

# KINGSBERRY ROAD RELOCATION ENVIRONMENTAL ASSESSMENT

Helena Ranger District  
Helena National Forest

July 2009



Lewis and Clark County Montana

# **CHAPTER 1 – PURPOSE AND NEED FOR ACTION**

## **INTRODUCTION**

The Forest Service has prepared this Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) and other relevant federal and State laws and regulations. This EA discloses the project's foreseeable effects for consideration in determining whether or not to prepare an Environmental Impact Statement.

This EA is not a decision document; it is a summarization of the environmental consequences of the alternatives. The deciding officer, (Helena District Ranger) will select an alternative based on the information in this document; how well the alternative meets the purpose and need for the project; public comments and issues; and how well the alternative complies with applicable state and federal laws, agency policy and Forest Plan direction.

The Kingsberry Road Relocation Project would relocate a road from private property onto immediately adjacent National Forest System (NFS) land. The road on private property is currently open to the public, but there is no public right-of-way for the road. The project area is located on the Helena National Forest in the Jimtown area of Lewis and Clark County Montana in the NW ¼, Section 22, T11N, R1W (see Figure 1, Vicinity Map). The Record of Decision (ROD) for the North Belts Travel Plan identified this route as being open year-round to motorized travel. None of the lands within the project area are within inventoried roadless areas.

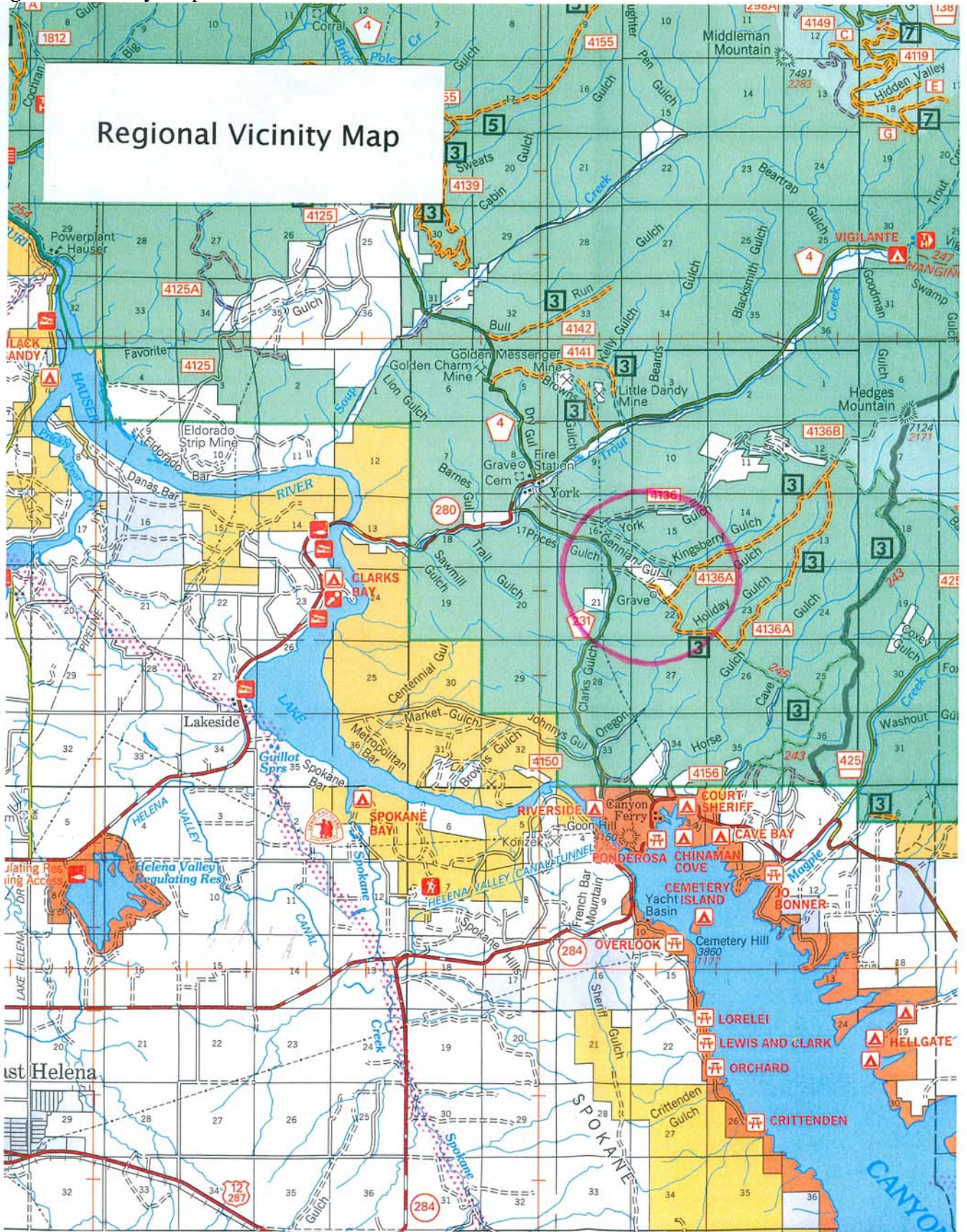
The purpose of this EA is to determine the environmental effects of the proposed road relocation. This analysis is organized into four chapters. Chapter 1 identifies the reasons that the project is being conducted, legal requirements, issues, public involvement and analysis parameters. Chapter 2 describes the alternatives – including those not analyzed in detail. Chapter 3 presents the resource components of the existing environment, the environmental effects of implementing the alternatives and the cumulative effects of the actions proposed in the alternatives. The Appendices incorporate reference materials needed to more fully understand the analyses and alternatives.

