

DECISION NOTICE
And
FINDING OF NO SIGNIFICANT IMPACT
MERCEDES PROJECT AREA

USDA Forest Service
Black Hills National Forest
Mystic Ranger District
Pennington And Lawrence Counties, South Dakota

INTRODUCTION

The Mercedes Environmental Assessment (EA) discloses the environmental effects of proposed activities associated with the harvest of timber, travel management, prescribed burning and other management activities within the Mercedes Project Area. I have reviewed the EA, Forest Plan Standards, Guidelines and Objectives for the Mercedes Project Area, and related material, including the project file, and I base my decision upon that review.

An interdisciplinary team (ID team) of resource specialists conducted the effects analysis and prepared the Mercedes EA. In accordance with the National Forest Management Act and the National Environmental Policy Act, the ID team considered the affected area, formulated alternatives, and estimated environmental consequences based on Forest Plan Goals, Objectives, Standards and Guidelines, together with issues raised during scoping.

The Mercedes EA is tiered to the Revised Land and Resource Management Plan, the associated Final Environmental Impact Statement for the Black Hills National Forest, and the May 2001 Phase I Forest Plan Amendment (hereafter referred to as the Forest Plan). The file entitled the Mercedes Environmental Assessment Project File (hereafter referred to as the Project File) is also referenced. The Project File includes documentation of the Interdisciplinary Team's evaluation of the alternatives and is located at the Mystic Ranger District Office in Rapid City.

LOCATION

The Mercedes Planning Area contains approximately 19,200 acres, of which 16,660 acres are National Forest System lands. There are several land parcels of other ownership within and adjacent to the Planning Area. The Planning Area is divided into two areas separated geographically. The bulk of the Mercedes Planning Area is located in a contiguous block immediately southwest of Rochford, South Dakota. The smaller portion of the Planning Area is west of Soholt Draw bounded by Forest system Road (FSR) 110 and 233 on the southwest, FSR 189 on the north and with Soholt Draw on the east (See Map A).

The legal description includes all or portions of the following sections which lie in Pennington and Lawrence Counties, South Dakota, Black Hills Meridian:

- Sections 11-14, 23-26, 29, 32, 33, 36 Township 2 North, Range 2 East;
- Sections 15-23, 26-36 Township 2 North, Range 3 East;
- Sections 4, 5, 8, 9 Township 1 North, Range 2 East;
- Sections 1-12, 14, 15 Township 1 North, Range 3 East;

The Planning Area consists of rolling topography with some steep rock slopes and outcrops. The predominant vegetation in the Planning Area is ponderosa pine. Black Hills white spruce is also found throughout the project area on north facing slopes. Most of the Planning Area has been logged in the past, and is well roaded.

FOREST PLAN MANAGEMENT AREA DESIGNATION

A management emphasis has been assigned to each geographical area (management area) of the Forest to meet multiple-use objectives. The Forest Plan describes a desired future condition, Goals and Objectives, and Standards and Guidelines for each management area. The Management Areas (MA) present in the Mercedes Project Area, along with a brief description of each portion are provided below and displayed in the Mercedes EA, Map C:

MANAGEMENT AREA 3.1- BOTANICAL AREAS (639 acres)

These areas are managed for protection of unusual or special characteristics.

MANAGEMENT AREA 3.7 - LATE SUCCESSIONAL FOREST LANDSCAPES (46 acres)

These areas feature stands of trees that contain late successional forest structure across the landscape.

MANAGEMENT AREA 5.1 - RESOURCE PRODUCTION EMPHASIS (16,631 acres)

These areas are managed for wood products, water yield, and forage production while providing other commercial products, visual quality, diversity of wildlife, and a variety of other goods and services. Numerous open roads provide commercial access and roaded recreation opportunities, while closed roads provide non-motorized recreation opportunities.

PURPOSE AND NEED

As described in Section 1.5 of the Mercedes EA, there are numerous goals identified in Chapter 1 of the Forest Plan. For this analysis the decision maker has chosen to emphasize implementing Forest Plan Goals 1, 2, 3, 4 and Management Area Goal 5.1-201 as the purpose and need of the Mercedes Planning Area analysis.

- Goal 1: Protect basic soil, air, water, and cave resources.
- Goal 2: Provide for a variety of life through management of biologically diverse ecosystems.
- Goal 3: Provide for sustained commodity uses in an environmentally acceptable manner.
- Goal 4: Provide for scenic quality, a range of recreational opportunities, and protection of heritage resources in response to the needs of the Black Hills National Forest visitors and local communities.

- Management Area Goal 5.1-201: Manage tree stands to emphasize timber products, forage production, and water yield.

The primary **purpose** for this project is to move toward achievement of Forest Plan Goals 2 and 3 and Forest Plan Management Area Goal 5.1-201, with associated objectives to increase vegetative diversity, provide wood fiber for commercial use and manage tree stands to emphasize timber products, forage production, and water yield. These needs are discussed in the FEIS to the Forest Plan (I-5 through I-11 and III-68). Secondary **purposes** of this project are to meet Forest Plan Goals 1 and 4 to the degree they can be addressed through the use of timber harvest, prescribed burning, and related activities as tools to meet resource conditions.

