

**DECISION MEMO**  
**BEARLODGE TRUCKTRAIL FUELBREAK PROJECT**

Bearlodge Ranger District  
Black Hills National Forest  
Crook County, Wyoming

**Introduction**

The purpose of this decision memorandum is to explain the decision to implement the Bearlodge Trucktrail Fuelbreak Project on Bearlodge Ranger District of the Black Hills National Forest. This project is categorically excluded from documentation as allowed by Forest Service Handbook (FSH) 1909.15 – Environmental Policy and Procedures Handbook, Section 31.2. The Project File is available for public review at the Bearlodge Ranger District office, Sundance, Wyoming.

**Decision**

It is my decision to treat approximately 485 acres of hazardous fuels in the central Bear Lodge Mountains on Bearlodge Ranger District north of Sundance, Wyoming. The fuels reduction treatment areas will take place along the “Bearlodge Trucktrail” (Forest Road #830) from its intersection with the #831 Road in T53N, R63W, Section 10, northeast to the Black Hills National Forest boundary near Merrick Spring in T53N, R62W Section 5. The seven treatment areas form an approximately 13.5 mile long constructed fuelbreak which averages 300 feet in width but varies from 80 feet wide to over 800 feet wide. The fuelbreak incorporates Road #830 along with prominent ridges, natural openings, and other logical terrain features. Refer to the attached project vicinity map and treatment area maps for the specific location of the fuelbreak. The project involves the commercial harvest of merchantable ponderosa pine, followed by a mechanical fuels reduction treatment to remove the majority of small diameter pine along with some isolated dense patches of oak brush from within the fuelbreak. A few areas too steep for mechanical equipment will require manual thinning and piling of live, dead, “ladder”, and downed fuels. Activities will take place over the next three to four years.

The reasons for my decision are:

1. The project will cause negligible adverse environmental effects.
2. The project will reduce the probability of devastating wildfires threatening public lands in addition to several local ranches adjacent to the project area.
3. The project will provide defensible space and strategic control points for fire suppression operations along the fuelbreak in the event of a wildfire ignition.
4. The project is consistent with the Black Hills National Forest Land and Resource Management Plan (1997), the Phase I Amendment to the Forest Plan (2001), direction found in the 10-Year Comprehensive Strategy to implement the National Fire Plan (2000), and guidance found in the Healthy Forest Initiative of 2003.

**Project Description**

Treatments include the removal of merchantable ponderosa pine 9 inches diameter at breast height (dbh) and greater through one or several commercial timber sales. Approximately 2.5 million board feet of commercial timber will be offered to prospective purchasers to complete the first phase of the project. The treatment areas that make up the fuelbreak contain mostly dry-site pine/oak stands on upper slopes and ridgelines, with hardwood stands in the many side draws and hollows running east and west of the fuelbreak. With the exception of two sites totaling approximately one acre, treatments will not take place within prominent hardwood stands. Within these two sites, material will be directionally felled to the #830 road with no equipment leaving the road. In all situations along the fuelbreak, the larger,

best-formed, most vigorous trees will be favored for retention. Well-formed dominant pine will be spaced approximately one tree height apart, to create a fairly open fuelbreak. Harvested pine will be whole tree yarded to concentrate slash on landings, and to reduce debris within the fuelbreak. Slash piles will be burned by Forest Service crews in wintertime, and burn pile locations sufficiently rehabilitated and seeded.

Mechanical equipment and thinning contractors will be used to complete the second phase of the project. Pine trees from 5 to 9 inches dbh will be commercially removed along the fuelbreak, if markets exist. Small diameter pine thickets will be thinned to an average 20 x 20 foot spacing, and isolated patches of dense bur oak will be mechanically treated with a mulching head, or “brushhead”. In addition, trees damaged or knocked over by wind and snow, mountain pine beetle mortality, and other dead standing and/or broken out tops and limbs will be mechanically treated during the follow-up treatment, except on steep slopes where material will be cut and piled by hand. Hardwood species such as aspen and paper birch, along with larger oak greater than 4 inches diameter, will not be treated. In areas of pine/aspen mix, the pine will be felled and by hand. Directional felling and “endlining” techniques will be used if this material is removed. Manually treated material and existing downed fuels greater than two inches in diameter and six feet long will be piled within the fuelbreak. Piles will be tightly compacted and approximately six feet in height and diameter to facilitate burning by Forest Service crews when sufficiently cured and optimum winter burning conditions exist.

