

DECISION NOTICE
and
FINDING OF NO SIGNIFICANT IMPACT

CEMENT PROJECT AREA

USDA Forest Service
Black Hills National Forest
Bearlodge Ranger District
Crook County, Wyoming

INTRODUCTION

The Cement Environmental Assessment (EA) discloses the environmental effects of proposed activities associated with the harvest of timber, fuel reduction, travel management, and other activities in the Cement project area. I have reviewed the EA, Forest Plan direction relevant to the project area, and related material including the Cement project file. I base my decision on that review.

An interdisciplinary (ID) team of resource specialists conducted the effects analysis and prepared the Cement 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 Cement EA is tiered to the Black Hills National Forest 1996 Revised Land and Resource Management Plan (Forest Plan), associated Final Environmental Impact Statement (FEIS), and Phase 1 Forest Plan Amendment. The Cement Environmental Assessment Project File (Project File) is also referenced. The Project File includes documentation of the ID team's evaluation of the alternatives and is located at the Bearlodge Ranger District office in Sundance, Wyoming.

I previously made decisions on this project on July 9 and September 4, 2003. Both were withdrawn due to procedural errors.

Location

The project area is located in Crook County, Wyoming, in the northwestern Black Hills (see Map A). The project area includes 17,510 acres of National Forest System land and 2,615 acres of private land for a total of 20,125 acres. All proposed activities would occur on National Forest System land. Log hauling may occur across areas of private land on which the Forest Service has acquired right-of-way.

The legal description includes all or parts of the following sections (Sixth Principal Meridian):

- 4-9, 16-18, Township 50 North, Range 60 West
- 1-5, 9-16, 21-27, Township 50 North, Range 61 West
- 31, 32, Township 51 North, Range 60 West
- 15, 21-23, 25-28, 33-36, Township 51 North, Range 61 West

Project area landmarks include Cement Ridge, Surprise Gulch, Williams Gulch, Plato Gulch, and Rattlesnake Canyon.

Forest Plan Management Area Designation

The Forest Plan assigns a management emphasis to each geographical area (management area) of the National Forest to meet multiple-use objectives. The Forest Plan describes a desired future condition, goals, objectives, standards, and guidelines for each management area. The management areas present in the Cement project area include the following and are displayed in Figure 2 (EA Section 1.2):

Management Area 5.1 – Resource Production Emphasis (16,167 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.

Management Area 4.1 – Limited Motorized Use and Forest Products Emphasis (1,343 acres)

These areas are managed for non-motorized recreation, timber and forage production, visual quality, and a diversity of wildlife habitat. Roads provide intermittent commercial access, but are normally closed to other than administrative use.

PURPOSE AND NEED

Based on review of the site-specific conditions and needs described in Section 1.3 of the Cement EA, I have chosen to emphasize implementation of the following Forest Plan goals as the purpose of and need for action in the Cement project area.

- 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...a range of recreational opportunities in response to the needs of Black Hills National Forest visitors and local communities.

In summary, the purpose of and need for action in the Cement project area is to provide a sustainable supply of commercial timber consistent with Forest Plan direction, reduce hazardous fuels, maintain or enhance wildlife habitat, improve management of the transportation system, and reduce sedimentation. Other Forest Plan goals and objectives, such as those associated with scenic integrity and heritage resources, would be met through implementation of 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, public comments, and information that has become available since circulation of the draft EA, I have selected Alternative 2, with modifications, for implementation in the Cement 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 Cement EA. The selected alternative includes commercial timber harvest, precommercial thinning, fuel reduction, prescribed burning, road construction, reconstruction, restriction, and decommissioning, mitigation measures, and monitoring requirements.

The selected alternative includes all of the actions described for Alternative 2 in the Cement EA except as listed below.

- 1) Level 3 prescribed burn will not take place in parts of stands 0121040018, 0121040019, 0121070008, 0121070009, 0121070023, and 0121070025 that overlap the documented montane grassland (Map B).
- 2) Timber harvest and prescribed burning will not take place on the lower slopes of stand 0121050016 (Map B). The associated road construction (NC4) will be reduced to a temporary drainage crossing rather than continuing up the draw, and logs would be moved from the unit to the landing via forwarder or skidder.
- 3) Parts of unclassified roads U620 and U630 on the ridge north of Rattlesnake Canyon will be converted to classified and put in storage rather than decommissioned (total 3.49 miles – Map C).
- 4) Several proposed roads will not be constructed. Road construction will total approximately 1.0 mile, as compared to the original 3.8 miles (Map C). Proposed road “NC4” has been reduced to a temporary drainage crossing.
- 5) Commercial harvest will not take place in stands proposed for storm salvage (149 acres). Storm-damaged trees have deteriorated to the point that they no longer have sufficient commercial value to warrant removal. 