## **PURPOSE AND NEED**

The Kingsberry Road Relocation Project Environmental Assessment (EA) analyzes a road relocation project that is proposed for a portion of the Helena Ranger District of the Helena National Forest. The project is located just northeast of the Jimtown Road between York and Canyon Ferry Dam.

The primary objective of the proposal is to relocate a portion of the Kingsberry Loop Road, Forest Development Road #4136-A, from private property onto NFS lands immediately to the southwest. The relocation would allow continued motorized and non-motorized access to the Kingsberry – Oregon Gulch and Hedges Mountain areas. The project would bypass the private property and result in new construction of approximately 3500 feet of road. The relocated portion of the road would begin just west of the private property and rejoin the existing road just east of the end of the private property.

Figure 1. Vicinity Map



In its present location the road crosses about 3000 feet of private property. Currently there is no right-of-way across the private property. The Forest Service has been trying for years without success to acquire a right-of-way for the Kingsberry Road where it crosses the private land. Up to this point, the private land owners have accommodated public use on this road, but have also stated that they will not allow public use to continue indefinitely. In addition, private land fences along the road do not allow adequate maintenance of the road. The road lies in a low area and proper drainage is lacking; the result is a road in poor condition with numerous potholes and in one location, a large “mud-bog” during periods of wet road conditions (see Figures 2, 3 and 4). If the road is relocated, or when the landowner closes the road, the landowner will remove the fences and reclaim the road to allow him full use and enjoyment of that portion of his property for grazing and other uses.



Figure 2. Typical mudhole on existing road. Note the closeness of the fences on each side of the road.



Figure 3. View of existing road immediately after entering the private property from the west.



Figure 4. View of existing road in timbered area.

