

PURPOSE AND NEED

PURPOSE OF AND NEED FOR ACTION

The purpose of this project is to recover value in the wood from a portion of the area burned by the Hayman Fire by putting it to beneficial use in the local and regional communities. There is a need and demand for wood and various wood products used throughout the region. This action responds to the goals and objectives outlined in the Pike and San Isabel Forest Plan, and helps move the project area towards desired conditions described in the Plan (pages III-3 to III-10).

PROPOSED ACTION

The Forest Service proposes to harvest a portion of the fire-killed trees from the 137,000-acre area burned by the Hayman Fire. Fire-killed trees are defined as dead or dying trees that meet or exceed the fire injury survivability standards as defined in R1-01-06 for Douglas-fir and R1-01-07 for ponderosa pine within the next 5 years. The Hayman Fire Salvage Project Area is within the Hayman Fire boundary (see Hayman Fire Vicinity Map) and is within the Pikes Peak, South Park and South Platte Ranger Districts, Pike National Forest, Colorado. The proposed harvesting activities are described below.

- Harvest standing fire-killed trees on approximately 17,500 acres from high- to moderate-burn severity areas with slopes generally less than 35 percent. Slash would be mostly left onsite to aid in erosion control. This salvage would be accomplished with standard ground-based logging equipment, including skidders and fallers. These areas would be treated primarily through timber sales contracts of all sizes.
- Construct up to nine miles of temporary road to facilitate salvage operations. Roads would generally be constructed on slopes less than 35%, but short sections (less than ¼ mile) may be on slopes up to 50%. The temporary roads would be recontoured and restored to as near as natural conditions as possible after salvage activities are completed. Affected Forest System road conditions would also be assessed and maintained as needed.

BACKGROUND

The Hayman Fire began in Pike National Forest on June 8, 2002, and burned approximately 137,000 acres between the towns of Lake George and Trumbull, Colorado. Both private and National Forest System lands were burned. At least 600 structures were lost including 133 residences, one commercial building, and 466 outbuildings. The fire burned within the Upper South Platte Watershed, the primary source of municipal water for the city of Denver. Cost of fighting the fire exceeded \$39 million dollars. The Hayman Fire burned to the Schoonover Fire area which was contained only 2 weeks earlier and had burned 3,900 acres.

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Burned Area Emergency Rehabilitation (BAER) was initiated after the fire was contained on July 7, 2002. This work provided short-term mitigation of the fire's effects and involved projects such as seeding, hydromulching, scarification, dry mulching, and dead tree felling to trap eroding soil. These measures were implemented on high-risk areas (high burn intensity, steep slopes, and erodible soils) within the fire perimeter to reduce the likelihood of damage to life and property. BAER treatments have been applied on 31,300 acres. Extensive road surveys were also completed within the burn area. Many road/stream crossings were damaged and need repair or maintenance. Roads with safety risks were kept closed in 2002 and may need to be closed in 2003, especially following large storm events. Costs for BAER treatments in 2002 for the above acres were approximately \$14.7 million. Additional acres will be assessed for treatment in the spring and summer of 2003. The initial emergency BAER issues will continue to be concerns this year. The 2002 BAER treatments along with natural recovery will help mitigate the effects in high burn severity areas, but risk remains high.

