoming State line. This withdrawal was done under PSC 374, dated 3/23/1945. There are no known plans for creating an impoundment at this time.

The following guidelines regarding rangelands and livestock grazing are contained in Chapter 2 of the Revised Plan under Management Areas 1.5-Wild Rivers and Management Area 3.4 – Scenic Rivers: 1) Manage livestock grazing to minimize conflicts with wild or scenic river values; 2) Design rangeland improvements to be compatible with wild or scenic river values. There may be impacts to grazing, but as analyzed in FEIS – Chapter 3 – Wild and Scenic Rivers, Effects from livestock grazing and big game use, effects are anticipated to be moderate and they would be addressed in the Comprehensive River Management Plan developed for designated river segments. In the selected alternative D-FEIS, the majority of the Platte River recommended for designation is already inside the Platte River Wilderness Area and changes to grazing would be minimal if at all. The majority of the Encampment River, which is also recommended in Alternative D FEIS is already in the Encampment River Wilderness Area so changes to grazing would be minimal if at all due to designation similar to Platte River.

### Wilderness and Roadless Area Management

Wilderness &
Roadless
Comment #1

Wilderness Effects on Livestock Grazing: These comments indicate concern over the requirements for grazing operations to use natural materials for fence replacement, conflicts with recreation, and concerns

over losing livelihoods along with their allotment. They want the Forest Service to add specific grazing restrictions in wilderness to the EIS or Plan.

Although grazing is permitted in wilderness areas, the EIS discussion alludes to the idea that with the allocation of MA 1.2, there will be more general management restrictions on livestock use. We cannot support an alternative that has a potential to restrict grazing.

On the other hand, it was argued that although grazing was a mandated activity under the 1964 Wilderness Act, this was meant for those livestock owners at the time the Wilderness Act was passed, not to new operations, so new operators should be removed.

**Response:** Requirements for grazing operators are outlined in the regulations (Forest Service manual (FSM) direction), and in the grazing regulations (36 CFR 293.7); grazing in wilderness areas ordinarily will be controlled under the general regulations governing grazing of livestock on National Forests.

Management Area 1.2-Desired Condition in Chapter 2 of the Plan contains the following statements: "Domestic livestock may be encountered in this area during the summer. Some signs of management practices, such as salting areas, fences, and water developments may be present. Past or present mining activity may be visible". A guideline under rangelands states, "Utilize natural materials in the construction/reconstruction of fences". Forestwide standards and guidelines for livestock grazing and rangeland management will be implemented in Management Area 1.2 except for the rangeland guideline previously listed. There will be no reduction in allotments and allotment management planning will determine site specific requirements for resource protection.

Section 4(d)(4)(2) of the Wilderness Act states that grazing in wilderness areas, if established prior to designation of the area as wilderness, "shall be permitted to continue subject to such reasonable regulations as are deemed necessary by the Secretary of Agriculture". Congress has since written guidelines to interpret this section of the Act. According to this interpretation, "There shall be no curtailment of grazing permits or privileges in an area simply because it is designated as wilderness, nor should wilderness designations be used as an excuse by administrators to slowly "phase out" grazing. Any adjustments in the numbers of livestock permitted to graze in wilderness areas should be made as a result of revisions in the normal grazing and land management planning and policy setting process, giving consideration to legal mandates, range condition, and the protection of the range resource from deterioration."

Further, grazing may be continued on any allotment where a grazing permit was in existence at the time of designation and where there is recent history of grazing use immediately prior to wilderness designation, including permits that were in non-use status for either personal convenience or range protection. The guidelines include situations where there were no actual permits in existence on the designation date because permit waivers were in process or because the expiration date of term permits happened to have coincided with the designation date.

As for materials to be used for replacement of fences, and water developments: according to FSM 2323, the general rule of thumb on grazing management in wilderness should be that activities or facilities established prior to the date of an area's designation as wilderness

should be allowed to remain in place and may be replaced when necessary for the permittee to properly administer the grazing program. Thus, if livestock grazing activities and facilities were established in an area at the time Congress determined that the area was suitable for wilderness and placed the specific area in the wilderness system, they should be allowed to continue. With respect to areas designated as wilderness prior to the date of this Act, these guidelines shall not be considered as a direction to re-establish uses where such uses have been discontinued.

To that end, Management Area 1.2 is not expected to affect existing permitted grazing operations. Please see the discussion in the Wilderness section of Chapter 3 of the EIS for an outline of the Congressional Grazing Guidelines.

# Wilderness & Roadless Comment #2

No Need for Additional Wilderness: These comments expressed concern over the Forest Service 'locking up' forestland in Wilderness (and defacto) designation. They said there is already enough Wilderness in Wyoming, (already 33% of National Forest area is in Wilderness), and that in wilderness, snowmobiles and four-wheelers can't be used, nor can down timber be removed. The comments emphasized concerns that Wilderness designation is inconsistent with the Multiple Use Sustained Yield Act.

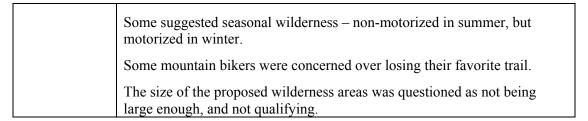
An area recommended for wilderness must meet the tests of capability, availability and need. Where is the proven need? The current 7% of the Forest that is already designated as wilderness is plenty of wilderness for this area, especially if you consider that only about 3% of the people recreating in this national forest use the current wilderness.

Wilderness keeps 97% of the people from using the area (Wilderness use accounts for 3%). These individuals refute any need for additional wilderness, because of the currently low use numbers in Wilderness on the Forest. These individuals feel wilderness is contrary to recreation. In addition, they say Wilderness is discriminatory against elderly, young, and disabled. Legislative authority was questioned.

Wilderness goes against the goal to plan for future generations by not allowing motorized use, and that they won't be able to use these areas as they have in the past.

All 1.2 Management Areas should be changed to 3.31 (year-round motorized). Concern that areas recommended in the Medicine Bow Plan should not be managed as such until areas currently recommended for Wilderness are decided on. In MA 1.2, current uses such as off trail snowmobiling and mountain biking should be allowed to continue until the time, which the area is designated wilderness by congress. The elimination of current uses in a proposed wilderness is a defacto wilderness when in fact only congress can designate wilderness.

FS needs to allow all current activities to continue until Congress designates them as wilderness. They don't want anything changed until Congress designates the area as wilderness. These individuals said there's plenty of room in the backcountry in the existing wilderness. They want the Forest to NOT manage these areas to protect their wilderness character.



**Response:** Wilderness preservation is one of the Multiple Uses of the Forest Service (see Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 528-531). There are many areas on the Forest where visitors don't go, but they are not locked out. Because only 3% of use is attributed to Wilderness use on the Forest does not mean that ninety seven percent of Forest visitors use motorized vehicles for accessing the backcountry. No legal ORV opportunities were eliminated by the areas recommended for wilderness.

Forest Service direction (FSM 2320), and consistent with 36 CFR 293, the Agency is directed to recommend wilderness and manage it so as to protect the wilderness values until their designation as wilderness or to other use is determined by Congress. Forest Service policy directs the Forest Service to protect the resource values of an area recommended for Wilderness until a final decision is made. In total, wilderness management acres on the Medicine Bow National Forest would account for 10% of the Forest (currently designated and proposed in the final Plan). There are currently no Wilderness areas on the Thunder Basin National Grassland.

Management Area 1.2 allows current uses to continue unless resource damage that would result in the area being unfit for designation as wilderness is occurring. The Forest Plan decision cannot make an area a Wilderness area, only Congress has that authority. The only management Area in the Plan that is consistent with Congressional direction on wilderness is 1.13.

FEIS-Appendix C details the capability, availability and needs analysis conducted on the 31 agency inventoried roadless areas and public proposed areas. There are six factors we considered for determining if there was a need for any of the 31 agency inventoried roadless areas to be recommended for wilderness designation. Those factors are 1) The location, size, and type of other wildernesses in the general vicinity and their distance from the proposed area; 2) Present visitor pressure on other wilderness areas, trends in use, population changes, and travel patterns; 3) The extent that non-wilderness lands can provide opportunities for unconfined outdoor recreation experiences; 4) The ability of certain biotic species to compete with increasing human development; 5) The need to provide a sanctuary for those biotic species unable to survive in less than primitive surroundings; and 6) The area's ability to protect certain landform types and ecosystems. (FSH 1909.12 (23b)).

Current use of existing wilderness areas was considered, but that is not the only factor used to determine whether an area should be recommended for wilderness designation. The analysis in Appendix C combined with public input were the basis for selecting specific areas to include in Alternatives D-DEIS, D-FEIS, E and F for recommended wilderness.

Designation would not "lock up" any manageable acres on the forest; roadless areas on the Medicine Bow National Forest have been managed to maintain the roadless characteristics. According to the first two management objectives in FSM 2302, Forests are directed to:

Maintain and perpetuate the enduring resource of wilderness as one of the multiple uses of National Forest System land.

To protect the long-term public interest by maintaining and enhancing open space options, public accessibility, and cultural, wilderness, visual, and natural resource values.

The Forest Service currently has no areas pending Wilderness legislation in Wyoming. There are numerous BLM areas, however. There are varying reasons why areas are eventually included in legislation or not; the Forest will work with the Wyoming Congressional delegation to clear up concerns and questions regarding the areas on the Medicine Bow National Forest.

The Wilderness Act defines wilderness at some point below absolute wilderness. The Agency is directed to consider the relationship between the natural, undisturbed purity of a wilderness area and the human influence that affects it (see Roadless Areas, Chapter 3, EIS). There are few areas (even inside the original Wilderness Areas) that have no influence of humans. Managers take this into account, and evaluate the qualities of each Wilderness for its own merits, and determine how far from "pure" it may be. They determine the type of management it would take to get the area closer to "pure." There are some activities that could occur in these areas, legally, that would not contribute to their "purity." According to the law, these activities must be allowed to occur, such as mining, grazing,

### Wilderness & Roadless Comment #3

Need for Additional Wilderness: There was support for additional Wilderness recommendations, not just the number in alternative D-DEIS.

Commenters were also concerned that snowmobile use would be allowed to continue in areas recommended for Wilderness, citing potential damage that would affect the condition of the area that gave it the eligibility for wilderness.

Some mountain bikers support additional wilderness.

There were recommendations that the Platte River and Savage Run combined (obliterate the road) so they could be more of a wilderness in size.

**Response:** Please see the Wilderness and Recreation Affected Environment, and the Direct and Indirect Effects writeups in Chapter 3 of the EIS for discussion on most of these issues. Appendix C in the EIS provides a good discussion on the Roadless Areas and the merits of recommending them for Wilderness designation.

# Wilderness & Roadless Comment #4

Wilderness and Natural Processes: These comments were an expression of concern that wilderness does not protect the forest from wildfire, disease, and management of the forest in a timely manner.

The Final Plan should not allocate any areas of MA 1.2 since it will increase the evidence of effects from insects and disease.

Others felt that fires should be allowed to burn in the wilderness, and that any control of natural insect and disease outbreaks violates the letter of the law.

**Response:** There is nothing in the Management Area direction that would indicate the Forest

Service intends to "control natural insect and disease outbreaks." See Chapter 2 of the Plan.

The Wilderness Act permits mining on valid claims, access to private lands, fire control, insect and disease control, grazing, water resource structures (upon the approval of the President), and visitor use in Wilderness Areas. There are guidelines for perimeter control of wildfires in Wilderness, and the Forest Service also has the authority to allow more intense fire management activities. There is no evidence that roads and road building are necessary to ensure the continued health of the forest. "Severe" wildfires are generally natural stand-replacing fire events that have been occurring in the forests for thousands of years. The Wilderness Act was first passed in 1964.

While Management Area 1.13, Wilderness includes an integrated pest management standard that says, "Allow natural processes, including insects and disease to occur", Management Area 1.2 direction is silent on integrated pest management so within that management area, forestwide standards and guidelines apply.

### Wilderness & Roadless Comment #5

Wilderness in the Laramie Peak Area: People felt the recommendation would eliminate hunting in the area (for many hunters) due to the rocky and mountainous terrain, and "one of the only motorized routes on the mountain." They also wanted to know where people would park to use the area.

The inability to kill wolves was a concern.

Commenters wanted buffers around the edge, especially where motorized access would be eliminated.

"Use is low, the land is rugged, so it acts like a natural wilderness area on its own." Others felt it didn't qualify because it's not road less or undeveloped.

Mountain bikers have demonstrated much skill, enthusiasm and willingness to volunteer to create trails on national forests. Laramie Peak presents an opportunity, but that will disappear if it is recommended for Wilderness.

The Forest Service used erroneous and inaccurate boundaries to qualify roadless areas for wilderness and roadless areas. On my property, there is a road previously and historically accepted for motorized use that is now being shut off by this plan. That is the only road available for use between parcels of private lands as well as for access by fire fighting vehicles to a large portion of both public and private lands. These roads are critical to ranching, fire fighting, forest thinning, logging, etc and other needs that require vehicle access.

If Laramie Peak was not suitable in Rare II, why is it suitable now?. The point is made that this area was not carried forward in RARE II, so why now?

On the other hand, comments in support of the area cited the ponderosa pine old growth (only intact assemblage of that type in the Region), bald eagles, and other raptors, bird species, habitat for wild turkey, and sensitive plant species found in the area. They said there were outstanding opportunities for solitude.

**Response:** The inventoried roadless areas were mapped according to FSH 1909.12, Chapter 7 which was also the basis for the June 1997 Region 2 guidance paper entitled "A Roadless and Unroaded Area Inventory, Purpose, Process and Products". FEIS-Appendix C describes the procedure that was used to map the Medicine Bow inventoried roadless areas. The procedures were consistent across all three districts of the forest. Appendix C describes that no classified roads were included in the mapped areas. A classified road was defined at the time of the 1998 inventory as road constructed or maintained for long term highway vehicle use. Therefore, inventoried roadless areas may contain motorized and non-motorized trails and user created roads.

Roads in the Laramie Peak IRA that are critical to ranching, fire-fighting and other administrative or emergency needs may be used for motorized travel according to a forestwide standard in Chapter 1 of the Plan. Under the Section, Infrastructure – Travelways (System Roads and Trails)-Standard, 1. Allow motorized use on restricted roads when: Prescribed in management prescriptions, authorized by the Deciding Officer, and in emergency situations, motorized use in permitted.