This focus leads to the following purpose and need statement:

The purpose and need for the Mercedes project is to increase vegetative species and age class diversity and provide commercial timber, while meeting or exceeding related Forest Plan Goals and Objectives, consistent with Forest Plan Standards and Guidelines.

DECISION

After careful consideration of applicable laws, regulations and policies, Forest Plan direction, environmental effects, other information contained in the EA and Project File, as well as public comments received on the draft EA, I have selected Alternative B, with modifications, for implementation within the Mercedes Project Area. The effects of these modifications are small in comparison with the overall project, and are well within the range of effects disclosed in Chapter 3 of the Mercedes Environmental Assessment. The Selected Action includes commercial timber harvest, pre-commercial thinning, road reconditioning, road construction and reconstruction, prescribed burning, wildlife habitat improvement work, motorized travel restrictions, decommissioning of some roads, and mitigation measures and monitoring.

The selected action includes all of the vegetative treatments and associated activities included in Alternative B as described in the Mercedes Final Environmental Assessment. Alternative B is modified in the Selected Action by keeping more miles of road open to motorized use than initially planned in Alternative B.

Planned Activities

The Selected Action (Alternative B, as modified) would commercially harvest an estimated 10.2 million board feet (MMBF) of sawtimber from 3,658 acres using primarily shelterwood prescriptions. Also, commercial and/or noncommercial activities including stand improvement, wildlife habitat improvement and vegetative diversity treatments would harvest an estimated 5,137 hundred cubic feet (CCF) of products other than logs (POL) from 1,906 acres. Total sawtimber and POL volume is about 12.8 MMBF.

This action maintains unusual or special characteristics in MA 3.1, maintains stands with late successional forest structure in MA 3.7 and emphasizes growth and yield of wood products in MA 5.1. Cable logging would occur on steep slopes on about 67 acres. Road construction totaling 0.5 miles would be required to access stands identified for cable harvest. Prescribed burning would occur on approximately 1196 acres north of Castle Creek and 254 acres in the vicinity of Whitetail Peak to reduce fuels and restore the ecological role of fire. Another 210 acres of patch clearcuts and hardwood stands would be burned to remove slash and stimulate forage production. Nearly 296 acres of hardwoods and meadows would be maintained or restored. This alternative would leave all 20" diameter (dbh) trees (or largest available) to provide replacement snags except where other resource issues exist, such as a safety hazard. A portion of the existing roadbed for FSR 181 would be raised to remedy siltation and water quality impacts. Excess dead wood would be removed from the stream and the channel would be re-established. Additional road construction would be required above FSR 181.1C to avoid crossing private land and provide additional egress from Castle Peak Campground. The bridge on FSR 191 across Rapid Creek will be replaced. This route will be available for log haul, fire suppression access, and recreational use. About 40.3 miles of new and existing road would be closed to motorized vehicles or removed to reduce maintenance costs, improve wildlife habitat and reduce sedimentation into local streams.

The vegetative management actions discussed above are presented in Tables 1 and 2 (DN pg. 11-12) under Alternative B, and the Vegetative Treatment Maps E and I in the Final EA.

Moreover, the Selected Action will provide Roded Natural Motorized and Roded Natural Non-motorized travel management opportunities. The total road system in this area will include 129.2 miles of road. Approximately 88.9 miles would be open to motorized travel and 19.8 miles would be restricted from motorized use. Another 20.5 miles of existing unclassified and two-track roads will be decommissioned. This means they will be removed from the landscape. Roadwork completed in association with commercial timber harvest will include 3.1 miles of road construction, 13.2 miles of reconstruction and 48.7 miles of reconditioning and pre-use maintenance.

The above road and travel management actions are presented in Tables 1 and 2 (DN pg. 11-12) under Alternative B. The net effect of implementing these motorized travel management changes will be a reduction in system roads open to motorized travel, decommissioning of most unclassified roads, and an increase in non-motorized recreation opportunities. Road motorized travel management actions are displayed in the Travel Management Map attached to this decision notice. There will be no off-road restrictions.

Projects implemented in the Mercedes Project Area are subject to availability of funds. Acres and miles listed are approximate and will be finalized during project field preparation. Timber Sale unit layout may differ slightly from the boundaries shown on the alternative maps, based on ground conditions and therefore volume figures may vary slightly. Tables 1 and 2 (DN pg. 11-12) display a list of activities.

MITIGATION AND MONITORING

The following mitigation and monitoring measures will apply to the selected action:

- Revised Forest Plan Standards and Guidelines (Forest Plan Chapters II and III and the Phase I Amendment)
- Best Management Practices (BMPs) for the Control of Nonpoint Pollution from Silvicultural and Related Road Activities.
- Site-specific mitigation measures listed in the EA, Sections 2.4, 2.5, and 2.6.
- Project monitoring discussed in the EA, Section 2.7.

