

CHAPTER 1

Purpose and Need for Action

1.1 INTRODUCTION AND PROJECT LOCATION

The Gallatin National Forest has conducted an environmental analysis to evaluate the potential effects of implementing a hazardous fuel reduction/vegetation treatment project on National Forest System lands in the portion of the Smith Creek drainage of the Livingston Ranger District that has been identified as a wildland/urban interface area. This Environmental Assessment (EA) was prepared in compliance with the National Environmental Policy Act (NEPA) and provides information to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI). The purpose of the NEPA process is to help public officials make decisions that are based on an understanding of environmental consequences, and to take actions that protect, restore, and enhance the environment (40 CFR 1500.1(c)).

The National Fire Plan defines wildland/urban interface (WUI) as “The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels”. The Park County Community Wildfire Protection Plan (CWFPP), located in the Project File, was completed in spring of 2006 and identified Smith Creek as a WUI that is at risk from potential wildfire and a priority for fuels reduction.

The Analysis Area for the proposed project is located in the Crazy Mountains along the northwest corner of the Livingston Ranger District, approximately 35 miles north of Livingston, Montana. It is bordered on the west and south by the Gallatin National Forest boundary, private lands, and by the Lewis & Clark National Forest boundary to the north and east. The approximately 23,200 acre Analysis Area consists of the WUI boundary as defined by the Park County CWFPP. The analysis area consists of a mixture of National Forest System (NFS) and interspersed private lands. See Vicinity Map (M-1) and Activity Area Overview Map (M-2).

The Project Area, located in T5N, R9E, Section 1 & T5N, R10E, Sections 4, 6, & 8, consists of the portions of the Smith Creek WUI that are in the closest proximity to residences, other structures, and primary transportation routes. The communities at risk are located in Sections 5, 6, and 7 of T5N, R.10E.. Numerous private residences are located within the Project Area, many of which are located along the Smith Creek Road #991. The largest concentration of residences (approximately 30), within the forest boundary, is the Smith Creek subdivision. These residences are a combination of summer cabins and year round residences, which have been identified as a community at risk from wildfire by the recently completed Shields River Watershed Risk Assessment (USFS 2005a) and Park County Community Wildfire Protection Plan. The reasons for the high fire risk rating include limited access and heavy fuel loadings, both along the travel routes and within/adjacent to the subdivision. Objectives for treatments within the WUI and along the primary evacuation routes are outlined below:

Wildland Urban Interface (WUI): Reduce the risk of crown fire near structures and private in-holdings adjacent to NFS resources by modifying vegetation, which would reduce fire intensity. The risk of sustained crown fire is high in and adjacent to much of the WUI in this area. Surface and ladder fuels are conducive to intense fire with torching that pushes a fire from the ground to the tree crowns. Crown canopy fuels are continuous and lend themselves to fire spread from crown to crown for long distances and are likely to produce ash that can travel long distances through the air. The proposed project would reduce the continuity of surface, ladder and crown fuels resulting in elevated canopy base height (distance from the ground to the first live limb) and reduced fuel continuity in all fuel strata or layers (surface, ladder and crown). Removal of conifer encroachment and encouragement of aspen regeneration in aspen areas would create “heat sinks” because aspen tends to retain moisture in fallen and decaying leaves late into the fall. The changed condition would lower fire spread rates and result in a change to the expected fire type from crown fire to surface fire.

Evacuation Routes: Allow time for safer ingress and egress by lowering flame length and fire intensity adjacent to key evacuation routes in the event of a wildfire. The Smith Creek and East Fork of Smith Creek Roads are the key evacuation routes. These roads are narrow, rutted, have little surfacing, and contain densely forested fuel accumulations immediately adjacent to portions of the roads. Expected flame lengths and fire intensity in the event of a wildfire would be high along these areas. To lessen the risk to public and firefighters, the continuity of surface, ladder, and crown fuels would be reduced, resulting in lower fire intensity and lower flame lengths along these evacuation routes.

The main concern in this portion of the Smith Creek drainage at this time is the buildup of fuels in an area that has a high degree of home development. The Smith Creek Vegetation Treatment Project was designed to improve public and firefighter safety by lowering the intensity of potential wildfire behavior. This would be accomplished by breaking up the vertical and horizontal continuity of vegetation and fuel conditions in the portions of the WUI in closest proximity to residences, other structures, and primary transportation routes. Treatment units have also been designed to improve wildlife habitat diversity by modifying forest structure where encroachment from conifers is occurring in meadow, aspen, and historically open grown Douglas-fir stands. By removing bug-infested trees and decreasing stand density, stand conditions would also be less susceptible to future insect and disease infestations.