Modifications are described in detail on p. 4.

An occurrence of *Botrychium lineare* (narrowleaf grapefern or slender moonwort), a Region 2 sensitive species new to both the Black Hills and the state of Wyoming, was determined in December 2003 to exist approximately five miles north of the Cement project area. Because this species was not expected to occur in the Black Hills, *B. lineare* was not included in the Biological Evaluation process for this project. Supplemental information has been prepared to analyze and disclose the effects of proposed activities. That analysis is enclosed as an attachment to this DN/FONSI. To summarize that information:

Little is known about this species, and habitat information for the Black Hills is based on the single known occurrence. Based on the information available, it was determined that implementation of Alternative 2 may adversely impact individuals but is not likely

to result in a loss of viability on the planning area nor cause a trend toward Federal listing or a loss of species viability rangewide. This determination considered that the known occurrence lies outside the project area; that the species is able to colonize areas of historic disturbance; that the plant may prefer open canopy conditions such as those created by some of the proposed management actions; and that over 70% of the 17,510 National Forest System acres in the project area will not be disturbed by management actions.

Planned Activities

The following projects will be implemented in the Cement project area, subject to availability of funds. Figures are approximate. Detailed descriptions and maps are found in Section 2.1 of the EA. Cutting unit layout may vary slightly from the boundaries shown on the maps depending on ground conditions. Any differences between the EA and final layout will be documented in the project file.

Fuel reduction. The selected alternative, as modified, will reduce hazardous fuels using mechanical means on 821 acres and by means of prescribed burning on 1,496 acres. As noted above, the proposed Level 3 prescribed burn in stands 0121040018, 0121040019, 0121070008, 0121070009, 0121070023, and 0121070025 will not take place in parts of the stands that overlap the documented montane grassland (Marriott 2000). The effects of prescribed fire on this community type are not known.

Timber harvest. Approximately 10,300,000 board feet (about 20,600,000 cubic feet) of commercial timber will be harvested from 4,293 acres using primarily shelterwood, overstory removal, and thinning prescriptions. All trees greater than 20" in diameter will be retained except in patch clearcuts and aspen enhancement units. Approximately 40,000 cubic feet of products other than logs (POL) will be harvested. Precommercial thinning will take place on 1,171 acres.

Patch clearcuts will take place on 92 acres to provide forage for various wildlife species and improve the balance of vegetation structural stages in goshawk post-fledging habitat. Individual patch clearcut units will range from two to seven acres in size.

If mountain pine beetles or other insects infest localized areas, infested trees may be removed on up to 250 acres in patches up to five acres in size. This sanitation harvest would take place in areas accessible from existing roads and in no more than 15% of the older, dense forest. Any sanitation harvest proposals would be reviewed on the ground by resource specialists before implementation and would include mitigation described in the EA.

As noted above, timber harvest and prescribed burning will not take place on the lower slopes of stand 0121050016. This approximately 20-acre area, which has not been assessed for sensitive plants, was inadvertently included in the harvest prescription.

Restoration. Restoration treatments will include reduction of soil disturbance at Guidinger Spring and removal of encroaching pine from 17 acres of aspen. The proposed action originally included more than 500 acres of this treatment in aspen and mixed aspen/birch stands, but many of the stands contain habitat with high potential for sensitive plant species. Because ground disturbance and microsite changes associated with removal of conifers would not enhance this habitat, the treatment was

dropped in all but the aspen stands in which succession to pine is clearly taking place and high-potential plant habitat would not be affected.

Transportation system. In support of timber harvest, construction of approximately one mile of new road will take place. As stated above, construction of road NC4 will be limited to a drainage crossing, and logs will be removed from the associated harvest unit via forwarder or skidder. Construction of roads NC2, NC3, and most of NC5 will not take place (Map C). Interdisciplinary team review showed that access to most or all of the associated harvest units could take place by other routes. Up to 63 miles of existing roads would be reconstructed. Again, actual miles of reconstruction may be less depending on individual site conditions at the time the work takes place. Some roads in the project area (e.g., NFSR 803.1 in Surprise Gulch and NFSR 802.1 in Pole Cabin Gulch) have considerable drainage problems, resulting in rutting and other surface damage. Reconstruction will be necessary over most of the length of these roads. Conversely, roads such as NFSR 868.1 in Schoolhouse Gulch are in better condition and may require only minor reconstruction or spot maintenance.