DECISION PROCESS

Public Involvement

One of the most important steps in the analysis process for the Mercedes Project Area was to identify members of the public whom the proposed projects could affect or who might have an interest in the decision. The list of individuals, groups and organizations contacted is contained in Appendix A of the EA. Section 1.5 of the EA discusses the Forest Plan direction influencing the scope of proposed actions in the Mercedes Project Area. Section 1.7 of the EA discusses the issues raised during scoping for the Mercedes Project Area. Appendix A contains a summary table of initial scoping comments and how the ID team addressed them.

Additional public comments were received when the first draft EA was made available for a 30-day comment period back in the summer of 1999. Comments received and the responses to them are included as Appendix C of the EA. As explained in Section 1.1 of the EA, the original Mercedes Decision was withdrawn. With resumption of the analysis in Mercedes, an amended draft EA was made available for comment between August 5 and September 4, 2002. Comments and responses are included as Appendix D. I have reviewed and concur with the responses in Appendix C and D of the EA. I believe the analysis addresses all issues satisfactorily.

The issues for the analysis were generated based on initial scoping, both internal (ID team) and external comments. These issues were refined or added to as a result of comments received on the two draft EAs. The alternatives in the final EA were then reviewed to ensure they addressed the refined list of issues. There were seven prevailing issue categories established regarding the proposed action. These issues are summarized as follows:

1. Concerns for protecting and improving wildlife habitat.
2. Support and opposition to timber harvest.
3. Concern for protecting and improving Castle Creek and Rapid Creek watersheds.
4. Desire to preserve the scenic beauty of the area.
5. Concern for road impacts plus a desire for more/less access.
6. Concern for impacts to both dispersed recreation and developed recreation sites related to closing or relocating roads.
7. Support and opposition to prescribed burning and other fuels treatments.

Other issues were mentioned less frequently. These included other resource issues and desires relating to range improvement, fire risk, heritage resources, and economics. These issues were addressed through development of alternatives and/or mitigation or resource protection measures.

Alternatives Considered in Detail

Five alternatives were evaluated in detail in the EA, including the No Action alternative and four action alternatives. Additional alternatives, proposed by members of the public and ID team, were also considered but dropped from detailed analysis (EA, Section 2.2). Complete descriptions of the alternatives considered in detail, including management activities, are contained in the EA, Section 2.3. I believe the range of alternatives adequately addresses the main issues raised during the analysis process and are responsive to the purpose and need. The following is a brief summary of the non-selected alternatives considered in detail in the EA.

Alternative A

This is the no action alternative. No timber harvest, road construction, or other new activities would be authorized.

Alternative C

This alternative was developed to:

- Provide greater structural diversity between and within stands while attaining Forest Plan Management Area 5.1 direction.
- Manage MA 3.7 following Forest Plan direction.
- Construct some new roads.
- Close some roads for resource protection.
- Use prescribed fire to reduce fuels and restore the ecological role of fire.
- Correct erosion problems on FSR 181 by reconstructing the road.

Alternative D

This alternative was developed to:

- Emphasize stand management to attain timber production goals in MA 5.1, allowable within Forest Plan constraints.
- Manage MA 3.7 following Forest Plan direction.
- No new roads.
- Close some roads.
- Emphasize economic efficiency.
- Limited use of prescribed fire.
- Correct erosion problems on FSR 181 by obliterating the road.

Alternative E

This alternative was developed to:

- Emphasize greater structural diversity between and within stands while attaining Forest Plan Management Area 5.1 direction.
- Manage MA 3.7 following Forest Plan direction.
- Construct no new roads.
- Close some roads for resource protection.
- Use prescribed fire to reduce fuels and restore the ecological role of fire.
- Correct erosion problems on FSR 181 by obliterating the road.

Comparison of Alternatives

In making my decision, I first focused on how well the alternatives address the purpose and need for action. The purpose and need for the Mercedes project is to increase vegetative species and age class diversity and provide commercial timber, while meeting or exceeding related Forest Plan goals and objectives, consistent with Forest Plan standards and guidelines. Secondary purposes include improving water quality and providing a range of recreational opportunities (EA, Section 1.6).

The summary of Forest direction and management opportunities presented in the EA (Sections 1.5 and 1.6) clearly indicates that actions are needed to respond to the purpose and need and move the existing Forest resource condition toward the Forest Plan desired condition. Because of this, Alternative A (No Action) does not respond well to the purpose and need for action. No action would be taken to retain or restore hardwood stands or meadows, create grass/forb openings, or conduct prescribed burning to increase vegetative species and age class diversity. This alternative thins no timber stands or takes any other action to protect the timber resource from insects and disease. Alternative A does not improve road drainage, reduce road densities, or take other action to protect or improve soil, water and wildlife habitat. It does not produce commercial timber products within management areas where timber production is an emphasis. The four action alternatives (B, C, D, and E) address the purpose and need in similar ways in that they would: increase vegetative species and age class diversity, protect soil and water resources, close some roads, use prescribed fire to reduce fuels, and provide commercial timber consistent with Forest Plan Standards and Guidelines.