The project was also designed to help improve water quality and fish habitat for Yellowstone Cutthroat Trout (YCT) by improving drainage and surfacing on portions of the Smith Creek Road #991 and the East Fork of Smith Creek Road #6635. Outside funding was recently obtained for the maintenance of problem areas (sediment sources) on these roads (See Map M-5). These funded pre-activity road maintenance treatments to improve road conditions and sediment concerns in the project area will be completed during the summer of 2007 prior to any harvest related activities and are no longer

considered to be part of this project (See second scoping letter dated 9/29/2006), but are analyzed in cumulative effects. There are additional road maintenance and surfacing treatments planned as part the project (Treatments B & C, Table A-24, Map M-6) that would be completed to the degree funding allows.

Harvest related activities would likely begin in the fall/winter of 2008/2009. The project is expected to be completed within four to five years.

1.2 BACKGROUND INFORMATION

B. John Losensky completed a fire history study in 1993 (See Project File) that focused on the west slope of the Crazy Mountains on the Livingston Ranger District. Losensky reached conclusions that wildfires in most or all of the Crazy Mountains were not uncommon. Data suggests that major portions were impacted by fire in 1849, 1855 and 1863, which was the last major fire. Many of these fires probably began in the valley grasslands and moved upslope into the forested lands.

Recent human activity has influenced the historic role fire has played on the Crazy Mountain landscape. A wide variety of land management practices have occurred within the project vicinity. Some private grasslands are irrigated, farmed, and grazed and some of the timbered areas have been logged; while other landowners have adopted a passive approach. National Forest System lands contain numerous roads, dispersed recreation areas and trailheads, suitable timber areas, and grazing allotments. This all leads to a very diverse landscape, resulting in a complex management area. In addition, fire suppression has been very successful in this area. Fires that historically would have grown to large sizes have been suppressed shortly after ignition. Recent fires in or near the Analysis Area include the 1994 Smith Creek fire, which burnt 1,000 acres and the 2000 Sugarloaf fire, which burnt 400 acres, and the 2003 Slippery Rock fire, which burnt 1,072 acres.

In May of 2005, the Shields River Watershed Risk Assessment (USFS 2005a) (WRA) was completed by the Forest Service. The Smith-Shields WRA was a landscape level assessment, evaluating approximately 44,000 acres in the Smith Creek and Shields River drainages for the risks to natural resources from different levels of predicted 50-year vegetative changes, caused primarily by wildfire and forest insects. The team of Forest Service resource specialists that conducted the analysis considered existing, historical, and projected future landscape conditions and weighed these considerations with current Forest Plan management direction and current and potential social settings. A primary component of this WRA process was data outputs generated by the SIMPPLLE model (SIMulating Patterns and Processes at Landscape ScaLEs). SIMPPLLE attempts to simulate vegetative changes to landscapes over time using pathways for stand development and natural disturbances. Multiple runs containing random variables were used to identify a range of vegetative conditions and natural disturbances (least, average and most) that might be expected for a given landscape. Using a series of multiple simulations (40), 50 years into the future and one “average”view of historic conditions, resource specialists, provided a coarse assessment of risk to individual resources. The Smith-Shields WRA was a landscape level assessment of the risk to natural resources

from different levels of predicted 50-year vegetative changes caused primarily by wildfire and forest insects. The findings of this WRA were used to assist in determining whether or not natural resources are at risk, and whether or not vegetative manipulation opportunities exist to reduce perceived risks

Once opportunities were identified using the WRA process, the District Ranger formed an Interdisciplinary Team (IDT) to validate the findings/opportunities with more intensive field reconnaissance and analysis. Upon validation, a Project Initiation Letter was sent by the District Ranger to members of the IDT in January of 2006 asking them to begin work on developing a “proposed action” and start the analysis (NEPA) process. The letter also outlined the need for using a collaborative and integrated approach in order to make improvements for a variety of resources, and clearly stated the expectations that there would be a substantial amount of public involvement associated with the planning process.

The analysis concluded that there were high risk natural fuel levels and limited access (“one-way-in” and “one-way-out”) in the Smith Creek (23,200 acre) WUI area. These conditions (fuel levels and limited access) create unsafe conditions for the public and firefighters. The WRA also identified as risks, modifications in wildlife habitat including increasing tree densities of Douglas-fir; and decreases in aspen and meadow habitats due to encroaching conifer trees. Another risk identified was the increased susceptibility of forested stands to bark beetle attacks due to dense tree stand densities.

The Park County Community Wildfire Protection Plan (CWPP), completed in the spring of 2006, identified the Smith Creek area as a priority “WUI area at high risk” from wildfire and a priority for fuels reduction projects. Although the majority of the residences are just outside of the Park County line in Meagher County, these areas have access or response issues that warrant Park County to take an active role assisting in their protection. A copy of the wildfire protection plan can be found in the Project File.