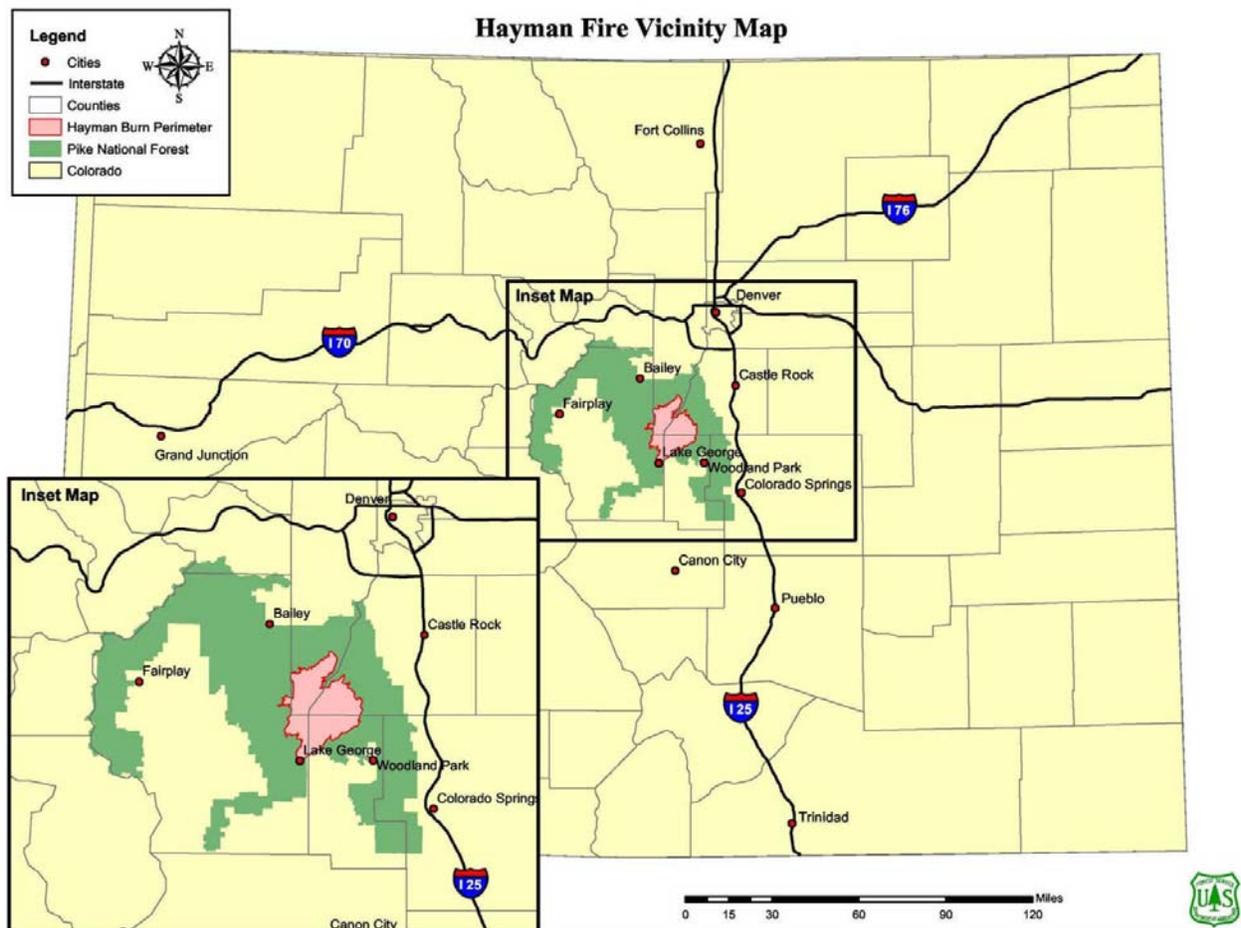


Figure 1. Hayman Fire Vicinity Map

MANAGEMENT DIRECTION

The *Land and Resource Management Plan for the Pike and San Isabel National Forests and Comanche and Cimarron National Grasslands* (Forest Plan), provides long-term programmatic forest-wide goals and objectives. This EA is a project-level analysis that conforms to applicable Forest Plan management direction (goals and standards/guidelines). Where appropriate, this EA tiers to the Forest Plan and is hereby incorporated by reference, as encouraged by 40 CFR 1520.20. The Forest Plan provides overall land management guidance through its goals, standards and guidelines, and management area (MA) direction. This proposed action was also designed in conformance with the area-specific Forest Plan direction that applies to each MAs.

