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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8, MONTANA OFFICE  
FEDERAL BUILDING, 301 S. PARK, DRAWER 10096  
HELENA, MONTANA 59626-0096

Ref: 8MO

September 7, 2006

Ms. Lesley W. Thompson, Forest Supervisor  
Lewis and Clark National Forest  
Attn: LBCC Travel Plan DEIS  
P.O. Box 869  
Great Falls, MT 59403-0869

Re: CEQ 20060287; Little Belt, Castle, and North Half Crazy  
Mountains Travel Management Plan DEIS

Dear Mr. Thompson:

The Environmental Protection Agency (EPA) Region VIII Montana Office has reviewed the Lewis & Clark National Forest's Draft Environmental Impact Statement (DEIS) for the Little Belt, Castle, and North Half Crazy Mountains Travel Management Plan in accordance with EPA responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309 of the Clean Air Act directs EPA to review and comment in writing on the environmental impacts of any major federal agency action. EPA's comments include a rating of both the environmental impact of the proposed action and the adequacy of the NEPA document (see summary of EPA's DEIS rating system enclosed).

Forest Travel Plans are critical elements in the management of National Forests, since they provide management direction for road and trail networks for public recreational access and land management activities. Public demand and recreational access has increased significantly in recent years, and newer motorized vehicles such as trail bikes, all terrain vehicles (ATVs) and snowmobiles can access areas much further into the Forest than they could historically, forcing wildlife onto smaller and smaller patches of habitat; degrading and fragmenting wildlife habitat and reducing wildlife security; and causing soil erosion and adverse effects to water quality, aquatic habitat and fisheries, and spreading weeds.

It is important that the Little Belt, Castle, and North Half Crazy Mountains Travel Plan include road system improvements and adequate limitations and restrictions on motorized uses to reduce adverse impacts to watersheds, water quality, fisheries, soil integrity, wildlife habitat and security, weed spread, and overall ecosystem functions. The challenge is in providing adequate access for land management and public recreation while protecting and restoring aquatic and terrestrial ecosystems. Where there are conflicts between access and recreational use and long-term protection of resources, we believe resource protection must be given priority in order to sustain and protect resources and ecosystems for use and enjoyment by future generations.



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All action alternatives appear to be improvements to the existing situation (no action), although, we consider Summer-Alternatives 5 and 4 to include more environmentally protective features than Summer-Alternatives 1 and 3 (i.e., in regard to protection of streams, water quality, fisheries, wildlife, and historic/prehistoric properties). Summer-Alternative 5 would be best for water quality, reducing the total number of road miles within 100 feet of a stream to 408; eliminating 54 miles of existing motorized roads and 25 miles of motorized trails within the 100-foot buffer; and eliminating 528 road stream crossings and 232 trail stream crossings. Similarly we consider Winter-Alternatives 2 and 3 to be environmentally preferred to Winter-Alternative 1 (due to increased wildlife habitat closed to snowmobiles, including habitat of the threatened Canada lynx, and reducing the level of conflict between uses). The EPA has greater levels of environmental concerns with Summer-Alternatives 1 and 3, and Winter-Alternative 1 due to increased adverse effects on watersheds, water quality, fisheries and wildlife habitat and security with these alternatives.

We also recognize that there are many user groups and interests, and social, economic and environmental effects and trade-offs that need to be considered during decision-making. We believe it may be possible to develop a new modified alternative to address purpose and need and the significant issues in a manner that better optimizes and balances access needs and the many environmental and resource management trade-offs. We believe such optimization can be done by building upon the resource protections in Summer-Alternatives 5 and 4 and Winter-Alternatives 3 and 2. In general, the desirable features EPA considers particularly worthy of including in a modified preferred alternative include:

- ☞ maintain and improve road/trail conditions, reduce sediment production from roads/trails; improve drainage, upgrade BMPs; close/decommission unneeded roads/trails; reduce overall road density; maximize watershed and water quality improvement; restore/protect fisheries;
- ☞ avoid/minimize new road construction, and if roads are absolutely needed, locate roads away from streams;
- ☞ do not provide new airstrips if they will compete for limited road maintenance funds, and thus, reduce already minimal funding available for road maintenance necessary for reducing water quality impacts from roads.
- ☞ include Goals, Objectives, Standards and Guidelines to maintain/improve fisheries habitat and reduce sediment delivery;
- ☞ close and restore non-system roads unsuitable for management, including user-built roads/trails causing resource damage (i.e., off-road vehicles should be restricted to designated routes to stop cross-country travel that causes resource damages);
- ☞ restrict motorized vehicle access adequately to protect wildlife habitat and security and

ecologically sensitive resources; restore wildlife connectivity; reduce fragmentation, and protect historic/prehistoric properties while allowing access for management and recreation;

☞ reduce threats of weed invasion from motorized uses which are the leading vector for spread of weeds;

☞ include education and enforcement efforts to improve public understanding of, and compliance with, travel management restrictions, and have a travel plan that can be enforced.

☞ minimize wildlife habitat, especially habitat of the threatened lynx, disturbance by snowmobile usage.

☞ minimize conflicts between uses.

There are over 1900 miles of road in the analysis area, and 469 miles of roads within 100 feet of a stream, with 3,167 road stream crossings. Roads are often a primary source of human-caused sediment increases, and sediment yields are generally higher from roads than from trails, and from motorized trails than from non-motorized trails. Roads/trails often tend to become wider and rutted with heavy motorized use, creating a need for continuing monitoring road/trail conditions, and for road and trail maintenance for needed repair and erosion control.

The DEIS states that most Jefferson Division watersheds have an extensive network of non-system or unauthorized routes receiving motorized and non-motorized use, and that maintenance work has been unable to keep up with needs resulting in adverse effects to fisheries habitat. Impairments to fisheries and fish habitat from roads are noted in the drainages of Middle Fork Judith River, King Creek, North Fork Running Wolf Creek, Hoover Creek, Jefferson Creek, Sheep Creek, Deadman Creek, lower Tenderfoot Creek, Daisy Dean Creek, and Haymaker Creek. Sediment from roads and degraded road conditions are likely contributing to water quality impairments for Belt Creek and the South Fork Judith River, which are listed as water quality impaired by the State of Montana under Section 303(d) of the Clean Water Act.

The DEIS states that regular road maintenance is important in reducing sediment production from road surfaces and drainage systems, but that only 3.3 to 9.2% of the roads in the analysis area have been maintained yearly since 2000, and that risk to water quality of perennial streams from roads and trails receiving little or no maintenance is moderate or greater. The DEIS states that the current level of road maintenance is not projected to increase, but is likely to stay similar to current levels or decrease, and that it is likely that many roads and trails will continue to impact water quality and fish habitat, and the maintenance backlog will persist, given expected funding levels.

We are concerned that there appears to be inadequate funding and resources to properly maintain roads and keep them in fair to good condition to minimize erosion and water quality

and fisheries impacts. We believe there is a need to address road conditions that contribute to degraded water quality and aquatic habitat, particularly to address road related water quality impairment in 303(d) listed streams. Reductions in road density as well as improvements in road drainage and reductions in sediment delivery from roads are important for improving watershed conditions and aquatic health in area streams. We believe road networks should be limited to those that can be adequately maintained within agency budgets and capabilities, and if roads cannot be properly maintained we believe they should be decommissioned, with removal of road stream crossings. We believe the preferred alternative should include a greater commitment of resources to road maintenance to reduce risks to water quality and fisheries. Adequate budgets need to be provided to maintain the roads remaining on the road system within the analysis area. We encourage the Forest Service to incorporate as much road rehabilitation and road closure and decommissioning as possible in its preferred alternative.

Efforts to improve road conditions and reduce sediment delivery from roads should be an important element of the Travel Plan. The Plan should be consistent with Total Maximum Daily Loads (TMDLs) and water quality restoration strategies that are being developed to restore water quality and beneficial use support in impaired 303(d)-listed waters in the area. The Lewis & Clark NF should coordinate their travel management planning with the Montana DEQ as well as EPA TMDL staff to assure travel plan consistency with TMDLs and water quality restoration plans being prepared by MDEQ.

The EPA is also concerned about increasing use of off-highway vehicles (OHVs) and all-terrain vehicles (ATVs), particularly illegal motorized use or user-built access roads, that occurs away from roads and trails, including steep slopes, fragile soils, wet meadows, and around water bodies. The DEIS states that enforcement actions have been unable to keep up with needs, and travel ways have been created in inappropriate locations, ATV use is occurring on trails not designed for such use, and closures or restrictions are being routinely ignored, either willfully or due to lack of clear information and signing. We believe off-road vehicles (ORVs) should be restricted to designated routes to stop cross-country travel causing resource damages, and illegal user created non-system roads should be closed and obliterated, with closures policed and enforced.

We note that the current yearlong road to access private inholdings in the Middle Fork Judith River Wilderness Study Area crosses the Middle Fork Judith River over 20 times, resulting in "extreme bank damage" in places. We particularly support the Summer-Alternative 5 proposal to convert the existing route that causes such extreme bank damage to the Middle Fork Judith River to a non-motorized trail.