Collaboration with the public, private landowners, recreationists, and other interested parties has been important in the development of the Smith Creek Vegetation Treatment Project. The proposal was developed with input from adjacent private homeowners, as well as state, county, and local officials. Public meetings and field trips have been held, with the Forest Service providing information and updates regarding the proposed project on National Forest System lands. A meeting with Forest Service officials and the Economic Development Coordinator for the Resource Conservation and Development Center (RC&D) was held to inform the public about the availability of and how to apply for funds through grants, to be used for fuel reduction activities in the Smith Creek WUI on adjacent private lands. To date, several private landowners are participating in the RC&D/County grant program and several additional residences are currently being evaluated. Collaboration, such as that described above, is anticipated to continue for the duration of the project.

1.3 PURPOSE AND NEED FOR ACTION

The purpose and need for this integrated vegetation treatment project is as follows:

- To modify potential wildfire behavior by creating vegetation and fuel conditions that provide for safer firefighter response and public evacuation in the event of a wildland fire.
- To improve wildlife habitat diversity by maintaining meadow and aspen areas, and decreasing tree densities in Douglas-fir stands.
- To decrease tree densities in the WUI adjacent to private lands, so that the remaining trees are less susceptible to future insect and disease infestations.

Note: The proposed action includes vegetation treatments only on National Forest System (NFS) lands. Private landowners are responsible for fuels reduction treatments and structure protection measures on privately owned property.

In addition to the primary purpose and need for the project, there are opportunities, as identified in the second project scoping (9/29/2006), to provide benefits to water quality and fish habitat for Yellowstone cutthroat trout by improving drainage and surfacing on project area roads that are adjacent to creeks. In recent weeks, outside funding was obtained for the maintenance of problem areas (sediment sources) on these roads in the summer of 2007, prior to any project activity (See Map M-5). These road treatments are necessary to reduce sediment introduction into the adjacent creeks whether or not the vegetation project is implemented, thus would not be considered a connected action (40 CFR 1508.25) to the project. The opportunity to fund this road maintenance was elevated because the area is currently in the planning stages for a vegetation reduction project. Additional road maintenance treatments to further improve drainage and surface conditions on the Smith Creek Road and the East Fork of Smith Creek Road (Road Treatments B & C, Table A-24, Map M-6) are included as a part of this project. A complete description of the various road treatments is outlined on pp. 1-6 & 1-7.

The following ecosystem restoration activities are also proposed:

- Placement of woody debris on old skid trails previously utilized for harvest activity to deter ATV usage and provide nutrients for soils.
- Aspen exclosures and/or fencing, if needed to protect aspen regeneration.
- A toilet facility at the ATV parking area.

1.4 DESCRIPTION OF THE PROPOSED ACTION

The Forest Service, Gallatin National Forest (GNF) is proposing to mechanically thin and/or hand-treat vegetation on a maximum of approximately 810 acres, and conduct prescribed burning on an additional 300 acres (Alternative 3). This proposal was developed by identifying “at risk” areas containing high fuel hazard ratings relative to improving public and firefighter safety, as well as identifying key portions of Smith Creek and the East Fork of Smith Creek roads that are currently contributing sediment to these creeks. Stands of trees with high potential for stand replacement fire to affect lives and property in this WUI area were included for treatment. Stands where vegetation treatments would maintain and/or improve vegetative diversity, wildlife habitat (meadows, Douglas-fir stands), stimulate aspen regeneration, and/or reduce susceptibility to existing and future insect and disease outbreaks were also considered to be high priority.

Mechanized equipment would not be allowed within Streamside Management Zones or wet areas (unless frozen) in conformance with the State of Montana Best Management Practices (BMP’s) as outlined in Appendix B.

No new permanent or temporary roads would be constructed. Existing project roads and trails (roads that were used for past logging activities and/or trails being used for motorized vehicles) would be utilized. Some of these project roads and trails would need to be reopened to provide access to treatment units (See Table A-24, p. A-103 thru A-109). Reopened Project Roads and trails that are located on National Forest System lands would be closed to the public during project related activities and permanently closed and rehabilitated following harvest and post-harvest activities. Rehabilitation would make these roads and/or trails impassable for future motorized travel. Old skid trails (located in proposed Units B, D, G and I) that have re-vegetated would have coarse woody debris scattered on them to deter ATV usage and provide additional nutrients for soils.

Three road treatment packages for maintaining/improving roads within the project area are proposed (See Table A-24, pp. A-103 through A-109 for detailed descriptions). Road Treatment A would be completed during/following implementation of harvest related activities. Road Treatments B & C would be completed to the extent that funding is available. For locations of proposed road treatments see Map M-6.