On page 3-364 of the Draft EIS, we stated that RARE II (1979 roadless area inventory) found Laramie Peak and Snowy Range Inventoried Roadless areas unsuitable for wilderness. This statement has been removed from the FEIS. Both Laramie Peak and Snowy Range areas were actually found suitable and recommended to Congress for wilderness along with the Platte River, Encampment River and Huston Park areas in the early 1980's. Those five areas had been managed to preserve their wilderness characteristics since the 1979 RARE II inventory was conducted. The other 22 areas that made up the remainder of the roadless areas on the Forest had been managed for non-wilderness uses and were not considered eligible for wilderness designation. The Wyoming Wilderness Act of 1984 designated the Platte River, the Encampment River and the Huston Park areas as Wilderness. Congress decided not to designate Laramie Peak and Snowy Range as Wilderness. These two areas were released from wilderness consideration in the first round of planning and were mapped under non-wilderness management direction in the 1985 Medicine Bow Forest Plan. Laramie Peak was recommended for Wilderness in Alternatives D-DEIS and F, but is not recommended for wilderness in Alternative D-FEIS which is the selected alternative.

No current legal motorized access is being eliminated, so buffers are not needed.

### Wilderness & Roadless Comment #6

Wilderness Additions to the Huston Park Wilderness: The Cheyenne Stage II road should be open to use during hunting season.

Commenters were concerned over access to private inholdings near the areas recommended for wilderness.

In general, any recommendation for wilderness was in question. Some individuals said they'd been all around the wilderness, but had never been in there, because it's "no-man's land."

Some said they'd taken their snowmobiles in there and they'd never seen a skier.

Others were in support of the additions to the Huston Park, saying these should have been the boundaries in the first place. They wanted the FS to use the boundaries in Alternative F for the final.

**Response:** There are currently no legal motorized opportunities in the Huston Park Wilderness Area additions, therefore current opportunities are not affected by this allocation.

The Pipeline road is closed to public use by order of the US District Court for the District of Wyoming [CA2-0331]. The order Prohibits public vehicular access (including snowmobiles) on Stage II roads, except for the board, the FS, the private land owner, or by special use permit, on gated portions of NFSR 809.1b and 809.1a.

Wilderness and the idea of wilderness is personal; everyone has their own interpretation of wilderness, and the appropriateness of any restrictions on use. Riding snowmobiles inside any designated Wilderness is illegal. All mechanized or motorized use is prohibited inside designated wilderness, unless allowed by other superseding regulation requiring special use permits.

## Wilderness & Roadless Comment #7

Criteria Used to Identify Inventoried Roadless: These comments focused on the roadless criteria: roads (what's a classified road?), existing ROS class, transportation travelways, heavily used campsites, trails.

The FS needs to clear up the confusion over the relationships between inventoried roadless areas, unroaded areas and classified roads. We are concerned that the FS underestimated the total roadless acreage on the forest by using an inappropriate definition of a road during the RACR review process. The Forest Service handbook 1909.12 (7.11b) defines roadless areas.

**Response:** Terms are defined below and found in the Revised Plan, Appendix G-Glossary:

Inventoried Roadless Areas are undeveloped areas typically exceeding 5,000 acres that met the minimum criteria for wilderness consideration under the Wilderness Act and that were inventoried during the Forest Service's Roadless Areas Review and Evaluation (RARE II) process, subsequent assessments, or forest planning.

Unroaded area are any areas, without the presence of a classified road, of a size and configuration sufficient to protect the inherent characteristics associated with its roadless condition. Unroaded areas do not overlap with inventoried roadless area

Road - A motor vehicle travelway over 50 inches wide, unless designated and managed as a trail. A road may be classified, unclassified, or temporary (36 CFR 212.1).

Classified road - Road wholly or partially within or adjacent to NFS lands that is determined to be needed for long-term motor vehicle access, including state, county, and privately owned roads, NFS roads, and other roads authorized by the Forest Service (36 CFR 212.1)

The Medicine Bow National Forest roadless inventory process is described in FEIS Appendix C-Roadless Area Evaluation. There are no classified roads within the areas, but there may be motorized trails and user created roads. Forest Service directive, FSH 1909.12 (7.11b) provides criteria for roadless area inventory in the eastern part of the country, east of the 100<sup>th</sup> meridian, not in the western part. The Medicine Bow National Forest is not considered to be in the eastern part of the country.

## Wilderness & Roadless Comment #8

Wilderness in the Rock Creek Area: These comments outline specific concerns over Rock Creek – that it should and that it shouldn't be recommended for wilderness. There was concern over existing uses being eliminated in the area; they wanted buffers for private lands adjacent to the area; the proximity to the interstate was a concern (due to heavy use potential), existing spring rights, and the boundaries as they were drawn for the draft. Bicyclists are very concerned over the potential loss of "tens of miles" of trails.

Mountain bikers were primarily concerned for their use of the Rock Creek area recommended for wilderness. They want to use the trail (from deep creek to the trailhead near Arlington), and if/when the area is designated wilderness, they'll lose this opportunity. They also wanted more trail opportunities just for bike use. Some comments were against users who mountain bike.

I have been hunting the Rock Creek area for over six years and have been driving into the Forest at Arlington. That road has been there since the 1950's. What is your definition of roadless? Appendix C states that Challenging activities in the area include hiking and mountain biking on the established trails. Yet, availability analysis fails to mention that with wilderness designation, bicycling would be excluded. Elimination of bicycling would be a significant effect of the proposed action. There are many acres of suitable timber in Rock Creek that will be removed from use. This will not permit multiple use and recreation opportunities. If Rock Creek is a citizen requested wilderness area, then other citizens request multiple use area.

Other comments provided support for Rock Creek as a wilderness, citing the unique characteristics of the area, and the need to "permanently protect the area for future generations."

**Response:** There is a very low standard road #127 that leaves Arlington and crosses non-National Forest System (NFS) lands including State of Wyoming lands and travels adjacent to Rock Creek. This road ends where the Forest boundary begins. Our roadless inventory is only conducted on NFS lands so this would not have been considered in our inventory.

Inventoried Roadless Areas are undeveloped areas typically exceeding 5,000 acres that met the minimum criteria for wilderness consideration under the Wilderness Act and that were inventoried during the Forest Service's Roadless Areas Review and Evaluation (RARE II) process, subsequent assessments, or forest planning. (See Appendix G- Glossary in the Revised Plan).

The Deep Creek to Arlington Trail, known as the Rock Creek Scenic Trail, is currently used for mountain biking. Wilderness designation does preclude use of motorized and mechanized vehicles, which include bicycles. The availability analysis should mention that bicycling could be a management consideration that would be inconsistent with wilderness management. We will include that statement in Appendix C. However, under Management Area 1.2, Recommended Wilderness, bicycling and other current uses in the Rock Creek area will continue to be permitted until such time as Congress approves the area as a

Wilderness.

Rock Creek inventoried roadless area does contain lands that are tentatively suitable for timber production. The availability analysis in Appendix C identifies the potential for timber production in this IRA in response to the question "is there land needed to meet clearly documented resource demands such as for timber, minerals, or developed recreation sites?" Alternatives A, B, C, D-FEIS and E allocate some of the area in the Rock Creek IRA to management prescriptions that emphasize timber production.

The public has high interest in how the Rock Creek area is managed. The desires vary from wilderness management to active management through timber harvesting and motorized recreation use. Multiple use management is defined as the management of all the various renewable surface resources of the National Forests so they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions (MUSYA 1960). The range of management areas allocated to the Rock Creek IRA shows that through the range of alternatives considered in the EIS, we have considered and analyzed everything from developmental management to wilderness management in the Rock Creek IRA. Appendix C- Rock Creek Environmental Consequences displays the range of management areas considered within the Rock Creek IRA.

The Forest Plan (Management Area Direction, Chapter 2 of the Plan) allows for the continued use of bicycles of this trail until such time that the area is either designated or released by Congress, or damage is documented to be occurring to the extent that the Agency should restrict this activity.

The designation of additional trails outside the Wilderness is dependent on funds available for the planning and development. Besides funding availability, the Forest Service relies on volunteer organizations to help with projects such as these. The Laramie District of the Forest has a partnership with a local (Laramie based) bicycle organization (BikeNet) that has taken the lead on several volunteer efforts on the Forest, including the Rails to Trails project.

As for the spring inside the Draft proposed Rock Creek Wilderness, any private interests were drawn out of the final proposed area. In addition, FSM 2320.04d allows for routine maintenance on any existing water use or water-control structure as long as maintenance doesn't change the structure's location, size, or type, or increase the storage capacity of a reservoir.

Buffer strips of undeveloped land cannot be maintained outside the Wilderness to provide an extension of wilderness, nor can they be maintained inside Wilderness to maintain buffer zones that would degrade wilderness values.

Wilderness & Roadless Comment #9  Wyoming Wilderness Act of 1984: Include the Wyoming Wilderness A of 1984 in the list on Appendix C-4.  These comments centered around different interpretations of the Wilderness Act of 1964, and the Wyoming Wilderness Act, citing the release language, Forest Service direction, and challenging the needs assessment.	ict
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Response: The needs assessment does not mention the Wyoming Wilderness Act of 1984

when discussing needs, but it does talk specifically about current use in the three wilderness areas that Congress designated in that Act; the Platte River, the Encampment River and the Huston Park Wilderness Areas.

The Wyoming Wilderness Act of 1984 designated three areas on the Medicine Bow National Forest as Wilderness Areas. It includes the following release language: "National forest areas not designated wilderness or wilderness study by this Act are released for multiple use management and need not be managed to protect their suitability for wilderness designation prior to or during revision of the initial land management plans."

In addition, under Title IV-Release of Lands for Multiple Use Management of the 1984 law, it states that "the Department of Agriculture shall not be required to review the wilderness option prior to the revisions of the plans, but shall review the wilderness option when the plans are revised, which revisions will ordinarily occur on a ten-year cycle, or at least every fifteen, years unless prior to such time, the Secretary finds that conditions in a unit have significantly changed".

The Forest Plan is now being revised. The National Forest Management Act directs the Agency to evaluate existing roadless areas for their potential inclusion in the Wilderness System (See Chapter 1 of the Plan for a discussion on the "decisions to be made" in the Forest Plan.

Wilderness &	g
Roadless	
Commant #16	n

Wilderness Needs Assessment: This set of comments focused on the Wilderness Needs Assessment, and whether or not there was a demonstrated need for additional Wilderness.

**Response:** Once capability and availability are determined, the capable and available inventoried roadless areas are further scrutinized in a needs determination. To determine need, we considered the following factors: 1. The location, size, and type of other wildernesses in the general vicinity and their distance from the proposed area. 2. Present visitor pressure on other wilderness areas, trends in use, population changes, and travel patterns. 3. The extent that non-wilderness lands can provide opportunities for unconfined outdoor recreation experiences. 4. The ability of certain biotic species to compete with increasing human development. 5. The need to provide a sanctuary for those biotic species unable to survive in less than primitive surroundings. 6. The area's ability to protect certain landform types and ecosystems. FEIS Appendix C contains a needs determination for each individual inventoried roadless area.

## Wilderness & Roadless Comment #11

Wilderness and Wildlife Management: These comments focused on wildlife management considerations – on the one hand, the concern was that wilderness prohibits wildlife management.

On the other hand, comments supported wilderness as important to wildlife security and for providing unaltered habitat away from human disturbance and motorized uses.

Roadless areas provide security areas for wildlife. Because the Medicine Bow has a low level of security areas it would be an important reason for not building roads.

**Response:** Seventy four percent of current inventoried roadless areas are in management areas that protect their current inventoried roadless area condition. Strategy Q under

Subgoal 1b. Provide ecological conditions to sustain viable populations of native and desired non-native species says, "Maintain or improve security areas through vegetation management design and by decommissioning roads identified in project level analyses". See Revised Plan Chapter 1. This direction instructs managers to maintain or improve security areas. The existing location of roadless areas may not provide the best distribution across the Forest, but the direction to maintain or improve is forestwide, not just in roadless areas.

# Wilderness & Roadless Comment #12

Wilderness and Municipal Water: These commenters were concerned that Wilderness designation would negatively affect water quantities because of the density of timber in a Wilderness Area compared to an area with management. They felt this would affect the town of Encampment's water supply. In addition, they were concerned that the tradeoff of not allowing the Forest Service to respond to a blowdown event would yield additional sediment load in the streams feeding this water supply.

**Response:** See FEIS, Chapter 3, Aquatics and Soils sections for a discussion on these concerns.

# Wilderness & Roadless Comment #13

Wilderness Standards and Guides: Standards and guidelines are consistent with the Wilderness Act, and with Forest Service direction. The outfitter and guide permit standards are appropriate and legal. How does it apply to hunting dogs?

**Response:** Forestwide Direction, Social Section, Wilderness Guideline 4d: Prohibiting dogs or requiring all dogs to be on voice control or on a leash. This does not apply to dogs used for livestock management operations.

Wilderness &
Roadless
Comment #14

Wilderness Additions to the Encampment River: These comments were either in support of the additions to the Encampment River Wilderness Area, or they felt there was enough.

**Response:** The presence of a road on the edge of a Wilderness Area provides some unique challenges and opportunities for management. There is a road alongside the Savage Run and the Platte River Wilderness Areas, as well. Most of the Forest's issues with illegal motorized use of the current Wilderness Areas occur inside Huston Park and (on the Routt side) Mt. Zirkel Wilderness Areas, both of which do not directly border roads.

## Wilderness & Roadless Comment #15

Roadless Designation Versus Wilderness: These comments appealed for all roadless areas (in Alternative F) to be recommended for wilderness, including combining some by obliterating roads that separate them (Campbell Lakes and Snowy Range, Libby Flats and French Creek).

Backcountry designations rather than wilderness designations provide the best protection for roadless areas and allow flexibility in future management decisions. Alternative D roadless area management prescriptions are insufficient because they are temporary and can be changed by a plan amendment or a new plan. Only by managing for wilderness is the public assured that the lands will be managed to promote ecological sustainability.

**Response:** Seventy four percent of current inventoried roadless areas are in management areas that protect their current inventoried roadless area condition, whether or not that means areas recommended for wilderness. The management of these areas will be limited by their allocated management area.

