



Department of  
Agriculture

Forest Service

February 2009



# Draft Environmental Impact Statement

## Black Hills National Forest Travel Management Plan

Black Hills National Forest  
Custer, South Dakota

# SUMMARY



The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

**Black Hills National Forest Travel Management Plan  
Draft Environmental Impact Statement**

**Custer, Fall River, Lawrence, Meade and Pennington Counties, South Dakota  
and Crook and Weston Counties, Wyoming**

**Lead Agency:** USDA Forest Service  
Black Hills National Forest

**Responsible Official:** Craig Bobzien, Forest Supervisor  
1019 N 5<sup>th</sup> Street, Custer, SD 57730

**For Information Contact:** Tom Willems, Travel Management Planner  
(605) 673-9217

**Abstract:** This draft environmental impact statement (DEIS) documents the analysis of five alternatives to manage motorized vehicle travel on the Black Hills National Forest (the Forest). This DEIS was prepared following extensive public comment including collaboration with the National Forest Advisory Board, scoping, several open houses, and public meetings and workshops. Alternative A, no action, proposes a continuation of the current condition. Alternative B, the modified proposed action, would develop a motorized recreational system, while considering effects to natural and cultural resources. It would allow public motorized vehicle travel on 4,129 miles of routes, and limited motorized cross-country travel for game retrieval and dispersed camping on 179,000 acres. Alternative C would maximize motorized road and trail use. It would allow motor vehicle travel on 4,353 miles of routes, and limited motorized cross-country travel for game retrieval and dispersed camping on 473,500 acres. Alternative D would provide a smaller motorized transportation system with fewer motorized trails. It would allow public motorized vehicle travel on 3,197 miles of routes and prohibit motorized cross-country travel. Alternative E represents the minimum action required to designate a motorized travel system and comply with the Travel Management Rule. It would allow motorized vehicle travel on 3,776 miles of routes and prohibit motorized cross-country travel. At this time, the Forest Service has not identified a preferred alternative.

It is important that reviewers provide their comments at such times and in such a way that they are useful to the Agency's preparation of the EIS. Therefore, comments should be provided prior to the close of the comment period and should clearly articulate the reviewer's concerns and contentions. The submission of timely and specific comments can affect a reviewer's ability to participate in subsequent administrative review or judicial review. Comments received in response to this solicitation, including names and addresses of those who comment, will be part of the public record for this proposed action. Comments submitted anonymously will be accepted and considered; however, anonymous comments will not provide the respondent with standing to participate in subsequent administrative or judicial reviews.

**Send Comments to:** BHNH Travel Mgmt Plan DEIS  
P.O. Box 162909  
Sacramento, CA 95816-2909  
E-mail to: [BHNHComments@fscomments.org](mailto:BHNHComments@fscomments.org)  
Fax to: 916-456-6724

**Date Comments Must Be Received:** May 4, 2009

## Commonly Used Acronyms and Abbreviations

ATV – All-Terrain Vehicle  
BMP – Best Management Practice  
CEQ – Council on Environmental Quality  
CFR – Code of Federal Regulations  
CMUA – Concentrated Motorized Use Area  
CWA – Clean Water Act  
DBH – Diameter at Breast Height  
DEIS – Draft Environmental Impact Statement  
EIS – Environmental Impact Statement  
EPA – Environmental Protection Agency  
FEIS – Final Environmental Impact Statement  
FS – Forest Service  
FSH – Forest Service Handbook  
FSM – Forest Service Manual  
GIS – Geographic Information System  
HRV – Historic Range of Variability  
ID Team – Interdisciplinary Team  
LMP – Land Management Plan (Forest Plan)  
MIS – Management Indicator Species  
MVUM – Motor Vehicle Use Map  
NEPA – National Environmental Policy Act  
NFAB – National Forest Advisory Board  
NFMA – National Forest Management Act  
NFS – National Forest System  
NRCS – Natural Resource Conservation Service  
NVUM – National Visitor Use Monitoring  
NWI – National Wetlands Inventory  
ORV – Off-road Vehicle  
OHV – Off-highway Vehicle  
R2 – Region 2 (Rocky Mountain Region) of the Forest Service  
RMBO – Rocky Mountain Bird Observatory  
ROS – Recreation Opportunity Spectrum  
SHPO – State Historic Preservation Office  
SIO – Scenic Integrity Objectives  
SOLC – Species of Local Concern  
USC – United States Code  
USDA – United States Department of Agriculture  
USDI – United States Department of the Interior  
UTV – Utility Terrain Vehicle  
WCPH – Watershed Conservation Practices Handbook  
WIZ – Water Influence Zone