Road Treatments

Funded pre-activity road maintenance treatments to improve conditions and reduce sediment concerns (not part of this project, Map M-5) are being completed in summer 2007 in the project area on problematic portions of Smith Creek Road & East Fork of Smith Creek Road. The funding for these treatments was granted specifically for road maintenance in areas with planned Forest Service projects. The treatments include improving stream crossings at perennial streams to meet BMP standards, adding armored drainage dips every 1000 ft, reshaping the road prism and ditches and adding additional drainage. These treatments will reduce runoff into waterways but

were not designed to significantly upgrade the overall road surfaces or to improve access (See Table A-24, pp. A-103 thru A-109).

Road Treatment A, associated with this proposal, would consist of post-harvest roadside cleanup and final surface blading of roads utilized for project activities. Road Treatment A also includes installation of a temporary culvert on Bear Mountain View Road #7110 (Access to Unit B), brush clearing, installation of 4 armored drain dips and recontouring/restoration of the culvert installation area and landings post-harvest, as well as blading and cleanup of the road from the junction of Smith Creek Road to the dispersed site.

Road Treatments B and C (to be completed as funding allows, Map M-6) associated with this project would improve Smith Creek Road #991, Goat Mountain Road #6636 and East Fork Smith Creek Road #6635 to a three season standard including 6” surfacing on residential access roads and 4” spot surfacing on seasonally gated roads. These treatments would improve access in the Smith Creek WUI, especially during spring and fall seasons when the road surfaces are soft with little surfacing and current conditions make them subject to extreme rutting.

One opportunity for funding Road Treatments B & C is stewardship, where the value of the commercial timber products is used to offset service projects, such as road improvements. See Table A-24 (pp. A-103 thru A-109) for a detailed description of all proposed road treatments by individual road. For locations of road treatments see Map M-6.

Map M-2 displays the areas of vegetation treatment associated with the proposed action. Detailed descriptions of the proposed treatment units to be implemented with the proposed action can be found on pp. 2-19 through 2-29. Table 2-2 (pp. 2-20 through 2-23) and Table 2-3 (p. 2-25) displays individual unit information (stand treatment, forest type, acres, management area, and remarks). Operating periods for the various associated activities are described on p. 2-24. Design criteria and mitigation measures that are applicable to all units can be found on pp. 2-30 through 2-39. Table 1-1 below summarizes the treatment units included in the proposed action (See Map, M-2):

Table 1-1 Unit Description & Purpose and Need for the Proposed Action

Treatment Unit	Est. Acres	Purpose & Need	Type of Treatment	Logging Method
A1	52	<ul style="list-style-type: none"> ▪ Promote aspen regeneration for wildlife habitat. Reduce risk of high severity fire for public & firefighter safety.	Conifer Removal with Reserves	Ground-based
A2	15	<ul style="list-style-type: none"> ▪ Promote aspen regeneration for wildlife habitat Reduce risk of high severity fire for public & firefighter safety.	Remove ladder fuels in riparian	Hand Treatment
B	165	<ul style="list-style-type: none"> ▪ Reduce risk of high severity fire for public & firefighter safety. ▪ Reduce risk of I & D (mountain pine beetle). ▪ Enhance aspen regeneration/ meadows. 	Thinning (Combination of Commercial and Post & Pole)	Ground-based
C	112	<ul style="list-style-type: none"> ▪ Improve evacuation route for public & firefighter safety. • Enhance aspen regeneration/ meadows. 	Pre-commercial thin, some Post & Pole	Hand Treatment, Some possible Groundbased
D	125	<ul style="list-style-type: none"> ▪ Reduce risk of high severity fire for public & firefighter safety, ▪ Enhance aspen regen ▪ Reduce risk of I&D (mountain pine beetle). ▪ 	Thinning (Commercial and Post & Pole), Conifer Removal with Reserves (aspen areas)	Ground-Based
E1	34	<ul style="list-style-type: none"> ▪ Reduce risk of I&D (mountain pine beetle). ▪ Restore open park-like Douglas-fir stand. 	Species Designate (Remove LP), Thin Douglas-fir (Retain large DBH trees)	Helicopter
E2	50	<ul style="list-style-type: none"> ▪ Reduce risk of I&D (mountain pine beetle). Reduce risk of high severity fire for public & firefighter safety.	Thin LP, Retain healthy Douglas-fir	Helicopter