Travel management changes will include implementation of an area closure in Management Area 4.1, which includes the area east of Surprise Gulch and north of 866.1 between Surprise Gulch and Bear Lake. Off-road motorized travel will be prohibited and only administrative use of the NFSR 819.1 system will be allowed. This change will bring the area into compliance with Forest Plan management area direction. The area to be closed is shown in Figure 2 (EA Section 1.2).

Twelve miles of currently open classified roads would be closed year-round using gates. With the modifications listed above (explained further on p. 9), 22.59 miles of currently open roads would be put in storage (blocked with barriers other than gates) and 18.29 miles would be decommissioned (permanently closed). A total of 16.21 miles of unclassified roads would be converted to classified; road system analysis showed that these roads provide access that will continue to be needed for future land management activities. Existing ineffective closures will be repaired or improved.

The previous decisions on this project included conversion of parts of unclassified roads U763 and U725 to classified to serve as a connecting route between the Rattlesnake Gulch area and upper Surprise Gulch. On further review, I have decided to decommission these roads as originally proposed in the EA. The main reason for my decision is soil erosion caused by U725 in Surprise Gulch. Additional field review showed that the erosion is more widespread and persistent than originally thought, and that there is no good location for the road in this drainage. Another reason is that improving U763 may place a barrier in the way of Black Hills redbelly snakes moving to and from hibernation areas. No hibernaculum has been located, but this sensitive species is often seen near the upper section of U763. Creating a new barrier could increase snake mortality and violate Forest Plan standard 3116. A third reason is that the wire gate just below the junction of U725 and 803.1 in Surprise Gulch is often left open by road users, allowing cattle to cross from one grazing allotment into another. Decommissioning these roads could help maintain appropriate livestock distribution. The Forest Service may embark on comprehensive travel management planning in the future, and at that time this route could be further reviewed.

Mitigation and Monitoring

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

- Forest Plan and Phase 1 Amendment standards and guidelines (Chapters II and III)
- State of Wyoming Best Management Practices (BMPs) for the Control of Nonpoint Pollution from Silvicultural and Related Road Activities
- Site-specific mitigation measures listed in Section 2.2 of the EA
- Project monitoring discussed in Section 2.3 and Appendix C of the EA.

Stand 0121040103 is planned for commercial thinning. The boundary of this stand will be marked, but the stand will not be included in the timber sale contract/s with the rest of the commercial units. This stand may be substituted for a timber sale cutting unit ("Unit X") if 1) a sensitive species population or heritage site is discovered in Unit X during implementation of the project, and 2) it is in the best interest of the resource to leave all or part of Unit X unharvested.

Decision Process

Public Involvement

During the scoping process for the Cement project, the ID team identified members of the public likely to have an interest in the decisions made for the project area or whom the proposed project could have affected. The individuals, groups, agencies, and organizations contacted during initial scoping are listed in Section 5 of the EA. Scoping letters, news releases, and comments received are contained in the project file. Appendix B of the EA shows the ways in which the analysis incorporated the initial scoping comments received from members of the public.

Issues identified for the analysis (Section 1.4 of the EA) were generated based on external comments made during the scoping phase and internal, ID team-generated issues. These issues were addressed through development of alternatives and/or mitigation, or through the disclosure of environmental effects. The alternatives in the final EA were reviewed to ensure they addressed the list of issues. Five issue categories were established regarding the proposed action.

1. Effects on biodiversity
2. Support for and opposition to timber harvest (whether it takes place at all, rather than level or type of harvest)
3. Differing opinions on travel management
4. Presence of hazardous fuels and benefits and risks of prescribed fire
5. Risk of insect infestation and forest mortality

Additional public comment occurred when the district released the draft EA in May 2003 for a 30-day comment period in accordance with Federal regulations at 36 CFR 215. Appendix D of the EA contains comments received during the comment period and responses to those comments. I concur with the responses in Appendix D. The analysis addresses all issues to my satisfaction.