## Summary

In November 2005, the Forest Service issued the final Travel Management Rule (the Rule, or travel management rule - Federal Register, 70FR68264). This Rule specifically requires that any roads, trails, and areas that are to be open to motor vehicle use on a National Forest be officially designated. The Rule also directs that designations be made by class of vehicle and by season of use, where appropriate and necessary. Motor vehicle use would be prohibited on routes and areas not designated open to use.

To comply with the Rule, the Forest Service proposes to designate certain roads and trails open to motorized travel on the Black Hills National Forest. Class of vehicle and season would be assigned to the designated roads or trails. Motorized travel, as allowed on designated routes and areas, would be depicted on a motor vehicle use map (MVUM). The motor vehicle use map would be the primary tool used to determine compliance and enforcement of motorized vehicle use on the ground. Existing Forest Service system routes and other routes not designated on the motor vehicle use map would be legally closed to motorized travel.

The designated route system would reflect current and anticipated travel needs, offer a variety of recreational opportunities, and provide for administrative access, while balancing the physical, biological, and social attributes of the Forest. The area affected by the proposal includes roughly 1.2 million acres of National Forest System (NFS) lands managed by the Black Hills National Forest, within the proclaimed Forest boundary. The decisions on motorized travel would not include snowmobiles or existing winter-use recreation or South Dakota snowmobile trails.

This action is needed to:

- Identify an official travel system and update the Forest travel map;
- Develop a transportation system to meet the increasing demand for recreational travel opportunities and to provide a range of quality experiences for a wide variety of Forest users;
- Reduce adverse impacts caused by unmanaged cross-country and road and trail usage in order to maintain and conserve the condition of ecosystems and watersheds;
- Specify roads, trails and areas open to motorized use; and,
- Closely align travel and recreation opportunities offered to the public with the Forest's management capability.

Based upon the analysis of the effects of the alternatives as disclosed in the final EIS and in the project record, the Forest Supervisor as the responsible official would make the following decisions.

- Whether to designate certain routes, trailheads and other facilities as open to the public for motorized use.
- Whether to authorize improvements to certain routes to allow their use, and if so, the nature of those improvements.
- Whether to allow motorized game retrieval and motorized dispersed camping or off-road parking.
- The season or types of public motorized use allowed for those routes open to motorized travel.

- Whether to amend existing Forest Plan direction to allow implementation of the selected travel management alternative.

To develop this proposal, the Forest worked closely with the National Forest Advisory Board (NFAB), which developed a number of recommendations for a motorized travel system. The Forest also consulted many user groups and individuals via public meetings and workshops, and questionnaires. During the scoping process, the Forest received comments on the proposed action from the public, Indian tribes and State and Federal agencies. The Forest evaluated these comments and developed four issue statements to guide development of alternatives to the proposed action. The significant issues used to develop alternatives and analyze effects are:

- 1) effects on natural and cultural resource effects;
- 2) effects on recreational opportunities;
- 3) effects of transportation system design on management capabilities; and
- 4) social and economic concerns.

These issues led the agency to develop the following range of alternatives.

