



Telegraph Forest Management Project

**Black Hills National Forest
Northern Hills Ranger District
Lawrence and Pennington Counties, South Dakota**

Proposed Action and Request for Comments

March 2008

Table of Contents

Introduction.....	1
Purpose of and Need for Action.....	1
Telegraph Project Area.....	3
Proposed Action	5
Planning Process.....	6
Where to get More Information	6
Tell Us What You Think.....	6
Comments Needed By	6

Introduction

The Black Hills National Forest Land and Resource Management Plan (Forest Plan) provides direction for management of resources contained within the Black Hills National Forest. The Forest Plan places an emphasis on improving forest health, especially through reducing the risk of catastrophic fire and epidemic insect events. The Forest Service is proposing to improve forest conditions in the Telegraph project area through commercial timber harvest, thinning, and fuel reduction activities. These treatments are intended to reduce the risk of catastrophic fire, reduce the risk of mountain pine beetle infestation, and create greater vegetative and structural diversity in the project area. Project area background information and a description of proposed actions are described below.

Purpose of and Need for Action

The primary purpose of and need for action in the Telegraph project area is to reduce the risk of catastrophic fire and insect events. In addition, there is a need to enhance structural and vegetative diversity. Finally, there is a need to contribute to local and regional economies by providing commercial timber harvest opportunities.

Reduce Risk of Catastrophic Fire and Insect Events

The Black Hills National Forest Land and Resource Management Plan (Forest Plan) directs natural resource managers on the Black Hills National Forest to establish and maintain a mosaic of vegetation conditions to reduce occurrences of catastrophic fire, insect, and disease events. Forest Plan Objective 10-01 directs that the forest be managed for 50 to 75 percent moderate-to-low fire hazard in the wildland-urban interface and for the reduction of fire hazard within proximity of structures to current NFPA standards. Existing information for the Telegraph project area indicates that only 17 percent of the acres in stands that overlap the wildland urban interface buffer currently have a moderate or low fire hazard rating. Outside of the wildland urban interface, forested lands are generally to be managed for 50 percent moderate-to-low fire hazard. Currently, only 18 percent of the acres in stands that do not overlap the wildland urban interface buffer have a moderate or low fire hazard rating.

Forest Plan Objective 10-07 states that where outbreaks of mountain pine beetle could present risks to management objectives for ponderosa pine, the acreage of ponderosa pine stands that are in medium or high risk for infestation should be reduced. Aerial pest surveys conducted in 2007 indicate that over 1700 acres of land within the Telegraph project area are currently infested by mountain pine beetle. The surveys identified approximately 130 separate instances of infestation ranging from less than one acre in size to over 187 acres. Further analysis of conditions within the project area indicates that 64 percent of the ponderosa pine stands have a high insect risk rating, and 28 percent of the stands have a medium rating.

Increase Landscape Structural Diversity

Conditions of ponderosa pine stands within the project area indicate there is a need to reduce the number of stands within structural stages 4B and 4C in Management Areas 4.1 and 5.1. Management Areas are described in this letter under the section titled *Telegraph Project Area. Structural stage* refers to any of several developmental stages of tree stands described in terms of tree size and the extent of canopy closure they create. Below are general descriptions of forest structural stages.

Structural Stage Descriptions

Structural Stage	Description
1-Grass/Forb	The grass/forb stage was historically a product of fires, windthrow or similar disturbances. Under forest management, this stage can be created through harvesting. This stage is dominated by grasses and forbs lasting until tree seedlings become established.
2-Shrub/Seedling	The shrub/seedling stage consists of shrubs such as chokecherry, rose and serviceberry along with tree seedlings. A stand remains in Stage 2 until the tree seedlings reach one inch diameter at breast height (DBH), which should take less than a decade.