Areas of the fuelbreak may require additional treatments every seven to ten years, including mechanical treatment and prescribed fire, in order to maintain the fuelbreak and monitor the effectiveness of treatments on bur oak. Maintenance treatments will involve the removal of live fuels such as pine and oak regeneration, along with reducing pine litter and other surface fuels. A site specific burn plan will be developed which will include a prescription identifying the necessary weather and fire behavior parameters to safely and effectively apply prescribed fire. Smoke production from burning is inevitable, however, smoke management techniques would be used to minimize the effects of nuisance smoke drifting downslope to local ranches.

Timber sale operating seasons will be designed to minimize impacts to winter recreationists. Snowmobile Trail B is the only trail that will be directly affected by activities. The northern one half of this trail will be closed for one season from the #831 road north to the Cook Lake junction. Trail B will be used as the haul route for logs north to the junction, then east out the Redwater Road #843. A temporary snowmobile trail adjacent to the #830 road for approximately 200 yards will connect Trails K and H. This will allow Trail K to remain open for this one season shutdown of Trail B. Public safety along the #830 road will be the responsibility of the timber sale purchasers and fuels reduction contractors. Activities would take place adjacent to Forest Road #830, so no road construction or re-construction would be necessary. Only routine spot maintenance of roads by timber sale purchasers will be necessary.

### **Purpose and Need for Action**

The purpose of the Bearlodge Trucktrail Fuelbreak is to reduce hazardous fuels and provide defensible space for firefighters and strategic control points for fire suppression operations. Fuelbreaks retard the spread of wildfire by causing crown fires to drop to the forest floor, and by substantially reducing the continuity of combustible ground and aerial fuels. Reducing wildland fuel accumulations at the ground surface and mid-layer of stands reduces the “fuel ladder” effect, decreasing tree torching and crown fire potential. The Trucktrail Fuelbreak will also aid suppression forces in the event of an ignition in the central Bear Lodge Mountains. Fuelbreaks can provide defensible space and strategic control points for fire suppression operations, such as safety zones or staging areas, and anchor points for fireline construction or burn out operations.

Reducing hazardous fuels on federal lands is a vital role of the *Healthy Forests Initiative*. The primary purpose of this legislation is to reduce the risk of catastrophic fire by restoring forest health, and implementing the goals of the *National Fire Plan 10 year Comprehensive Strategy*. This initiative establishes procedures to expedite and streamline forest restoration planning projects on national forest lands, while increasing collaboration and public involvement. Goals of the *Fire Plan* are to prevent loss of life, reduce firefighter injuries, and lessen damage to communities and the environment from severe, unplanned, and unwanted fires. Recent *Fire Plan* priorities include collaborative planning

involvement with stakeholders, use of third party contracting that supports rural community stability, and obtaining economic use of treated area by-products. The primary goals of the *10-year Comprehensive Strategy* are to improve fire prevention and suppression, reduce hazardous fuels, restore fire adapted Ecosystems, and promote community assistance. The Bearlodge Trucktrail Fuelbreak Project is consistent with these priorities in addition to the fuels management goals and objectives identified in the Black Hills National Forest Land Resource Management plan. (Forest Plan, 1997).

### **Objectives**

The objectives of the proposal are to construct a fuelbreak in a logical, strategic location on the forest in order to reduce the continuity of live, dead, standing and downed hazardous fuels, and to aid fire suppression tactics and strategies in the event of a wildfire ignition. The proposal will reduce the amount and continuity of hazardous fuels within the fuelbreak, which will ultimately reduce the risk of catastrophic fire on public and private lands within and adjacent to the forest. Reducing wildland fuel accumulations at the ground surface and mid-layer of stands reduces the “fuel ladder” effect that lessens crown fire potential and large fire spread. The fuelbreak construction will treat stands currently in Fire Regime Group I Condition Class 2. These are areas where the natural fire regime (low-severity fire every 0 to 35 years) has been moderately altered from historical ranges (one or more fire return intervals have been missed) and there exists a moderate risk of losing key ecosystem components to fire. The proposed treatments will alter stands towards Condition Class 1, where species composition and structure are intact and functioning within a historical range.

Retaining the birch and aspen within and adjacent to the fuelbreak while removing the majority of the ponderosa pine component will reduce the probability of ignition and fire spread while improving overall stand vigor and structure of these hardwoods. Healthy birch and aspen stands can be used as natural firebreaks for fire control. They also provide nesting and hiding cover for a multitude of wildlife species. Other objectives of the proposal include maintaining and restoring these plant and wildlife habitats and meeting the intent of the congressionally supported *Healthy Forest Initiative* and *National Fire Plan*.