Further public input took place following my withdrawal of the previous decisions (p. 1). Twelve groups or individuals submitted a total of 24 comments via letters, telephone

calls, electronic mail, personal visits, and two meetings. I met with Nancy Hilding of Prairie Hills Audubon Society in July 2003. The second meeting was held November 2, 2003, at the request of Prairie Hills Audubon Society, Biodiversity Conservation Alliance, and other groups and individuals. This meeting covered other topics in addition to the Cement project. Forest Service officials visited the project area with Ms. Hilding and other individuals on June 6, October 8, and November 19, 2003. I participated in the November site visit. The Forest Service received and responded to four Freedom of Information Act requests for project data. In general, comments focused on the Sand Creek Roadless Area and adjacent land, road construction, and recreational opportunities. I am modifying some aspects of the project (decommissioning of unclassified roads U725 and U763, reduction of road construction) due in part to these comments.

Alternatives Considered in Detail

Three alternatives were evaluated in detail in the EA, including the no action alternative and two action alternatives. Additional alternatives proposed by members of the public or ID team were also considered but dropped from detailed analysis for various reasons, as described in Section 2.5 of the EA. Complete descriptions of the alternatives considered in detail, including management activities, are contained in the EA in Section 2.1. Alternative comparison tables and discussion are found in Section 2.6. I believe the range of alternatives adequately address the issues raised during the analysis process and are responsive to the purpose of and need for action. The following is a brief summary of the alternatives considered in detail in the EA.

Alternative 1. This is the no action alternative. No timber harvest, road construction, fuel reduction, or other new activities would be authorized.

Alternative 2. This alternative was developed to:

- Reduce hazardous fuels
- Provide commercial timber while retaining large-diameter trees and increasing growth of remaining trees
- Reduce risk of mountain pine beetle infestation
- Reduce open road density
- Comply with Management Area 4.1 travel management direction
- Decrease road-related erosion and sedimentation

Alternative 3. This alternative was developed to provide the same vegetation management and timber harvest as Alternative 2 while:

- Emphasizing fuel reduction via mechanical means and less use of prescribed fire
- Keeping more roads open to motorized vehicles
- Retaining more motorized access in Management Area 4.1
- Providing more rapid access to closed roads by using gates rather than rocks, berms, etc. as closures

Comparison of Alternatives

In making my decision, I first focused on how well the alternatives address the purpose of and need for action. The purpose of and need for action in the Cement project area is

to provide a sustainable supply of commercial timber consistent with Forest Plan direction, reduce hazardous fuels, maintain or enhance wildlife habitat, improve management of the transportation system, and reduce sedimentation.

The summary of Forest Plan direction and management opportunities presented in the EA (Section 1.3) clearly indicates that actions are needed to respond to the purpose and need and move the existing forest resource conditions toward the Forest Plan desired condition. Because of this, Alternative 1 (no action) does not respond well to the purpose of and need for action. No actions would be taken to reduce hazardous fuels or risk of mountain pine beetle infestation, improve timber stand growth, improve the balance of structural stages in goshawk habitat, reduce open road density, or reduce erosion and sedimentation on damaged roads. This alternative would not produce commercial timber in management areas where timber production is an emphasis.

The action alternatives (Alternatives 2 and 3) would address the purpose and need in similar ways in that they would produce commercial timber, reduce fuels, and reduce open road density.

After reviewing each alternative's response to the purpose and need, I then examined differences between the action alternatives, how they address issues and public comments, and how well they would meet Forest Plan standards, guidelines, and management area direction. The alternatives vary in acreage and method of fuel reduction and mileage of roads open year-round, gated year-round or seasonally, stored, or decommissioned.

The action alternatives address, to varying degrees, the issue of hazardous fuels and prescribed burning. Both action alternatives would move the project area toward the Forest Plan objectives for fuel loading and fire hazard. To obtain the maximum benefit, Alternative 2 would use both mechanical fuel reduction treatments and both low- and moderate-complexity prescribed burns to reduce fuels. Public comments expressed concern with prescribed fire; as a result, Alternative 3 includes only low-complexity burns and mechanical treatments.

Both action alternatives also address the issue of travel management and wildlife habitat improvement as it relates to roads. Both alternatives would reduce open road density, maintenance needs, and erosion and soil damage on problem roads while increasing non-motorized recreation opportunities. Alternative 2 would minimize open road density. Alternative 3 responds to public comments and internal concerns regarding road closures. Fewer roads would be decommissioned than under Alternative 2 and more would be gated rather than stored (barred with rocks, berms, etc.) to allow more rapid access in case of fire.