Structural Stage	Description
3-Sapling/Pole	The sapling/pole stage consists of trees with stems one to nine inches DBH. This stage typically persists up to 30 years to age 70. Less than 40 percent canopy closure is 3A; 40 to less than 70 percent canopy closures is 3B; and greater than 70 percent canopy closure is 3C. Understory production is inversely related to overstory pine canopy cover.
4-Mature	The mature stage begins when trees reach the 9-inch DBH class. Trees remain in this stage until they are about 160 years old. As with Structural Stage 3, understory productivity depends upon the overstory canopy cover. Less than 40 percent canopy closure is 4A; 40 to less than 70 percent canopy closures is 4B; and greater than 70 percent canopy closure is 4C. The sizes of trees in this stage will vary depending upon growing-site potential and the density of the stand.
5-Late Succession	This structural stage is characterized by very large trees (16+ inches DBH). Trees are at least 160 years in age; ponderosa pine that reach this age are commonly referred to as "yellow barks." Late succession ponderosa pine may occur in dense stands, but may also grow in the open or in "park-like" stands.

Forest Plan Objectives for Management Areas 4.1 and 5.1 direct natural resource managers on the Black Hills National Forest to manage ponderosa pine stands in an effort to move toward a desired composition of structural stages. The table below identifies the existing distribution of structural stages for pine stands in the project area. It also indicates the forest-wide distribution reported in the Black Hills National Forest's most recent Monitoring and Evaluation Report as well as the desired forest-wide distribution as specified in the Forest Plan.

Structural Stage Distribution of Ponderosa Pine on NFS Land in MAs 4.1 and 5.1

Structural Stage	Distribution in MA 4.1 in the Project Area		Distribution in MA 4.1 Forest-Wide		Distribution in MA 5.1 in the Project Area		Distribution in MA 5.1 Forest-Wide		Forest Plan Desired Forest-Wide Distribution in MAs 4.1 & 5.1
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Percent
1	63	0.9	413	1.1	644	1.7	38,308	8.0	5
2	75	1.1	548	1.5	2,119	5.5	15,453	3.2	5
3A	0	0.0	908	2.5	941	2.5	18,371	3.9	10
3B	573	8.3	1,021	2.8	1,146	3.0	22,827	4.8	15
3C	244	3.6	844	2.3	1,064	2.8	11,675	2.5	5
4A	528	7.7	9,391	26.0	10,509	27.4	177,660	37.3	25
4B	3,608	52.5	14,445	40.0	14,756	38.4	144,167	30.3	25
4C	1,710	24.9	8,382	23.2	7,123	18.5	47,617	10.0	5
5	68	1.0	204	0.6	103	0.2	307	0.1	5
Total	6,869	100	36,156	100	38,405	100	476,385	100	100

In addition to the need to move toward the structural stage objectives identified in the Forest Plan, there is also a need to create a greater number of age classes within Management Area 8.2 (Developed Recreation Complexes). Existing conditions within this area are representative of one-aged stands of ponderosa pine. Management direction, however, calls for a diverse range of tree sizes and ages to be represented in such areas.

Increase Landscape Vegetative Diversity

The Forest Plan directs natural resource managers on the Black Hills National Forest to provide for a variety of life through management of biologically diverse ecosystems. A number of objectives identified in the Forest Plan that are intended to help the forest move toward that goal.

Objective 201 states that the forest should be managed for a minimum of 92,000 acres of aspen. In 2006, there were 45,559 acres of aspen across the forest. The project area contains 1,939 acres of aspen. Review of project area conditions suggest that some of these aspen stands are showing signs of decadence and that there is an opportunity to treat them to facilitate regeneration.

Objective 204 calls for the conservation and management of lodgepole pine (among other species). The project area contains 103 acres of lodgepole pine. The condition of some of these stands could be enhanced through active management.

Contribute to Economies by Providing Commercial Timber Harvest Opportunities

The Forest Plan directs natural resource managers on the Black Hills National Forest to provide for sustained commodity uses in an environmentally acceptable manner. Forest Plan Objective 303 provides guidance on how much timber on suitable and available timber lands should be offered.