Management Areas

The Forest Plan divides the Pike National Forest into individual MAs. The Forest Plan designates specific direction, goals, standards, and guidelines to be used in the management of these areas to more completely meet the MA emphasis. These are referred to as “management area prescriptions.” There are 11 MAs in the Project Area. About 85 percent of the project area and 99 percent of the salvage units are in the following five MAs:

2A – Emphasizes semi-primitive motorized recreation opportunities such as snowmobiling, four-wheel driving, and motorcycling. Motorized travel may be restricted or seasonally prohibited to designated routes to protect physical and biological resources. Management Area 2A covers 23.4% of the project area and 17.7% of the salvage units.

2B – Emphasizes rural and roaded-natural recreation opportunities such as driving for pleasure, viewing scenery, picnicking, fishing, snowmobiling and cross-country skiing. Motorized travel may be prohibited or restricted to designated routes, to protect physical and biological resources. Management Area 2B covers 40.5% of the project area and 47.7% of the salvage units.

4B – Emphasizes wildlife habitat management for one or more indicator species. Roaded-natural recreation opportunities will be provided, but vegetation treatment and human activities are managed to provide optimum habitat for the selected species. Semi-primitive motorized recreation opportunities are provided on those local roads and trails that remain open, semi-primitive non-motorized opportunities are provided on those that are closed. Management Area 4B covers 2.1% of the project area and 6.0% of the salvage units.

7A – Emphasizes wood-fiber production and utilization of large roundwood of a size and quality suitable for sawtimber. Roaded-natural recreation opportunities are provided along Forest arterial and collector roads. Semi-primitive motorized recreation opportunities are provided on those local roads and trails that remain open, semi-primitive non-motorized opportunities are provided on those that are closed. Management Area 7A covers 13.4% of the project area and 18.7% of the salvage units.

7D – Emphasizes the production and utilization of small roundwood of a size and quality for products such as fuelwood, posts, poles, props, etc. Semi-primitive non-motorized, semi-

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primitive motorized, roaded-natural and rural recreation opportunities can be provided. Management Area 7D covers 6.0% of the project area and 8.7% of the salvage units.

About 15 percent of the project area and less than one percent of the salvage units are in the following six MAs: 3A (emphasizes semi-primitive non-motorized recreation in both roaded and unroaded areas), 5B (emphasizes forage and cover on winter range for big game species), 6B (emphasizes management for livestock grazing), 8B (provides for primitive recreation opportunity of low use and essentially unmodified natural environment in wilderness), 8C (provides for a semiprimitive recreation opportunity in areas of moderate to low use in wilderness), and 9A (resource use managed to protect and maintain the riparian area).

ISSUES

Issues are potential environmental problems that may result from federal action, if it is taken. Issues were identified by the public during scoping for this project and specialists in the Forest Service. A letter asking for public input on this project was mailed in November 2002. Comments were received through December 2002. Public comments were analyzed by the EA interdisciplinary team to determine issues for this analysis.

Once issues were identified, they were used to help formulate the alternatives and mitigating measures. Impact topics were then selected for detailed analysis based on substantive issues; environmental statutes and regulations; and the Forest Plan. A summary of specific issues addressed in this EA follows.

Natural Resources

Soil and Water. Issues specific to these resources are erosion, sedimentation, soil productivity, and soil displacement. The primary issues that encompass soil and water quality were key to alternative development. Timber harvesting and road construction may impact already highly erodible soils that may be increasing erosion potential and sediment delivery into the City of Denver's water supply and tributaries of the South Platte River. Salvage harvesting would entail the use of heavy machines designed to cut trees and/or remove logs. Operation of heavy equipment could increase soil disturbance and erosion rates that are already far above normal due to the burned soil conditions. Skid trails, created by dragging the logs to the road, could create channels for surface runoff that may increase erosion. If eroded soil reaches a stream, it may be deposited and increase turbidity, which could adversely impact water quality and fish habitat. Ground-disturbing activities in BAER treated areas could also delay burn area recovery by one or two years.

Vegetation. The Hayman Fire substantially modified the forest in the high/moderate severity burn areas leaving an open forest structure of fire killed trees with a future potential for downed logs characterizing the post-fire conditions. The salvage harvest would alter this forest structure by reducing snag density in these areas. Timber harvest activities, could slow vegetation recovery by one or two years and spread noxious weeds.