In Alternative D-FEIS, there are approximately 115,000 acres or about 1/3 of inventoried roadless areas allocated to Management Areas 1.31 and 1.33, which are backcountry management. There are approximately 28,000 acres of Management Area 1.2, which is recommended wilderness. Recommended Wilderness is not a permanent allocation and will not be permanent until Congress designates it. Management prescriptions assigned in a Forest Plan decision, except RNA establishment, are subject to change in future planning processes. Amendments and future revisions can result in changes. The Forest Plan can only recommend wilderness and at that point, cannot establish management direction for wilderness, but rather manage to retain the potential for Congress to approve wilderness in the recommended area.

# Wilderness & Roadless Comment #16

Wilderness and Non-Resident Hunters: DEIS should include mention of adverse impacts to non-resident hunter access that would result from converting the 31 roadless areas into Wilderness. It would also trigger State non-resident hunter guide restrictions.

Non-resident hunters are concerned about not being able to use their traditional hunting areas.

**Response:** Wyoming law requires all non-residents who hunt in wilderness areas to have guides, however the law allows any Wyoming resident who holds a valid big or trophy game license to take up to two non-residents into wilderness areas. The resident guide license is free and can be obtained from game wardens and at G&F regional offices. The intent of the resident guide law is to allow Wyoming residents to take non-resident friends and relatives hunting in wilderness areas without that person having to hire a professional guide.

The EIS discloses the effects of managing recommended wilderness under Management Area Direction 1.2, which permits current uses to continue until such time Congress approves an area as a Wilderness Area. Revised Plan management direction for areas recommended for wilderness will not place any new restrictions on non-resident hunters.

# Wilderness & Roadless Comment #17

Roadless Area Management: It was my understanding that roadless areas were to be managed as multiple use areas. Why is the FS making recommendations that some areas be connected to wilderness?

We support management of roadless areas, which minimizes irreversible and irretrievable loss of roadless characteristics that define roadless areas.

The decision to allow oil and gas exploration and development such as timber sales and off road vehicle use, and other surface disturbing activities will likely change the nature of the areas such that they do not qualify for future considerations as wilderness areas or wild and scenic rivers.

Roadless rules related to roadless allocations do not preclude timber harvest and active management that retains the roadless character. There are opportunities to manage roadless lands without permanent roads that will provide better biodiversity, especially around the lower edges of roadless lands. Forwarders can feasibly move logs at least ½ mile without roads. (Linjala, 2003). There are approximately 115,000 acres or 35% of roadless lands are within ½ mile of the boundary and are classified as suitable timber. Logging in roadless areas can achieve forest health goals in a shorter amount of time than if it were not done.

Roadless areas need to be disposed of in order to improve these areas and to decrease the possibility of future fire incidence in the forest. Is it possible to have these areas delisted from having roadless character?

**Response:** The Multiple Use Sustained Yield Act of 1960 states that "The Secretary of Agriculture is authorized and directed to develop and administer the renewable surface resources of the National Forests for multiple use and sustained yield of the several products and services obtained therefrom". The MUSYA also states that establishment and maintenance of areas of wilderness are consistent with provisions of the Act. The National Forest Management Act of 1976 as implemented by regulations at 36 CFR 219.17 describes the evaluation of roadless areas during the forest planning process. 36 CFR 219.17(1)(ii) and (iii) require evaluation of areas contiguous to existing wilderness.

Forest planning regulation at 36 CFR 219.17 – Evaluation of Roadless Areas states that unless otherwise provided by law, roadless areas within the National Forest System shall be evaluated and considered for recommendation as potential wilderness areas during the forest planning process.

The EIS Chapter 3 – Roadless Areas discusses how roadless areas are affected by oil and gas exploration and development such as timber sales and motorized use and surface disturbing activities for each alternative. That same section of the EIS also contains an analysis of how many acres of the inventoried roadless acres retain roadless characteristics and how many individual roadless areas retain their roadless characteristics for the whole area under each alternative.

The RACR prohibits cutting, sale, and removal of timber in IRAs (IRA) except:

For the cutting, sale or removal of generally small diameter trees which maintains or improves roadless characteristics and:

To improve habitat for threatened, endangered, proposed, or sensitive species, or

To maintain or restore ecosystem composition and structure, such as reducing the risk of uncharacteristic wildfire effects.

When incidental to the accomplishment of a management activity not otherwise prohibited by this rule.

For personal or administrative use.

Where roadless characteristics have been substantially altered in a portion of an IRA due to the construction of a classified road and subsequent timber harvest occurring after the area was designated an IRA and prior to the publication date of this rule.

This means that timber harvest for timber production purposes is prohibited under the rule. In Alternative D-FEIS, 69% of the roadless area acres are in management prescriptions that would be consistent with the RACR. Another 26% are not consistent, but result in retention

of roadless area characteristics. In Alternative D-FEIS, about 17,000 of the 320,000 acres of roadless area acres are mapped with timber production emphasis.

Roadless areas are conditions, not designations nor areas to be considered for land adjustment purposes. See the earlier discussion on human caused fires and access to suppress fires in a previous comment and response. The 31 inventoried roadless areas meet a minimum set of criteria and if management actions such as road building or timber harvesting for timber production purposes occur within some of these areas, they may not meet the criteria that categorizes them as roadless and be removed during future inventories through a planning process.

# Wilderness & Roadless Comment #18

Roadless Areas and Fire Management: Roadless areas can have a negative effect on fire management through decreased access. By continuing to use roads in the area, fire managers will be more capable of responding to wildfires.

**Response:** The EIS Chapter 3 – Roadless Areas (Effects from fire and fuels management) discusses the advantages and disadvantages of roads as it relates to risk of human caused ignition as well as access for ground-based fire fighting resources. Roadless areas by definition do not have classified roads within them, so management direction that retains the current condition in roadless areas will provide no change in fire starting or fire fighting opportunities. Management direction that permits road building in roadless areas will concurrently increase motorized access to a previously inaccessible area and increase the risk of human caused fires as well as increasing access for ground-based fire fighting resources.

# Wilderness & Roadless Comment #19

Roadless Areas and Economics: Roadless areas provide vital ecological services at virtually no cost to local communities and residents. Also, maintaining all acres of roadless areas would support over 135,000 visitor days of non-motorized recreation worth nearly \$5.7 million in annual recreation benefits to the visitors.

Prohibiting road construction in roadless areas would slow the growth of the road system and maintenance costs and save taxpayer dollars. According to the Roadless Rule, more than \$1 million would be saved in annual maintenance costs by not building 682 miles of new roads planned for roadless areas.

I request that the present net value analysis undertaken in the 1985 EIS specifically in the unpublished appendix G be repeated. I suspect it would show the same result as in 1985, that the highest PNV for each roadless area would be if it were designated wilderness. Recreation activities generate far more jobs and income than do other uses of the MBNF.

The roadless designation with its limitations makes any project (i.e. Rainbow Valley Hazardous Fuels project) in those areas extremely costly.

**Response:** See the Communities – Economics Section of the FEIS Chapter 3. This analysis includes full disclosure of recreation costs and benefits for each alternative. Alternative F represents the highest amount of roadless acres allocated to recommended wilderness, and a significant reduction in jobs and income from the current condition compared to the change

displayed for the rest of the alternatives. According to regulations that implement NEPA, 40 CFR 1502.23 – Cost Benefit analysis, "For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations". Even if we accepted the assumption that an analysis would have the same results as the analysis conducted for the 1985 Plan, PNV is not one of the factors used to recommend wilderness or make a selection of an alternative that revises the Forest Plan.

Roadless is not a designation, but rather an inventory of a condition. Any management activities that require new road building or will have road costs associated with them. Hazardous fuel projects may be conducted through mechanical or prescribed fire methods. The management area allocation and site specific conditions will determine whether or not a project is costly.

## Wilderness & Roadless

Comment #20

Retaining Roadless Characteristics: Honor the intent of former president Clinton's roadless area conservation rule. Do not allow road building in roadless areas. Ensure that small trees are the focus of any logging in roadless areas. Disclose whether management prescriptions within roadless areas will improve TES species habitat. Disclose whether harvest levels are needed to maintain or restore the characteristics of ecosystem composition and structure within any management prescription permitting logging in roadless areas. Disclose finding that any projects within roadless areas will maintain or improve roadless areas.

The Medicine Bow is a highly roaded forest, yet the Plan only proposes to maintain 85% of the existing roadless areas as roadless and the net roads are barely decreased. This issue should be addressed specifically under forestwide objectives.

Please protect our last remaining wild and roadless areas for the purposes of restoring natural habitat and processes including connecting forests. While motorized and semi primitive recreation is a big part of the Medicine Bow NF experience, we also believe that roadless areas will also be in greater demand in the coming years. We ask for no net decrease in roadless areas. Specific roadless areas with requests for protection include: Illinois Creek and LaBonte Canyon. Additional areas over and above the inventoried roadless areas that should be protected include: the Aspen forests above Sandstone Canyon, the Snowy Range, Vedauwoo, the ancient forests of Coon Creek and the middle fork.

Why is MA 3.31 not included in the management areas that retain roadless characteristics? Just because you build trails in a semi primitive motorized area that is currently roadless does not mean the area is no longer roadless. The roadless rule allows motorized trail construction.

**Response:** The RACR was published in the Federal Register in January of 2001. Since that time, it has been litigated and the Forest Service operated under interim direction for roadless areas until the summer of 2003. At this time, a court ordered injunction has determined that the Rule is not valid. There are 155 Forest and Grassland plans across the Nation. Management of inventoried roadless areas must either comply with the Forest Plan

or with the Rule if it is in effect. The Rule has a provision that permits it to automatically supercede Plan direction with the discretion of amending plans left at the local line officer level. See additional discussion about the RACR in FEIS-Chapter 3-Roadless Areas and in the Record of Decision.

EIS Chapter 3 – Travel Management describes the current condition on the forest including miles of roads that are included in the system managed as a system of roads. While there are many miles of roads on the Forest, the fact that there are approximately 320,000 acres of inventoried roadless areas or about 30% of the forest without system roads shows that those miles of roads are concentrated on about 70% of the planning unit.

Subgoal 1.b: Provide ecological conditions to sustain viable populations of native and desired non-native species and strategy Q under that subgoal address road decommissioning. Subgoal 4.a: Improve the safety and economy of Forest Service roads, trails, facilities, and operations, and provide greater security for the public and employees and objectives 3 and 4 under that subgoal focus on this issue.

After public involvement and analyzing a range of alternative management areas applied to the 320,000 acres of inventoried roadless areas, alternative D-FEIS places approximately 17,000 acres or about 5% of the inventoried roadless areas in developmental management areas that could result in a condition that does not retain roadless characteristics over the life of the revised Plan. An additional 26% or about 82,000 acres have the potential for being modified from its roadless condition. This process is consistent with the planning process and laws and regulations that govern that process.

FEIS-Appendix C-Roadless Area Evaluations describes each of the 31 inventoried roadless areas including Illinois Creek and LaBonte Canyon. Alternative D-FEIS retains roadless characteristics in the majority of the acres in each of those roadless areas. There were alternatives analyzed that retained roadless characteristics is in almost all of those areas, but the selected alternative does not. The areas listed above that were not in the agency inventoried roadless areas were considered for Management area 1.2 in Alternative F, but that was not the selected alternative. They have a variety of management areas assigned to them and will be managed according to the management area direction, geographic area direction and forestwide standards and guidelines will also provide protection for them.

In the FEIS, we have conducted a new analysis for retaining roadless characteristics and Management Area 3.31 is included as an area that retains roadless characteristics. The analysis also considers consistency with the Roadless Area Conservation Rule, Category 2, which does include motorized trail construction.

# Wilderness & Roadless Comment #21

Roadless and the Range of Alternatives: Range of alternatives is said to be broad when it is viewed in conjunction with roadless area protection. Table 3-138, however is misleading since it looks at the percentage of lands that are currently roadless and that will retain their roadless character under the various alternatives rather than the percentage of lands within the entire forest that are roadless. The latter percentages look far less protective of forest resources and are far less likely to promote what is supposed to be the agency's primary goal of promoting ecological sustainability. (36 CFR 219.19)

**Response:** Table 3-138 is located in the section of Chapter 3 of the EIS that address

Inventoried Roadless areas and not the entire planning unit. 36 CFR 219.19 is planning direction for the fish and wildlife resources.

In the EIS Appendix D, the Biodiversity report describes how this Revised Plan addresses ecological sustainability. The foundation for the analysis and the conclusion is a two-part system focusing on the ecosystem as a whole and the single species that have population viability concerns. Appendix D states that "sustainability of ecosystems and the species they support is based on composition, structure, pattern and distribution of vegetation communities; ecosystem processes including growth and nutrient cycling; natural ecosystem disturbance processes such as fire, wind, insects and disease; human ecosystem disturbance processes and species viability for threatened, endangered, sensitive species and species of concern.

Wilderness &
Roadless
Comment #22

Access to Private Land: Maintain roadless character of the forest unless it prevents landowner access to his land.

**Response:** Alaska National Interest Lands Conservation Act - ANILCA (December 2, 1980) is listed in the Appendix C of the Revised Plan. The Preface in the Plan describes how the direction in the Plan is integrated with laws such as ANILCA. The Plan does not restate laws. ANILCA states that the Secretary of Agriculture shall provide such access to nonfederally owned land within the boundaries of the National Forest System as the Secretary deems adequate to secure the owner the reasonable use and enjoyment thereof. Regardless of the management area applied to inventoried roadless areas, the provisions of ANILCA remain a requirement in managing access to private inholdings.

# Wilderness & Roadless Comment #23

Motorized Use in Roadless Areas: I would like to see the following, no motorized vehicles in any roadless area. In particular, any logging or motorized vehicle traffic most particularly in the dry season would endanger our springs and water supplies and risk starting fires.

Some respondents are concerned that the Forest Service will continue to permit snowmobile use in roadless areas. They request the Forest Service close all roadless lands to this type of motorized use. Other constituents asked that roadless areas be open for all recreation activities.

Simply because there are no existing roads in an area that does not mean access should be denied to off trail ORV and snowmobiles.

**Response:** Infrastructure – Travelways (System Roads and Trails) standard #3 Prohibits motorized use with wheeled vehicles on lands more than 300 feet from designated travelways except for authorized emergency services and administrative uses and unless geographic area direction identifies specific motorized access. This standard along with the fact that inventoried roadless areas do not contain classified roads results in a condition where the majority of roadless areas will meet the condition described in the comment. Approximately 70% or about 210,000 acres currently inventoried as roadless areas will provide the situation discussed.