In regard to backcountry airstrips, Summer - Alternatives 3 and 5 propose four and two airstrips in the Little Belt Mountains, respectively, while Summer - Alternative 4 does not propose any airstrips. The DEIS states that the road maintenance budget would be used to maintain new airstrips. As indicated above, we are concerned that there is inadequate funding for road maintenance, and that there is a moderate or greater risk to water quality from roads and trails receiving little or no maintenance. We do not support development of new airstrips that

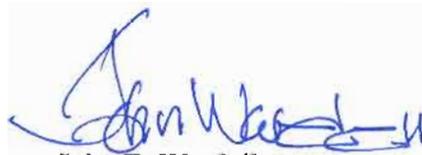
would compete with roads for limited, inadequate road maintenance funding, until road conditions are improved. We do not believe limited road maintenance funding should be diverted further to support development of backcountry airstrips when roads cannot be adequately maintained to keep them from delivering excess sediment to area streams.

Also, the DEIS states that there are public airport facilities in nearby communities where pilots can land and travel by vehicle to gain access to the Forest. There is no need for airstrips to provide access. We also have concerns about effects of aircraft noise and increased recreational access and use promoted by increased aircraft activity, particularly upon wildlife and on the solitude of the forest. We also note that mountain valleys and meadows often that provide the only flat topography suitable for backcountry airstrips, and there are concerns about impacts to important meadow/wetland habitat from airstrip development. We do not believe development of backcountry airstrips should be a high priority given limited road maintenance funding, ability of pilots to access the Forest through nearby airports, and concerns about additional adverse environmental impacts from airstrip development and use. We also want to note that if airstrip development could be related to additional road removals, with overall reduction in adverse environmental effects, we would be more in support of airstrip development (i.e., convert road access to aerial access with less ground disturbance and removal and obliteration of roads).

The EPA's more detailed questions, comments, and concerns regarding the analysis, documentation, or potential environmental impacts of the Little Belt, Castle, and North Half Crazy Mountains Travel Management Plan are included in the enclosure with this letter. Based on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action and alternatives in an EIS, the Little Belt, Castle, and North Half Crazy Mountains Travel Management Plan DEIS has been rated as Category EC-2 (Environmental Concerns - Insufficient Information). A summary of EPA's DEIS rating criteria is attached.

If you have any questions you may contact Mr. Steve Potts of my staff in Helena at (406) 447-5022 or in Missoula at (406) 329-3313, or via e-mail at [potts.stephen@epa.gov](mailto:potts.stephen@epa.gov). Thank you for your willingness to consider our comments at this stage of the process, and we hope they will be useful to you.

Sincerely,

A handwritten signature in blue ink, appearing to read "John F. Wardell", is written over a light blue rectangular background.

John F. Wardell  
Director  
Montana Office

Enclosures

**U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements  
Definitions and Follow-Up Action\***

**Environmental Impact of the Action**

**LO - - Lack of Objections:** The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

**EC - - Environmental Concerns:** The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

**EO - - Environmental Objections:** The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

**EU - - Environmentally Unsatisfactory:** The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

**Adequacy of the Impact Statement**

**Category 1 - - Adequate:** EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

**Category 2 - - Insufficient Information:** The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

**Category 3 - - Inadequate:** EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

# **EPA Comments on the Draft EIS for the Little Belt, Castle, and North Half Crazy Mountains Travel Management Plan on the Lewis & Clark National Forest**

## **Brief Project Overview:**

The Lewis and Clark National Forest proposes to revise and update their current travel management plan to designate roads, trails and airfields as system routes for the Forest transportation system. The project areas includes Lewis & Clark National Forest lands within the Little Belt Mountains (900,310 acres), Castle Mountains (79,820 acres), and north half of the Crazy Mountains (69,980 acres) within the Belt Creek, Judith, Musselshell, and White Sulphur Springs Ranger Districts (a total of 1,050,110 acres). The purpose and need is to provide the public with opportunities to use both motorized and non-motorized modes of transportation to access public lands and travel on National Forest system lands, roads, and trails.

Three action alternatives were developed and compared with the no action alternative for summer wheeled vehicle management. Two action alternatives were developed and compared with the no action alternative for winter over-snow management. The effects on 21 issues were analyzed and displayed for all 7 alternatives. A preferred alternative has not been identified.

Summer - Alternative 1 and Winter-Alternative 1 are the no action alternatives involving no change from current management in the 1988 Travel Plan. No action provides a baseline for assessing effects of other alternatives.

Summer - Alternative 3 was developed by a coalition of organizations representing motorized travel including aircraft. This alternative features a network of single-track loop trails for motorcycles, and loop trails for ATVs in all three mountain ranges. Non-motorized foot and horse travel is accommodated in the upper Tenderfoot Creek, Hoover Creek, Sawmill-Wagner Gulch, Lost Fork Judith River, Steiner Creek, and Yogo Creek areas of the Little Belt Mountains. Four airstrips are also proposed in the Little Belt Mountains.

Summer - Alternative 4 promotes non-motorized recreation in areas identified by the Montana Wilderness Association, incorporating features of the proposed action for areas open to motorized recreational travel during the spring, summer, and fall. This alternative features large blocks of “quiet” non-motorized areas in the Middle Fork Judith Wilderness Study Area, Tenderfoot-Deep Creek, Eagle Creek, Pilgrim Creek, Hoover-Big Baldy, Daisy Dean-Nevada Creek, Haymaker Creek, and East Fork Spring Creek areas in the Little Belt Mountains. It also features large non-motorized blocks in the west half Castle Mountains, and north half Crazy Mountains. Single-track loop trails for motorcycles and ATVs are accommodated in the Calf Creek, Jumping Creek, Jefferson Creek, Smoky Mountain, Dry Wolf Creek, South Fork Judith River, Spring Creek, and eastern portion of the Little Belt Mountains. No airstrips are proposed.

Summer - Alternative 5 attempts to blend public preferences with resource concerns for all three mountain ranges. It includes actions not directly considered in Alternatives 1, 3, or 4 to help display and compare the effects of options to address some specific issues. This alternative features a network of single-track loop trails for motorcycles and ATVs in the Little Belt Mountains. The Castle Mountains accommodates one ATV loop trail in the west half, and a network of roads in the east half. One loop ATV trail is provided in the Crazy Mountains. Non-motorized foot and horse travel is promoted in large blocks of quiet areas along the Smith River, upper Tenderfoot Creek, Pilgrim Creek, Lost Fork Judith, and South Fork Judith river in the Little Belt Mountains. In the Castle Mountains there would be large quiet areas in the Beartrap Peak-Woodchuck Mountain area, and Castle Mountain area; and the north half of the Crazy Mountains is predominantly a large area for non-motorized travel. Two airstrips are proposed in the Little Belt Mountains.

Winter - Alternative 2 depicts an agreement between the Montana Snowmobile Association, Montana Wilderness Association, and other organizations for management of winter recreation in the Little Belt Mountains. Forest Service managers developed the “proposed winter recreation action” for the Castle and north half Crazy Mountains. This alternative is the “proposed action” for winter over-snow travel management that was released in September 2005 for public comment. This alternative features maintenance of the existing groomed and designated about half of the Little Belt Mountains. Similarly, about two-thirds of the Castle Mountains, and half of the Crazy Mountains would remain open to snowmobiling. Developed cross country ski areas would be promoted in the Mizpah, Deadman, O’Brien Park, and Jefferson Creek areas. Big-game winter ranges currently closed to snowmobiling would continue to be restricted. Large blocks of non-motorized quiet areas would be provided in the Middle Fork Judith WSA, Tenderfoot-Deep Creek-Pilgrim Creek-Dry Wolf area, and northeast end of the Little Belt Mountains. The east one-third of the Castle Mountains, and the east half of the Crazy Mountains would also provide quiet areas.

Winter - Alternative 3 was developed by Forest Service managers and resource specialists for all three mountain ranges to protect big-game winter ranges, wolverine denning habitat, and cross-country ski areas. It includes actions not directly considered in Winter Alt. 1 or 2 to help display and compare the effects of options to address some specific issues. This alternative features maintenance of the existing groomed and designated snowmobile trail system in the Little Belt Mountains, and provides for open snowmobiling in about two-thirds of the Little Belt Mountains. Similarly, about two-thirds of the Castle Mountains, and one-third of the Crazy Mountains would remain open to snowmobiling. Developed cross-country ski areas would be promoted in the Mizpah, Deadman, O’Brien Park, and Jefferson Creek areas. Large blocks of non-motorized quiet areas would be provided in the Smith River-Deep Creek area, Thunder Mountain, Barker Mountain, Peterson Mountain, Big Baldy Mountain, Kelly Mountain, Bluff Mountain, and northeast end of the Little Belt Mountains. The Four Mile Creek area and east one-third of the Castle Mountains; and the northwest corner and east half of the Crazy Mountains would also be quiet areas.