Reasons for the Decision

The analysis presented in the EA clearly indicates that action is 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 compelling information on why the area should not be managed, I have decided to implement timber harvest, fuel reduction, travel management, and other associated activities in the Cement project area, consistent with Forest Plan direction. This decision leads to the rejection of Alternative 1 (no action).

Alternative 3 responds well to issues and comments that stress concern about prescribed fire, loss of wildfire suppression access, and reduction in motorized recreation opportunities. Fewer prescribed burns would take place than under Alternative 2, and those that did take place would be low-complexity burns, usually conducted in fall or early spring when control is rarely an issue. More roads would remain open, and more of the roads that were closed could be easily opened if needed.

I did not select Alternative 3 because I believe the fuel and fire hazard reduction and ecological benefits of prescribed fire outweigh the risk of escape. As described in the EA (Section 3.2.3), thinning remains an effective means of reducing vertical continuity of fuels longer if used in combination with fire. Burning also has nutrient cycling and browse regeneration benefits not duplicated by mechanical treatment alone. I believe the risk of prescribed fire escaping is small, and that preparation of and adherence to the burn plan that will be prepared for each burn unit will minimize chances of substantial damage to private or public resources.

The other factor in my decision not to select Alternative 3 is travel management. Alternative 3 relies heavily on gates to control motorized use of roads. Gates are expensive to install and maintain. The project area already has a large number of gates; maintenance and repair of these structures requires a substantial investment of time and money. To be effective, gates often need to be backed up with large rocks or other barriers, which negates the rapid access argument. Though some people object to road closures, given funding and personnel it is simply not possible to maintain the extensive road network to required standards if the bulk of the system is open to motorized vehicles. Furthermore, the project area's road system reaches to within 0.25 mile of nearly every acre in the project area. With the majority of these roads open to motorized vehicles, there are few areas where wildlife can be assured of escaping disturbance and few areas available for quality non-motorized recreation experiences. I believe it is important to provide such areas for these multiple-use reasons.

To lessen the road closure impact of Alternative 2, I decided to modify it to include one proposal from Alternative 3. Parts of unclassified roads U620 and U630 will be classified and put in storage rather than decommissioned. These roads follow the ridgetop north of Rattlesnake Canyon and provide access that may be needed in the future for fire suppression, timber harvest, or other management actions. The route would be difficult to close effectively with gates, and I do not believe that storage would substantially delay access if it were needed.

I considered additional information that has become available since the draft Cement EA was released for public comment. This additional information includes 1) effects on wildlife and plant species added to the Regional Forester's sensitive species list on November 3, 2003, 2) results of consultation with the Wyoming State Historic Preservation Officer (SHPO), 3) effects on migratory bird species of concern, 4) clarification of cumulative effects on Management Indicator Species and soils, and 5) further development of the Welcome-Sand project proposals. None of this information changed the project's scope, alternatives, or effects. Effects on wildlife and plant species are of the same type and intensity as those disclosed in the EA. The Wyoming SHPO concurred with the analysis of effects on cultural resources. Review of the additional information did not indicate any reasons to modify the decision.

Table 1. Comparison of proposed activities by alternative.

Activities by Alternative			
Activity	Alt. 1 (No Action)	Alternative 2 (as modified)	Alternative 3
Fuel management treatments¹			
Hand pile fuels	0	38 acres	38 acres
Lop fuels	0	660 acres	660 acres
Machine pile fuels	0	123 acres	123 acres
Moderate complexity burn	0	830 acres*	84 acres
Low complexity burn	0	666 acres*	935 acres
Roads			
New construction	0	1.0 miles*	3.8 miles
Conversion from unclassified	0	16.2 miles*	21.8 miles
Reconstruction	0	63.4 miles	63.4 miles
Pre-use maintenance	0	2.9 miles	2.9 miles
Roads open year-round	80.2 miles	44.7 miles	52.6 miles
Roads currently open to be gated year-round	0	12.0 miles	32.3 miles
Roads currently open to be put in storage (blocked)	0	22.6 miles*	6.1 miles
Number of road closure gates	32	30	38
Roads currently open to be decommissioned	0	18.3 miles*	12.7 miles
Vegetation management treatments¹			
Commercial thin – 60 BA	0	196 acres	
Commercial thin – 80 BA	0	471 acres*	
Commercial thin/Overstory removal	0	52 acres	
Commercial thin/POL	0	958 acres	
Aspen enhancement	0	17 acres	
Overstory removal	0	236 acres	
Patch clearcuts	0	92 acres	
“Products other than logs” thin	0	78 acres	
Sanitation	0	up to 250 acres	
Shelterwood seedcut	0	529 acres	
Seed cut/Overstory removal	0	1,322 acres	
Seed tree cut	0	18 acres	
Seed tree cut/Overstory removal	0	179 acres	
Precommercial thin	0	1,171 acres	
¹ See EA p. 16 for fuel treatment descriptions			
² See EA p. 14 for vegetation treatment descriptions			
*Modified from EA			