Treatment Unit	Est. Acres	Purpose & Need	Type of Treatment	Logging Method
F	60	<ul style="list-style-type: none"> ▪ Reduce risk of I&D (mountain pine beetle). <p>Reduce risk of high severity fire for public & firefighter safety.</p>	Thin LP (Commercial and Post & Pole)	Helicopter, Hand treatment
G	28	<ul style="list-style-type: none"> ▪ Promote aspen regeneration for wildlife habitat. ▪ Reduce risk of high severity fire for public & firefighter safety. ▪ Reduce risk of I&D (mountain pine beetle). 	Conifer Removal with Reserves	Ground-based
H	103	<ul style="list-style-type: none"> ▪ Improve evacuation route for public & firefighter safety. 	Remove Ladder Fuels near creek, Pre-commercial Thin, Post & Pole in plantation areas	Hand Treatment
I	66	<ul style="list-style-type: none"> ▪ Reduce ladder fuels & open canopy closure for public & firefighter safety. ▪ Reduce risk of I&D (mountain pine beetle). 	Commercial Thin, Post & Pole	Combination of Ground-based, Hand treatment
J (Alternative 3)	300	<ul style="list-style-type: none"> ▪ Improve wildlife habitat (create open Douglas-fir stand) ▪ Reduce ladder fuels 	Prescribed burn Create a mosaic pattern of vegetation.	
Total	1110			

1.5 SCOPE OF THE PROPOSED ACTION

The Council of Environmental Quality (CEQ) regulations implementing NEPA define the “scope” of an action consisting of “...the range of actions, alternatives, and impacts to be considered”. To determine the scope, federal agencies shall consider three types of actions; (1) connected actions; which are two or more actions that are dependent on each other for their utility; (2) cumulative actions; which when viewed with other proposed actions may have cumulatively significant effects and therefore be analyzed together; and (3) similar actions; which when viewed with other reasonably foreseeable or proposed actions have similarities that provide a basis for evaluating their environmental consequences together. (40 CFR 1508.25).

The scope of the proposed vegetative treatment actions addressed in this EA are limited to stand density reduction and the reduction of downed fuel loadings on National Forest Land including:

- Thinning and/or harvest of medium and large diameter (>6” dbh) green conifers to meet unit objectives
- Harvest of insect or disease damaged/killed conifers except where needed to meet snag retention requirements.
- Thinning of Post & Pole size green conifers (4” to 6” dbh)
- Slashing of small diameter conifers
- Harvesting and/or slashing of conifers encroaching into meadows and aspen stands.
- Piling and removing and/or burning of downed woody materials and fuels resulting from treatment actions.
- Prescribed burning in the Meadow Creek area (Unit J) is included in Alternative 3.

Other actions that are within the scope of the project that would be completed are cleanup and maintenance of project area roads (Described on pp. 1-6 & 1-7 and in detail in Table A-24, pp. A-103 through A-109 & Map M-6) and ecosystem restoration activities including weed monitoring and spraying, aspen monitoring and protection measures, placement of woody debris on approximately four miles of previously utilized skid trails, and rehabilitation of user created ATV trails within the Project Area.

Other ecosystem restoration items that may be completed if funding allows, include additional road maintenance (surfacing of portions of Smith Creek and East Fork of Smith Creek roads), aspen fencing, and a toilet at the ATV parking area.

Actions that are outside of the scope of the proposed action include:

- Future fuel reduction treatments needed to maintain post-treatment conditions that begin beyond the timeframe of the decision for this project are outside the scope of the decision to be made. Decisions supported by an environmental analysis of the current situation commonly remain valid for six to eight years. The environmental effects of future projects would be disclosed and project-specific decisions made before these projects would be implemented.
- Future fuel reduction activities that may occur on private land. Decisions private landowners make concerning fuel reduction activities on private land are outside the agency’s authority, so they are outside the scope of the decision to be made. Known activities on private lands are included in the past, present, and reasonably foreseeable activities in Chapter 3 and were considered in the cumulative effects analysis for this project.

1.6 RELATIONSHIP TO THE GALLATIN FOREST PLAN AND OTHER ADMINISTRATIVE DIRECTION

Gallatin Forest Plan

The Gallatin Forest Plan (1987) embodies the provisions of the National Forest Management Act, its implementing regulations, and other guiding documents. The Forest Plan sets forth in detail the direction for managing the land and resources of the Gallatin National Forest.

Chapter 3 and Appendix A include a summary of the standards and guidelines established in the Forest Plan that are pertinent to the various resources affected by this proposal. The proposed action is also supported by the following Forest Plan direction:

Forest Plan Goals

- Provide a fire protection and use program, which is responsive to land and resource management goals and objectives. (Goal #17, p. II-2)
- Meet or exceed State of Montana Water Quality Standards. (Goal #5, p. II-1).
- Maintain and enhance fish habitat to provide for an increased fish population (Goal #6, p. II-1).