After reviewing how each alternative responded to the purpose and need, I then looked at how the alternatives differed, how well they addressed the issues and public comments, and how well the alternatives met Forest Plan management area direction, Standards and Guidelines. The alternatives vary by the effects on wildlife habitat, the number of acres treated by commercial and pre-commercial harvest, prescribed burning area, timber volume produced, roads reconstructed, roads decommissioned, and the restrictions on motorized vehicle use.

The four action alternatives (B, C, D and E) address, to varying degrees, the issue of improving wildlife habitat through vegetative treatment. All action alternatives move the project area toward the Forest Plan Objectives for grass/forb structural stage. All action alternatives meet vertical diversity habitat, grassland and hardwood community objectives. The Mercedes area

currently meets the Forest Plan Guideline for screening cover. With implementation there will be no change in existing conditions and cover along arterial and collector roads will be maintained and improved over time by protecting developing cover. Summer and winter habitat effectiveness for deer and elk is maintained or improved for each action. Each of the action alternatives meets Forest Plan habitat effectiveness Standards and Guidelines. Current snag density averages (0.95 snags/acre) fall short of the FP Phase I Amendment desired conditions of 2-4 snags per acre across watersheds. All action alternatives provide mitigation measures to protect existing snags, create additional snags and to monitor snag levels to determine if actions may be needed to create additional snags to move toward the desired condition. For all action alternatives, analysis indicates an upward trend in snag densities and green snag recruitment trees across watersheds such that Forest Plan levels are reached by either the first or second decade. Alternative A (No Action) maintains existing conditions and does not move toward meeting Forest Plan Goals, and Objectives for grass/forb structural stage, grassland and hardwood communities, and snag densities.

The acreage and volume of commercial and pre-commercial treatments varies between the action alternatives (see Table 1 and 2). Alternative C treats more acres but produces slightly less sawlog timber volume than Alternative B. Alternative D treats the fewest acres and produces the lowest volume of sawlogs. Alternative E treats fewer commercial acres and produces less sawlog volume than Alternative B. Alternative B produces more products other than logs (POL) than the other action alternatives. Alternatives B, C and E include prescribed burning to enhance wildlife habitat and reduce fuels. Alternative D includes some prescribed burning to treat pockets of high natural fuels and some activity fuels. All action alternatives address timber health concerns by reducing the potential risk of treated stands to losses caused by MPB to varying degrees. Alternative A produces no commercial timber, does not reduce the risk in stands of MPB mortality, and does not include prescribed burning.

The Forest Plan contains motorized travel guidelines for each of the management areas (Guideline 9108) and Standards for removing roads that are not needed to achieve management objectives or where resource damage cannot be mitigated (Standard 9106). All action alternatives include road reconstruction to improve drainage and road conditions, yearlong road restrictions applied to motorized vehicles, and road decommissioning. Alternatives B and C also include a section of new road construction to avoid crossing private land and remedy soil erosion problems on FSR 181. Alternatives D and E address these same problems by obliterating a section of FSR 181. These collective actions would improve soil and water conditions (Forest Plan Goal 1) and increase wildlife habitat effectiveness (Guidelines 5.1-2501 and 5.4-3203). Alternative A proposes no changes in motorized travel management or improvements to existing road conditions.

REASONS FOR THE DECISION

The analysis presented in the EA clearly indicates that some actions are needed to respond to the purpose and need and move the existing Forest resource condition toward the Forest Plan desired condition. Given this information, and the lack of any new compelling information on why the area should not be managed, I have decided to implement timber harvest, travel management, prescribed burning, pre-commercial thinning and other associated activities within the Mercedes Project area, consistent with Forest Plan direction. This decision leads to the rejection of

Alternative A (No Action).

Alternative C responds well to issues and comments received that stress wildlife habitat and vegetative diversity, support prescribed burning, and address soil and water concerns. Alternative C treats the greatest number of acres but does not produce as much sawlog volume as Alternative B. Alternatives C and E include more hardwood treatments and uneven-age treatments but do not do as much to reduce the risk of insect infestation. I did not select Alternative C because it relies too heavily on uneven-age management within a resource production emphasis management area (MA 5.1). The Forest Plan FEIS (page II-20) discussed the use of uneven-age management systems on the Black Hills and concluded that it is not the preferred method for harvest of ponderosa pine for a variety of reasons. One reason is the potential to reduce productivity of the area. There may be valid reasons to use uneven-age management in the Black Hills but the analysis does not provide sufficient justification for its use within a resource production emphasis area, where timber productivity is a key concern. Also, Alternative C does not provide as much protection from insect and disease as other alternatives. This is important considering the current outbreaks of mountain pine beetle within the Black Hills.

Alternative D responds well to issues and comments received that stress timber production, oppose prescribed burning, oppose new road construction, and support economic efficiency. I did not select Alternative D for two primary reasons. First, the Black Hills generally evolved under a frequent interval low intensity fire regime. Vegetation and wildlife are adapted to fire. I did not select Alternative D because it limits the amount of prescribed burning that would both eliminate fuels and return fire to its ecological role in the environment. Second, this alternative would obliterate FSR 181 in order to minimize sedimentation issues. While the sedimentation issue must be addressed, I did not select this alternative because it would result in a potentially hazardous public safety and egress situation. FSR 181 provides access along a narrow canyon to the Castle Peak Campground and summer home residents near the campground. Obliterating FSR 181 just beyond the campground and residential area could leave people stranded, with no way out, in the event of fire or other emergency such as flooding. Wildfire and flooding in this area are very real threats, and it would not be responsible to put people in harm's way without emergency egress.