**Alternative A - No Action.** Alternative A would continue the current situation. Current management plans would continue to guide project area management. Cross-country motorized use would continue on 864,000 acres in an unregulated manner. The official motorized trail system would consist of the existing 36 miles of trails. No motor vehicle use map would be issued. User compliance and law enforcement would continue to be difficult without an approved motor vehicle use map. It is expected that motorized cross-country travel and route proliferation would continue to occur in areas of the Forest. Resource damage and conflicts with nonmotorized recreationists would continue to take place, and motorized users would not enjoy a planned travel system designed to meet their needs.

**Action Alternatives.** Alternatives B, C, D, and E would comply with the Travel Management Rule and meet the purpose and need to designate selected roads and trails open to motorized vehicle travel on lands administered by the Forest. Designations would be made by class of vehicle and by season. A motor vehicle use map would be published depicting designated roads and trails. All of these alternatives would amend the Forest Plan to allow motorized use levels and to specify that motorized use must be conducted in compliance with the motor vehicle use map.

A major consideration in this analysis is motorized-mixed use, or the use of both highway-legal and non-highway-legal motor vehicles on NFS roads. Alternatives B, C and D would pre-empt (not be in accord with) South Dakota State law, which currently requires that only highway-legal motor vehicles may use public roads. Alternatives B, C and D would comply with Wyoming State law by enrolling all designated roads in the Wyoming Off-Road Recreational Vehicle program. All alternatives would be consistent with laws in both states requiring licensing of vehicle operators.

**Alternative B – Modified Proposed Action.** Alternative B represents the original proposed action. It has been modified to correct data errors, but the intent of this alternative is the same as the original proposed action on which the public was asked to comment. This alternative would meet most NFAB recommendations to provide an active (designed) travel system while protecting resources and reducing conflicts with other users. It would provide 3,466 miles of roads including 2,226 miles of motorized-mixed-use roads; boost motorized trails to 663 miles; and limit cross-country motorized use to 179,000 acres only for the

purposes of game retrieval (elk only) or dispersed camping. The motor vehicle use map would make user compliance and law enforcement easier. Resource damage and conflicts with nonmotorized recreationists would be reduced, and motorized users would find a planned travel system designed to meet their needs.

**Alternative C.** Alternative C would provide the largest motorized travel system. It would provide 3,582 miles of roads including 2,878 miles of motorized-mixed-use roads; boost motorized trails to 771 miles; and limit cross-country motorized use to 473,500 acres only for the purposes of game retrieval (elk and deer) or dispersed camping. The motor vehicle use map would make user compliance and law enforcement easier. Higher user numbers could bring more business to adjacent communities, and motorized users would find a planned travel system designed to meet their needs.

**Alternative D.** Alternative D would provide the smallest motorized travel system. It would reduce impacts of motorized travel on natural and cultural resources, reduce conflicts with nonmotorized recreationists, and would promote a safer environment for motorized users. It would provide 2,877 miles of roads including 580 miles of motorized-mixed-use roads; and 320 miles of motorized trails, and prohibit motorized cross-country use for any reason, with exceptions. The motor vehicle use map would make user compliance and law enforcement easier. Resource damage, conflicts with nonmotorized recreationists and system maintenance costs would be reduced, and motorized users would find a planned travel system designed to meet their needs.

**Alternative E.** Alternative E would take the minimum actions necessary to comply with the Travel Management Rule. It would provide a motor vehicle use map designating the existing travel system. Alternative E would provide 3,740 miles of roads including 160 miles of motorized-mixed-use roads; and 36 miles of motorized trails. It would prohibit motorized cross-country use for any purpose, with exceptions. The motor vehicle use map would make user compliance and law enforcement easier. Resource damage, conflicts with nonmotorized recreationists and maintenance costs would be reduced. Motorized users would find a minimal planned travel system designed to meet their needs.

## Major Conclusions

### Issue 1 – Effects on Natural and Cultural Resources

**The soil resource** would see the most risk of disturbance from cross-country motorized use under Alternative A, followed by Alternatives C, B, D, and E. Reducing the area open to motorized cross-country use would also give the greatest benefit to retaining or improving vegetative productivity of the soil resource. Levels of road and trail miles open to motorized use could indirectly affect soils through more OHV parking on the edge of the road or trail, more route maintenance needed, and more time needed for recovery. Alternatives C, B, and A would have the greatest effects, with Alternatives D and E less.