Forest Plan Objectives

- Timber will be used as a tool to carry out vegetative management activities (p. II-5).
- Vegetation manipulation projects, such as prescribed fire and timber harvest, will be used to maintain or improve habitat conditions (pp. II-3 & 4).

- Emphasis will be placed on the harvest of lodgepole pine stands infested or with the potential of infestation by mountain pine beetle (p. II-5).
- Management of timber within riparian zones will be designed to improve fish habitat (p. II-4).
- Projects to improve lake and stream habitat will be implemented (p. II-4).
- In drainages with intermingled ownership, the Forest Service will work closely with the private landowners to develop watershed activities and, where necessary, schedule management activities to ensure the desired conditions of the watershed is maintained (p. II-5).

Forest Plan Standards

- Vegetative Diversity Standards: Forest lands and other vegetative communities such as grassland, aspen, willow, sagebrush and whitebark pine will be managed by prescribed fire and other methods to produce and maintain the desired vegetative condition. (p. II-19)
- Fire Standards: Treatment of natural fuel accumulations to support hazard reduction and management area goals will be continued. (p. II-28)
- Fish and Wildlife Standards: The Forest will be managed to maintain and, where feasible, improve fish habitat capacity in order to achieve cooperatives goals with the Montana Department of Fish, Wildlife, and Parks and to comply with State Water Quality standards (p. II-19)

The Forest Plan uses management areas to guide management of the National Forest lands within the Gallatin National Forest. Each management area (MA) provides for a unique combination of activities, practices, and uses. The proposed vegetation treatment units are consistent with the management direction from the Forest Plan. The harvest units are located within areas, which are to be managed as MA 8 (timber) with some units containing narrow linear inclusions of MA 7 (riparian). The Meadow Creek prescribed burn unit is located in MA10 (grasslands with timber). All of these management areas are considered in the Forest Plan to be suitable for timber management. (See Forest Plan, pp. III-19 through III-32 and

The sections on Management Area Map M-10 that are displayed as MA 99 were previously privately owned and traded to the Forest Service in 1997 with the Goat Creek Land Exchange. These sections have not officially been assigned management areas after the land trade. Generally, the interim management direction for areas such as these is to manage them the same as adjacent areas. Section 1 is the only section containing treatment units that is currently unclassified. The proposed units in Section 1 are adjacent to MA8 on the north, east and south boundaries, so the interim direction would be to treat them as such. The remaining unclassified sections within the analysis area do not contain treatment units included in the proposed action. All vegetation treatment activities associated with the proposed action comply with Forest Plan guidelines for the applicable MA.

The Forest Plan (Chapter III) contains a detailed description of each management area as it relates to the significant issues. Following is a brief description of the applicable management area direction for each of the MAs affected with the proposed action:

Management Area 7 (MA 7) This management area consists of riparian zones across the forest. It will be managed to protect the soil, water, vegetation, fish and wildlife dependent on it. These areas are classified as suitable for timber production if adjacent areas contain suitable timber. Design timber harvest to meet the needs of riparian dependent species. Commercial or pre-commercial thinning may be used. Prescribed fire may be used to meet management goals. (Forest Plan III-19 through III-23)

Note: These areas often times are too narrow to be displayed on forest MA maps due to the small scale of these maps.

Management Area 8 (MA 8) This management area consists of lands which are suitable for timber management. Management goals are to provide for productive timber stands and optimize timber growing potential, develop equal distribution of age classes to optimize sustained timber production and improve vegetative diversity, and allow for other resource uses if compatible with the other goals.

Management Area 10 (MA10) This management area consists of open grasslands that provide forage for livestock interspersed with suitable timberlands. Management goals are to maintain healthy stands of timber and promote timber growth consistent with other goals, to improve range management to optimize livestock grazing, and to use timber to create transitory range.

Gallatin National Forest Travel Management Plan

The October 2006 Gallatin National Forest Travel Plan decision identifies and establishes opportunities for public recreation use and access using the Forest's road and trail system. For each road and trail, it specifies the types of uses that are appropriate. It also describes seasonal restrictions and programmatic direction that will provide guidance for future management proposals related to Forest travel. This decision includes an amendment to the Gallatin National Forest Land and Resource Management Plan (Forest Plan, USDA 1997) that removes outdated and/or poor programmatic direction relevant to Forest travel.

National Fire Plan Direction

The 1995 Federal Wildland Fire Management Policy and Program contains nine guiding principles that support the Smith Creek Vegetation Treatment Project.