**Alternatives Comparison Summary Tables**

	Summer - Alt. 1	Summer - Alt. 3	Summer - Alt. 4	Summer - Alt. 5
Motorized ROS	88%	87%	69%	78%
Hwy. Veh. Roads (miles)	1359	1003	939	915
4x4 Roads	550	446	407	388
ATV Trails/Roads	202/17	193/42	70/71	118/67
Roads/Trails within 100 feet of streams	513	454	431	408
Road/Trail Stream Crossings	3100	2715	2559	2365
Motorized road density/route density	1.13/1.56	0.81/1.28	0.75/0.92	0.72/1.03
Airstrips	0 airstrips	4 airstrips	0 airstrips	2 airstrips
	Winter - Alt. 1	Winter - Alt. 2	Winter - Alt. 3	
Open to snowmobiles	413,140 acres	121,599 acres	235,512 acres	
Potential for user conflict (1=low, 5=high)	5	1	2	
Lynx habitat open to snowmobiles	64%	53%	69%	

Snow routes in lynx habitat	274	301.8	281.9
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**Comments:**

**Alternatives**

1. Thank you for providing Summary Tables and Matrices comparing alternatives, including Table 1-2 addressing evaluation of significant issues (page 15-16), and Tables II-1 and II-2 comparing features and effects of alternatives (pages 22-25), as well as clear, large, maps of the alternatives. The summary tables, alternatives descriptions and maps help clarify alternatives, define issues, and provide a basis of choice among alternatives for the decisionmaker and the public as directed by the CEQ's regulations for implementing NEPA (40 CFR 1502.14).
2. Forest Travel Plans are critical elements in the management of National Forests, providing direction to manage road and trail networks for public recreation and conduct of land management activities. Public recreational demand and access has increased significantly in recent years, and motorized uses and roads in many cases have caused increased damage to aquatic and terrestrial resources. Roads and motorized uses have affected wildlife behavior and life history functions and habitat quality and quantity; caused habitat loss and fragmentation and wildlife mortality from vehicle-wildlife collisions; increased erosion resulting in sediment transport to water; degraded watershed conditions, water quality, aquatic habitat, and fisheries; increased dust emissions to air; spread weeds; and otherwise disrupted and degraded terrestrial and aquatic environments. Newer motorized vehicles such as trail bikes, all terrain vehicles (ATVs) and snowmobiles can access areas much further into the Forest than they could historically, forcing wildlife onto smaller and smaller patches of habitat, fragmenting habitat and migration corridors, and adversely affecting wildlife security.

It is important, therefore, that Travel Plans include adequate limitations and restrictions on motorized uses to minimize road and travel impacts to watersheds, water quality, fisheries, soil integrity, wildlife habitat and security, spread of weeds, air quality, and overall ecosystem functions. The challenge is in providing adequate access for land management and public recreation while protecting and restoring aquatic and terrestrial ecosystems. Where there are conflicts between access and recreational use and long-term protection of resources and ecosystems, we believe resource/ecosystem protection must be given priority to sustain and protect resources and ecosystems for use by future generations.

While the action alternatives all appear to be improvements to the existing situation (no action), we consider Summer-Alternatives 5 and 4 to include more environmentally protective features than Summer-Alternatives 1 and 3 (i.e., in regard to protection of

streams, water quality, fisheries, wildlife, and historic or prehistoric properties). Similarly we consider Winter-Alternatives 2 and 3 to be environmentally preferred to Winter-Alternative 1 (due to closing more wildlife habitat to snowmobiles, including habitat of the threatened Canada lynx, and reducing the level of conflict between uses). Summer-Alternative 5 would be best for water quality, reducing the total number of road miles within 100 feet of a stream to 408; eliminating 54 miles of existing motorized roads and 25 miles of motorized trails within the 100-foot buffer; and eliminating 528 road stream crossings and 232 trail stream crossings. The EPA has greater environmental concerns with Summer-Alternatives 1 and 3, and Winter-Alternative 1 due to increased adverse effects on watersheds, water quality, fisheries and wildlife habitat and security with these alternatives.

We recognize that there are many user groups and interests, and social, economic and environmental effects and trade-offs that need to be considered during decision-making. It may be possible to develop a modified alternative that addresses purpose and need and the significant issues to better optimize and balance access needs and the many environmental and resource management trade-offs. We believe such optimization can be done by building upon the resource protections in Summer-Alternatives 5 and 4 and Winter-Alternatives 2 and 3. In general, the desirable features EPA considers particularly worthy of including in a modified preferred alternative include:

- ☞ maintain and improve road/trail conditions, reduce sediment production from roads/trails; improve drainage, upgrade BMPs; close/decommission unneeded roads/trails; reduce overall road density; maximize watershed and water quality improvement; restore/protect fisheries;
- ☞ avoid/minimize new road construction, and if roads are absolutely needed, locate roads away from streams;
- ☞ do not provide new airstrips if they will compete for limited road maintenance funds, and thus, reduce already minimal funding available for road maintenance necessary for reducing water quality impacts from roads.
- ☞ include Goals, Objectives, Standards and Guidelines to maintain/improve fisheries habitat and reduce sediment delivery;
- ☞ close and restore non-system roads unsuitable for management, including user-built roads/trails causing resource damage (i.e., off-road vehicles should be restricted to designated routes to stop cross-country travel that causes resource damages);
- ☞ restrict motorized vehicle access adequately to protect wildlife habitat and security and ecologically sensitive resources; restore wildlife connectivity; reduce fragmentation, and protect historic/prehistoric properties while allowing access for management and

recreation;

☞ reduce threats of weed invasion from motorized uses which are the leading vector for spread of weeds;

☞ include education and enforcement efforts to improve public understanding of, and compliance with, travel management restrictions, and have a travel plan that can be enforced.

☞ minimize wildlife habitat, especially habitat of the threatened lynx, disturbance by snowmobile usage.

☞ minimize conflicts between uses.

Specific comments in regard to the alternatives and environmental impacts are included in our more detailed comments below. We note that the Lewis & Clark NF will need to evaluate and analyze the impacts (e.g., watershed and water quality, wildlife impacts) of any new modified alternative, and display those impacts in the FEIS to allow for public disclosure, and to allow the decision maker to make a reasoned choice between alternatives. Discussion of additional evaluation of a modified preferred alternative in the FEIS may also better explain to the public the trade-offs involved in making travel management decisions, and may lead to improved public acceptance of decisions.

### **Water Quality/Soils/Fisheries**

3. The condition of forest road networks and environmental effects of motorized travel are a significant concern of EPA in regard to land management. Roads are often a primary source of human-caused sediment increases, and sediment yields are generally higher from roads than from trails, and from motorized trails than from non-motorized trails. Roads/trails often tend to become wider and rutted with heavy motorized use, creating a need for continuing monitoring road/trail conditions, and for road and trail maintenance for needed repair and erosion control. Improperly designed and/or poorly maintained roads can modify natural drainage networks and accelerate erosional processes, resulting in increased stream sedimentation, degradation of aquatic habitats and altered channel morphology.

We appreciate the analysis of water quality and fisheries effects of travel management (pages 196 to 219; pages 277 to 291). There are over 1900 miles of road in the analysis area, and 469 miles of roads are within 100 feet of a stream, with 3,167 road stream crossings (Table III-71, page 204). We note that Table III-73 (page 213) shows 513 miles of roads and trails within 100 feet of streams. This apparent discrepancy between Tables III-71 and III-73 in regard to road miles within 100 feet of streams should be

explained.

The DEIS acknowledges the potential for roads/trails and travel management to cause adverse effects to water quality as follows:

- construction & use of roads and trails are chronic sources of erosion and sediment to analysis areas watersheds, page 172;

- roads have resulted in elevated sediment levels where stream channels are confined by fill slopes and vegetation buffers between roads and streams are not adequate, and at stream crossings, page 199;

- roads can increase surface and subsurface drainage efficiency, routing upslope waters to natural channels at higher rates and increasing erosion and floodwater levels, page 200;

- trail rutting, erosion, lack of drainage and trail widening have been noted in District files and in comments from the public, page 219;

- roads and trails have localized effects on nearby stream segments or at stream crossing sites, especially fords, page 277).

The DEIS indicates that roads cross approximately 637 miles of land types with sensitive soils and trails cross 203 miles of land types with sensitive soils in the analysis area. (page 171); and that many streams in the analysis area have a high sensitivity to disturbance (pages 198-199). Impairments to fisheries and fish habitat from roads are noted in the drainages of Middle Fork Judith River, King Creek, North Fork Running Wolf Creek, Hoover Creek, Jefferson Creek, Sheep Creek, Deadman Creek, lower Tenderfoot Creek, Daisy Dean Creek, and Haymaker Creek (pages 277, 281).

Appendix A shows water quality limited streams from Montana's 1996 and 2004 Clean Water Act Section 303(d) listings. Siltation and habitat alterations are listed as causes of impairment on the 2004 303(d) list for Belt Creek and the South Fork Judith River. Sediment from roads and degraded road conditions are likely contributing to water quality impairments for these waterbodies. Logging road construction and maintenance is identified as a probable source of impairment for the South Fork Judith River (page 345). Sources of pollutant loading may also occur in unlisted tributaries to listed streams, and TMDLs must account for all sources of pollution, hence there is a need to also address road related pollution sources in watersheds of 303(d) listed waters.