CEMENT PROJECT AREA ENVIRONMENTAL ASSESSMENT

Table 2. Response of alternatives to issues

Issue	Alternative 1	Alternative 2 (as modified)	Alternative 3
Effects of vegetation management on biodiversity continued			
Effects on other sensitive wildlife species	No immediate effects. Over time, increasing fire hazard could lead to catastrophic fires that would have negative effects on habitat for most sensitive species but positive effects on some others.	Individuals of some sensitive species could be adversely affected by the proposed actions, but there would be no effect on populations.	Closure of fewer roads would leave a higher potential for loss of snags along open roads and damage to moist habitats. Less increase in habitat diversity due to less burning. Otherwise similar to alternative 2.
Effects on management indicator species	No immediate effects. Over time, increasing fire hazard could lead to catastrophic fires that would have negative effects on habitat for several species.	Individuals of some species could be adversely affected. Improvement of forage and habitat diversity due to prescribed fire would benefit most MIS. Road restrictions would improve habitat for big game and snag-associated species.	Similar to alternative 2. There would be less burning, resulting in less increase in forage and habitat diversity. Fewer road closures would result in less improvement of big game habitat.
Timber harvest			
Percent of project area proposed for commercial timber harvest	n/a	25%	Same as alternative 2
Percent of project area harvested commercially since 1987 (approximate)	61%	72%	Same as alternative 2
Approximate sawtimber volume proposed for harvest	n/a	10,300,000 board feet (approximately 20,780,000 cubic feet)*	Same as alternative 2
Approximate POL volume proposed for harvest	n/a	40,000 cubic feet	Same as alternative 2
Road restrictions			
Miles of roads open to motorized vehicles year-round	80.18	44.7	52.62
Miles of roads proposed for decommissioning	n/a	18.3 miles*	12.7 miles
Miles of roads closed with gates	25.4 miles	32.92 miles	55.12 miles
Miles of roads closed with barriers	0.62 miles	39.3 miles*	17.53 miles
Management of motorized vehicle use in management area 4.1	NFSR 819.1 open year-round to motorized vehicles (ineffective gate). Spur roads closed with varying effectiveness. Off-road motorized travel allowed.	Area closure (motorized travel on and off roads prohibited except authorized administrative use).	NFSR 819.1 open year-round to motorized vehicles. Motorized travel on other roads and off roads prohibited.

*Modified from EA

CEMENT PROJECT AREA ENVIRONMENTAL ASSESSMENT

Table 2. Response of alternatives to issues (continued)

Issue	Alternative 1	Alternative 2 (as modified)	Alternative 3
Road restrictions continued			
Management of motorized vehicle use in management area 5.1	Roads open unless designated closed. Off-road travel allowed.	Roads open unless designated closed. Off-road travel allowed.	Roads open unless designated closed. Off-road travel allowed.
Open road density (summer)	3.58 miles/square mile	1.81 miles/square mile	1.96 miles/square mile
Number of road closure gates	32	30	38
Fuels and prescribed fire			
Proposed mechanical fuel treatments	n/a	821 acres	821 acres
Proposed prescribed burns	n/a	1,496 acres*	1,019 acres
Risk of insect infestation			
Percent of project area ponderosa pine stands by mountain pine beetle infestation risk	High risk = 23% Moderate risk = 52% Low risk = 25%	High risk = 15% Moderate risk = 36% Low risk = 49%	High risk = 15% Moderate risk = 36% Low risk = 49%
Proposed thinning <i>(Precommercial thinning would overlap other treatments in some stands)</i>	n/a	Commercial = 1,755 acres* Precommercial = 1,171 acres	Commercial = 1,775 acres Precommercial = 1,171 acres