The bulk of the Telegraph project area consists of Management Area 5.1 (Resource Production Emphasis). Land under this management designation is to be managed so that it provides a variety of goods and services, including resource commodities such as timber. Monitoring completed since the late 90s indicates that the Black Hills National Forest has not exceeded the decadal allowable sale quantity of 838 million board feet (mmbf). Volume offered between 1998 and 2006 has ranged between 2.8 and 92.9 mmbf annually. Finally, commercial timber sales that might result from this project could provide a cost-effective method for moving the project area toward desired conditions.

Telegraph Project Area

Location and Features

The Telegraph project area is located in the northern Black Hills about 5 miles directly south of Lead, South Dakota (see the **Project Area Vicinity Map** below). The project area is 63,608 acres in size and is comprised of 56,172 acres of National Forest System (NFS) land and 7,436 acres of private land.

The project area contains landmarks such as the North Fork of Rapid Creek, North Boxelder Creek, Middle Boxelder Creek, Crooks Tower, and Custer Peak. Elevation ranges from 5,193 feet near Boxelder Creek in the very eastern portion of the project area to 7,085 feet at Crooks Tower in the south-west corner of the project area. Ponderosa pine is the dominant type of vegetation within the project area, covering over 46,000 acres. The project area also contains a substantial amount of white spruce (5,330 acres), grassland (2,004 acres) and aspen (1,939 acres).

There are approximately 291 miles of roads in the Telegraph project area. The Mickelson Trail, which is managed by the State of South Dakota, bisects the project area. It occurs in a north-south line and divides the project area into roughly equal halves. In addition, there are approximately 127 miles of designated snowmobile trails. These snowmobile trails are part of the #2, #5, and #7 trail systems. Additional recreation features within the project area include the Dumont Mickelson Trailhead, the Custer Peak Lookout Tower, the Roubaix Campground, the Roubaix Picnic Ground, and the Roubaix Swimming Area. The Black Fox Campground is adjacent to but outside of the project area.

Management Direction

The Forest Plan identifies the location of and describes the goals and objectives associated with the Forest's Management Areas (MAs). The table below identifies the MAs that comprise the Telegraph project area.

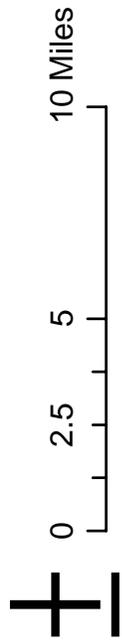
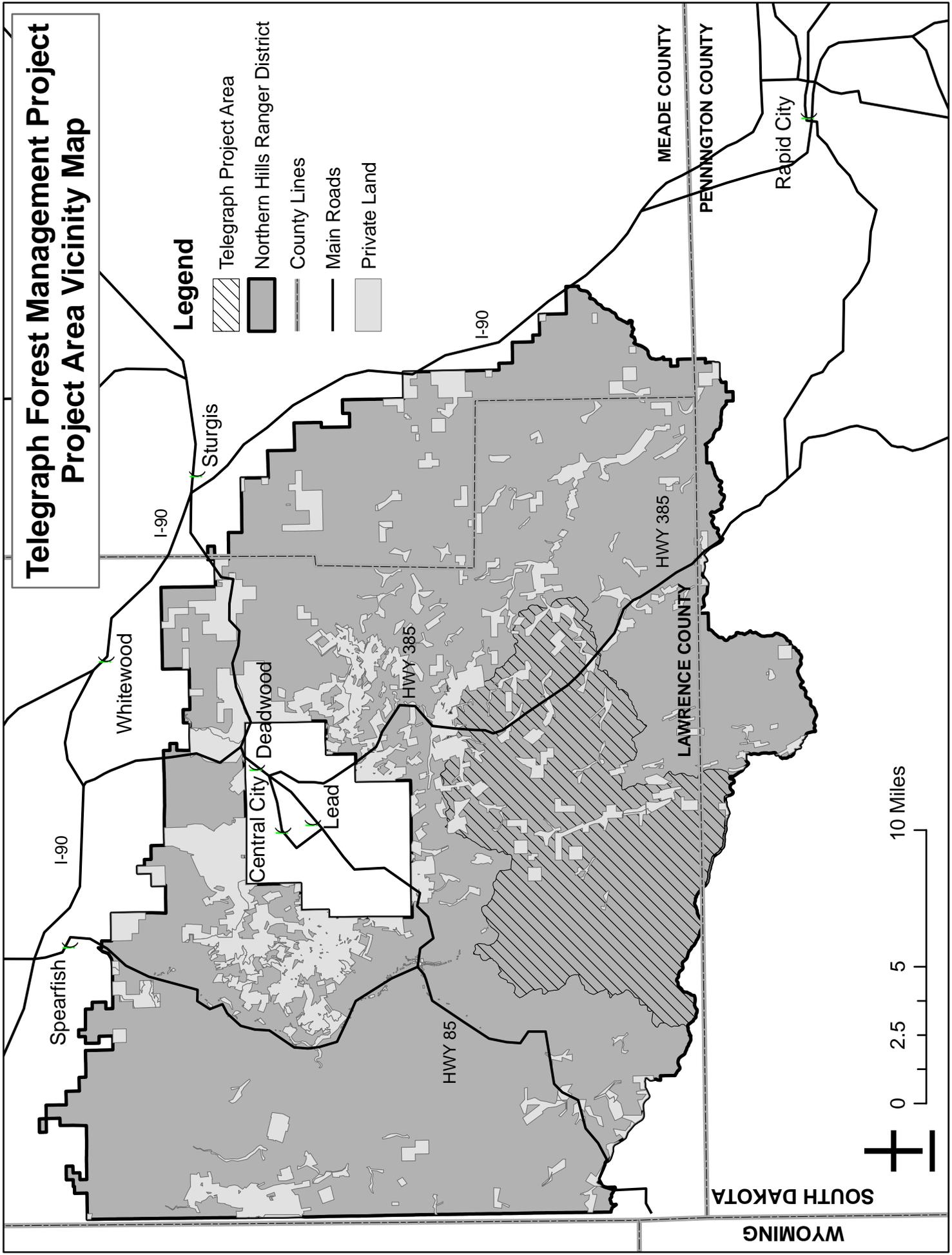
Management Areas and Forest Plan Direction