As you know, stream segments designated as "water quality impaired" and/or "threatened" listed on State 303(d) lists require development of a Total Maximum Daily Load (TMDL). A TMDL:

*Identifies the maximum load of a pollutant (e.g., sediment, nutrient, metal) a waterbody is able to assimilate and fully support its designated uses; allocates portions of the maximum load to all sources; identifies the necessary controls that may be implemented voluntarily or through regulatory means; and describes a monitoring plan and associated corrective feedback loop to insure that uses are fully supported; Or can also be viewed as, the total amount of pollutant that a water body may receive from all sources without exceeding WQS; Or may be viewed as, a reduction in pollutant loading that results in meeting WQS.*

Montana's approach is to include TMDLs as one component of comprehensive Water Quality Restoration Plans (WQRPs). TMDLs/WQRPs contain eight principal components:

1. Watershed characterization (hydrology, climate, vegetation, land use, ownership, etc.)
2. Description of impairments and applicable water quality standards.
3. Pollutant source assessment and estimate of existing pollutant loads, including pollutant loads in tributaries to 303(d) listed waters.
4. Water quality goals/restoration targets.
5. Load allocations (i.e., TMDLs).
6. Restoration strategy
7. Monitoring Strategy
8. Public involvement (30 day public comment period, informational meetings, etc.)

The load allocations and targets established by TMDLs/WQRPs inform land managers how much sediment, nutrient or other pollutant discharge may be too much (i.e., prevent support of beneficial uses). A WQRP provides a means to track the health of a stream over time. If a WQRP has not restored beneficial uses within five years, the Montana DEQ conducts an assessment to determine if:

- \* the implementation of new and improved BMPs are necessary;
- \* water quality is improving but more time is needed to comply with WQS; or
- \* revisions to the plan will be necessary to meet WQS.

The Montana Dept. of Environmental Quality (MDEQ) and EPA are under a Court Ordered schedule to prepare TMDLs. Montana has divided the State into TMDL Planning Areas, grouping streams with similar water quality problems and land ownership as much as possible on a watershed basis. Each TMDL planning area may include 4 to 10 impaired watersheds that have specific TMDL preparation needs. See <http://deq.mt.gov/wqinfo/TMDL/TMDLSchedule2006.pdf> for the latest schedule for preparation of TMDLs in Montana.

Pending completion of a TMDL in Montana, new and expanded nonpoint source activities may commence and continue, provided those activities are conducted in accordance with (MCA 75-5-703). The Administrative Rules of Montana (17.30.602) define these as “methods, measures, or practices that protect present and reasonably anticipated beneficial uses.” “Reasonable soil, land and water conservation practices” include but are not limited to structural and nonstructural controls and operation and maintenance procedures. Appropriate practices may be applied before, during, or after pollution producing activities.

It is important to note that “reasonable soil, land and water conservation practices” are differentiated from BMPs, which are generally established practices for controlling nonpoint source pollution. BMPs are largely practices that provide a degree of protection for water quality, but may or may not be sufficient to achieve Water Quality Standards and protect beneficial uses. “Reasonable soil, land and water conservation practices” include BMPs, but may require additional conservation practices, beyond BMPs to achieve Water Quality Standards and restore beneficial uses.

All action alternatives appear to have potential to reduce adverse effects on water quality, since all action alternatives would reduce the total miles of roads and trails open to motorized use, and some roads would be decommissioned (Table III-74). Preliminarily Summer - Alternatives 4 and 5 would appear to have greatest potential for water quality improvements, with Alternative 5 being the best water quality alternative.

Reduction of sediment delivery from roads is an important element in water quality restoration. We support upgrading of BMPs and improving road/trail drainage on the existing road/trail network. Road reclamation and improvements in road drainage and BMPs (i.e., installing waterbars, drain dips, and ditch relief culverts), and relocating roads away from streams, decommissioning roads, removing and/or upgrading undersized culverts, eliminating fords, and armoring stream channels at former road stream crossings, and reducing motorized uses in erosive areas should improve water quality in the long-term, and help provide consistency with the TMDLs.

The DEIS indicates that proposed activities are not expected to impact the existing condition of water quality limited streams (page 212), although they may improve overall water quality condition of such streams. It is also stated that water quality impacts from roads will continue until the roads are properly removed from the landscape. The DEIS states that regular road maintenance is important in reducing sediment production from road surfaces and drainage systems (page 205), but that only 3.3 to 9.2% of the roads in the analysis area have been maintained yearly since 2000, and that risk to water quality of perennial streams from roads and trails receiving little or no maintenance is moderate or greater (page 207).

The DEIS states that the current level of road maintenance is not projected to increase, but is likely to stay similar to current levels or decrease (page 209). Ruttled running surfaces, lack of functioning water control devices (rolling dips, water bars, ditches and cross drainage culverts) and the breakdown and loss of road and trail surfacing increase the risk of sediment reaching perennial streams (page 209). Maintenance work has not kept with needs, and as a result, drainage features are lacking or not functioning properly (page 279). It is likely that many roads and trails will continue to impact water quality and fish habitat, and the maintenance backlog will persist, given expected funding levels (page 278).

We are concerned that only 3.3 to 9.2% of the roads in the analysis area have been maintained yearly since 2000, and that risk to water quality of perennial streams from roads and trails receiving little or no maintenance is moderate or greater. There appears to be inadequate funding and resources to properly maintain roads and keep them in fair to good condition to minimize erosion and water quality and fisheries impacts, and keep them from delivering excess sediment to area streams. Inadequate road maintenance in the 303(d) listed Belt Creek and South Fork Judith River drainages are of particular concern, as are the impairments to fisheries and fish habitat from roads in the drainages of Middle Fork Judith River, King Creek, North Fork Running Wolf Creek, Hoover Creek, Jefferson Creek, Sheep Creek, Deadman Creek, lower Tenderfoot Creek, Daisy Dean Creek, and Haymaker Creek (pages 277, 281).

We believe there is a need to address road conditions that contribute to degraded water quality and aquatic habitat, particularly to address road related impairment in 303(d) listed streams. There should be a continuing road inspection, evaluation and maintenance program in place to identify road drainage and BMP needs, including an inspection, evaluation and road maintenance program, and adequate funds to correct road deficiencies. Adequate budgets need to be provided to maintain the roads remaining on the road system within the analysis area.

Long-term travel management plans should be consistent with TMDLs and water quality restoration strategies that are being developed to restore water quality and beneficial use support in impaired 303(d)-listed waters in the area. We believe the preferred alternative must include a greater commitment of resources to road and trail maintenance to reduce risks to water quality and fisheries. Roads in need of repair or maintenance should be improved, and travel management should assure that necessary BMP upgrades, drainage improvements and sediment and erosion control measures will be implemented.

We encourage the Lewis & Clark NF to coordinate their travel management planning with the Montana DEQ as well as EPA TMDL staff to assure travel plan consistency with TMDLs and water quality restoration plans being prepared by MDEQ (contact George Mathieus, Robert Ray, and/or Mark Kelley of the MDEQ in Helena at 444-7423, 444-5319, and 444-3508, respectively; and Ron Steg, EPA TMDL Coordinator for Montana

in Helena at 457-5024). Proposed travel management should also be discussed with any local watershed groups that may be involved in preparing TMDLs and water quality restoration plans. Aquatic/water quality effectiveness monitoring activities that are being carried out to evaluate water quality effects should also be described.

4. The DEIS states that most Jefferson Division watersheds have moderate to high road and trail densities with an extensive network of non-system or unauthorized routes receiving motorized and nonmotorized use. Maintenance work have been unable to keep up with the need, and as a result, drainage features are lacking or not functioning properly. In addition to the unavoidable impacts of designated roads and trails, the use of non-system or unauthorized routes is adversely affecting the quality of fisheries habitats in many parts of the project area. (page 279)

The DEIS indicates that road densities in the analysis area ranged from 0.12 to 6.4 miles per square mile (page 200). Several drainages with high road density are noted (e.g., Dry Fork Belt Creek, Dry Wolf, Lone Tree Creek, headwaters of Belt Creek, mainstem of Sheep Creek, Newlan Creek, North Fork Smith River, Deadhorse Creek, Yogo Creek, and South Fork Judith, Miller Gulch, Lower Tenderfoot, and Belt Park, page 200). Specific concerns about the impacts of roads and trails on habitat for westslope cutthroat trout (WCT), especially in Tenderfoot Creek/Smith River, S.F. Judith River, N.F./S.F. Deep Creek, Hoover Creek and Graveyard Creek (i.e., primary concerns are sedimentation, damage to spawning gravels, and population security).

Reductions in road density as well as improvements in road drainage and reductions in sediment delivery from roads are important for improving watershed conditions and aquatic health in area streams. Areas with higher road density have been correlated with higher levels of stream sedimentation, and higher quality aquatic habitat and higher populations of salmonid fish (trout) are often associated with watersheds with low road density.