FEIS Chapter 3 – Roadless Areas contains an analysis of summer and winter motorized and non-motorized use as it relates to roadless areas. The selected alternative has approximately 340,000 acres in the Recreation Opportunity Spectrum of winter non-motorized compared to

185,000 acres in the 1985 Plan and in Alternative B. (See FEIS-Chapter 2 – Alternatives, S1 Table). Alternative F contains the greatest amount of winter non-motorized and Alternatives A and B contain the least amount of winter non-motorized. And the converse for most is just the opposite; Alternative F has least amount of motorized and Alternatives A and B have the greatest.

The October 2000 Travel Management decision prohibits off-road motorized use except in specific circumstances denies off-trail motorized use. The decision restricts use of off-road vehicles to designated routes. Motorized use off designated routes in the summer has been illegal since the October 2000 decision and will not be considered again as part of the Forest Plan decision. Snowmobiles, however are permitted to operate over the snow and off trails, but only under the conditions stated in the forestwide standards and guidelines unless prohibited by Management Area direction.

#### Wildlife

#### Wildlife Comment #1

Landscape Scale Analysis: Each method has assumptions, some of which may not be valid, but the general conclusions are consistent across these studies and are very probably accurate." This statement, and most likely the research it is describing, is very speculative and confusing. For an important topic like landscape patterns, better data based on valid methods and assumptions should be used. The research is only as strong as it's weakest part so "very probably accurate" conclusions cannot be drawn from invalid assumptions.

**Response:** Most research at the scale of landscapes requires assumptions, for example about whether a "reference area" provides a valid comparison. The fact that three studies using different methods and therefore different assumptions led to the same conclusions increases our confidence in the validity of the conclusions. The consistency of outcomes, if anything, supports the validity of the assumptions used.

#### Wildlife Comment #2

Snowmobiles Have Adverse Effects on Wildlife: Snowmobiles should be restricted on the basis of the following adverse effects on wildlife:

There is damage to the base of the snow pack and to species using that habitat (effects on soil, subnivian space, alpine and subalpine plants, subnivian mammals, hibernators, amphibians).

Snowmobiles create disturbance, causing animals to consume energy during a stressful time of year.

Restricting snowmobiles to roads and trails will help wildlife.

Small numbers of snowmobiles would not have adverse effects, but the high volume of traffic on the MBNF creates ecological problems.

Compaction of snow by motorized and non-motorized are treated the same, though motorized covers far more area.

Data are adequate to support damaging effects on animals and plants, and closure of some areas to snowmobiling. Since there is some evidence of adverse effects, some areas should be protected from snowmobiling until

there is proof that snowmobiles do not cause resource damage.

The Plan's Standards do not adequately protect species from snowmobiles"... "Snowmobiles other motorized recreation should be excluded from alpine meadows; riparian areas; near winter bat colonies; near potential lynx, wolverine, or bear denning areas; near known nesting cavities for boreal owls; and in any other sensitive areas of importance to species of interest during the winter and early spring.

For wintering areas along the Forest boundaries, the Forest Service must implement an active snowmobile policy to direct snowmobile use away from crucial winter range..."

Growing snowmobile use has not been addressed in the Objectives as the major issue that it is.

**Response**: The potential impacts of snow compaction are addressed in FEIS Chapter 3, Wildlife Snow Compaction and in Effects of Recreation near the end of the wildlife section. Changes in temperature, soil microfauna and plants have been documented under compacted snow. Only one study has been directed at the effect of compaction by snowmobiles on subnivian mammals. No studies have been done on amphibians or hibernators. Many studies have been done on the response of ungulates to disturbance in winter and on the energetics of moving though snow and of physiological effects of disturbance. Some species plainly react to disturbance in a way that increases energy consumption or decreases energy acquisition. Restricting snowmobiles to roads and trails would greatly reduce the amount of area compacted, especially compaction over wet meadows, wetlands, and riparian areas. Impacts appear to increase with amount of use. Forestwide standards allow closing of areas to snowmobiling if resource damage is documented and closing the season when major roads are plowed (dispersed recreation standards 4 and 5). The DEIS made the point that motorized activities compacted a far larger area: this has been clarified and given more emphasis in the FEIS. The Forest Service concluded that the data are adequate to support the likelihood of local effects and to trigger research on the topic but more information on populations is needed before closing areas.

Dispersed recreation Standard 4 (Do not allow snowmobiles to be operated off-roads or trails in any area where snow cover is inadequate for resource protection) provides protection of any habitat or species that is found to be adversely impacted by snowmobiles. The Plan Revision IDT does not know of any evidence that boreal owls are prevented from breeding by snowmobile disturbance (many successful nest boxes are located along roads), or that bats react to noise outside the hibernation caves. No wolverines are believe to be on the Forest now (McKelvey, pers. comm.); if the Southern Rockies population begins to recover, this issue can be revisited. Bears can be disturbed during denning, but their hibernation sites are not localized or predictable. The Southern Rockies population of lynx is expanding and lynx were found on the MBNF in the past year. Effects on the lynx and subnivian mammals are uncertain: the Plan addresses these concerns in the following strategies and in Dispersed Recreation Standard 4: Subgoal 1.b strategy r. Map the location and intensity of snow compaction in lynx habitat to serve as a baseline for future evaluation of effects on lynx.

Subgoal 3.b strategy b. Cooperate with and develop partnerships to conduct research on

topics that require additional information to ensure proper management on the Forest. (Research topics include but are not limited to the effects of burning and grazing on Preble's meadow jumping mouse and the effects of snow compaction on small mammals and lynx).

Crucial winter range allows motorized use only on a few designated roads that pass through the area to provide access to higher elevation land. The specific roads open to motorized use will be designated by the Forest Supervisor. Crucial winter range is at lower elevations that typically have too little snow for snowmobiling.

## Wildlife Comment #3

Snowmobiles Should Not be Restricted due to Wildlife: Snowmobiles should not be restricted on the basis of adverse effects on wildlife. Snowmobile use does not harm animals or plants- I have gone there in summer and see no effect. How do voles survive under deep naturally-compacted snow? There is no damage to the base of the snow pack (no effect on soil, plants, subnivian mammals, hibernators, amphibians) because the snow is too deep.

There is no disturbance of wildlife because the wildlife have left the area to lower elevation (or migrated south). Evidence for lack of wildlife is (a) we don't see them when snowmobiling (so they are not present) and (b) we do see them when snowmobiling (so they are not "disturbed.").

There is no evidence that restricting snowmobiles to roads and trails will help wildlife. The area is too big to allow compaction to have a significant effect; only a small part of the area is affected. Clustering use will just magnify impacts on those areas. Animals react more to people walking that to snowmobiles; suggest reduction of non-motorized areas.

Furbearers are not declining so there is no need for snowmobile restrictions for them. Data are inadequate to prove damage to animals, plants, or soil and do not support closure of any areas to snowmobiling. Proof of damage is required before any limitations should be put on areas or season.

Response: The basis for concern for subnivian mammals, amphibians, and insects is based on a logical pathway: we know what habitat they use and the importance of snow to the microclimate, and we know how compaction alters the temperature and processes in the snow (See FEIS Chapter 3, Wildlife, Snow Compaction section and references). Subnivian effects on plants under snowmobile trails in Colorado and to soil microfauna have been recorded. The changes would not necessarily be obvious to casual inspection. The greatest threat to voles related to snow cover is lack of snow. In years of shallow snow (below about 10"), mortality is high and reproduction is low. Under naturally-compacted deep snow, the subnivan space is well insulated because, though the compacted snow is less effective insulator than fluffy snow, there is a deep layer of it. The subnivian space forms early in the season, and the snow has enough structure to retain the space as snow piles up above it. It may be true that snowmobiling on 10 feet of snow does not harm subnivian species (there is no evidence one way or the other). However, not all snowmobiling occurs at that depth of snow. Snowmobiling at lower elevation (near trailheads) or at high elevation in fall and spring may occur on relatively shallow snow.

Many comments interpreted "wildlife" to mean "big game." It is true that large ungulates and species like rosyfinches and goshawks generally leave the high country in winter and go

to lower elevation and other species go south. However, other types of animals stay. These are the species that have special adaptations to these high, cold, snowy environments and that are vulnerable to habitat alteration and/or disturbance.

Hibernation is not complete protection from disturbance or habitat alteration resulting from snow compaction. Hibernating black bears have left winter dens, even abandoning cubs, following disturbance near the den site. Small animals hibernating under shallow burrows or in duff near the surface can be affected by loss of insulation when snow is compacted and the soil freezes deeper than under uncompacted snow.

Disturbance may not be reflected in behavior: animals may stand still but experience physiological change (MacArthur et al 1979) or they may abandon otherwise unsuitable habitat. When they are not seen, it may be because they are avoiding the areas used. Many of the animals of concern are small, nocturnal, and/or live under the ground.

Restricting snowmobiles to roads and trails would reduce the area in which snow is compacted and would keep snowmobiles away from sensitive areas like wetlands above treeline that are impossible to detect under the snow. In forested areas, snowmobiles would create fewer side trails for competitors of the lynx to follow, opening up less of the forest to these species. Although the area is large, snowmobiling is not randomly distributed across the landscape- it occurs more in open areas. In addition to areas above treeline, these open areas occur over wet meadows, wetlands like fens, and riparian zones which are locations of the highest small mammal density. Species that occur on open sites often do not occur in the more protected forested areas that have no snowmobiling. A large portion of the suitable habitat for a species may be affected, but this has not been studied. It is always difficult to determine whether it is better to disperse use and effects over a large area, or cluster use (increasing local impacts) while retaining other spaces free of impacts. For wildlife, many species have a threshold above which use is essentially zero-further increases in disturbance have no more adverse effect (Mace et al 1996). Clustering of use in such situations does not increase impacts after a certain level of use.

In a specific encounter, wildlife (especially big game) display a stronger disturbance effect from pedestrians and skiers than to motorized vehicles especially when the latter are commonly used in the area. However, winter non-motorized use is very limited in scope, occurring mostly on very limited cross-country ski trail areas. Animals have far more encounters with snowmobiles, though each encounter may be less draining. Managers make many decisions without 100% of the information needed. Decisions have to be made under conditions of uncertainty, using the best information available. Given the lack of research on the question of direct effects of snowmobiles on populations, most of the areas where snowmobiling was restricted in the Draft Plan have been opened to off-trail riding in the Final Plan.

Wildlife	New Research to Determine Snowmobile Effects: The Forest Service
Comment #4 must initiate on-the-ground research to determine the effects of	
	snowmobile use on plants and wildlife.

**Response:** Subgoal 3.b strategy b recommends cooperating with partners on research on this topic. We agree that alpine meadows and riparian areas are among the habitats where snowmobiling is most likely to have affects on wildlife and those sites will be included in the research.

Wildlife	Seasonal Restrictions on Snowmobile Use: In chapter3 DEIS page 250,	
Comment #5	there is a list of 5 "possible" effects of snow compaction on wildlife. There	
	is an option to this possible problem; open the off-trail areas after there have been a few snowfalls. This way the compaction will not be as severe,	
	close to the ground and the small animals will be able to forage easier	

**Response:** The Plan Revision IDT analyzed a proposed standard that would achieve the result you have suggested. However, since the date on which snow builds up varies from year-to-year, a set date for beginning a snowmobile season was not appropriate. Using snow depth to determine when an area opened was not feasible because the depth varies so much from place to place and the depth of the snow at a site cannot always be detected from the surface. Finally, existing information did not allow determination of the effects of compaction at different depths. The decision was to include Standards limiting snowmobiling to areas where is will not cause resource damage and closing the snowmobiling season when the major roads are plowed (Dispersed Recreation Standards 4 and 5), and an objective to cooperate on research on the effects of snow compaction on subnivian animals Subgoal 3.b strategy b).

#### Wildlife Comment #6

Management Area Emphasis Restrictions on Snowmobiles: The proposed MAP 3.5 areas are a deliberate and unjustified attempt to hurt snowmobiling. Please manage these areas in a manner that allows off-trail snowmobiling to continue. Turpin reservoir, Singer and Bridger Peaks. These areas receive some of the heaviest snowfalls in the mountains and snowmobiles in these areas pose no threats to plants, wildlife, or their habitats. Lands with prescription 3.5 should be changed to one allowing off trail snowmobiling to continue, like map 3.31 or 5.4.

For wintering areas along the Forest boundaries, the Forest Service must implement an active snowmobile policy to direct snowmobile use away from crucial winter ranges.

**Response:** Off-trail snowmobiling is not appropriate in areas allocated for wildlife. Most of the area at the specific sites mentioned has been allocated to a different emphasis MA that allows off-trail snowmobiling. Crucial winter range is allocated to MA 3.58. Snowmobiling is prohibited except on roads that pass through the winter range to allow access to higher elevations. These roads will be designated by special order.

## Wildlife Comment #7

Canada Lynx and Snowmobiles: There are several areas outside of the Lynx Analysis Units, specifically to the West (MPA 1.31) and South (MPA 3.5) of the Houston Park Wilderness that are designated non-snowmobiling. Why?

Bottom of page 3-272, a statement about it not being "possible to predict the trend of snowshoe hares" begs again the question of its valid use in considering the impact of snowmobiling on hares and, therefore, the elusive lynx.

**Response:** The MA 1.31 area has been changed to a motorized allocation. The MA 3.5 area is designated for wildlife. Snowmobiling is permitted, but is restricted to roads and trails. Less area is designated as this MA in the selected alternative than in the proposed

alternative. Allocation of some areas with reduced disturbance provides patches of security areas for wildlife that avoid areas with human activity. The snowshoe hare is not being used as an indicator of effects of snowmobiling. Rather, it was selected as an MIS for vegetation management. Hares are a major prey species for many forest carnivores, not lust lynx. See Appendix H and Dolan 2002, Background paper on MIS (in the Administrative Record), for the balance of pros and cons in selection of MIS.

#### Wildlife Comment #8

Wildlife Corridors: Wildlife corridors should be provided and protected to allow movement of animals through the forest. Winter ranges cannot be separated by areas without adequate corridors.