Management Area Code	Management Area Name	Acres within the Project Area	Percent of the Project Area	Management Theme
3.7	Late Successional Forest Landscape	1,312	2.3	These areas feature stands of trees that contain late successional forest structure across a landscape.
4.1	Limited Motorized Use and Forest Product Emphasis	8,725	15.5	These areas are managed for non-motorized recreation while providing for timber production, forage production, visual quality and a diversity of wildlife.
5.1	Resource Production Emphasis	45,973	81.8	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.
8.2	Developed Recreation Complexes	162	0.3	These areas are managed for recreational opportunities and visual qualities adjacent to developed recreation sites and bodies of water.

Telegraph Forest Management Project Project Area Vicinity Map

Legend

- Telegraph Project Area
- Northern Hills Ranger District
- County Lines
- Main Roads
- Private Land



Proposed Action

The proposed action is intended to be responsive to the purpose of and need for action specified for this project and to move conditions within the project area toward more desirable conditions as described in the Forest Plan. The proposed action includes a variety of commercial and non-commercial vegetation and fuels treatments on approximately 31,722 acres (see the **Proposed Action Map**). Commercial treatments proposed could result in approximately seven commercial sales. Stewardship opportunities through which the Forest Service exchanges goods for services may also be allowed under this project. Some treatments will stand alone, while others include initial treatments as well as follow-up treatments. The following table lists the vegetation and fuels treatments comprising the proposed action. Design criteria will be established for these activities to help ensure consistency with Forest Plan Standards and Guidelines.