- 1.) ***Firefighter and public safety is the first priority in every fire management activity.*** One purpose and need of the Smith Creek Vegetation Treatment Project is to improve firefighter and public safety, modifying fire behavior by changing the fuels environment in the portions of the WUI that are the closest to residences and other structures. The modification of fuels will provide safer conditions in the event of a large wildfire event.
- 2.) ***The role of wildland fire as an essential ecological process and natural agent have been incorporated into the planning process.*** Treating the Smith Creek WUI will reduce the current level of risk, allowing the possibility of future wildland fires to play an ecological role in the adjoining wilderness landscape under certain conditions.
- 3.) ***Fire management plans, programs, and activities support land and resource management plans and their importance.*** The Smith Creek project is consistent with the Federal Wildland Fire Management Policy and the Gallatin National Forest Fire Management Plan.
- 4.) ***Sound risk management is the foundation for all fire management activities.*** The Smith Creek Vegetation Treatment Project analyzes the risk to the public and firefighter communities associated with each alternative, by comparing the resulting fuel conditions associated with management activities versus “no action”, as related to fire behavior.
- 5.) ***Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives.*** With the Smith Creek Vegetation Treatment Project, the overriding value at risk is the safety of the public and firefighters. A cash-flow analysis included in Appendix A to this document supports the conclusion the anticipated return from the sale of wood products will exceed the total cost of the activities needed to realize the mandatory post-treatment activities and that funds will likely be available to achieve some of the optional ecosystem restoration items such as additional road maintenance, possible aspen fencing, further road reclamations, and a toilet at the ATV parking area.
- 6.) ***Fire management plans must be based on the best available science.*** The Smith Creek Vegetation Treatment Project has incorporated the latest science and modeling techniques for fire behavior prediction and the effectiveness of fuels treatments. These techniques include Forest Vegetation Simulation –Fire/Fuel Effects Extension (FVS-FFE), NEXUS, and BEHAVE (See p. 2-7 Issue Indicator for a description of these modeling techniques).

- 7.) ***Fire management plans and activities incorporate public health and environmental quality considerations.*** The Smith Creek Vegetation Treatment Project addresses the need for increasing public and firefighter safety in the event of a large fire event. Smoke management, recreational values, and the impacts of fuels treatments on wildlife, fish, noxious weeds, soils, and visuals are also addressed in the document.
- 8.) ***Federal, Tribal, State and local interagency coordination and cooperation are essential.*** Coordination and cooperation for the project included local consultation with the Park and Meagher County officials including county commissioners, fire, and law enforcement; the Northern Rocky Mountain Resource Conservation and Development Council (RC&D); and local environmental groups. Federal cooperation and consultation includes State and Federal Private Forestry groups and the Crow tribal government.

National Fire Plan, 2000: states assign the highest priority for hazardous fuels reduction to communities at risk, readily accessible municipal watersheds, threatened and endangered species habitat, and/or other important local features, where current conditions favor uncharacteristically intense fires. The analysis area for the project has been identified by the Park County CWPP as a WUI that is at high risk for catastrophic wildfire. The actual treatment units associated with the proposed action are located in the portions of the Smith Creek WUI that are in the closest proximity to residences, other structures, and primary transportation routes.

Other Administrative Direction

Project objectives include creating a more defensible area in a Wildland Urban Interface (WUI) by reducing the wildfire severity risk and crown fire hazard in the Smith Creek WUI. The following direction provides additional support for these objectives:

- Directed by ***National Fire Plan (2000), the Cohesive Strategy (October 2000), 10 Year Comprehensive Strategy (August 2001), 2001 Review and the 1995 Federal Wildland Fire Management Policy, Gallatin National Forest Plan, (1987).***

Project objectives also include maintaining low risk areas by reducing conifer encroachment.

- Directed by ***National Fire Plan (2000), the Cohesive Strategy (October 2000), 10 Year Comprehensive Strategy (August 2001), 2001 Review and the 1995 Federal Wildland Fire Management Policy, Gallatin National Forest Plan (NFP), (1987).***

In August 2000, President Clinton asked Secretary of the Interior (Babbitt) and Secretary of Agriculture (Glickman) to recommend how best to respond to the recent fire events, reduce the impacts of wildland fires on rural communities, and ensure sufficient firefighting resources in the future. The President also asked what actions federal agencies, in cooperation with states and local communities could take to reduce immediate hazards to communities in the wildland urban interface and to ensure that fire management planning and firefighter personnel and resources are prepared for extreme wildland fires in the future. National and regional level reports have set the stage for more aggressive fuels management:

Western National Forests: A Cohesive Strategy is Needed to Address Catastrophic Wildland Fire Threats (GAO/RCED-99-65). This report concluded: “(The) most serious problem related to the health of the national forests in the interior West is the over-accumulation of vegetation.”