The EPA fully supports road decommissioning and reductions in road density, particularly removal of road stream crossing, and closing and obliterating illegally user created non-system roads that cause resource damages. Off-road vehicles (ORVs) should be restricted to designated routes to stop cross-country travel causing resource damages. We believe road networks should be limited to those that can be adequately maintained within agency budgets and capabilities, and if roads cannot be properly maintained we believe they should be decommissioned.

We are pleased that the DEIS indicates that Summer-Alternative 5 would reduce the total number of road miles within 100 feet of a stream to 408 and would eliminate 54 miles of existing motorized roads and 25 miles of motorized trails within the 100-foot buffer, and would eliminate 528 road stream crossings and 232 trail stream crossings (pages 211, 284). Summer-Alternative 4 would reduce road miles to 434 and eliminate 47 miles of

motorized roads and 17 miles of motorized trails within the 100-foot buffer, and would eliminate 383 road stream crossings and 171 trail stream crossings. Summer-Alternative 3 had the lowest reduction of road miles within 100 feet of a stream at 454, and would eliminate 47 miles of motorized roads and 13 miles of motorized trail with the 100 foot buffer, and would eliminate 371 road stream crossings and 143 trail stream crossings. Table III-62 (page 174) shows that roads on land types would be significantly reduced to 471 miles with Summer-Alternative 4, with only minor reductions with Summer-Alternatives 3 and 5 at 612 miles and 621 miles, respectively. Table III-75 shows how selected roads within 100 feet of perennial streams would be addressed.

We encourage the Forest Service to incorporate as much road rehabilitation and road closure and decommissioning as possible in its preferred alternative. We support prioritizing decommissioning of roads close to streams rather than roads on upper slopes or ridges, and roads on sensitive soils or slopes or in landslide prone areas that have greater erosion potential, or roads within riparian areas to maximize water quality improvement benefits. Where roads or trails are located in narrow valleys adjacent to streams where roads/trails cannot be decommissioned, we recommend consideration of use of vegetative plantings, silt fences, and/or rock or log placement along the stream banks and/or steep slopes to reduce sediment entry into the streams. We believe efforts to improve road conditions and reduce sediment delivery from roads should be an important element of the Travel Plan.

Summer-Alternative 5 followed by Summer-Alternative 4 have the most potential to improve water resources. Summer-Alternative 5 provides the greatest protection to water quality, aquatic habitat and fisheries, although as noted in comment # 2 above, we believe it may be possible to construct a modified preferred alternative to optimize and balance the access needs and the many environmental and resource management trade-offs.

5. We note that the current yearlong road to access private inholdings in the Middle Fork Judith River Wilderness Study Area crosses the Middle Fork Judith River over 20 times, resulting in "extreme bank damage" in places (page 149). We particularly support the Summer-Alternative 5 proposal to convert the existing route that causes such extreme bank damage to the Middle Fork Judith River to a non-motorized trail.
6. The DEIS states that while some road and trail decommissioning is proposed, the specifics of decommissioning (methods and timing) have not been developed for this project (page 211). We note that it is difficult to effectively restrict motorized access and protect public lands with simple gated road closures. Road rip-seed-slash (obliteration or full road recontour) is a more effective, and thus, preferred method of road closure. We advise removing and restoring stable drainage ways during road removal to address water quality concerns. It is important that adequate attention be directed to culvert removal and ripping, scarifying, and seeding disturbed areas with native seed. We also note that adequate budgets need to be provided to close and

obliterate roads and restore natural drainages and restore and revegetate natural landscapes.

7. Has the Lewis & Clark NF evaluated or conducted a survey of fish passage on culverts on the District? Since culverts often impede fish passage we recommend that such a survey be conducted to identify culverts causing fish passage problems. A priority list of culverts requiring modification or replacement should then be developed.
8. We note that the Travel Management Plan for the Gallatin National Forest included amended Goals, Objectives, Standards and Guidelines to direct future management activities related to public access and travel. The Little Belt, Castle, and North Half Crazy Mountains Travel Management Plan does not appear to include new or amended Goals, Objectives, Standards and Guidelines. Roads and trails are among the most important activities that have affected water quality, soils, and fisheries yet apparently existing Goals, Objectives, Standards and Guidelines will be retained for future travel management.

It is not clear to us why the Lewis & Clark National Forest is not reevaluating the adequacy of its Goals, Objectives, Standards and Guidelines for directing future management activities related to public access and travel in the Little Belt, Castle, and North Half Crazy Mountains with this Travel Plan? Does the Forest believe that its current Goals, Objectives, Standards and Guidelines are adequate, and no revision is needed? We encourage adoption of Goals, Objectives, Standards and Guidelines that provide for maintenance of road/trail systems so they protect soil and watershed conditions and maintain riparian areas in good condition and minimize impacts to fisheries and wildlife.

It would be helpful to include the current Goals, Objectives, Standards and Guidelines that guide public access and travel in the Little Belt, Castle, and North Half Crazy Mountains in the FEIS, perhaps as an appendix, so travel management direction for this area were disclosed and could then be evaluated. Our primary interest is the adequacy of management direction in regard to reducing water quality and aquatic habitat and fisheries impacts from roads, since roads often have a significant effect on water quality, aquatic habitat, and fisheries, and as noted in earlier comments we have concerns regarding adequate maintenance of road/trails.

EPA was generally supportive of the Goals, Objectives, Standards and Guidelines included in the Travel Plan for the Gallatin National Forest, particularly their Objective to close and restore non-system and user-built roads. Although we did suggest consideration of additional management direction to further assure a reduction in adverse effects to water quality and aquatic habitat from roads. For your information, some suggestions we made in regard to additional and/or supplemental management direction to reduce road impacts to water quality and fisheries for the Gallatin Travel Plan that may

be of interest to the Lewis & Clark National Forest included:

\* Revise their Objective C-1 to include consideration for closing and rehabilitating roads where they may be causing resource damage. For example, *“Close and rehabilitate existing road that are in excess to administrative, recreation, and access needs, or where roads are causing significant damage to water quality and fisheries or may otherwise be adversely affecting the ecological value of riparian resources. At a minimum we believe there should be a supplemental Standard or Guideline indicating that priority in road closures and rehabilitation would given to roads causing water quality and fisheries impacts.*

\* Add a Guideline for Gallatin Objective C.1, to, *“Leave culverts or other crossing structures on closed or decommissioned roads, only when they can be maintained on a regular basis to minimize or prevent the risk of failure and associated resource damage.”*

\* We very much supported proposed Gallatin Goal D. for fisheries that indicates road and trails systems should be managed to “fully support the beneficial use of growth and propagation of salmonid fisheries and associated aquatic life.” This is consistent with the Clean Water Act and Montana Water Quality Standards focus on beneficial use support, and the fact that growth and propagation of salmonid fisheries and associated aquatic life is a high prevalent beneficial use on Gallatin National Forest waters.

\* We supported the intent of fisheries Gallatin Objective D-4 and D-5 and roads and trails Standards M-1 through M-6 regarding road impacts on water quality, but suggested some additional Standards and/or Guidelines regarding design of stream crossings, road stabilization and other issues to protect water quality and fisheries as follows:

*Minimize road stream crossings, and road and landing locations in riparian areas.*

*Avoid disruption of natural hydrologic flow paths and making channel changes on streams and drainages.*

*Construct and maintain stream crossings to prevent diversion of streamflow out of the channel and down the road in the event of crossing failure.*

*Stream crossing should simulate natural stream grade and substrate as much as possible in fish bearing streams (use bridges, arches and open bottom culverts).*

*When constructing new, replacement and reconstructed culverts, bridges, and other stream crossings accommodate a 100-year flood, including associated bedload and debris. Culverts should be properly aligned with the stream channel. Undersized culverts should be replaced and culverts which are not properly aligned or which present fish passage problems and/or serve as barriers to fish migration should be adjusted.*

*Construction of stream crossings should occur during periods of low stream flow (usually in late summer or early Fall). Special care should be taken to avoid or minimize impacts to the stream channel and to riparian vegetation during construction. Stream banks disturbed during construction should be revegetated. Operation of equipment within the channels of creeks and rivers only occurs if absolutely necessary and with proper permits and authorizations (e.g., Clean Water Act 404 permits, Montana DEQ 318 authorizations and/or Montana DFW&P 124 authorizations).*

*Complete watershed analysis, prior to construction of new roads or landings in RCAs. The level of analysis should be commensurate with the scope and issues of the project and related aquatic resources.*

*Avoid constructing roads on unstable landtypes or landslide or mass failure prone areas. Such areas should be identified for avoidance prior to road design and construction.*

*Conduct implementation and effectiveness monitoring plans for road stability, drainage, and erosion control.*

*Stabilize road cut and fill slopes.*

*Avoid sediment delivery to streams from the road surface.*

- Provide adequate numbers of waterbars, rolling dips and ditch relief culverts to avoid drainage running on or along roads;*
- Outsloping of the roadway surface is preferred, except in cases where outsloping would increase sediment delivery to streams or where outsloping is infeasible or unsafe. Route road drainage away from potentially unstable stream channels, fills, and hillslopes.*
- Avoid placing ditch relief culverts where they may discharge onto erodible slopes or directly into streams.*
- Where possible install cross-drainage above stream crossings to prevent ditch sediments from entering streams.*
- Minimize road use during spring thaw periods that causes rutting and channeling of snowmelt and runoff, and during wet periods that may erode road surfaces to minimize erosion and sediment delivery to streams.*
- Avoid sidecasting of soils or snow where it may enter streams or wetlands.*