Alternative E responds well to issues and comments received that stress wildlife habitat and vegetative diversity, support prescribed burning, and address soil and water concerns. I did not select Alternative E for three primary reasons. First, it relies too heavily on uneven-age management within a resource production emphasis management area (MA 5.1). The Forest Plan FEIS (page II-20) discussed the use of uneven-age management systems on the Black Hills and concluded that it is not the preferred method for harvest of ponderosa pine for a variety of reasons. One reason is the potential to reduce productivity of the area. There may be valid reasons to use uneven-age management in the Black Hills but the analysis does not provide sufficient justification for its use within a resource production emphasis area, where timber productivity is a key concern. The second reason is that Alternative E does not provide as much protection from insects and disease as the other alternatives. This is important considering the current outbreaks of mountain pine beetle within the Black Hills. Thirdly, by obliterating a segment of FSR 181, Alternative E does not provide emergency egress from the Castle Creek Canyon in case of fire or other emergency such as flooding.

Alternative B responds well to most of the issues. It meets or moves towards Forest Plan Goals, Objectives, Standards and Guidelines. It provides for prescribed burning to enhance wildlife habitat and reduce fuels. Access provided by new road construction will provide continued access for future forest management activities in Management Area 5.1. Road reconstruction, road closures and obliterations will address specific soil and water concerns as well as wildlife habitat effectiveness issues. It also protects public safety by providing emergency egress from the Castle Creek Canyon.

Based upon public comment and a review of the project record including the Roads Analysis (FSM 7703.2(3)), I have decided to include modifications to Alternative B as part of the Selected Action. The modification regards the travel management direction proposed in Alternative B, as presented in the Final Mercedes EA. I have reviewed the effects of incorporating these road and travel modifications with Alternative B vegetation treatment activities as the selected action. These effects fall well within the range of effects analyzed and disclosed in Chapter 3 of the Mercedes EA. Specifically there is negligible change to the key issues, effects and outputs as displayed in Tables 2-2 through 2-5 in the Mercedes Final EA. Comments received on the Draft EA indicated a strong public opposition to road restrictions and decommissioning. Such opposition is increasing in the Black Hills area, as new travel management changes are proposed. Travel management restrictions are most effective with public support. I believe that implementing all of the restrictions proposed in Alternative B would be counterproductive because there would not be the public support needed to make the restrictions effective. It would alienate the local public that historically has used the area for recreation and hunting. By responding to this public concern and making modest modifications – as included in the Selected Action – I believe we can strike the balance of achieving adequate resource protection and providing for the public need. The additional roads to remain open as part of this modification are needed to achieve Goal 4 of the Forest Plan, which includes providing a range of recreational opportunities in response to needs of Forest visitors and local communities.

Travel management direction for the Selected Action is displayed on the map included with this Decision Notice. The modified travel management direction would reduce the number of system roads open on a yearlong basis from the current amount of approximately 114.5 miles to approximately 88.9 miles. It would also result in removal of approximately 20.5 miles of unclassified (non-system) and two-track roads that are currently being used to varying degrees by the public. These unclassified roads are typically in poor locations and result in resource damage or effects on wildlife. Some are roads that we have attempted to close in the past but the closures have been ineffective.

Decommissioning efforts will eliminate use on these roads through a variety of methods, up to and including total obliteration where warranted. About 1 mile of unclassified road will remain open under the Selected Action. (These roads will be added to the Forest Road System and maintained as required by recent changes in National Forest roads policy (36 CFR 212.1). This mileage is shown as new construction per this recent policy change.) Travel management is an ongoing and important issue. The Mystic Ranger District will continue to monitor motorized travel use within this area, and make adjustments as necessary to protect resources and meet public needs.

In summary, I have decided to implement Alternative B, as modified, because it responds well to the issues: it meets or moves towards Forest Plan goals, objectives, standards and guidelines; it provides for prescribed burning to enhance wildlife habitat and reduce fuels; and provides a travel management framework that protects resources and responds to public needs. In making this decision I have considered my obligations under Executive Order 12898 and feel that this project will not disproportionately affect any segment of the population.