Proposed Vegetation and Fuels Treatments

Treatment	Acres	Description
Commercial Hardwood Enhancement	1,611	Hardwood enhancement is intended to maintain or encourage hardwood growth. It involves removal of conifers 9" or greater at diameter breast height (dbh) from hardwood stands.
Commercial Lodgepole Pine Enhancement	405	This treatment is intended to maintain the presence and vitality of lodgepole pine stands. Specific treatments will be determined following a site visit and could range from thinning to clearcutting and burning, depending on site conditions.
Commercial Overstory Removal/ Pre-commercial Thinning	9,350	The objective of removing overstory trees is to liberate the established understory regeneration. Thinning following the initial treatment is intended to retain appropriate growing stock levels.
Commercial Overstory Removal/ Pre-commercial Thinning/ Prescribed Burning	1,037	This treatment is the same as the one above except that prescribed burning could also take place in these stands following initial treatments.
Commercial Seed Cut/ Pre-commercial Thinning/ Prescribed Burning	2,741	This treatment involves thinning overstory trees to create optimal regeneration conditions. The best formed overstory trees are retained at approximately 30 sq. ft. of basal area (~ 35 foot spacing between trees).
Commercial Thinning/ Pre-commercial Thinning/ Prescribed Burning	8,675	Retention densities would vary from 40 to 80 sq. ft. of basal area. The best formed, most dominant, and vigorous trees would be retained.
Meadow Enhancement	293	This treatment involves removal of pine in historical meadow areas to increase vegetative diversity and grass production in meadow communities.
Pre-commercial Thinning	3,055	Pre-commercial thinning would involve the reduction of standing stems less than 9 inches in diameter, retaining 200-400 stems per acre (~12 foot spacing). Cut material is lopped and scattered within the stand to maintain nutrients on the site.
Pre-commercial Thinning/ Prescribed Burning	177	This treatment is the same as the one above except that prescribed fire could be used as a follow-up to hasten fuel decomposition and reduce the risk of uncontrolled fire.
Prescribed Burning	4,312	The intent of prescribed burning is to reduce surface fuels and the risk of uncontrolled fires.
Planting	66	Planting of native species is intended to create greater vegetative diversity in and around the Roubaix Developed Recreation Complex.

Transportation System

To facilitate the treatments described above, an estimated 83 miles of new National Forest System road would need to be constructed, and 29 miles of currently unclassified road would be added to the system. These roads would be closed following harvest activities. The proposal would also require use of approximately 166 miles of existing National Forest System road. These system roads would need to be prepared for use. Preparation could range from minimal maintenance activities to reconstruction of the road template, depending on the current condition of the road.

Planning Process

Public involvement is a key element of the land management planning process. Public input at this point in the process will help identify issues associated with the Telegraph project area and guide development of alternatives to the proposed action. Foresters, biologists, and others will analyze the effects of the proposed action and alternatives on the physical, biological, and social environment. The Forest Service will present the results of this analysis in a Draft Environmental Impact Statement (DEIS) to be circulated for public comment in July 2008. Based on the analysis and public input, the District Ranger will decide which alternative to implement.

Where to Get More Information

To find out more about this project, contact Jackie Groce, Natural Resource Planner, at the Northern Hills Ranger District, (605) 642-4622. If you elect to comment on this project, you will automatically be retained on the project mailing list. If you do not comment on the project but wish to be mailed a copy of the DEIS when it is released, please contact Jackie Groce at the phone number above.

The Northern Hills Ranger District invites you to an open house to discuss the Telegraph project on Thursday, April 3, 2008 from 6:00-7:30 PM at the Northern Hills Ranger District Office, 2014 North Main St., Spearfish, SD. Staff will be on hand to help answer questions you might have, and larger scale maps will be available for review.

Tell Us What You Think

We invite your review of the proposed action. Your comments will help us develop a practical project and conduct meaningful analysis. Comments can be submitted by mail, phone, fax, or electronic mail. Phone calls may be placed to the above number. Faxed comments should be sent to (605) 642-4156. Electronic comments should be sent to: comments-rocky-mountain-black-hills-northern-hills@fs.fed.us. Please indicate "Telegraph Project" in the subject line. Written comments should be addressed to:

Northern Hills Ranger District
Attn: Jackie Groce, Telegraph Project Leader
2014 North Main St.
Spearfish, SD 57783

Comments Needed by...

We welcome comments at any time. However, to consider your comments as we prepare alternative actions and the Draft Environmental Impact Statement, they should be received by April 15, 2008.

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Telegraph Forest Management Project Proposed Action Map