Protecting People and Sustaining Resources in Fire-adapted Ecosystems – A Cohesive Strategy, October 2000: This report outlines a strategy to reduce wildland fire threats and restore forest ecosystem health in the interior West. The Cohesive Strategy outlined four priorities: 1) wildland urban interface; 2) readily accessible municipal watersheds; 3) threatened and endangered species habitats; and 4) maintenance of existing low-risk Condition Class 1 areas (refer to 2.3.B).

A Collaborative Approach for Reducing Wildland Fire Risk to Communities and the Environment – 10-yr. Comprehensive Strategy, August 2001: This document responds to Congressional direction for a multi-agency strategy by outlining a comprehensive approach to the management of wildland fire. The 10-year comprehensive strategy has four goals: 1) improve prevention and suppression; 2) reduce hazardous fuels; 3) restore fire-adapted ecosystems; and 4) promote community assistance. This document provides the initial foundation of the recent ***President’s Healthy Forest Initiative (August 2002).***

By reducing hazardous fuels and promoting community assistance in the management of wildfire this project responds to the more recent ***Healthy Forest Initiative (August 2002).***

1.7 DECISION TO BE MADE

This Environmental Assessment (EA) is not a decision document. It does not identify the alternative to be selected by the Deciding Official. This document discloses the analysis and environmental consequences associated with implementing the proposed action and other alternatives. This EA provides information and analysis used to determine whether an action results in a significant effect, and therefore, would require the completion of an Environmental Impact Statement (EIS). The Livingston District Ranger, Ron Archuleta, is the Responsible Official. Based on the analysis documented in this EA, as well as comments received during the 30-day comment period, the Deciding Official will make a decision on this project. If it is determined that an EIS is not required, a Decision Notice (DN) and Finding of No Significant Impact (FONSI) will be released to document the decision and the rationale for it. Official notification of the availability of the Decision Notice and FONSI would be published in the Bozeman Chronicle (the newspaper of record).

The decisions to be made are:

- Should vegetation treatments occur in portions of the Smith Creek WUI.?
- Should prescribed burning occur in the Meadow Creek area?

If so:

- What types of and where should hazardous fuels reduction treatments (including thinning, conifer removal, ladder fuel removal, piling, burning of piles, and/or prescribed burning) should be implemented to improve public and firefighter safety?
- What types of and where should vegetation treatment be implemented to improve vegetative diversity in meadows, aspen areas, and previously open-grown Douglas-fir stands?
- What types and where should vegetation treatment be implemented to reduce insect and disease susceptibility?
- What type and how much road maintenance and treatments should be implemented to help improve water quality and fisheries habitat?
- What design criteria, mitigation, and monitoring should be required?

1.8 DOCUMENT ORGANIZATION

The Forest Service prepared this Environmental Assessment in compliance with the National Environmental Policy Act (NEPA). This Environmental Assessment discloses the direct, indirect, and cumulative impacts that would result from the action and no action alternatives. The document is organized into four chapters and two appendices.

Chapter 1. Purpose and Need for Action: This chapter includes information on the background of the project proposal, the purpose and need for the project, and the agency’s proposed action for meeting the purpose and need.

Chapter 2. Issues and Alternatives: This chapter details how the Forest Service informed the public of the proposal and how the public participated. Chapter 2 provides a more detailed description of the proposed action and the other possible alternative methods for achieving the stated purpose and need. These alternatives were developed in light of “significant issues” raised by the public, Forest Service specialists, and/or by other agencies. The significant issues are described, as well as the issues considered but were not deemed to be to be significant. Comparison of the alternatives and how they address the significant issues is included. This chapter also contains a discussion relating to project design criteria, mitigation measures, monitoring requirements.

Chapter 3. Affected Environment and Environmental Consequences: This chapter describes the affected environment, the current conditions of the natural resources involved with the significant, and the environmental effects of implementing the various alternatives. The analysis is structured around significant issues. This chapter discloses the past, present, and reasonably foreseeable activities in the project area, as well as the forest-wide goals, objectives, and standards applicable to the project. Chapter 3 includes a discussion of applicable laws, regulations, and other guidance.

Chapter 4 Consultation and Coordination: This chapter provides a list of preparers and agencies consulted during the development of the Environmental Assessment. Chapter 4 includes a discussion on public involvement, the scoping process, and how this document was made available and reviewed.

Appendices (A-B), Glossary, Literature Cited, & Maps: Appendix A provides analysis for issues concerning natural resources that were not considered to be significant and could be mitigated effectively. Appendix B describes the Best Management Practices to be followed to protect water quality and maintain soil productivity. These appendices are followed by a literature cited section, glossary, and various maps pertaining to the project.