Table 1. Summary of Vegetative Treatments in acres				
TREATMENTS	Alternative B	Alternative C	Alternative D	Alternative E
Patch Clear-cut	160	162	157	159
Shelterwood Seed Cut	225	211	225	211
Partial Shelterwood Removal	581	483	581	483
Final Shelterwood Removal	1,593	1,130	1,579	1,116
Individual Tree Selection	73	455	73	417
Group Selection	5	1,185	5	1,185
Commercial Thin	903	265	903	265
Precommercial/POL Thin	3,610	2,291	3,424	2,185
Site preparation	13	13	13	13
Meadow maintenance/restoration	93	93	93	93
Hardwood maintenance/restoration	203	377	203	377
Prescribed burning	1,660	1,758	383	1,660
Pile & burn	207	199	207	199
Fuel breaks	307	303	307	303
Total Acres (Commercial)	3,658	3,965	3,121	3,546
Total acres treated	5,498	5,717	4,994	5,647
Total Sawtimber Volume (MBF)	10.25	10.06	8.69	8.99
Total POL Volume (CCF)	5,137	3,226	4,325	2,988
Total Gross Volume (CCF)	25,630	23,347	21,714	20,968
Total Gross Volume (MBF)	12.82	11.67	10.68	10.48
OTHER DESIGNATIONS				
Goshawk Post Fledging Areas	2,210	2,210	2,210	2,210
Marten Habitat	1,094	1,094	1,094	1,094
Designated Late Succession Added	199	199	199	199

Note: The Selected Action (shaded column) includes vegetative treatments in Alternative B.

Table 2. Key Issues and associated effects or outputs by Alternative					
	Alt. A	Alt. B	Alt. C	Alt. D	Alt. E
Wildlife Habitat issue					
Habitat diversity	Fair	Good	Better	Good	Best
Goshawk nesting/PFA habitat (acres)	0	2,210	2,210	2,210	2,210
High potential marten habitat (acres)	0	567	567	567	567
Marten connectivity habitat (acres)	0	527	527	527	527
Grass/Forb (acres)	345	530	532	527	531
Snag density (snags/acre)	0.95	Increase with snag creation			
Open road density (mi./sec.)	3.8	3.0	3.0	3.0	3.0
Screening Cover (%)	50%	Same	Same	Same	Same
Timber issue					
Volume Harvested Sawtimber (MBF)	0	10.25	10.06	8.69	8.99
Volume Harvested POL (CCF)	0	5,137	3,226	4,325	2,988
Benefit/Cost Ratio considering only timber harvest related costs	N/A	0.56	0.61	0.60	0.58
Benefit/Cost Ratio considering all proposed activity costs	N/A	1.31	1.33	1.37	1.38
Mountain Pine Beetle Risk Issue					
% of Area at Moderate Risk	42.9	30.2	29.2	32.1	30.8
% of Area at High Risk	12.2	8.9	9.3	9.9	10.1
Roads/Travel Mgmt. Issues (miles)					
Construction	0	3.1	2.1	0	0
<i>Unclassified converted to FSR</i>		3.1			
Reconstruction	0	(14.4) 13.2	13.2	12.5	12.2
Pre-use Maintenance	0	(48.0) 48.7	46.8	45.0	45.2
Open Roads	114.5	88.9	86.2	85.1	85.1
Decommission/Obliteration	0	(22.5) 20.5	20.4	22.6	20.5
Yearlong Restriction (closure)	11.6	(21.8) 19.8	20.2	19.4	19.4
Other issues					
Fire and Fuels Issue (Acres)					
Prescribed burning	0	1,660	1,758	383	1,660
Fuels treatments	0	514	502	514	502
Scenic Quality	N/A	**	**	**	**
Recreation	N/A	**	**	**	**

**Effects to be mitigated per Forest Plan Standards & Guidelines.

Note: The Selected Action (shaded column) includes the issues, effects, and outputs associated with Alternative B with modifications to the Road and Travel Management items displayed in *bold italics*.

CONSISTENCY WITH THE LAND AND RESOURCE MANAGEMENT PLAN

The regulations [36 CFR 219.10 (e)] require me to ensure permits, contracts cooperative agreements, and other activities carried out on the Black Hills National Forest are consistent with the Forest Plan. Accordingly, I have reviewed my decision against Forest Plan direction, and find they are consistent.

My decision is consistent with the Forest Plan in that:

- Planned activities are consistent with the management area direction.
- Planned activities will contribute to Forest Plan Goals and Objectives (EA, Section 1.6).
The planned activities will not detract from or jeopardize any Forest Plan goal or objective.
- Planned activities comply or move towards compliance with Forest Plan Guidelines and Standards.
- Planned activities meet resource protection and other requirements of 36 CFR 219.16 and 219.27.

One groups feels species associated with snags and mature forest have not been adequately considered in the environmental analysis process. The Mercedes EA and this decision notice require all existing snags (except safety hazards) be retained, and sufficient numbers of live trees be left to provide snags now and in the future. The cutting of standing dead trees for fuelwood is prohibited under the Phase I Forest Plan Amendment. Snag levels in the Project Area are being managed to move toward Forest Plan levels, which are based on habitat needs to support viable populations of snag dependent species (Forest Plan II-27).

Habitat for species associated with mature forest habitat is a concern to some members of the public. The Revised Forest Plan has designated late successional (old growth) landscapes and stands. Some Revision designated stands lie within the Mercedes Project Area.