Maintaining corridors for dispersal and wildlife habitat should be a priority goal.

The Forest Plan must also restore connectivity between the MBNF and neighboring national forests to the south. Beauvais (2000) summarized the issue as follows: "Populations on peninsular forest like those in the Medicine Bow and Sangre de Cristo mountains likely exchange few individuals with neighboring populations, and are at risk of future isolation by disturbances to connecting corridors of forest." ... The revised Forest Plan must address deficiencies in forest habitat connections between the MBNF and the Arapaho-Roosevelt and Routt National Forests...

[5.15] In the setting section, there are two references to the concept of "connectivity". The need for maintaining "connectivity" is a theory and not a proven need accepted by wildlife scientists and has no place in this document.

**Response:** The issues of corridors and connectivity is addressed in Chapter 3 of the FEIS includes discussion of Fragmentation in Chapter 3 (Biodiversity, Fragmentation and Wildlife, Spatial pattern sections) and Appendix D (Biodiversity and wildlife sections). Very little of the forest is truly "fragmented" by past logging (i.e., leaving islands of forest surrounded by a matrix of early successional stage). Rather it is "perforated" (openings in a matrix of forest). This pattern has high edge and other effects of "fragmentation" but animals that avoid openings (like marten) can move through the forest, skirting the nonforested patches. The analysis did not identify any forest animals that are not connected by habitat through which they can move to disperse, migrate, etc. The Revised Plan includes an objective on maintaining natural pattern of connectivity.

The forest is "fragmented" by roads. For species for which roads are a barrier (or which avoid roads), we agree that this may be a problem. The Revised Plan has an objective of reduction of 150 miles of road in addition to all user-created roads.

The comment on separation of "winter ranges" is not clear. Animals do not generally move between winter ranges. Bighorns need a "corridor" of unforested land to move freely between winter and summer range. Deer and elk inhabit both open and forested country in winter and do not need forested corridors for movement.

As discussed in Chapter 3, not every species need "corridors. Most if not all the natives can move through a perforated landscape (lynx, Squires et al 2000; marten, O'Doherty pers. comm. 2003). The Revised Plan includes the Subgoal 1.b: "Provide ecological conditions to

sustain viable populations of native and desired non-native species" and an associated strategy "Maintain and manage habitat to retain connectivity typical of that created by natural processes unless detrimental to threatened, endangered, proposed or sensitive species."

See Chapter 3, Wildlife section on Spatial Pattern and the map of management area allocations. In the Medicine Bow Range, the area that connects to the forest to the south is all allocated to MA 5.15. Though this allocation allows timber harvest, it has an ecological emphasis on maintaining spatial patterns similar to those created by natural processes, and connectivity will weigh into any decision on activities. In the Sierra Madre, the MA's connecting to the national forest to the south are MA 5.15, MA 3.5 (wildlife emphasis, no scheduled timber harvest), MA 11.31 (yearlong non-motorized, no scheduled timber harvest), and a small amount of MA 3.56 (aspen). We believe that these allocations and expected activities will provide adequate connectivity for native species, which are adapted to use of perforated forests.

The concept of retaining connectivity is proven and isolation does have detrimental effects on some species. However, we believe that the amount of forested habitat and its spatial pattern that will be created under the Revised Plan will provide the connectivity needed by native and desired non-native terrestrial animals. In other contexts (isolated patches of forest set in an impermeable matrix) lack of connectivity may be very damaging to some species.

#### Wildlife Comment #9

Fragmentation: Fragmentation is undesirable for its adverse effects on wildlife.

The Wildlife section of Chapter 3 (DEIS) places too much emphasis on literature conducted in the Midwest and Pacific Northwest, and on downplaying the relevance of this literature.

It is not at all difficult or impossible to explicitly model the relationship of species to fragmentation, and if the Forest feels this is needed, it should be done.

The unequivocal results of Anderson and Keller and Anderson (1992) in the Medicine Bow National Forest itself, showing changes in the distribution of interior forest birds and reductions in frequencies of occurrence of these species in fragmented landscapes, leave no room for debate that fragmentation has indeed occurred on the Medicine Bow.

Forest Service Summary: It is not difficult to deal with confounding effects of changes correlated with changes in spatial pattern.

The Fahrig and Villard studies are countered by many studies showing the opposite.

Interior forest species are not provided for in the Revised Plan.

Complaints by groups that the MBNF 'is a very fragmented Forest and should be returned to an unfragmented state' does not hold water. As stated in the document, what is fragmented for one species is connected and unfragmented for another. The MBNF Plan must balance the needs of open-country and Forest adapted species..." "Fragmentation" can be a good and necessary part of the Forest."

Remove selected timber to encourage mosaic-pattern features for wildlife, and early, mid, and late seral stages...

**Response:** The complex topic of "fragmentation" (including connectivity) has been addressed in the "Biological Diversity/Fragmentation" and the "Wildlife/Spatial Patterns on the landscape" sections of Chapter 3 and Appendix D of the FEIS. The review of literature from other areas was included because those sources are often cited as the basis for comments on fragmentation effects. The section has been re-written to clarify that research from other areas is acknowledged, but conclusions will be based primarily on research from systems similar to the MBNF.

It is difficult to model the relationship of species to fragmentation (See Bissonette and Storch 2002). Though measurement of landscape metrics is straightforward, understanding the effects on species is not. Each species responds in its own way to fragmentation at different scales and of different types (road, disturbance, cover type, age class, etc). Rather than try to address each species individually, the Forest Service considers that moving the current conditions towards patterns typical of common conditions created by natural processes is the best avenue to meeting all species' needs. At any single moment, just as was true during these animals' evolutionary history, conditions are not optimal for every species.

The Wildlife section of Chapter 3 does not suggest that the current spatial pattern is desirable for all species. The first sentence of the Spatial Pattern section is "In the MBNF, the spatial distribution of patches of forest of different age that has been created by timber harvest is different from that created in the past by natural processes." It goes on to cite differences in patch size, patch shape, edge and fragmentation by linear features like roads. The confusion may arise because the DEIS avoided use of the term "fragmentation" (which properly is limited to islands of forest left unconnected to other forest habitat) and instead used the term "perforation," (islands of logged patches set in a matrix of forest, which more accurately represents the situation. This was purely a semantic choice, designed to avoid confusion by those who limit "fragmentation" to the island biogeography model. (See Appendix D, Wildlife Chapter 3, and EIS Chapter 3, Wildlife, Spatial Pattern, Affected Environment. This section has been expanded to improve clarity.)

Anderson and Keller point out in their paper (1992, p. 64), "Results suggest that forest tracks (sic) interspersed with clearcuts have different abundances of only a few species compared to uncut forest tracts. Differences in these species did not appear to result from increases in forest edge or loss of forest interiors. These changes may be simply because clearcutting creates openings that attract some species, but also removes forest [i.e., reduction of suitable habitat] making the distribution of remaining forest resources more dispersed." For most species, then, there was no difference in abundance related to configuration alone. Their results found only two species less abundant in stripcuts and spotcut configurations than in the interior forest: the Brown Creeper (absent from residual forest in cut areas) and Hermit Thrushes (less abundant in residual forest in cut areas).

Anderson and Keller's results and assessment are in accord with the conclusions (FEIS, Chapter 3, Wildlife, Spatial Pattern, Conclusions) that only a few birds were affected by configuration independent of habitat loss (species with large home range or old growth associates that use interior forest). This is not to suggest that spatial pattern is not important; for the species sensitive to it, it is very important. For the few species affected, numbers declined more rapidly than predicted by habitat reduction, indicating the spatial configuration is an important factor for these species. The American marten will be monitored as a management indicator species for spatial pattern.

It is not easy to deal with confounding effects. When a population declines, it may be difficult to isolate that causative factor when many variables have changed at once. Even the effect of the amount of habitat lost, which is easy to measure, has seldom been isolated from effects of spatial pattern.

The Fahrig and Villard studies point out that most of the "countering" studies did not attempt to isolate habitat effects from those of spatial pattern. When this has been done, species declines have been shown to be correlated more closely with habitat loss than with spatial pattern (though both have some effect) at least for species with home ranges that are small relative to the scale of disturbance (e.g., Lichstein et al 2002.) However, this is not to suggest that fragmentation is unimportant and habitat loss is the only important factor. Some species may decline nearly linearly with habitat loss, but other species will decline with the combination of habitat loss and change in configuration. Spatial pattern of forest is certainly a serious problem for some species (like those susceptible to edge effects, those inhabit only large patches of interior forest, and those with large home ranges relative to the scale at which the Forest Service disturbs forested habitat). The American marten is among the latter (Bissonnette et al , 1997), and will be monitored as a management indicator species for spatial pattern of high elevation forest.

The needs of interior forest species are addressed in objectives and guidelines for retention of large patches of old growth (current and recruitment), increasing security areas, and moving toward a spatial pattern n the Forest more similar to that created by natural processes. See Subgoal 1.b objective 1, strategies f and q; Biological Diversity Standard 1 and Guidelines 1 and 5; and Silviculture Guideline 1.

The Wildlife, Spatial Pattern and Biodiversity, Fragmentation sections use the word "fragmentation" to refer to isolated patches of remaining habitat in an impermeable matrix. In that sense the MBNF is not "fragmented." However it is perforated in a pattern totally unlike that created by natural processes. From maps that show an estimate of late successional stands (based on estimated volume) superimposed on timber harvest, it is possible to detect the "shadow" of past mature/old forest (Kozlowski, pers. comm.) Few patches of that size remain intact today. On the MBNF, the difference in condition (compared to patterns that would have been created by natural processes) are the loss of large patches of forest, the creation of small patches of early seral and the scattered distribution of these small patches. Like any deviation from HRV conditions (Dillon et al 2003), the changes in pattern increases the risk of failing to meet some species needs (Brown Creeper, Hermit Thrush, and possible other species that have not been studied for this effect.) Though having a component of early seral forest has benefits, the existing pattern in which it occurs is not necessarily beneficial.

We agree that early seral stages should be encouraged when they are in short supply compared to estimated availability created by natural processes. A range of seral stages does encourage landscape level diversity. A spatial arrangement (the mosaic) that mimics that created by natural processes is likely to benefit native species.

Wildlife	Clearcuts: Clearcuts are bad for wildlife and reduce bird diversity, especially in the "dead zone" of young conifers. Clearcut logging is	
Comment #10		
	harmful and should not be used on the Med Bow. Harmful properties	
	(include) the patches of open space expose certain wildlife making them	
	vulnerable to predators "	

Clearcutting is good for wildlife: it increases diversity, that is where the game is found, and animals can adjust.

**Response:** Some species that are typical of post-fire habitat also flourish in clearcuts - ungulates, butterflies, many birds, rabbits, rodents. Other species rely on the structure of post-fire habitat (perches, standing dead trees for foraging, current and future down dead wood). Of the 85 species found in early successional burns, only 53 were found in early successional clearcuts. However, more species (63) were found in mid-successional clearcuts than in mid successional burned forest (45). (Hutto 1995) The "dead zone" of dense early conifers does not differ from dense stands that follow natural processes like fire and are part of the native species evolutionary history.

Compared to a landscape with no early seral habitat, an area with some logging will have higher landscape-level diversity. However, some birds are lost from the early successional stage (compared to post-fire habitat) and some species may be reduced or lost in the long-term because of reduced legacy wood (snags and downed dead wood). In the long-term logging may (not necessarily will) result in long-term overall loss of diversity compared to a landscape formed by natural processes.

Clearcuts (like natural processes like fire) cause a temporary loss of vegetative cover. Native animals that need overhead cover will stay in the forest and circumvent openings until adequate cover occurs. See Chapter 3, Wildlife, Spatial Patterns, on animal movement through perforated forest. Some animals, like big game, forage in early successional forest and do not need the structure of burned forest. These species benefit from a certain level of logging, including clearcutting. Clearcutting is not beneficial to all wildlife. Animals do not necessarily "adjust" to the change: some species are lost from the area but other species come in.

#### Wildlife Comment #11

Aspen: Aspen supports a greater richness in bird species than any other mountain habitat in North America (De Byle and Winokur, 1985; Turchi et al. 1995). This diversity is dependent to a large extent on trees old enough to support cavity-nesting woodpeckers, who in turn create the cavities used by other cavity-nesting birds including the newly listed sensitive species, the Purple Martin (Kingery, 1998) " and "[promote] aspen regeneration without removing old stands of aspen, which are especially important for a variety of nesting birds and other wildlife."

**Response:** The Forest Service agrees on the importance of aspen to bird diversity. Because of extensive fire around 1900, the Medicine Bow (unlike much of the West) does not have problems with loss of aspen. However, the Forest will have such problems in coming decades if young stands are not recruited soon. This recruitment need not come from "old" stands; it can come from middle aged stands where they are available. The suggestion that all old stands be retained to avoid loss of current habitat ignores the fact that some of these stands would have been regenerated by fire if humans were not suppressing this process. There is little variation in the age of the current aspen on the forest. With continuing fire suppression, these 100 year old stands will age synchronously, leaving little middle-aged forest to become old growth 50 to 100 years from now, when the present mature/old stands die and fall down. Old aspen will be available in the climax aspen stands (half of the aspen on the forest) which are not a priority for regeneration. Given the lack of a market for aspen

and experienced budget levels, the area of aspen regenerated is expected to be limited.

Wildlife Comment #12	MIS: Many comments pointed out the weaknesses of species on the list of Management Indicator Species (MIS) proposed in the Draft EIS or suggested other species that should be added, especially those representing a habitat. There are no MIS for subnivian habitat, winter recreation or effectiveness of corridors/connectivity.
MIS populations may respond to factors	MIS populations may respond to factors other than forest management.
	Little or no population data is available for the current MIS.
No species is limited to young LP, but many are to old spruce.	
	Why do we have to wait 15 years for a positive trend? Shouldn't the Forest Service be managing the species from day one?

**Response:** The process for selection of species is detailed in Appendix H. This list has been modified since the Draft EIS. The balance of strengths and weaknesses of potential MIS are well understood; no species is a perfect MIS (see MIS background report, Dolan 2002, in Record).

Selection was based on prioritization of issues, then selection of an appropriate MIS if one could be identified. See Appendix H. Therefore there is not a representative for every habitat. The Forest biologists were unable to find a species for which monitoring would provide useful information for all of the priority issues (see Appendix H). For subnivian habitat, for example, they felt that a research project was needed to determine correlation with snow depth, etc., rather than just population estimates over time. The Revised Plan includes an objective to cooperate in research, and one of the priority issues is effect on snow compaction on subnivian species.