*\* We supported their “other options for consideration” travel planning area goals, objectives and guidelines, particularly a guideline to maintain a 600 meter buffer adjacent to streams where new roads or trails (parallel or connector routes) may be established within riparian areas, when terrain and topography make such a buffer logistically feasible.*

## Off-Road Uses and Law Enforcement

9. We appreciate the discussion of law enforcement in the DEIS (beginning on page 48) and agree that lack of enforcement results in resource and environmental damage. The DEIS indicates that in the last couple of decades more and more trails have been created by users illegally seeking to increase their access into the forest by motorized and non-motorized means (page 54). The DEIS states that most Jefferson Division watersheds have an extensive network of non-system or unauthorized routes receiving motorized and non-motorized use. Maintenance work and enforcement actions have been unable to keep up with the need, and as a result, drainage features are lacking or not functioning properly, travel ways have been created in inappropriate locations, ATV use is occurring on trails not designed for such use, and closures or restrictions are being routinely ignored, either willfully or due to lack of clear information and signing. The use of non-system or unauthorized routes is adversely affecting the quality of fisheries habitats in many parts of the project area. (page 279).

We have been concerned about increasing use of off-highway vehicles (OHVs) and all-terrain vehicles (ATVs) that occurs away from roads and trails, including steep slopes, fragile soils, wet meadows, and around water bodies. Off-road violations often occur due to lack of policing and enforcement. Demand for recreation opportunities on public land may be exceeding the capability of the land and resources to provide recreation in a manner that is consistent with resource and ecosystem protection.

Executive Orders 11644 and 11989, "Use of Off-Road Vehicles on Public Lands," require agencies to ensure that the use of off-road vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands. OHV/ATV use in environmentally sensitive areas can cause erosion, rutting, transport of sediment to streams, destruction of riparian and wetland habitat, adverse effects to wildlife habitat and security, and spread noxious weeds. We have concerns that damage to wetlands and aquatic habitat, including riparian vegetation may be occurring from illegal motorized use or user-built access roads and associated campsites.

It is important that appropriate limitations and restrictions be placed on off-road motorized vehicle use to protect against erosion, transport of sediment to streams, spread of noxious weeds, and degradation of terrestrial and aquatic habitat by off-road motorized vehicle use, especially in environmentally sensitive areas such as wetlands; and there is a need for additional law enforcement personnel to handle the vast increase in motorized use on the Forest.

We support closing, obliterating and revegetating illegally user created non-system roads that cause resource damages, and restricting cross-country travel off designated routes. User created roads created by cross-country travel should be obliterated and revegetated,

with their closures policed and enforced. We support closing National Forests to motorized off-road use unless lands are specifically designated for motorized use. This reverses the situation, in which all lands are open unless posted with closure signs. Closing lands for motorized use unless they are designated as open to such use reduces uncertainty about allowable uses, and removes the incentive for illegal motorized recreationists to tear down and remove signs.

The Travel Management Plan for the Gallatin National Forest DEIS summarized past violations and developed enforceability criteria for alternatives so that alternatives could be evaluated for their enforceability (enforceability ratings were assessed for each alternative). The Gallatin Travel Plan included a commitment to develop a Travel Plan implementation enforcement strategy that will be tiered to their Gallatin Forest Law Enforcement Plan, with the Enforcement Plan updated annually with specific program emphases, personnel needs, costs and fund sources. We recommend that the Lewis & Clark National Forest consider development of an enforcement strategy and a road and trail use inspection and enforcement program to assure that ATVs, OHVs and snowmobiles will not violate motorized vehicle access limitations, and damage aquatic and terrestrial resources.

Adequate enforcement funding is needed to have an effective policing and enforcement program that assures that motorized access does not cause damage in restricted areas. We encourage the Lewis & Clark National Forest to develop and fund an effective enforcement strategy, to assure that OHVs and snowmobiles will not violate motorized vehicle access limitations. A Travel Management Plan is of little consequence unless it is enforced. Are there adequate funds for enforcement and for monitoring off-road vehicle use to identify resource impacts? It is also important that adequate resources be devoted to user education and signage to promoting public understanding of travel restrictions and improve compliance with the Travel Plan.

We also agree that educational efforts to improve voluntary compliance with travel management restrictions is more desirable than apprehending violators (page 49), and support proposals to provide clear, understandable travel maps to the public, and to improve trails signs, and provide educational efforts for the public.

10. We appreciate the discussion of outdoor recreation in the DEIS (pages 50 to 127), including the many tables showing motorized and non-motorized recreational opportunities for the alternatives in the Castles, Crazy and Little Belt Mountains. While we recognize that a balance of motorized and non-motorized recreational opportunities need to be provided, we have concerns that motorized uses contribute more to resource and environmental damage than non-motorized uses. Motorized uses push wildlife onto smaller and smaller patches of habitat; reducing migration corridors; increasing adverse effects to wildlife habitat and security; causing soil erosion and adverse effects to water quality and aquatic habitat and fisheries; spreading weeds; and increasing opportunity for

vandalism of historic properties.

Motorized uses also have the potential to degrade the quality of experience and solitude desired by non-motorized uses (e.g., hiking, viewing natural features and wildlife). It appears that the existing condition provides very little opportunity for non-motorized recreation to occur without effects of motorized uses. The percentage of motorized to non-motorized trails in the Little Belts, Castles and Crazies is 89/11%, 82/18%, and 99/1%, respectively. We do not believe that recreation should be so skewed toward motorized uses that result in degradation of the quality of non-motorized uses such as viewing wildlife or natural features in solitude. We believe motorized activities should be limited so that they only occur in a manner and location that minimize effects to other public uses, and are consistent with protection of natural features, wildlife, and other resources. Accordingly, we support Summer-Alternatives 5 and 4, and Winter Alternatives 3 and 2 (in that order) since these alternatives provide greater limitations on motorized uses to allow greater levels of protection for wildlife, natural features, and other resources that are used by the public.

## Airfields

11. The DEIS includes good discussion of issues and trade-offs associated with development of backcountry airstrips on National Forest land (pages 72 -78). Presently there are no backcountry airstrips on National Forest land in the Little Belt, Castle or Crazy Mountains (page 75). Summer - Alternatives 3 and 5 propose four and two airstrips in the Little Belt Mountains, respectively, while Summer - Alternative 4 does not propose any airstrips. The DEIS states that the road maintenance budget would be used to maintain new airstrips (page 77). As indicated in comment #3 above, we are concerned that only 3.3 to 9.2% of the roads in the analysis area have been maintained yearly since 2000, and the risk to water quality of perennial streams from roads and trails receiving little or no maintenance is moderate or greater. The DEIS indicates that there is inadequate funding and resources to properly maintain roads and keep them in fair to good condition to minimize erosion and water quality and fisheries impacts.

“Maintenance work and enforcement actions have been unable to keep up with the need, and as a result, drainage features are lacking or not functioning properly” (page 279)

“It is likely that many roads and trails will continue to impact water quality and fish habitat, and the maintenance backlog will persist, given expected funding levels” (page 278)

The DEIS indicates that road maintenance funding may even decrease in the future (page 172). We do not support development of new airstrips that would compete with roads for already limited and inadequate road maintenance funding. We do not believe limited

road maintenance funding should be diverted further to support development of backcountry airstrips when roads cannot be adequately maintained to keep them from delivering excess sediment to area streams.

The DEIS also states that there are many public airport facilities at Bozeman, Great Falls, Harlowton, Helena, Lewistown, Livingston, Ryegate, Stanford, Townsend, and White Sulphur Springs, and pilots wishing to recreate on the National Forest presently can land at these airports and travel by vehicle to the Forest. Since there are public airstrips available in nearby communities to allow access of pilots to the Forest, and only a limited amount of the public would gain easier forest access from backcountry the airstrips, we do not believe there should be a high priority for development of backcountry airstrips.

We are also concerned about effects of aircraft noise and increased recreational access and use promoted by increased aircraft activity, particularly upon wildlife and on the solitude and quiet nature of the forest. We also have concern that many mountain valleys and meadows that provide flat topography suitable for backcountry airstrips also provide important meadow habitat, including wetlands, which could be adversely affected by airstrip development.

We did not see information about the natural characteristics and existing conditions at the proposed sites for airstrip development, nor did we see disclosure of more site-specific environmental effects of airstrip development that would occur with Summer - Alternatives 3 and 5 (e.g., effects upon existing quality and capacity of wildlife habitat, particularly meadow and wetland habitats; wildlife displacement, fragmentation, security; recreational uses, recreational characteristics such as solitude, wilderness characteristics, etc.). We believe the final EIS should include improved analysis and disclosure of site-specific environmental effects of airstrip development.