### **Mitigation and Monitoring**

The following project specific mitigation measures will be incorporated into project implementation to ensure objectives are met and resource protection commitments are fulfilled:

1. Harvest activities will take place only when the ground is adequately frozen or protected by a minimum of 6 inches of snow.
2. For the two areas designated as suitable plant habitat (totaling approximately one acre): Pine will be removed using directional falling onto the road: no mechanized equipment will actually enter these sites.
3. No activities will take place around all known archaeology sites along the fuelbreak.
4. An average of four large snags per acre on north and east aspects, and two large snags per acre on south and west aspects, will be retained for wildlife species habitat.
5. When possible, without compromising the integrity and purpose of the fuel break, existing snags will be retained by digging to mineral soil at the base of existing snags out to a distance of approximately 5 feet. This will be done, when needed, to meet Phase 1 snag requirements.
6. Approximately 50 linear feet of downed logs greater than 10 inches diameter per acre will be retained for wildlife species habitat and long term site productivity.
7. All fences will be immediately repaired following harvest and mechanical fuel reduction activities.
8. Range improvements such as stock tanks and storage tanks will be protected by 50 foot radius no activity zones.
9. No road construction or re-construction will take place.
10. Project activities will not take place within 1/4 mile of active goshawk nests from March 1 through September 30 to protect nesting goshawks.
11. District botany and wildlife personnel will be involved in project implementation. In the event a sensitive plant or animal species is located after a contract is in place, active coordination between the contractor or purchaser,

and the District Ranger, contract administrator, and the biologist will take place to assure appropriate management of the species.

12. District heritage personnel will be kept abreast of all ongoing activities. If any cultural properties are discovered during implementation, work will cease until the site has been evaluated.
13. 100 foot no activity zones around known archaeological sites have been established. No ground disturbing activities including hand pile construction will occur within these no-activity zones.
14. Skid trails and landing areas will be adequately rehabilitated and permanently closed utilizing native materials.
15. Along arterial roads, remove 70 to 90 percent of the activity fuels seen from the road's edge up to a maximum distance of 300 feet. Treat debris within one year of harvest completion.
16. Where the Scenic Integrity Objectives criterion is high or moderate, meet the criterion within one full growing season after completion of the project. Where it is low or very low, meet the criterion within 3 full growing seasons after completion of the project.
17. Initiate revegetation as soon as possible, not to exceed six months, after termination of ground disturbing activities. Revegetate all disturbed soils with native species when available in seed/plant mixtures that are noxious weed free.
18. Due to the location of this project along ridge tops, it is critical that the edges of the treatments are not laid out in straight lines. Avoid traversing steep slopes, along a line that is mid slope, and in a straight line. Create boundaries that are irregular in shape, similar to natural vegetation edges that can be observed in the forest (and in aerial photos).

Monitoring the effectiveness of treatments, changes in community types, and introduction of weeds will be accomplished by the installation of photo points within the treatment areas. One photo point per 20 acres will be installed prior to implementation, and relocated each year following for five years. In addition, the Forest Landscape Architect will monitor the scenic integrity objectives of the project within one year from the completion of all activities.

### **Scoping and Public Involvement**

Internal scoping was conducted in the summer of 2003 with specialists representing wildlife, range, timber, heritage, botany, watershed, and fire resources. No significant issues were identified. The proposed activities are tiered directly to silviculturist and fuels specialist recommendations.

External scoping included public meetings and mailings. The project was originally introduced to the Crook County Resource Advisory Committee (RAC) on May 19, 2003. A field trip to the project area for several RAC members was conducted on September 27, 2003. A follow-up presentation describing the proposed activities was presented to the RAC on October 20, 2003. A news release describing the proposed project and soliciting public comment was sent to over 50 interested parties on January 29, 2004. These parties included state and local government, other agencies, adjacent landowners, and interest groups. In addition, an open house at the Bearlodge District office was conducted on February 16, 2004, to answer questions and discuss the proposal. Over 15 comment letters and/or telephone contacts were received as a result. Responses to these comments are documented and available in the Project File. These scoping efforts identified no significant issues.

### **Reasons for Categorical Exclusion**

This proposal falls under a new category of action made effective June 5, 2003. This category is found in FSH 1909.15, Section 31.2:

“(10) Hazardous fuels reduction activities using prescribed fire, not to exceed 4,500 acres, and mechanical methods for crushing, piling, thinning, pruning, cutting, chipping, mulching, and mowing, not to exceed 1,000 acres. Such activities:

- a. Shall be limited to areas:
  - (1) In wildland-urban interface; and

- (2) Condition Classes 2 or 3 in Fire Regime Groups I, II, or III, outside the wildland-urban interface;
- b. Shall be identified through a collaborative framework as described in “A Collaborative Approach for Reducing Wildland Fire Risks to Communities and Environment 10-Year Comprehensive Strategy Implementation Plan”;
- c. Shall be conducted consistent with agency and Departmental procedures and applicable land and resource management plans;
- d. Shall not be conducted in wilderness areas or impair the suitability of wilderness study areas for preservation as wilderness;
- e. Shall not include the use of herbicides or pesticides or the construction of new permanent roads or other new permanent infrastructure; may include the sale of vegetative material if the primary purpose of the activity is hazardous fuels reduction.”