MIS monitoring involves sampling the population at intervals to look for trend and relative populations. No MIS provides an explanation of the cause of observed population change. Population change would trigger a more detailed analysis of what cause the change. The MIS list for the 1985 Plan was long (over 30 species) and monitoring was done at the project level. As a result, no Forestwide data on populations were collected; information was scattered and was biased towards representation of habitat where projects (mostly timber) were done. The new list is shorter, but comes with a commitment to monitor at the Forest level, independent of project activities. Young lodgepole is a common and important part of typical landscapes in the Southern Rockies. It is important even if vertebrate diversity is lower and there are fewer than other ages and species. It is an important (though not the only) habitat for the snowshoe hare, a prey species that supports many local predators. It will take 15 years or more to detect a trend for MIS and sensitive species. See MIS background report in record (Dolan 2002) for discussion of the problems with detection of trends.

Wildlife	Livestock Grazing: Grazing should be maintained to benefit birds that	
Comment #13	need open sites (low grass). The EIS states that 'The biggest threat to	
	riparian habitat [for birds] in the physiographic area (PIF Physiographic	
	Area 62) is the greatly reduced under story vegetation layer caused by	
domestic livestock grazing.' We are unsure where PIF Physiogra		
	62 is located and if this is a forest wide area. Information in this document	

points out that 99% of the riparian areas are in good condition which seems to contradict the statement made on page 3-259. The information on riparian areas being in good condition is not presented in this section..."

If our AUMs are cut, we could also be forced to sub-divide and sell off our land to the highest bidder. Definitely not good for the wildlife."

Wildlife adversely affected by domestic stock grazing include: Northern harriers, Tiger salamander, Brewer's sparrows, Northern leopard frog, Bighorn sheep, Smooth green snake, Short-eared owls, Colorado River cutthroat trout, Autumn willow, Hall's fescue, Colorado tansy aster, Rabbit ears gilia. This information is substantiated in the DEIS and its literature sources."

Does it need to be stated that livestock needs are subordinate to wildlife needs?

Wildlife Guideline 2 could be interpreted as year-round and negate the use of the grazing allotment (Converse County).

p. 3-259. "This discussion totally ignores the impacts on riparian areas associated with elk and moose grazing. Earlier statements in the document have shown that big game numbers are on a 25 year increasing trend and that game animals have impacts on riparian areas, but no discussion of these impacts is presented in this section and instead the focus is entirely on domestic grazing.

**Response:** None of the alternatives proposed elimination of grazing. In areas that were grazed by bison, livestock grazing can maintain variety of structures created by natural processes. This includes areas with low structure and areas with high structure. The Desired Conditions section sets 10-20% early seral, 60-80% mid seral and 10-20% late seral as the desired distribution of seral stages.

The statement on the threat to riparian habitat and associated birds is based on a large area (Partners in Flight Area 62, "southern Rocky Mountains", stretching from the Medicine Bow through central Colorado into New Mexico) in which, over the years, grazing in riparian areas altered habitat to the detriment of riparian birds. We do not intend to suggest that damage is the inevitable result of grazing, or that it is expected from grazing that meets Forest Service standards. The Rangeland section of Chapter 3 of the FEIS states that 99% of the monitored rangeland acres that are grazed by livestock are in satisfactory condition.

The selected alternative does not call for a change in grazing. (Only Alternative F did so.) The community economic analysis (Chapter 3 of the FEIS) does not predict reduced AUM's and related pressures on adjacent agricultural landowners would result in changes in land use.

The open country animal species listed can be affected by habitat alteration by grazing. Grazing is a natural process, and these open country species evolved with periodic intensive grazing. However, 99% of the acres rangeland acres that grazed by livestock are in satisfactory condition.

See Chapter 1 of the Plan, Desired Conditions, FEIS Chapter 3 Livestock section and

Effects of livestock section of the Wildlife section. MA 3.24 (corridors) does not occur in the preferred or in the selected alternative. Grazing allotments are active in the summer, when animals subject to disturbance are limited to some breeding birds and lambing areas that are very limited in extent. The presence of livestock is not a disturbance to most species. Outside of non-motorized MAs, motorized access would be allowed for permittees and permits would be modified to avoid the limited sites where protection was desired.

The changes related to livestock grazing in this section are changes in comparison to the historic conditions, which included grazing and browsing by native animals. This section mentions the effect of the introduced moose in addition to effects of livestock. Big game levels are not determined by the Forest Plan and therefore were not used in comparing alternatives. As mentioned, two birds have been selected as Management Indicator Species for riparian habitat. Monitoring of MIS does not determine the cause of a change in the species population. Rather, it triggers an investigation of the causes.

## Wildlife Comment #14

Security Areas: Hiding and Thermal Cover Protections Although the PRP contains some language about hiding cover, this appears to be weaker than the hiding cover requirements in the 1985 Forest Plan. Moreover, there is apparently no language in the PRP about thermal cover, even though the 1985 Plan had fairly good standards to protect thermal cover. The DEIS and PRP do not explain why the USFS decided to get rid of the hiding and thermal cover requirements in the existing Forest Plan.

Since the Plan contains a Wildlife Guideline addressing security areas, we don't understand the need for a strategy statement as well. We are also confused by the benchmark established in this Strategy of the "forestwide average"

The Draft Plan provides a Guideline related to "security areas" for wildlife which will exist a certain distance from "roads or motorized trails." Draft Plan at 1-28. This Guideline is arbitrary because the Forest Service has not shown that motor vehicles, in fact, threaten the security of wildlife any more than other uses of the forest. In fact, studies have shown that certain prey species of wildlife are more threatened by human beings on foot than they are by humans in automobiles or on OHVs because humans on foot more closely resemble the "predator profile" for prey species.

The Revised Plan's requirement to retain large "security areas" across the landscape should be retained, given the force of a Standard, and strengthened with specific, enforceable provisions.

Security Areas "These areas will be well distributed over 20% of the forest," is ambiguous.

**Response:** Hiding cover is addressed by the use of "security areas," which are 250 acre or larger patches of hiding cover at least ½ mile from a road. Most biologists, including the Wyoming Game and Fish representatives who cooperated with the Forest Service in Plan Revision, no longer measure "thermal" cover, which was found to be uncorrelated to condition of elk in winter (Cook et al 1998.) Strategies and guidelines have different purposes. A strategy indicates a means of pursuing a goal; a guideline puts a limit on activity done to accomplish another goal. The quantitative objective for security areas has

been dropped.

Adverse effects on elk (avoidance of roads, changes in habitat use, alterage in age distribution of bulls) have been documented for may years (Rost and Bailey 1979, Lyon 1983, Hillis et al 1991, Hurley and Sargeant 1991, Christensen et al 1993, Rowland et al 2000). The Wyoming Game and Fish letter of comments on the Draft Plan said "...the road densities and hunter success related to roads have been identified as being at least as important, or more so, than removal of timber habitat in achieving a desired big game population on Forest." It is true that non-motorized use has more effect on some animals (e.g., Freddy et al 1979), but this use is more limited in extent. Animals have more winter encounters with motorized use because this covers more area.

The latest version of direction on security areas is in the Goals and Objectives — section of Chapter 1 of the FEIS: Subgoal 1.b strategy s. "Maintain or improve security areas through vegetation management design and by decommissioning roads identified in project level analyses." The wording "These areas will be well distributed over 20% of the forest," (Security Areas ) has been dropped from the FEIS.

Wildlife	Limit on Non-Motorized Use: As winter is a critical time for wildlife,
Comment #15	large numbers of people force a variety of animals out of these portions of
	the forest. The cross country trails (greenrock to libby creek, happy jack
	area, and the newly expanded trails surrounding the boy scout camp)
	should not be allowed to increase from their present size. An example of
	this are the boy scout trails not immediately west of an elk and deer
	wintering area.

**Response:** The Forest Service agrees that increasing non-motorized use has adverse effects on game on winter range. However, away from developed sites (ski trails), non-motorized winter use is limited in frequency and spatial extent, especially in elk and deer winter range. The Forest Service will not take action to facilitate human use (like construction and plowing of parking lots or creation and grooming or ski trails) in winter range. However, the MBNF has not determined that the effect of existing use has enough effect to ban non-motorized use on or near winter range. Motorized use covers a much greater area and affects more animals at a higher frequency.

Wildlife	
Comment	#16

Big Game Herd Objectives: There is no need to reduce road density for wildlife. Deer and elk are not adversely affected or stressed by roads. If elk were affected, game populations would not have increased as road density increased. Does wildlife actually seek "solitude"? Is this a value for which sheep, deer, and elk have expressed a preference?

There is no need to reduce roads or off-road use for big game. Access improves big game management. Motorized access is needed to allow WDGF's desired level of elk harvest.

If game populations are high, improve habitat for them to avoid concentration on a small area.

There are misstatements about the causative factors related to the current high populations of big game/elk. Populations vegetative diversity, hiding cover, and road densities will not directly affect populations, only habitat

use and hunting success. Creating more openings and summer forage will have no positive effect on the big game populations, and conversely, reducing openings will have

no negative effect, because there is no evidence that natural meadows and forage base found in forested environments does not provide sufficient summer range to sustain current big game at their current high levels, even if all of the clearcuts that are present today mature into closed-canopy forest.

Some comments stressed the importance of providing habitat for game species: "Habitat for game species should always take precedence over habitat for currently 'in vogue' TES species;" "the Forest should be managed to increase habitat so that game populations will increase." Increase habitat for game species with increasing populations.

Some comments pointed out that elk populations are 40% over state objectives and urged more aggressive management to reduce populations to reduce competition with livestock for forage.

Wildlife guideline number 2, game herd objectives will be developed in cooperation with the Wyoming Game and Fish Department. Given the way forage utilization guidelines for livestock will be implemented, the livestock producer should also be involved with establishing game numbers. Wildlife Guideline 2 could be interpreted as year-round and negate the use of the grazing Allotment." (Converse County).

Wildlife Standard 3. We agree in concept. However, restrictions for birthing areas and winter range have often created significant impacts on timber sale operations for what appear to be very marginal wildlife benefits. We recommend that you add the following sentence from page 1-14 of the Routt NF forest plan – "This does not imply that all birthing areas and winter range are considered equally important..."

The Six-Mile area and the area south of Highway 230 in the Big Creek and Bear Mountain areas: The large prescription area 1.31 in Alternative D does not allow for the kind of hunting access that will help the WG&F get a handle on the elk numbers in the area. Access is an important part of wildlife management and a non-motorized area there will encourage elk to group and become a problem to the adjacent private lands when winter chases them off the forest. Some periodic travel restrictions could be used to protect the herds in that area during winter grazing and calving times.

**Response:** Adverse effects on elk (avoidance of roads, changes in habitat use, alteration in age distribution of bulls) have been documented for may years (Rost and Bailey 1979, Lyon 1983, Hillis et al 1991, Hurley and Sargeant 1991, Christensen et al 1993, Rowland et al 2000). The Wyoming Game and Fish letter of comments on the Draft Plan said "...the road densities and hunter success related to roads have been identified as being at least as important, or more so, than removal of timber habitat in achieving a desired big game population on Forest."

The signs of stress in wildlife is not necessarily obvious to casual observation; animals may not flee immediately because the cost of running through snow is very high. However, the disruption of feeding and resting, increased metabolism with higher heart rate, and abandonment of preferred habitat may increase energy drain enough to have critical adverse effects on survival.

Snowmobiling and other off-road winter use causes behavior change and flight by big game animals (e.g. Freddy 1986). A balance of roaded and unroaded areas provides areas with vehicular access and areas with non-motorized access to meet the needs of different hunters. Off-road travel in most hunting seasons is currently limited to a narrow buffer along roads on the MBNF, and the Revised Plan will not change this. If the numbers are exceeding carrying capacity, the resolution may involve reduction of numbers or improvement of habitat that the animals use in the limiting season.

The section pertaining to big game/elk populations has been re-written in the FEIS to express the effect of various factors more clearly. The Forest Service agrees that the upper limit on herd size is usually related to hunting pressure and to winter conditions, rather than by limitation by spring and summer forage. Changes in the wording of standards and guidelines (Wildlife guideline number 2) call for the involvement of permittees and adjacent landowners.

Big game objectives will not always supercede management for other native species. As a multiple use agency the Forest Service is responsible for a mix of consumptive and nonconsumptive uses. Elk populations are currently 40% over WGF objectives. When populations increase, increase in habitat or reduction of numbers may be appropriate, depending on circumstances. The upper limit on population of elk is controlled primarily by hunting regulations set by Wyoming Game and Fish, not by Forest Service habitat management. The Forest Service meets with Wyoming Game and Fish each year to set herd objectives with consideration of forage needs of both big game and domestic livestock. (see Subgoal 1.b strategy c; subgoal 2.c objective 3 and strategy f.)

The Forest Service considers that motorized access is available on enough acres to allow effective hunting access and also wishes to provide areas for individuals who prefer to hunt away from roads. Biologists from WDGF participated in development of standards and mapping of MA allocations, and did not express concern that their ability to manage herds will be impaired by the selected alternative.

#### Wildlife Comment #17

Buffer Widths: What is the source of the buffer widths around bighorn lambing areas, sharp-tailed grouse leks, sage grouse leks, and Sandhill crane breeding areas?

The raptor buffers are inadequate because line of sight leaves too much room for accepting an ineffective barrier that blocks vision between the activity and the nest, but not noise and activity in the area. The buffer distances around raptor nests are too small. There is no definition of "activity" or "new disturbance". The ban on only "construction" during nesting is inadequate.

Why aren't all raptor nests protected since all raptors are protected under the Migratory Bird Treaty Act and a number of other federal and/or state acts and statutes? Some loss of nests can be anticipated. Will the Forest Service have to monitor raptor nests to establish years in which the nest are occupied to determine whether a nest is "active?" Why does a Bald Eagle nest become inactive after 2 years instead of the more typical 5 years? The oil and gas stipulation seems to be inconsistent with the Plan Standard in its use of "active."

There should be a standard protecting nests from noise.

**Response:** The buffer widths were developed from recommendations of WDGF biologists, based on experience with buffer widths that have proven effective in the past.