We also note that if airstrip development involves potential discharges of dredged or fill material into waters of the United States, including wetlands, the U.S. Army Corps of Engineers should be contacted to determine applicability of 404 permit requirements to specific airstrip construction activities in or near streams or wetlands (e.g., contact Mr. Allan Steinle of Corps of Engineers Montana Office in Helena at 406-441-1375). For non-water dependent activities, such as airstrips, alternatives to siting in wetlands are presumed to be available unless demonstrated otherwise. The 404(b)(1) Guidelines (found at 40 CFR Part 230) and Corps of Engineers, EPA, and USFWS Wetland Specialists should be consulted to provide specific environmental criteria and guidance when USFS projects need a 404 permit. See Corps of Engineers Montana Regulatory Office website for further information, <https://www.nwo.usace.army.mil/html/od-rmt/mthome.htm>.

We also note that if airstrip development could be related to additional road removals, with overall reduction in adverse environmental effects, we would be more in support of

airstrip development (i.e., convert road access to aerial access with less ground disturbance and removal and obliteration of roads).

## Wetlands

12. EPA considers the protection, improvement, and restoration of wetlands to be a high priority. Wetlands increase landscape and species diversity, and are critical to the protection of designated water uses. Possible impacts on wetlands include damage or improvement to: water quality, habitat for aquatic and terrestrial life, channel & bank stability, flood storage, ground water recharge and discharge, sources of primary production, and recreation and aesthetics. Road construction and motorized uses may lead to erosion and sediment production that may affect wetland integrity and function.

Executive Order 11990 requires that all Federal Agencies protect wetlands. In addition national wetlands policy has established an interim goal of **No Overall Net Loss of the Nation's remaining wetlands**, and a long-term goal of increasing quantity and quality of the Nation's wetlands resource base (see "Presidential Wetland Policy of 1993" at website, <http://www.usace.army.mil/inet/functions/cw/cecwo/reg/aug93wet.htm> ). Wetland impacts should be avoided, and then minimized, to the maximum extent practicable, and then unavoidable impacts should be compensated for through wetland restoration, creation, or enhancement.

The FEIS should assess impacts of proposed travel management on wetlands, and explain how impacts, if any occur, will be mitigated (i.e., mitigation means sequence of avoidance, minimization, rehabilitation, and compensation for unavoidable impacts). Wetlands should be included within designations of Riparian Habitat Conservation Areas (RHCAs), so that roads and trails avoid impacts to wetlands. It is important that appropriate limitations and restrictions be placed on off-road motorized vehicle use to protect against degradation of wetlands and other sensitive areas by off-road motorized vehicle use.

## Snowmobiles and Winter Use

13. Snowmobile noise can have adverse effects upon wildlife and solitude characteristics, and snowmobile air pollutant emissions can be an environmental concern. Much information is available regarding snowmobile noise and pollutant emissions and environmental effects. Most snowmobiles (and ATV's) used in mountain environments utilize 2-stroke engines, which mix the lubricating oil with the fuel and both are expelled in the exhaust. These engines allow up to one third of the fuel/oil mixture delivered to the engine to be passed into the environment virtually unburned. As stated in the U.S. Department of the Interior document, "Air Quality Concerns Related to Snowmobile Usage in National Parks", Feb. 2000, hydrocarbon emission rates from 2-stroke snowmobile engines are about 80 times greater than those found in a 1995-96 automobile

engines. A majority of these hydrocarbons are aromatic hydrocarbons, including polyaromatic hydrocarbons, which are considered to be the most toxic component of petroleum products, and aromatic hydrocarbons are also associated with chronic and carcinogenic effects.

The actual and potential environmental and human health effects from snowmobile emissions of noise, hydrocarbons and carbon monoxide are probably best summarized in the Park Service's recent Final EIS for winter use management in Yellowstone and Grand Teton National Parks ( <http://www.nps.gov/grte/winteruse/update.htm> ). Additionally, there are numerous studies underway to more clearly determine what environmental effect these pollutants may have. Although the analysis area has relatively good air pollutant dispersion characteristics, EPA recommends that the Lewis and Clark National Forest monitor the results of these studies and consider the results when evaluating future management direction for winter snowmobile use.

Increased snowmobile pollutant emissions could be particularly problematic in areas where snowmobiles congregate (e.g., trailheads) and during short periods of poor air dispersion (e.g., valleys where frequent inversion conditions may trap air pollutants). Some visitors and employees at Yellowstone National Park have experienced health effects from over-snow vehicle emissions even though Ambient Air Quality Standards have not been exceeded. In general, snowmobile emissions are worst when the engine is first started and hasn't yet warmed. For this reason trailheads are areas where this concern is greatest. If there are heavily used trailheads with large numbers of snowmobiles where stable air is present, the Forest should consider placing signs or implementing patrols on heavy use mornings to encourage users to limit idling time. The EPA also encourages use of the newer less polluting 4-stroke engine snowmobiles (e.g., <http://www.deq.state.mt.us/CleanSnowmobile/solutions/engine/four-stroke.asp>).

14. Also, some Forests have policies that prohibit off-trail snowmobile use until at least 6 inches of snow has accumulated. Snow in alpine areas is highly susceptible to wind movement which can leave bare or thinly covered areas that would be difficult or impossible to avoid given the speed of snowmobiles. Plant communities, biodiversity and water quality in higher elevation shallow-soil ecosystems may be extremely vulnerable to soil or vegetation disturbance. The impact of a road cut, a pioneered trail or other disturbance, can extend well downslope of the disturbed area, and adversely affect plant communities, biodiversity and water quality. Fragile alpine vegetation may need protection against such use, since impacts to some fragile alpine areas for all practical purposes may be irreversible. We suggest ending the snowmobiling season early enough (e.g., April 15) to reduce potential snowmobile use in marginally snow covered areas that could result in damage to fragile alpine vegetation. We note that climatic changes have been occurring that may result in earlier seasonal snowmelt than occurring historically. Are any measures proposed to protect fragile alpine vegetation from off-trail snowmobile use?

## Monitoring

15. There should be an effective program for monitoring, evaluation and adaptive management to assure that effects of travel management are identified and management modified where necessary to mitigate adverse effects. The brief discussion of monitoring in the DEIS (page 26) states that monitoring could be used to evaluate the physical, biological, social and economic effects of implementing alternatives, and references Appendix E, Project Monitoring and Evaluation, for potential criteria for evaluating the effects of implementation. Appendix E indicates that the monitoring items in the Appendix are relevant for travel planning. The DEIS, however, does not appear to clearly state a commitment or assurance that adequate monitoring will be conducted to identify effects from travel management or a commitment that effects of travel management will be mitigated with the monitoring and adaptive management program.

EPA believes monitoring and evaluation should take place with an adaptive management approach for all resource conditions. It is through the iterative process of setting goals and objectives, planning and carrying out travel management, monitoring impacts of travel management, and feeding back monitoring results to managers so they can understand effects and make needed adjustments to mitigate effects, that adaptive management works. We see no clear commitment to such an approach in the Little Belt, Castle, and North Half Crazy Mountains Travel Management Plan.

Appendix E indicates that damage from off-road vehicle use and Travel Plan effectiveness can be monitored, but does not appear to commit to such monitoring or provide much detail in regard to how adaptive management will be used to minimize resource impacts. Similarly Appendix E indicates that effects to aquatic habitat condition and watershed condition can be monitored, but there is no assured commitment that such effects will be monitored, or that effects to aquatic habitat and watershed conditions occurring as a result of motorized uses that are detected will be mitigated. We believe the FEIS should describe in greater detail the monitoring and adaptive management program that will be used to assure that effects of travel management will be detected and adequately mitigated.

We recommend development of criteria or thresholds that are protective of resources (e.g., for aquatic and wildlife habitat) that represent the minimum desired conditions for each resource affected by travel management in the Little Belt, Castle, and North Half Crazy Mountains analysis area. These criteria can serve as “trigger points” that when reached trigger conduct of additional management responses, such as more detailed monitoring and evaluation, conduct of additional planning or mitigation. Monitoring and evaluation of resource impacts relative to threshold values followed by subsequent management responses when thresholds are exceeded are what makes adaptive management programs work.

We have particular concerns regarding potential effects of off-road motorized uses on water quality, aquatic habitat and fisheries, as well as other resources such as wildlife habitat, sensitive plants, etc., and it would be appropriate to develop monitoring components to assess travel management impacts on these resources. We also recommend that mechanisms for public disclosure of the monitoring analysis and the decisions for the Travel Plan be provided. The roles of the Forest Service, other Agencies, independent science, and the public should be identified. The FEIS should discuss the future decision points in this adaptive process that may require additional NEPA analysis. The FEIS should also provide assurance that funding is available for monitoring and adaptive management.

### **Roadless/Wilderness**

16. The DEIS states that there are 17 inventoried roadless areas with the analysis area, including the Middle Fork Judith Wilderness Study Area (page 128). Wilderness study areas and roadless areas often provide population strongholds and key refugia for listed or proposed species and narrow endemic populations due to their more natural undisturbed character.