**Concerning hydrology and fisheries**, the alternatives with the most stream crossings and roads close to streams would contribute the most sediment, but generally, all action alternatives are similar in effects to each other and would have less adverse effects than the current situation (Alternative A). Alternatives B, C, and E reduce the number of water crossings by almost 70 percent, and Alternative D by 75 percent. With respect to miles of roads and trails within 30 and 119 feet of perennial streams, Alternatives B and C reduce the mileage by over 50 percent, and Alternatives D and E by over 60 percent.

Designation of new trailheads, game retrieval, and dispersed camping would not be likely to have adverse effects on the water resource if design criteria are followed. Alternatives with more acreage open to some form of cross-country use would potentially have more effects on wetlands, with Alternative A having the most acreage open to this use. Alternatives C and B have less acreage open, respectively, and both would limit motorized cross-country use to game retrieval and dispersed camping only. Alternatives D and E would have by far the least acreage open to this use.

**Wildlife habitat and species** would see a net benefit from implementing any of the action alternatives due to the closing of areas to motorized cross-country travel. Alternative D would be the most beneficial, followed by Alternatives E, B, and C. The effects of motorized game retrieval in Alternatives B and C could be expected to be minor. Alternative C would have the most road and trail miles open to motorized use, and would be expected to displace wildlife more than any other alternative, followed by Alternatives B, A, E, and D.

**Regarding effects to botanical and rare plant values**, implementation of any of the action alternatives would be expected to have a net positive effect on native plant species in several habitat types due to the amount of area that would be closed to motorized cross-country travel. The effects of motorized cross-country game retrieval on plant species in Alternatives B and C is expected to be minor since the use would occur outside the reproductive season for most species. Alternative D would have the lowest number of route miles in hardwood habitat and within 400 feet of riparian areas, and thus show the greatest benefit; Alternatives B and C would have the highest number of route miles and show the least benefit; and Alternatives A and E would be between these. In spruce habitat, Alternative D would have the lowest number of route miles, decreasing about 17 percent from current levels; Alternatives A, B, C and E would be about equal in route mileage. All species of sensitive plants would be expected to persist in the project area if design criteria are implemented to avoid known occurrences. The action alternatives would provide a net benefit to these species by reducing or eliminating motorized cross-country travel.

With respect to **effects on the range resource, livestock grazing, and the potential for noxious weed spread**, the main indicators are total miles of road and consequent route density, and acreage open to motorized cross-country use. Alternative A contains the highest concentration of routes, including unauthorized routes, and allows unrestricted access to the greatest acreage. This contributes to matting down or removing area of vegetation, harassment of livestock, and potential for weed spread. Alternatives C, B, E, and D, in that order, would reduce the number and mileage of motorized routes and acreage open to motorized cross-country use. Alternatives D and E would show the greatest benefits due in large part to their restrictions on motorized cross-country use.

Alternative A would have the most **effects to cultural resources** by potentially allowing motorized cross-country travel to occur on cultural resource sites without any site protection. Alternatives C and B would see less area open to cross-country travel and effects to resources, with Alternatives D and E having no area open to this use. Alternatives B, C, and D would concentrate motorized use on routes within corridors, which could increase the potential severity of impacts to resources in these areas, but this potential could be reduced by site-specific protection measures. Alternative D would have the least impacts overall by reducing the motorized route mileage and eliminating cross-country travel.

**Under all alternatives, access would be provided as needed** for timber and forest fuels management, fire suppression, and mineral exploration. Access for prospecting and mineral development would be provided as appropriate and necessary.