Wildlife. The proposal may slightly reduce habitat for snag dependent species and slow recovery of vegetative habitat. Proposed activities would temporarily disturb wildlife. Construction of new or opening existing roads may provide additional motorized and non-motorized access causing wildlife impacts.

Fish. Proposed activities may accelerate erosion and sediment transport that could potentially affect fish habitat. See “Soil and Water” section above.

Heritage Resources

There would be no direct effects on cultural resources. However, erosion caused by ground-disturbing activities may indirectly affect cultural resources.

Socioeconomic Resources

Local and Regional Economy. Because fire-killed trees deteriorate rapidly, the opportunity to recover their economic value is limited. Timber salvage related employment and expenditures would temporarily benefit the local economy. However, impacts on recreation could adversely affect commercial outfitters.

Recreation. Timber salvage activities may temporarily reduce recreation opportunities that may exist in or near moderate/severe burn areas. Log truck traffic and temporary road or trail closures may also limit dispersed recreation opportunities.

Visual Resources. The Hayman fire substantially altered the visual character of the landscape. Timber salvage activities will likely be visible because of the loss of tree cover. Noise, dust, and visual intrusions from logging truck traffic may also affect viewing opportunities.

Transportation. Up to 12,500 truckloads of logs could be hauled on roads leading from the project area. This much truck traffic could damage roads and adversely affect normal traffic. Construction of temporary roads may create new access into the Forest, may negatively impact soils and visuals, may provide additional motorized and non-motorized access, and may not be closed and obliterated.

Fuels. The proposed action would leave slash from the harvested trees that would increase fuel loads during the short-term. However compared to unharvested areas, less fuel would accumulate over the long-term after fire-killed trees begin to fall. Besides being a potential fire hazard, the dead standing and down trees are a safety hazard to firefighters and others.

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ISSUES DISMISSED FROM FURTHER ANALYSIS

If an issue was considered to be outside the scope of this environmental assessment, or if the best available information indicated that impacts would be negligible, it was eliminated from further analysis, as per NEPA requirements. The issues considered but not evaluated further in this document are as follows.

Bestcha Paper Issues Not Related to this Project

Several scoping comments suggested that the Forest Service consider the Beschta Report (1995) for this project. This paper, submitted to the Pacific Northwest Regional Forester, evaluates the ecological basis for salvage logging following wildfire. The paper remains unpublished and was not peer reviewed, and has received criticism from several scientists. Everett (1995), in fulfilling a request by the former Regional Forester to respond to the Beschta commentary, suggests that although post-fire logging should be evaluated case by case, the custodial post-fire approach advocated in the Beschta paper would be less desirable because of soil degradation in the absence of seeding and dangerous fuel accumulations in the absence of tree harvest. Everett (1995); however, concurs with Beschta and others (1995) in stating that there is little to no information available to support either the reburn hypothesis or the premise that post-fire logging results in no more environmental damage than typical green tree harvest.

Several concerns relevant to this project that Beschta and others (1995) express are part of the action alternatives. The proposed action for Hayman salvage project addresses many of these concerns by avoiding sensitive areas and applying other resource protection measures. However, the Beschta paper is otherwise irrelevant to this project because the purpose and need for the project is to recover wood value from some of the fire-killed trees while improving economic opportunities, rather than to reduce future wildfire risk or improve ecological conditions.

Wild and Scenic River

South Platte River segments within the project area are being studied for designation as a Wild and Scenic River. No proposed work would occur within or near the South Platte River corridor (1/4 mile on either side of the river). Therefore, this issue was dismissed from further analysis.

Roadless Areas

No proposed activities would occur within any Inventoried Roadless Areas. Therefore, this issue was dismissed from further analysis.

Environmental Justice

Executive Order 12898 requires federal agencies to address disproportionately high and adverse human health or environmental effects on minorities and low-income populations and communities. The proposed action would not be expected to cause significant changes in the socioeconomic environment of the project area and thus would not affect low income or minority populations or communities. In addition, no environmental justice issues were raised during scoping. Therefore, environmental justice was dismissed.