Line of sight has been dropped from the standards and replaced with adjustment for site-specific conditions like a topographic barrier. The distances are consistent with the USFWS Utah Field Office Guidelines for Raptor Protection. Dates were adjusted in some cases to be consistent with local conditions. The standard in the DEIS requiring a ½ mile buffer for disturbance was a typographic error, the standard is ½ mile. The correction has been made. Activities vary so much in scale and duration that it was not possible to give a precise definition that would apply in all cases. The biologist on the project will be required to use professional judgment in determining whether an activity will have a detrimental effects, based on the nature and duration of the activity, distance from the nest, stage of the nesting cycle, past behavior of the pair, and other factors. The activity affected during nesting are not confined to "construction" only. "New" disturbances are activities other than ongoing uses like grazing, rafting a river, or existing use of a road. If raptors have co-existed with these activities on the site in the past, it is assumed that the current pair can tolerate them.

Except for federally listed species, the Forest Service manages for viable populations of species, and does not protect every individual. Birds that live in forested habitat experienced fire, blow down and other destruction of nest sites, which were replaced slowly as forest in other areas aged. Birds that nested in grass also moved to a site that met its needs for vegetation cover (whether this was a site with little or no vegetation or a site with tall grass and shrubs). These site were not in the same location in each year. Birds that nest on cliffs, rock outcrops, or isolated trees in grassland have a limited number of suitable nest sites do not have alternatives; their sites would last centuries in many cases under natural disturbance regimes. Yes, monitoring will be necessary. The Bald Eagle unoccupied interval has been increased to 5 years. Except for harrier and short-eared owls, the "active" status is based on previous years occupancy and this should be clarified in the oil and gas stipulations.

The Revised Plan provides Forestwide Direction, Physical, Minerals, Standard 3; to limit noise levels from oil and gas production facilities and in the Biological section, Wildlife, Standard 2 which prohibits disturbances as certain times, like nesting.

Wildlife	
Comment	#18

Bighorn and Domestic Sheep: Some comments suggest that there is no evidence of adverse effects of domestic sheep on bighorns and/or requested documentation of any effect. Others suggest that the threat to bighorns means that all grazing allotments near bighorns should be closed to sheep and goats. One letter said a "forest plan that allows the possibility of domestic sheep grazing adjacent to Bighorn sheep is to be applauded." One comment said the EIS was "quiet" on the bighorn, especially the interaction with domestic grazing.

NFMA requires maintaining the viability of species throughout the planning area. It is unlikely that all three herds will be maintained under current direction. Allotment in the Snowy Range and the Sierra Madre should be retired to preserve the viability of bighorn populations well-distributed across the MBNF.

The Revised Plan should incorporate the Laramie Peak Habitat Management plan.

**Response:** A summary report "Bighorn/Domestic Sheep Management Strategy" by Schommer and Woolever (2001) is filed in the Administrative Record. This report summarizes and provides references for studies on mortality of bighorns following contact with domestic sheep. It strongly suggests that grazing domestic sheep and maintaining bighorns are incompatible goals if the two species are close enough to provide potential contact. See Appendix I, Section 4, Species of Local Concern, Bighorn Sheep. This issue is addressed and used in viability outcomes. The Forest Service is concerned about the viability of bighorns on the Forest (especially related to contact with domestic sheep and coniferous forest barriers to migration to high elevation summer pasture). As a result, the species is assessed as a "Species of Local Concern (in Appendix I) rather than in the Big Game section.

The section of the Bighorn Sheep analysis has been revised to address bighorn sheep viability more clearly. This plan has been incorporated in Standards in the Geographic Areas with mapped bighorn use in the Laramie Peak Unit.

Wildlife	Management Area Emphasis 3.5: [MA 3.5] In maps like 3.5 you	
Comment #19	unrealistically close and fail to manage the land.	

**Response:** Land in this MA can be managed for the relevant objectives. Timber harvest will be limited to projects to improve wildlife habitat. However, the acres of land with scheduled timber harvest are designated at other sites is enough to provide expected rates of harvest.

Wildlife Comment #20	Management Area Emphasis 5.42: In Management Emphasis 5.42, as well as all other emphasis areas, we recommend that 2 years of post-burn (wild or prescribed) livestock grazing deferment be incorporated into the plan as a guideline where 10 acres, or more than 10% of a pasture has been burned (whichever is smallest). With 2 years of deferment, noxious weed invasion will hopefully be kept to a minimum, and native, perennial vegetation will be given an opportunity to revegetate the sites.  Several comments suggested changes in the location of MA 5.42 or (Bighorn sheep emphasis). Several comments endorsed emphasis on bighorns.
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**Response:** The interval following burning varies with the desired eventual vegetation composition (grass versus forbs). This is a consideration in planning prescribed burns. Decisions on a case-by-case basis provide a better way of meeting site-specific desired conditions than a fixed standard. These comments were used in assessing and altering the map, altering the 5.42 allocation (see map of MA allocation).

Wildlife	Management Area Emphasis 3.51: Recreation Standard 2 for		
Comment #21	Management Area Prescription 3.51 (Bighorn Sheep) should be stricken as		
	it has not been shown that snowmobile use in any way affects bighorn		
	sheep.		

**Response:** There is no MA 3.51 in the Selected Alternative. This MA was used only in alternatives with a different management emphasis.

#### Wildlife Comment #22

Management Area Emphasis 3.54: [3.54 Special wildlife Areas - Limited Management.] If these areas are so "special" and "necessary" for wildlife, why will you allow cattle grazing there? Cattle will graze off the very thing the wildlife need, winter feed.

[MA 3.54] Forest Service Summary. The area allocated as the "special wildlife management area" (MA 3.54) does not include all of the area designated in the original act of Congress (June 7, 1924) as part of the Sheep Mountain Federal Game Refuge which were "hereby set aside as a game refuge and shall be recognized as a breeding place for game animals and birds." Management is not consistent with this designation.

[MA 3.54]. [Sheep Mountain] Our proposal would be easily accomplished by simply closing all of the gates year-round that are normally closed for the winter from Dec. 1st to May 31st.

[3.54] "Nonmotorized recreation use will be managed to prevent unacceptable stress on big game animals." How and by whom is this requirement measured? It seems to be a "nice" statement, but very difficult to determine.

[3.54] [sheep mt] There are conflicting statements in the Desired Condition discussion. Vegetative treatments, prescribed burning and mechanical treatments are not compatible with keeping the landscape predominately natural in appearance and relatively undisturbed by human activity. We suggest this be re-written to clarify what is actually being proposed.

**Response:** Sheep Mountain is a wildlife grazing allotment. Livestock would be introduced only if biologists from the Wyoming Game and Fish agreed that this use would be beneficial to wildlife. According to the Medicine Bow Range Specialist, this has not been done in "decades." The option is retained because there are cases when grasses grow in spring producing green nutritious forage, but are tough and low in nutrition by the end of summer or fall, so that the forage available in winter is low in nutrition. In such cases, the use of livestock grazing early in the season keeps the plant growing so that the late season growth is high in nutrition and this is what dries to produce winter forage. Livestock grazing can produce some of the benefits of fire.

The map has been updated to show the boundary of the Refuge. The area includes MA 3.54, 3.58, and 5.41. The WDGF believes that all these MAs are consistent with the direction and objectives for this area.

Only the few square miles of MA 5.41 will allow winter motorized use on al roads and offroad when there is enough snow. The larger area in MA 3.58 (crucial winter range) will

restrict motorized use in winter to designated access routes to higher elevation. MA 3.54 is non-motorized in winter. The Forest Supervisor can approve a closure order to address non-motorized use.

Most of the treatments in this MA are expected to be prescribed fire. Since fire is a natural process, the appearance is considered by the Forest Service to be consistent with a natural appearance. Because of past fire suppression, forest may now separate areas of open habitat used by sheep (either to allow seasonal movements or to maintain contact between subherds) It may be desirable to remove this barrier to free movement. This may require mechanical treatment before fire, or logging. The treatment would occur only in agreement with the WDGF that there was a benefit to bighorns.

## Wildlife Comment #23

Management Area Emphasis 3.58: Winter range (MA 3.58) creates conflicts with livestock and recreation. It is not necessary because game populations are high and past livestock use has not hurt the wildlife. The management areas will be managed solely for wildlife concerns (one comment indicated that Wyoming Game and Fish managed these lands). This plan does not take into account the relationship between the need of the ranching community in the forest and the need of wildlife on private lands bordering the forest. These areas are de facto wilderness, limited to hikers and equestrians.

Some comments stated that winter range (MA 3.58) is mapped in places that are not good winter habitat for elk and deer. (including the area to the east of Battle Mountain and Big Bear Canyon). Other comments suggests areas that are not mapped as winter range should be allocated MA 3.58 (including East Fork Savery Creek).

[MA 3.58] "Even if Timing Limitations are imposed in this MA, routine well maintenance and associated vehicle traffic are likely to occur during the sensitive winter period."

MA 3.58 Deer and Elk Winter Range, Limited Management The Infrastructure Standard restricts motorized use from November 15 through April 30. In some cases this is intermingled with private lands that are used for winter feeding of livestock.

[MA 3.58] is also a ploy to change grazing leases in these areas, effective eliminating cattle on the forest.

Restrictions on motorized use in winter range (MA 3.58) are unnecessary and impossible to enforce. Exceptions should be made for habitat improvement projects, routine well maintenance, and access to private land. Is there flexibility for the Forest to allow hunting but restrict other uses on winter ranges? The term "Limited Management" is unclear.

**Response:** Some comments indicated that the perception was that this designation would preclude livestock grazing by being managed solely for wildlife concerns. Like all MAs, this area is multiple use, and practices that do not conflict with the primary objective are permitted. Winter range designation does not change grazing practices. Standards that apply to all management allocations limit grazing to allow for wildlife needs, just as they

always have. Limits on motorized recreation apply only in the winter. Non-motorized recreation like skiing and backpacking are not restricted. The WDGF is a cooperator, but the area is managed by the U. S. Forest Service. The MA 3.58 areas are based on the most recent maps made by the Department of Game and Fish. The boundaries are based on their most recent data.

Only 2 wells are expected to occur within the Planning Period. Should they be in winter range, there would be localized disturbance. Disturbance would be much less, however, than if the area were open to unlimited public use. Access to private land is always provided to the owner. Cattle grazing is permitted in winter range. Wintering game animals often run away if not habituated to human presence, consuming large amounts of limited energy. However, since running through snow uses a lot of energy, animals may not react to motorized use by fleeing, but research has found that their heart rates rise, indicating that they are stressed and are consuming more energy than when undisturbed (MacArthur et al 1979). Many regulations are "impossible to enforce," but are beneficial because most users do respect them. Exceptions are made for habitat improvement projects, routine well maintenance, and access to private land. Local areas in winter range may be opened to public access during the restricted interval to allow hunting during special seasons, but all public uses (not just hunting) are allowed while the area is open. The term "limited management" has been removed.

Wildlife	Ef
Comment #24	ha
	41.

Effects of Natural Processes: Reduction of insects, disease, and fire will have adverse effects on wildlife dependent on the area and distribution of these natural processes.

An increase in lethal, "stand-replacing" fire will be bad for wildlife.

**Response:** The Forest Service agrees that insects, disease, and fire create habitat essential for some species. The Revised Plan acknowledges this and provides for more areas where natural processes will be allowed to follow their natural course as much as is consistent with safety, property interests and other resource objectives. Fires that kill trees in lodgepole and spruce/fir forest are typical of the processes active when native species lived here before the descendents of Europeans came to the area. The habitat quality or quantity declines for the moment for animals that use mature and old forest, and increases for those that use post-fire or early successional forest. Direct mortality is generally low, though individuals and groups may be trapped by the fire, and small animals under the ground surface may be killed by prolonged heat if the fire moves slowly.

#### Wildlife Comment #25

Old Growth: The Plan will result in insufficient old growth with adverse effect on wildlife. The Preferred Plan does not provide adequate mature and old-growth forest for maintaining the viability of a variety of forest-obligate species. Objectives or strategies should be added to increase the amount of older spruce-fir forests and retain small patches of old-growth spruce-fir that are important to Boreal Owls. Standards should include requirements for maintaining understory and selecting sites that are relatively flat.

The analysis does not adequately describe existing old growth and assumes there are enough acres. The analysis does not display how many acres of old growth are needed.

Designate future old-growth and mature forest to link existing mature and old-growth forest patches...Add standards for distribution by 5<sup>th</sup> order watershed so that timber emphasis areas are not stripped of all old growth and old forest is available across the whole forest.

To protect these species [the Brown Creepers and the Hermit Thrushes] and other interior forest songbirds, the Revised Plan should establish direction to ensure at least 30-40% of the landscape is comprised of a good distribution of large patches -- each at least 1000 hectares in size -- of mature/late successional interior forest."

There should be a standard that the understory in old-growth spruce/fir forest be maintained. Understory is a vital part of old-growth spruce/fir and many species depend on this structure for foraging and protection. We do not support the clearing of understory or thinning of high elevation forest in the name of fire prevention, because the biodiversity costs are high, and the benefits highly doubtful."

The Plan will result in too much old growth with adverse effect on wildlife. Old growth is not needed by any species (or by very few species). Too much old growth will be disadvantageous to all but a few species.

**Response:** We agree that old forest and its habitat components are essential habitat for some species. Standards were increased from those in the 1985 Plan and are based on information about percentages in forests shaped by natural processes. For spruce-fir, the standard is at the low end of HRV. The standards give the minimum old growth to be retained. The only animal species on the Forest suspected of being dependent on "old growth" (as opposed to late seral forest or old growth components somewhere in its home range) is the Brown Creeper. The current standard for retention of old growth spruce-fir was increased from 10% (in the 1985 Plan) to 20% (in the Draft Revised Plan) and to 25% in the Final Revised Plan. The recommendations accompanying the standards on old growth retention include keeping a variety of patch sizes distributed across each mountain range. Whether retention of understory is desired or not depends on the cover type and natural fire regime. The current map of late successional forest and the planned inventory select by habitat structure, without bias for or against level terrain.