Alternative B reduces habitat in the short term for species associated with mature forest stands. Based on the Revised Forest Plan management emphasis for the Project Area, I am willing to accept these effects in exchange for appropriate silvicultural treatments and sawtimber production, as well as for improvements in scenic quality, watershed conditions, vegetation diversity and stand health. Nothing in the Mercedes EA or the FEIS for the Revised Forest Plan indicates that populations of species associated with mature forests are in jeopardy.

Fragmentation has been addressed in the Revised Forest Plan FEIS (FEIS III-247 through 275). Fragmentation is more properly an issue for eastern deciduous forests and western rain forests than for the ponderosa pine forest of the Black Hills, which was historically dominated by fire and insects/disease and was naturally patchy. The Mercedes project is within the scope of the Forest Plan FEIS analysis and does not include any unusual or extraordinary circumstances.

The northern goshawk, a management indicator species (MIS) for late succession forests and an R-2 sensitive species, occur in the Project Area. Vegetation treatment moves the project area toward meeting Forest Plan Phase I Amendment direction for northern goshawk post-fledging area structural stages. And, 540 acres of potential nesting habitat will not be affected by treatment actions. Mitigation has been included to prevent disturbance in nest stands and post-fledgling territories between March 1 and September 30. Surveys will continue for additional nests. Any goshawk nests located during the course of this project will be protected (EA, Section 2.5). Effects on the northern goshawk are not anticipated to result in a loss of viability, nor cause a trend to federal listing, or loss of species viability range wide (EA, Section 3.2).

Some people are concerned that the Forest's reliance on BMPs to prevent impacts on water quality is unwarranted and ineffective. I have reviewed the results of BMP monitoring done by the State of South Dakota recently. It appears that these measures are being implemented and are effective in preventing further degradation of water quality. In addition, I feel that the road reconstruction, decommissioning and obliteration will remedy known sources of sedimentation thereby improving water quality in streams within Mercedes project area. This project is not expected to result in further degradation of any waters of the U.S.

- Adequately restocking lands within five years is assured
Areas identified for regeneration harvest (for timber production purposes) have been reviewed by a silviculturist and are capable of being regenerated within five years of final harvest. Some stands may require site preparation and seeding to meet this requirement. The Silviculture Report held in the Project File contains information pertaining to restocking.
- No timber harvesting will occur on lands not suited for timber production
No timber harvesting will occur on lands not suited for timber production, except to meet other resource objectives, per Forest Plan direction. Treatments to meet other resource objectives are planned on lands not suited for timber production, such as removing conifers to maintain existing meadows and hardwood stands. The objective for these treatments is to maintain the vegetative diversity of these existing habitats.
- Individual cut blocks, patches, or strips shall be less than 40 acres
There are no created openings greater than 40 acres in the selected alternative.
- Clearcutting must be determined to be the optimum method
Clearcutting has been determined to be the optimum method to meet the objectives of the Forest Plan where it is prescribed. The purposes of clearcutting are to provide grass/forb structural stage for diversity and for wildlife forage and to regenerate aspen/birch stands. This is the optimum method for achieving these vegetative diversity objectives. See Mercedes EA, Section 3.2 and Silviculture Report held in the Project File.
- Culmination of Mean Annual Increment (CMAI) requirements are met
Stands planned for regeneration harvest (for timber production purposes) in the selected alternative meet the CMAI requirements of 36 CFR 219.16. CMAI calculations are contained in the silviculturist's report in the project file.

The NFMA, at 16 USC 1604(m)(2), allows exceptions to the general prohibitions on harvesting trees prior to the culmination of mean annual increment for a given timber stand. This decision will create exceptions consistent with the law at part (m)(2). These treatments are more fully described in the EA (Chapter 3 Section 3.3 and Appendix C). The public was advised of these exceptions to the law in the second Mercedes draft EA.

FINDINGS REQUIRED BY LAWS AND REGULATIONS

Executive Orders 11988 and 11990

Although logging activities will occur in some riparian areas (e.g. removal of conifers from meadows and hardwood stands), no effects are predicted on floodplains or wetlands (See EA Section 3.6 and Hydrology Report held in the Project File).

Endangered Species Act

For the proposed actions, a finding of "No Adverse Effect" on any species listed as Threatened or Endangered which may be found in the Project Area was determined (EA, Section 3.2 and Appendix E).

National Historic Preservation Act

The potential effects have been considered in this analysis. Heritage resources inventories were conducted within the Project Area. Sites determined eligible to the National Register of Historic Places will be protected through avoidance. No adverse effects are anticipated. The South Dakota State Historic Preservation Officer (SHPO) reviewed the reports on the heritage resource inventories and concurred in determinations of no effect and no adverse effect in correspondence (located in the Mercedes Project File). The Section 106 compliance process has been completed.

FINDING OF NO SIGNIFICANT IMPACT

Based on my review of the Mercedes EA, I have determined Alternative B, as modified, is not a major federal action that would significantly affect the quality of the human environment; therefore, an environmental impact statement will not be prepared.