EPA supports protection of the pristine character and integrity of the few remaining minimally disturbed roadless and wilderness study areas to prevent further fragmentation and degradation of wildlife habitat, and to maintain or restore solitude and primitive recreation characteristics in such areas. We have concerns about allowing motorized recreation within such areas that may have potential adverse effects on wilderness and roadless values, especially in recognition of trends of increasing public use of ORV's that can access previously inaccessible lands and cause increased damage to resources. One of the National Strategic Goals regarding the use of motorized equipment in wilderness (FSM 2326.02) is to "Exclude the sight, sound, and other tangible evidence of motorized equipment or mechanical transport within wilderness, except where they are needed and justified." We also believe provisions of access to roadless lands should be limited to where such access is absolutely needed and justified. It is important that our last remaining wildlands remain unspoiled and natural in order to provide clean water and air, sanctuary for native wildlife and plant species, and opportunities for low impact human recreation.

Table III-37 (page 135) shows the status of roads and trails within the Middle Fork Judith Wilderness Study Area and Roadless Area. Table III-46 (page 148) shows road miles open to motorized use within roadless areas, and Table II-47 (page 150) compares motorized and non-motorized trails within roadless areas by alternative. We encourage the Lewis & Clark NF to restrict motorized use in remaining roadless and wilderness study areas to protect the pristine characteristics of such areas. We support closure of motorized routes created by cross-country travel in such areas, with closures policed and enforced. We support the features of Summer-Alternative 4 that would result in the

fewest open road miles within roadless areas (page 149).

## Vegetation

17. The DEIS indicates that there are currently 1,423 acres infested with noxious weeds on 445 sites in the Little Belt, Castle, and North Half Crazy Mountains area, with the majority of infestations along main access routes and small unit with or adjacent to National Forest (page 181). The DEIS also says that there is insufficient data to draw a definite conclusion that any alternative would have a significant difference on the spread of noxious weeds based only on the type of use allowed under that alternative (page 184). We agree with the Forest Service publication Stemming the Invasive Tide which states: “The problem of noxious weeds and non-native invasive species threatens every aspect of ecosystem health and productivity. The increasingly devastating effects include reducing biological diversity, impacting threatened and endangered species and wildlife habitat, modifying vegetative seral stages, changing fire and nutrient cycles, and degrading soil structure.” Weeds can out-compete native plants and produce a monoculture that has little or no plant species diversity or benefit to wildlife.

Weed seeds are transported by wind and water, animal fur, feathers and feces, but primarily by people. **The greatest vector for spread of weeds is through motorized vehicles—cars, trucks, ATVs, motorcycles, and even snowmobiles.** A single vehicle driven several feet through a knapweed site can acquire up to 2,000 seeds, 200 of which may still be attached after 10 miles of driving (Montana Knapweeds: Identification, Biology and Management, MSU Extension Service.) We believe an effective noxious weed control program must include restrictions on motorized uses, particularly off-road uses. Off-road vehicles are designed to, and do, travel off-trail, disturbing soil, creating weed seedbeds, and dispersing seeds widely. Weed seed dispersal from non-motorized travel is of lesser concern because of fewer places to collect/transport seed, and the dispersal rate and distances along trails are less with non-motorized travel.

EPA supports the need to minimize noxious weed infestation. Noxious weeds are a great threat to biodiversity. Weeds can out-compete native plants and produce a monoculture that has little or no plant species diversity or benefit to wildlife. Noxious weeds tend to gain a foothold where there is disturbance in the ecosystem, such as road construction and where off-road vehicles disturb soils.

We believe that alternatives that restrict motorized uses such as Summer-Alternatives 4 and 5 would have a lesser potential for spreading of noxious weeds than Summer-Alternatives 1 and 3. We believe the Lewis & Clark NF should consider restrictions on vehicles to reduce effects of motorized uses on natural resources including potential for further weed infestation of the Little Belt, Castle, and North Half Crazy Mountains area. We encourage limiting motorized uses to designated roads and trails to reduce threat of weed spread, and limitations on motorized use in roadless areas, which are often

reservoirs of native plants.

18. It is important that strategies for prevention, early detection of invasion, and control procedures for weeds be developed. EPA encourages efforts to develop and implement an Integrated Pest Management Program consisting of prevention, education, biological control, herbicide control, mechanical control, and monitoring to control noxious weeds. All users of the Forest should be educated about the threat of noxious weeds, and about measures to reduce weed threats. As you know weed seeds can be carried from a source area by the wind, wildlife or pack animals, on equipment or vehicle tires and tracks, by water, and on the boots of workers, so care should be taken to implement control procedures in all source areas to avoid spread to unaffected areas. For your information, measures we often recommend at the project level for preventing spread from source areas to uninfested areas include:

- ▶ Ensure that equipment tracks and tires are cleaned prior to transportation to an uninfested site.
- ▶ Focus control efforts at trail heads and transportation corridors to prevent tracking of seed into uninfested areas.
- ▶ Attempt to control the spread from one watershed to another to reduce water as a transport vector.
- ▶ If a localized infestation exists and control is not a viable option, consider rerouting trails/roads around the infestation to reduce available vectors for spread.
- ▶ Establish an education program for industrial and recreational users and encourage voluntary assistance in both prevention and control activities.
- ▶ Reseed disturbed sites as soon as possible following disturbance.

We also note that hay can be a source of noxious weed seed. Hay/straw is used as mulch to slow erosion and encourage seed germination, and used to feed horses in hunting and recreation camps, and as wildlife feed during harsh winters. The Federal Noxious Weed Act of 1974 prohibits the interstate transport of noxious weeds or weed parts, such as seed. Cattle that are released on grazing allotments or horses used on public lands can transport undigested weed seed and spread it in their manure. Weed free seed forage should be required for backcountry users.

## **Wildlife**

19. The DEIS reports that the Little Belt, Castle, and North Half Crazy Mountains serves as habitat for the threatened gray wolf, bald eagle, and Canada lynx, and many sensitive species (pages 230-224). We believe the Travel Plan should avoid adverse impacts upon species of special concern, and contribute to recovery of listed species, and should maintain and protect high quality wildlife habitat and linkage corridors for productive and diverse populations of wildlife species (species viability). Wildlife connectivity and security should be maintained or improved and wildlife fragmentation and displacement

should be reduced.

It is known that motorized use increases wildlife encounters with humans which can result in habitat degradation, displacement, increased wildlife mortality, changes in behavior, increased stress, and reduction of reproductive success. We support adequate limitations on motorized travel and road density for protection of wildlife habitat and security, and key corridors for wildlife migration.

The analysis and disclosure of the effects of alternatives on wildlife habitat and species shows that Summer-Alternative 5 would result in the lowest open road densities, and result in a significant decrease in open road density disturbance effect on wildlife in general and big game specifically over the existing condition (page 244). Summer-Alternatives 1 and 3 appear to have the less potential to reduce adverse effects to wildlife habitat, fragmentation and connectivity, and species viability. Winter-Alternatives 3 and 2 appear to provide for greater closure of wildlife habitat to snowmobiles, including habitat of the threatened Canada lynx than the no action alternative. Accordingly (as stated earlier) we believe Summer-Alternatives 5 and 4, and Winter-Alternatives 3 and 2, in that order, should be favored during decision making for selection of a preferred alternative.

20. We are pleased that a Biological Assessment regarding effects to threatened and endangered species will be prepared for the preferred alternative in the FEIS (page 224). It is important that a Biological Assessment and the associated U.S. Fish & Wildlife Service Biological Opinion or formal concurrence be carried out during the NEPA process for the following reasons:
- (1) NEPA requires public involvement and full disclosure of all issues upon which a decision is to be made;
  - (2) The CEQ Regulations for Implementing the Procedural Provisions of NEPA strongly encourage the integration of NEPA requirements with other environmental review and consultation requirements so that all such procedures run concurrently rather than consecutively (40 CFR 1500.2(c) and 1502.25); and
  - (3) The Endangered Species Act (ESA) consultation process can result in the identification of reasonable and prudent alternatives to preclude jeopardy, and mandated reasonable and prudent measures to reduce incidental take. These can affect project implementation.

Since the Biological Assessment and EIS must evaluate the potential impacts on listed species, they can jointly assist in analyzing the effectiveness of alternatives and mitigation measures. EPA recommends that the final EIS and Record of Decision not be completed prior to the completion of ESA consultation. If the consultation process is treated as a separate process, the Agencies risk USFWS identification of additional significant impacts, new mitigation measures, or changes to the preferred alternative. If

these changes have not been evaluated in the final EIS, a supplement to the EIS would be warranted.

#### Air Quality

21. We did not see analysis and discussion of potential air quality effects associated with travel management, however, we recognize that all the action alternatives propose fewer miles of motorized roads/trails than no action, and the project area is known to have good air dispersion characteristics, so that impacts of travel within the analysis area roads/trails and on the air quality are likely to be small. We anticipate that the Travel Plan is likely to be consistent with National Ambient Air Quality Standards (NAAQS) and other applicable air quality requirements, but we recommend that the FEIS identify Travel Plan consistency with NAAQS and other applicable air quality requirements.