As explained in Chapter 3 of the EIS (Biodiversity, Age Class and Habitat Structural Stages and Wildlife, Old Growth), amount and distribution of old growth is estimated in the EIS. The Forest Service recognizes the importance of this information, and the Plan contains an objective to inventory old growth in the first 3 years of Plan implementation. The estimates based on three different definitions indicate that over 50% of the Forest is in late successional stages. The characteristics of old growth do not suddenly appear the day the stand reaches the Mehl criteria, but are developing as the forest passes through structural stage 4. Most of these acres in this estimate provide large components probably provides habitat suitable for old forest species (snags, large downed wood, textured bark, etc.). The point of the statement quoted ("there are enough acres of late successional forest to provide for current old growth and recruitment needs"), however, was that while acres may be adequate, the map of these acres indicates that much of the area is in small fragments and leave strips that will not function for some of the species that need late successional forest.

The Plan standards set minimum levels of old growth to be retained. The biodiversity section of Chapter 3 displays the HRV for old growth in each forest cover type; Forest minimum standards are within that range. (Chapter 3 Biodiversity, Age Class and Habitat Structural Stages). The need for connectivity and distribution are addressed in Subgoal 1.b strategy f. "Manage old growth and recruitment old growth to maintain desired composition and structure and to reduce the risks of loss." and in the recommendations accompanying the standards on old growth retention.

Standards and objectives for moving toward a spatial pattern more similar to that created by natural processes and the recommendations associated with old growth standards should retain and recruit large blocks. This direction is based on an understanding of the range of conditions produced by natural processes, not the specific needs attributed to individual species. Removal of understory in spruce-fir forest would be done only for reduction of fire risk. These treatments are expected to be limited in extent, occurring only around structures, near at-risk communities and in other sites where human safety is a concern.

We agree that many species do not use old growth forest. However, if old growth is lost, it takes centuries to restore it. Deficits in early successional stages can be made up in a decade or a few decades. Late successional forest is also the most desirable forest for timber harvest. For these reasons, the Plan places more emphasis on maintaining and recruiting late successional forest than other successional stages.

## Wildlife Comment #26

Closure of Roads: Closure of roads would benefit wildlife. Closures could create larger or more security areas. Roads limit the movement of predators, so more should be closed. ORV use effect on wildlife not adequately addressed.

Some comments requested that language be changed in wildlife allocations so that habitat improvement projects could be carried out in areas with road closures (like winter closures in winter range and spring closures near lambing habitat). One comment suggested flexibility in closures to allow opening roads only to hunters during mountain lion season and to allow special hunts.

**Response:** Creation of larger and more security areas will be a major consideration in the site specific decisions of which roads will be closed. Some small predators avoid crossing any opening to reduce risk of predation and may also avoid habitat adjacent to roads. Closure of roads and creation of security areas would benefit these species. Other predators may move freely through roaded forest (low standard roads with little night use by people) from day to day, including lynx and marten. (These species may avoid or experience high mortality when crossing highways that are paved with high speed and high volume traffic.)

Motorized use is allowed on otherwise closed road for administrative use like fire and other habitat manipulation that cannot be done otherwise. Roads that are usually closed for the winter can be opened by special order to allow access for hunting. However, the use of the roads would not be restricted to hunters: once open, they could be used by anyone.

#### Wildlife Comment #27

Leave Roads Open: Closure of roads would not benefit wildlife. Motorized use on roads is not a problem for wildlife or deer and elk would not be at the highest level in the past 50 years. Summer motorized use is not limiting to elk.

Motorized use has less effect on wildlife than non-motorized use.

The Forest Service proposes seasonal restrictions on motorized use and travelways, ostensibly to benefit various species of wildlife. Draft Plan at 1-27. These restrictions are arbitrary and must be revised for three reasons. First, their temporal scope is not justified by citation to any facts or science related to the breeding habits of the wildlife listed. Are these time periods in fact the times when these species breed and/or rear their young? This question must be answered. Second, the spatial aspect of these restrictions is not set forth. In other words, the areas of the forest that will be effected is not explained. Finally, the specific types of activities to be prohibited during these time frames are not set forth. The phrase "concentrated intense activities" is not defined. See Draft Plan at 1-27. Standard 2. Before restricting legitimate uses of the forest, the Forest Service must set forth the specific scientific evidence and data showing the need for these restrictions. Which types of human activities, at what intensities and in which areas, actually adversely affect the breeding processes of the wildlife listed? Without first knowing and explaining the answer to this question, these seasonal restrictions are entirely arbitrary and must be set aside."

**Response:** Adverse effects on elk (avoidance of roads, changes in habitat use, alterage in age distribution of bulls) have been documented for may years (Rost and Bailey 1979, Lyon 1983, Hillis et al 1991, Hurley and Sargeant 1991, Christensen et al 1993, Rowland et al 2000). The Wyoming Game and Fish letter of comments on the Draft Plan said "...the road densities and hunter success related to roads have been identified as being at least as important, or more so, than removal of timber habitat in achieving a desired big game population on Forest." It is true that non-motorized use has more effect on some animals (e.g., Freddy et al 1979), but this use in more limited in extent. Animals have more winter encounters Other species may avoid habitats near roads, fail to breed near roads, or have a reduced reproductive success along roads.

In a specific encounter, wildlife display a stronger disturbance effect from pedestrians and skiers than to motorized vehicles, especially when the latter are commonly used in the area. Different species habituate to a greater or lesser degree, habituation varies with the human use associated with the use. However, non-motorized use is very confined in the area affected compared to the area affected by motorized use. Animals have far more encounters with cars, trucks, four-wheelers, and snowmobiles than with hikers, skiers, cyclists, etc., though each encounter may be less draining.

The dates and buffers were developed in cooperation with the Wyoming Game and Fish Department based on their local knowledge of the sensitive periods for these species. The location that need protection may vary over time and are not specified at the Plan level. The type of activity that would cause disturbance varies with context (e.g., which species is involved? what is the date? What is the duration and intensity of the activity). Because of the interaction between these factors, it is not possible to provide a simple definition that is appropriate in every case. These question will be addressed in site-specific planning.

Wildlife	Wilderness and Wildlife: We don't see the relevance of wildlife	
Comment #28	vulnerability to uses outside Wilderness or whether the size of Wilderness	

areas is adequate to support populations of wide-ranging species within the boundaries, and suggest those discussions be deleted as irrelevant. No matter how large a Wilderness area is, there will always be the adjacent area just outside the Wilderness boundary, and there will always be species that do not live out their entire lives with the Wilderness area."

**Response:** A large wilderness has a core area lacking some human uses that is large enough to support a group of wide ranging individuals. Individuals on the boundary will have adjacent non-wilderness, but those in the center will not and individuals may live out their whole lives in Wilderness.

## Wildlife Comment #29

Animal Damage Control: The DEIS does not adequately assess the impacts of allowing lethal predator control on the Forest, including impacts to predator populations, disruption of predator-prey relationships, increased depredation resulting from compensatory reproduction in coyote populations, and reduced opportunities for visitors to observe predatory animals.

Increased predator management can improve bighorn sheep recruitment, but that is not included in the standards and guidelines. We question why this important tool is being ignored.

**Response:** A section on the effects of animal damage control has been added to the Wildlife analysis in FEIS Chapter 3. Removal of predators often leads to an increase in other predators. The reduction of coyotes, for example, is followed by an increase in red foxes which prey on ground nesting birds. Consideration of effects on bighorn sheep is considered by WDGF in setting hunting quotas for mountain lions and bears. WDGF considers habitat quality, not predation, to be the limiting factor on bighorn populations on the MBNF.

#### Wildlife Comment #30

Black Bear Management: Food storage in bear proof containers should be mandatory throughout the Forest. Others expressed concerns about this guideline.

The proposed alternative does not properly protect predators. ...fails to protect the small populations of black bears.

The Forest Service should prohibit the unsportsmanlike-like, cruel practice of bearbaiting across the Forest.

**Response:** Storing food and other substances that attract bears keeps bears from being rewarded for entering campsites and getting used to people. Some campers may not mind having a bear come into camp and feel that they can protect themselves. However, a bear that has lost its fear of humans may return and behave aggressively toward future campers in the area. People may be injured and the bear will almost certainly be killed. Direction on use of bear proof containers came from the Regional Deskguide and was recommended by the Wyoming Department of Game and Fish.

Hunting regulations and objectives are determined by the Wyoming Game and Fish Department. The selected alternative will reduce roads and increase security areas.

#### Wildlife Comment #31

Snags and Coarse Woody Debris: p. 3-246 – the first sentence on this page, i.e., "all of the alternatives include standards and guidelines to maintain adequate levels of snags and coarse woody debris during the planning period, and monitoring requirements which will identify future changes if needed", would appear to negate the remainder of the discussion on pages 3-246 to 247."

Alternative D claims to promote fuels reduction treatments while in the same section promotes more snags and woody debris. Exactly the thing that increases fire danger.

Prevent the cutting of dead trees and snags." "....One to two snags per acre is too little for cavity nesting birds in Ponderosa Pine Forest".

Response: Snag retention standards have been adjusted to levels expected in stands formed by natural processes. These have been increased (compared to the 1985 Plan) in lodgepole and in spruce-fir cover type, where most of the logging occurs on the MBNF, and decreased in ponderosa pine There is no scheduled timber harvest in the Laramie Peak Unit, where most of the ponderosa pine occurs. The Revised Plan requires retention of live trees ("snag recruits") that are expected to develop into the next generation of snags and, eventually, downed wood. The Revised Plan also forbids cutting snags (e.g., for firewood) in riparian areas (within 150 feet of streams and lakes.)

**Response:** The "planning period" is the 10 to 15 year interval over which this Revised Plan will be in effect. The proposed direction is expected to provide adequate downed wood over that interval. However, if the proposed direction is continued over a longer time, effects of the retention and recruitment standards become increasingly uncertain. Because it takes so long to create large snags and downed wood, the potential for loss of these habitat components requires assessment of long-term effects of their loss.

Fuel treatment and retention of snags and downed wood (as wildlife habitat) are not necessarily mutually exclusive. The retention of downed wood emphasize retention of large material (over 10", preferably larger). The dead material classified as "fuel" is the small diameter material (under 3"). Fuel reduction treatments are expected to limited in extent, focused on the urban interface, other sites of human use and property, and ecosystems with reduced fire compared to HRV. On other parts of the Forest, retention of snags and downed wood for their value to wildlife will be emphasized.

#### Wildlife Comment #32

Species Reintroduction: Some comments urged restoration of habitat and/or reintroduction of extirpated species. Others opposed upsetting the current balance by restoring these species and reducing the genetic integrity of adjacent populations.

Prevent introduction of species that could harm TES species or prevent introductions of all non-natives.

**Response:** Reintroductions of federally listed species like the wolf and grizzly bear are carried out by the U. S. Fish and Wildlife Service. Reintroductions of other species would be led by the state which manages populations of wildlife. An analysis of effects on other

species would be done.

NFMA requires maintaining the viability not only of native species, but of desired non-natives. These include species that are hunted and fished. Stocking of non-natives will be avoided when this could harm TES species (for example, non-native game fish will not be introduced with TES amphibians and fish that serve as they prey) according to the following two strategies.

Subgoal 1.b, strategy k: Coordinate with the Wyoming Game and Fish to prevent introductions of fish and other wildlife species where there is potential for adverse impacts on threatened, endangered, and sensitive species or species of concern.

Subgoal 2.b Strategy a: In cooperation with the Wyoming Game and Fish and the USFWS, emphasize fish and wildlife management activities within Wilderness Areas that ensure the protection of natural processes and that conform to the Wilderness Act.

## Wildlife Comment #33

Migratory Birds: The Revised Plan must also ensure pre-project surveys are done to determine presence of migratory songbirds. Where migratory birds may be present, the Revised Plan must ensure compliance with the Migratory Bird Treaty Act by prohibiting activities that may result in the killing of a bird (including destruction of active nest).

We believe Audubon's Important Bird Area Program could be a part of the biodiversity monitoring.

The DEIS does not adequate asses and disclose the direct, indirect, and cumulative impacts of logging, including loss of migratory birds from logging activities, road kill from logging trucks, irreparable changes in understory vegetation

**Response:** Pre-project surveys will be done for TES species, when needed. Migratory birds will be monitored at a forestwide scale, in monitoring using methods consistent with those used across R2. Except for federally listed species, the Forest Service manages for viable populations of species, and does not protect every individual. The MBNF has nominated the Snowy Range Peaks as an IBA and would consider other areas of importance to birds.

#### Wildlife Comment #34

Management Area Allocations for Wildlife: There is much less acres designated as having a wildlife management emphasis under the Revised Plan alternatives as compared to the 1985 Forest Plan. There is no defensible reason for the USFS to reduce the emphasis on wildlife in the Revised Plan or any of the alternatives.

**Response:** Forestwide standards and guidelines for wildlife apply to all management areas. Though it may not be immediately apparent most of the management areas under the Revision do emphasize wildlife. The 4B management area with emphasized wildlife management under the 1985 Forest Plan has mostly become 5.15 Ecological Maintenance and Restoration management area under the preferred Alternative D in the Revised Plan. The 5.15 areas are to be managed for a diversity of wildlife, with a special emphasis on maintaining habitat connectivity of older forest across the Forest for dependent wildlife species.

Wildlife Comment #35	Viability Goals: The Proposed Plan will increase common species or habitats at the expense of uncommon species or habitats by continuing to emphasize timber harvest as a way to increase 'vegetative diversity'.
	Any management plan should promote ideal habitats for all wildlife with a variety of landscapes.
	Forest Service's duty to protect viable populations is not limited to individual species, for it also "requires planning for the whole biological community- not for one species alone.

**Response:** Standards protecting habitats that are often underrepresented or altered are designed to provide habitat for uncommon species that live in them. Subgoal 1.b, strategy n provides for protection of uncommon habitats and centers of biodiversity. A balance of age classes more similar to that found in the past should create a balance of species abundance that is not out of that typically found in the past.

No plan can optimize habitat for all individual species. As conditions change over time, different species will be favored, just as happened under natural processes. Protection of rare or declining habitats, creation of ephemeral habitats, and balancing the variety of seral stages should maintain habitat for all wildlife. This is the rationale behind the MBNF's use of an ecological approach (focused on changes from patterns created by natural processes) as the first step in developing direction for vegetation management and wildlife habitat.

Wildlife	Wildlife Strategy 5:	Strategy 5 is dangerous and should be deleted.
Comment #36		

Response: This strategy has been reworded to eliminate the unrealistic goals for data collection, like population size and trend for all species.