I base this conclusion on the following:

Context: The significance of effects of implementing Alternative B, as modified, have been analyzed in several contexts. The Selected Action is consistent with the requirements of the Forest Plan and FP Phase I Amendment and contributes to moving toward meeting or meeting the goals of the Plan. None of the effects disclosed in the Mercedes EA are different from those anticipated in the FEIS for the Revised Forest Plan. Cumulative effects have been analyzed on the Project Area, watersheds and vicinity adjacent to the project area. Site-specific effects within the Project Area have been estimated and disclosed in the EA. The contribution of this project to the effects described in the FEIS, the possible cumulative effects, and the site-specific effects on the Project Area have all been considered in this determination.

Intensity:

1. Impacts that may be both beneficial and adverse.
Both beneficial and adverse effects have been considered and disclosed in the Mercedes EA.
2. The degree to which the proposed action affects public health or safety.
Public health and safety are minimally affected by the action.
3. Unique characteristics of geographic areas, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
There are no known unique characteristics of the area which would be adversely affected by the project. No prime farmland, park lands, wild or scenic rivers, or ecologically critical areas occur in the Mercedes Project Area. No adverse impacts are anticipated within floodplains. No adverse effects to wetlands or cultural resources are expected. No trend toward Federal listing or loss of species viability is expected for sensitive species as a result of the action. See Mercedes EA, Section 3.2, BA/BE in the Project File.
4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.
The environmental effects of the proposed activities are known and there is little controversy over those effects. The effects on biological diversity have been described and mitigation has been included so the Mercedes Project Area can contribute to maintaining habitat for viable plant and animal populations, as well as to maintaining water quality and soil productivity. I believe the kinds of effects, which are likely to occur, are not highly controversial. (Disagreement over the decision itself does not constitute controversy for the purpose of determining significance under 40 CFR 1508.27).
5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
The possible effects of this proposal are known because it is similar to other management activities on the Forest. Timber harvesting has occurred in the Black Hills over a period of 100 years and has occurred previously in the Mercedes Project Area. Implementation of the proposed activities does not involve any unique or unknown risks.
6. The degree to which the action may establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration.
The proposal does not set a precedent or represent a decision in principle for any future actions.
7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.
Similar and connected actions related to this proposal have been included as part of the proposed alternatives and their effects analyzed and disclosed. This includes road reconstruction to access the area for timber harvest, travel management, pre-commercial thinning, prescribed burning and fuel treatments. Cumulative effects, including past, present, and reasonably foreseeable future activities, on both private and public lands, have been analyzed and disclosed. See Mercedes EA, Section 3.1 and Project File.

8. The degree to which the action may adversely affect districts, sites, highways, structures or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources.
Heritage resources have been considered in this analysis and no adverse effects are anticipated. The SHPO has concurred in a determination of no effect. See Mercedes EA, Section 3.9 and Project File.
9. The degree to which the action may adversely affect an endangered or threatened species or its habitat.
With the possible exception of occasional use by wintering bald eagles, no threatened or endangered plant or animal species, or their critical habitats, are known to occur in the Project Area. The United States Fish and Wildlife Service was consulted regarding wintering bald eagles and they concur that the mitigation measures prescribed in the EA and this decision notice will prevent the project from having adverse effects on bald eagles.
10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.
No effects threaten violation of any Federal, State or local law or other requirements for environmental protection. Actions are specified to meet State BMPs where BMPs are not being met.

ADMINISTRATIVE REVIEW

This decision is subject to appeal under 36 Code of Federal Regulations (CFR) Part 215. A written appeal must be submitted within 45 days of the day after notice of this decision is published in the Rapid City Journal (Rapid City, South Dakota) a daily newspaper to:

USDA, Forest Service, Region 2
Attn: Appeal Deciding Officer
PO Box 25127
Lakewood, Colorado 80225

Appeals must meet the following requirements:

1. State that the document is an appeal filed pursuant to 36 CFR 215;
2. List the name and address of the appellant and, if possible, a telephone number;
3. Identify the decision document by title and subject, date of the decision, and name and title of the Responsible Official;
4. Identify the specific change(s) in the decision that the appellant seeks or portion of the decision to which the appellant objects;
5. State how the Responsible Official's decision fails to consider comments previously provided, either before or during the comment period specified in 36 CFR 215.6 and, if applicable, how the appellant believes the decision violates law, regulation, or policy.

A copy of the Mercedes Environmental Analysis is available for public review at the Black Hills National Forest Supervisor's Office, RR 2, Box 200, Custer, SD 57730; and at the Mystic Ranger District Offices: in Rapid City at 803 Soo San Drive, Rapid City, SD, 57702. Please direct questions about this EA to Robert Thompson, Mystic District Ranger, 803 Soo San Drive, Rapid City, South Dakota 57702, or phone (605) 343-1567.

Pursuant to [36 CFR Sec. 215.10(a)], if no appeal is filed, implementation of this decision may occur on, but not before, 5 business days from the close of the appeal filing period. If an appeal is received, implementation may not occur for 15 days following the date of the appeal disposition [36 CFR Sec. 215.10(b)].

/ s/ John C. Twiss
JOHN C. TWISS
Forest Supervisor
Black Hills National Forest

____ 9/30/02 ____
Date