*Modified from EA

CONSISTENCY WITH THE LAND AND RESOURCE MANAGEMENT PLAN

Regulations at 36 CFR 219.10(e) require me to ensure that permits, contracts, cooperative agreements, and other activities carried out on the Black Hills National Forest are consistent with the Forest Plan and Phase 1 Amendment. My decision is consistent with this direction in that:

- Planned activities will contribute to Forest Plan and Phase 1 Amendment goals and objectives (EA Section 1.3). They will not detract from or jeopardize any goal or objective.
- Planned activities are consistent with management area direction.
- Planned activities comply or move towards compliance with Forest Plan and Phase 1 Amendment standards and guidelines (EA Section 2.4).
- Planned activities meet resource protection and other requirements of 36 CFR 219.16 and 219.27:
 - o No timber harvesting will occur on lands not suited for timber production. No harvest will occur for timber production purposes on lands classified as unsuitable for timber harvest.
 - o Adequate restocking is assured. A certified silviculturist determined that areas identified for regeneration harvest (for timber production purposes) are capable of being regenerated within five years of final harvest.
 - o Individual cut blocks, patches, or strips shall be less than 40 acres. The selected alternative would not create any openings greater than 40 acres in size.
 - o 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 purpose of clearcutting is to provide grass/forb structural stage for structural diversity and for wildlife foraging areas. This is the optimum method for achieving these vegetation diversity objectives.
 - o 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 project silviculturist's report in the project file. The National Forest Management Act, at 16 U.S.C. 1604(m)(2), allows exceptions to the general prohibition 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) with the following treatments: precommercial thinning, products other than logs thinning, commercial thinning, aspen enhancement, patch clearcuts, storm salvage, sanitation, and fuel treatments. These treatments are more fully described in Section 2.1 of the EA. The public was advised of these exceptions to the law in the draft EA.

Some groups and individuals feel that snags have not been adequately considered in the environmental analysis process. The Cement EA and this decision notice require all existing snags, except those that pose a safety hazard, to be retained, and sufficient numbers of live trees to be left to provide snags now and in the future. The cutting of standing dead trees for fuelwood, except in designated areas, is prohibited under the Phase 1 Forest Plan Amendment. The project area is being managed to move toward Forest Plan snag levels, which are based on habitat required to support viable populations of snag-dependent species (Forest Plan p. II-27).

Some groups and individuals feel that dense, mature forest habitat has not been adequately considered in the environmental analysis process. The Forest Plan designated late successional (old growth) landscapes and stands. Late successional stands occur within the Cement project area. Alternative 2 will reduce habitat in the short term for species associated with mature, dense forest stands. Based on the Forest Plan management emphasis for the Cement project area, I am willing to accept these effects in exchange for appropriate silvicultural treatments and sawtimber production as well as improvements in vegetation diversity and stand susceptibility to pathogens. Nothing in the Cement EA or the FEIS for the Forest Plan indicates that populations of species associated with dense, mature forests are in jeopardy.

Fragmentation has been addressed in the Forest Plan (FEIS pp. III-247 through 275). Fragmentation has been documented to be an issue for eastern deciduous forests and western rainforests; this is not the case for the ponderosa pine forests of the Black Hills, most of which were historically patchy due to the influence of natural processes such as wildfire and insect infestation. The Cement 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 and Region 2 sensitive species, occurs in the project area. Vegetation treatment will move the project area toward meeting Forest Plan Phase 1 Amendment direction for goshawk post-fledging area composition. Known and high-quality potential nesting habitat was excluded from treatment proposals. Mitigation has been included to prevent disturbance in nest stands and post-fledging areas during the nesting season. Any additional goshawk nests located during the course of this project will be protected. 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 3.1.2).

FINDINGS REQUIRED BY LAWS AND REGULATIONS

Executive Orders 11988 and 11990

Although some activities will occur in riparian areas, no adverse effects to wetlands or to the integrity of floodplains are anticipated (EA Section 3.2.1).

Endangered Species Act

A finding of “No Adverse Effect” was made for all species listed as Threatened or Endangered that may be found in the project area (EA Section 3.1.2).