This decision meets all of the criteria included in this new category. There are no extraordinary circumstances.

### **Findings Required by Other Laws and Regulations**

#### Heritage Resources:

A heritage resource field inventory and file search were completed during the autumn of 2003. Findings regarding resources eligible for listing on the National Register of Historic Places within the project area were submitted to the Wyoming State Heritage Preservation Office on June 2, 2004 (Case #0204RLC009). No response was received from the SHPO within 30 days. The project may therefore proceed pursuant to 36 CFR (800.4d) and (800.11d). The National Heritage Preservation Act Section 106 process is completed.

#### Threatened, Endangered and Sensitive Species:

A field review was conducted in the summer of 2003 to determine if threatened, endangered or proposed plant and animal species exist or have the potential to exist in the project area. With the exception of the Bald Eagle, no other threatened, endangered, or proposed species are known to occur within this project area. Bald Eagles are primarily winter residents in the project area; however, no nesting is known to occur. This project is expected to have no effect on the Bald Eagle or any other federally threatened, endangered or proposed animal species and their habitat; consultation with the US Fish and Wildlife Service is therefore not necessary. A determination of “*May adversely impact individuals, but not likely to result in a loss of viability on the Planning Area, nor cause a trend to federal listing*” is made for 13 Region 2 sensitive animal species with suitable habitat found in the project area. In addition, a determination of “*May adversely impact individuals, but not likely to result in a loss of viability on the Planning Area, nor cause a trend to federal listing*” is made for four Region 2 sensitive plant species with suitable habitat found in the project area. North Zone Botany and Bearlodge Ranger District Wildlife Biologist Biological Evaluations document these findings and are located in the Project File.

#### Floodplains and Wetlands:

A field review was conducted in the autumn 2003 to verify the existence of floodplains and wetlands within the project area. There are no floodplains or wetlands within the project area. No impacts to the size, shape, or integrity of these water resources are anticipated through this decision. The North Zone Hydrologist’s report is also located in the Project File.

#### Forest Plan Consistency

This project is consistent with the standards and guidelines of the *Black Hills National Forest Land and Resource Management Plan* (March 13, 1997), and the *Phase I Amendment* to the plan (May 18, 2001). Forest Plan guideline 4110a (p. II-55) addresses activity and natural fuel treatments based on ratings of fire risk, fire hazard, as well as resource and/or human values associated with a project area. The Bearlodge Trucktrail Fuelbreak project area has ratings of high risk, high hazard, and moderate value. Forest Plan guideline 4112b (p. II-56) addresses the treatment of fuels adjacent to roads and trails. This standard addresses the management of fire and fuels through control practices and prescribed fire to protect the biological and scenic values of the area. Forest Plan standard 4113 (p. II-56) directs managers to reduce the threat of wildfire to public and private developments, and reduce fuel loadings to acceptable

standards. The Bearlodge Trucktrail Fuelbreak Project will meet these guidelines and standards by reducing potential fireline intensities of both natural and activity fuels in a timely manner, thereby reducing the threat of wildfire. The project is also consistent with management area direction for the two management areas in which the project lays – Management Area 5.1 – Resource Production Emphasis, and Management Area 5.4 – Big Game Winter Range Emphasis.

The *Phase I Amendment* to the forest plan outlines revised standards and guidelines to provide more protection for sensitive species. Mitigation measures designed for this project follow direction found in the Amendment. These measures include maintaining snags and some downed woody debris, reducing the risk of adverse impacts to sensitive plant and animal habitat; and maintaining or improving long-term riparian health.

A silvicultural prescription, fuels specialist’s report, and scenery management specialist’s report are also located in the Project File. This project will meet all management requirements of 36 CFR 219.27(a) *resource protection*, (b) *vegetative manipulation*, (c) *silvicultural practices*, and (e) *riparian areas*.

**Administrative Review and Implementation**

This decision falls under Category 10 as identified in Section 31.2 of Forest Service Handbook 1909.15 – Environmental Policy and Procedures Handbook. This decision is not subject to appeal in accordance with 36 CFR 215.12 (f) (2003). Implementation of this decision may occur immediately.

For more information concerning this project, contact Brad Harris, North Zone Assistant Fire Management Officer (Fuels) or Steve Kozel, District Ranger, PO Box 680, Sundance, Wyoming 82729 (307-283-1361).

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7/14/04  
Date

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