## Issue 2 – Effects on Recreation Opportunities

**Recreation opportunity in terms of route miles available for licensed drivers** on motorized-mixed-use roads and trails, with or without vehicle registration, would be greatest under Alternative C, then B, with much less route mileage under Alternative D. Vehicle registration would be required under Alternatives A and E, with much less route mileage available. Route opportunity available to unlicensed drivers (trails only) with or without vehicle registration would be greatest under Alternative C, then B, with much less mileage under Alternative D, and less yet under Alternative E.

**Motorized cross-country use** for any purpose would be available only under Alternative A. Motorized cross-country use for the limited purposes of game retrieval and dispersed camping only would be allowed on less area in Alternatives C and B, with the largest area in Alternative C. Alternatives D and E would allow no motorized cross-country use for any purpose.

The Recreation Opportunity Spectrum (ROS) is used in the Forest Plan to describe recreation opportunities available in different areas of the Forest. Nonmotorized recreation opportunities are offered in areas with ROS classes of primitive (P), semi-primitive nonmotorized (SPNM), and roaded-natural nonmotorized (RNNM). Under all alternatives, 10 percent of the Forest area would continue to provide these opportunities; primitive ROS designation would be unaffected in the Black Elk Wilderness and Inyan Kara Inventoried Roadless Area; and the ROS standard in research natural areas (RNAs) would be met. The miles of road or trail closed to motorized use in areas of SPNM and RNNM classes would decrease from current levels in Alternatives B and C, representing less potential for nonmotorized route opportunity in these areas; and would increase in Alternative D, representing more potential nonmotorized route opportunity.

**Nonmotorized trail opportunity** across the Forest is currently 311 miles on 35 trails, with another 12 miles of the Centennial Trail shared with motorized users. This opportunity would remain the same under all alternatives. However, based on the number of miles of motorized trail within ½-mile of a nonmotorized trail, Alternative D would have by far the lowest potential for noise disturbance to nearby nonmotorized users, followed by Alternatives A and E, with Alternatives B and C about equal in higher potential to disturb nearby nonmotorized users.

## Issue 3 – Effects of Transportation System Design on Management Capabilities

Travel management under any of the action alternatives would be more easily enforced by law enforcement personnel, because users not complying with the motor vehicle use map could be cited.

Many factors must be considered to estimate system costs. Alternative E would not create a motorized trail system beyond the existing roads and would be the most supportable with current funding levels. Concerning Alternatives B, C, and D, the miles of trails, number of trailheads and miles of roads to be closed would be the factors having the largest effect on long-term costs. Based on these, Alternative D would have much lower costs, with Alternatives C and B the most costly, in that order.

Based on the total number of system road and trail miles, Alternative A would have the highest maintenance costs, followed by Alternatives C and B. Alternatives E and D would have the lowest costs, in that order. Increased costs of vandalism could be expected with higher numbers of trailheads. Alternatives B and C have the highest number, with Alternative D less and Alternatives A and E the lowest number.

Based on the number of miles of roads open to motorized mixed use by both highway-legal and non-highway-legal vehicles, Alternative D would be the safest, followed by Alternative B, and then Alternative C.

#### Issue 4 – Social and Economic Concerns

Alternatives B and C are roughly equal as having the most trailheads located within 3 miles of a gateway community, followed by Alternative D. Alternatives A and E have no trailheads located within 3 miles of a gateway community. Based on the number of miles of trail within 300 feet of adjacent private land, Alternative D would have the lowest potential for noise disturbance and increased road and trail dust to neighbors. The other alternatives would all have higher potential, at about the same level.

The population in the Black Hills region, and recreational use of the Forest, would continue to grow under all alternatives. It is expected that user expectations for recreational experiences will continue to be diverse. The loss of OHV recreational opportunities from limiting or prohibiting cross-country motorized travel would be at least partially offset by the enhanced OHV trail system opportunities under Alternatives B, C, and to a limited extent Alternative D. Commercial opportunities could develop on adjacent private properties to provide cross-country areas for OHV users seeking opportunities for activities such as hill-climb, motocross, mud-bogging, or rock-crawling. None of the alternatives would be expected to create any measurable social or economic consequences on the Black Hills region.

– End of Summary –