National Historic Preservation Act

Heritage resource inventories (100% of affected area) have been conducted in the project area, and potential effects on heritage resources have been considered. Sites determined to be eligible to the National Register of Historic Places will be protected through avoidance. No adverse effects are anticipated. The Wyoming State Historic Preservation Officer reviewed the report on heritage resource inventories and concurred in the determination of no effect and no adverse effect in correspondence dated Nov. 18, 2003 (Case Number 0302TLOL026, project file). The Section 106 compliance process is complete.

FINDING OF NO SIGNIFICANT IMPACT

Based on my review of the Cement EA, I have determined that Alternative 2, as modified, is not a major federal action that would significantly affect the quality of the human environment. None of the environmental effects of my decision meet the definitions of significance in context or intensity (40 CFR 1508.27); therefore, an environmental impact statement will not be prepared. I base this conclusion on the following:

Context: The significance of effects of implementing Alternative 2, as modified, has been analyzed in several contexts. The selected alternative is consistent with the requirements of the Forest Plan and Phase 1 Amendment and contributes to moving toward or meeting the goals of the Forest Plan. None of the effects disclosed in the Cement EA is different from those anticipated in the FEIS for the Forest Plan. Cumulative effects have been considered and analyzed for the project area and associated watersheds. 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:

Impacts that may be both beneficial and adverse. Both beneficial and adverse effects have been considered and disclosed in the Cement EA.

The degree to which the proposed action affects public health or safety. Public health and safety will be minimally affected by the action. Prescribed burning is the only activity that could have more than a minimal effect on public health and safety (if a burn went out of prescription and became a wildfire). Mitigation measures included in the EA and requirements for prescribed burns reduce this risk to an acceptable level.

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 that would be adversely affected by the project. No prime farmlands, park lands, wild or scenic rivers, or ecologically critical areas occur in the Cement 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 EA Sections 3.1.2 and 3.1.3 and the BA/BEs located in the project file.

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 the actual effects. The effects on biological diversity have been described and mitigation has been included so the Cement EA can contribute to maintaining habitat for viable plant and animal populations, water quality, and soil productivity. I believe the kinds of effects that 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.)

The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.  possible effects of this proposal are known because the actions are similar to other management activities on the National Forest. Timber harvesting has occurred in the Black Hills for over 120 years and has occurred previously in the Cement project area. Implementation of the proposed activities does not involve any unique or unknown risks.

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.

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 precommercial thinning and road reconstruction to access areas for timber harvest. Cumulative effects, including past, present, and reasonably foreseeable future actions, on both private and public lands, have been analyzed and disclosed. See Cement EA, Section 3.1.1, and the project file.

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. No adverse effects on heritage resources are expected. The State Historic Preservation Officer has concurred with the determination of no effect (EA Section 3.3.4).

The degree to which the action may adversely affect an endangered or threatened species or its habitat. No effects on threatened or endangered species are expected, as none are known to occur within the project area with the exception of occasional winter use by bald eagles.

Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment. All state water quality requirements will be met as well as other Federal, State, and local requirements imposed for the protection of the environment. Effects on water quality, floodplains, and wetlands are documented in the EA and project file. Mitigation measures are used to protect water quality and to meet standards imposed by the Forest Plan and the State. Best Management Practices are applied consistent with requirements of the Clean Water Act. Changes in air quality are expected to be negligible during harvest of sawtimber. Prescribed burning will comply with air quality standards, as addressed in more detail in the individual burn plans that will be developed for each burn. No violations of environmental laws and requirements were identified through the environmental effects analysis.

ADMINISTRATIVE REVIEW

This decision is subject to administrative review pursuant to Federal regulations at 36 CFR 215 (November 4, 1993). 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, CO 80225-25127

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 date, subject 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 Section 215.6 and, if applicable, how the appellant believes the decision violates law, regulation, or policy.

Pursuant to 36 CFR 215.10(a), if no appeal is filed, implementation of this decision may occur on, but not before, five 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 215.10(b)).

The Cement EA is available for review at the Black Hills National Forest Supervisor's Office, 25041 N. Highway 16, Custer, SD 57730; and at the Bearlodge Ranger District Office, 121 S. 21st St./PO Box 680, Sundance, WY 82729. For additional information on

this decision or the project area, contact Elizabeth Krueger at the Bearlodge Ranger District, phone (307) 283-1361.

/s/ *Brad Exton*

2/20/04

BRAD EXTON
Deputy Forest Supervisor
Black Hills National Forest

Date