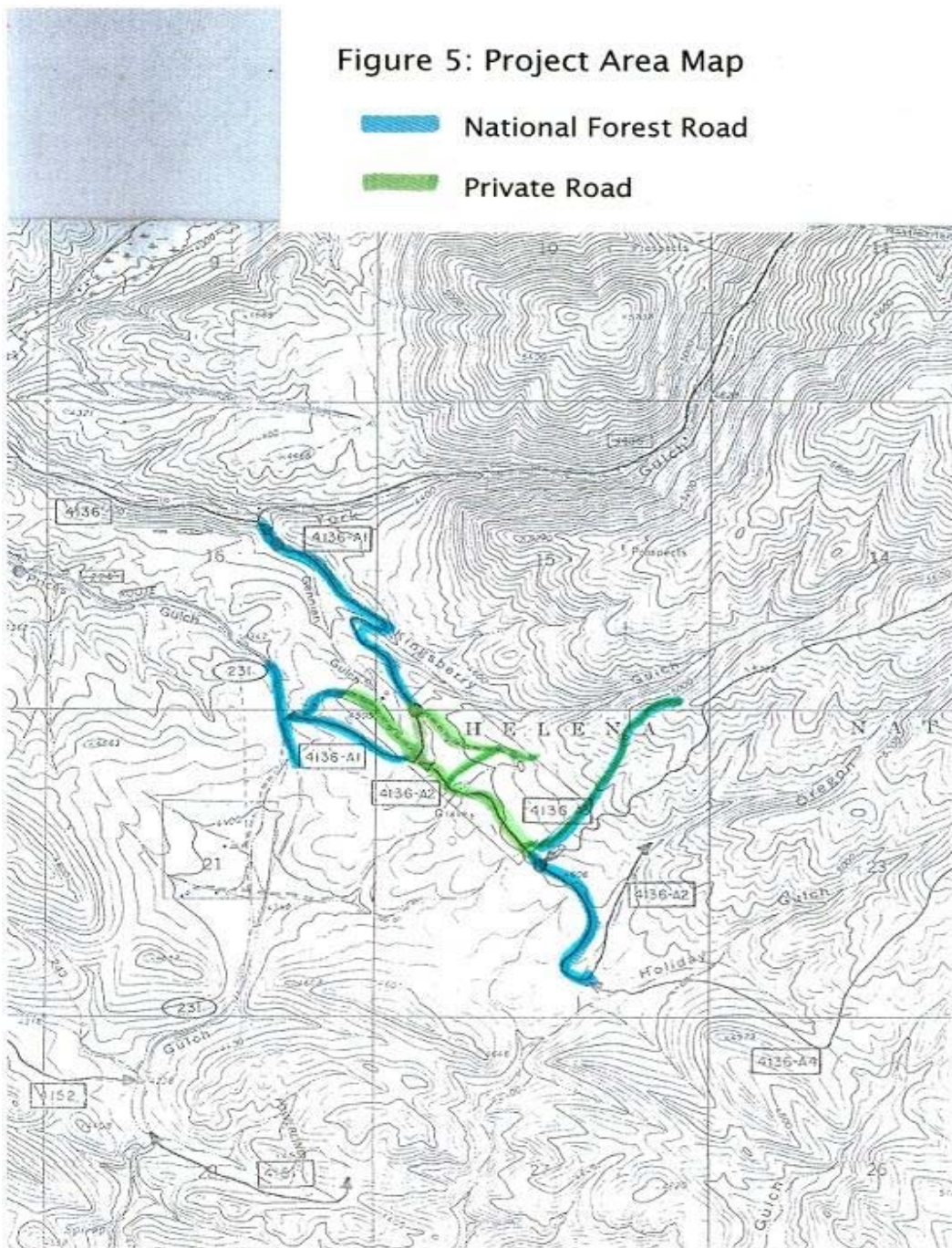
This EA discloses the environmental effects of proposed activities within the Kingsberry Road Relocation Project area and provides the site-specific resource analysis necessary for the

responsible official to make an informed decision for managing the project area. The direct, indirect, and cumulative effects of the alternatives are displayed.

## PROJECT AREA LOCATION

The Kingsberry Road Relocation Project area encompasses approximately 3500 feet of new road and would disturb about 1.2 acres of land in the vicinity of the Jimtown Road. This project area is located within the NW ¼, Section 22, T11N, R1W. (See Figure 5, Project Area Map). None of the lands within the project area are within inventoried roadless areas.

The project area provides a setting for a variety of recreational activities including hunting, hiking, horseback riding and motorized uses. The Kingsberry Road provides access for the public to enjoy these activities.



## **MANAGEMENT DIRECTION**

The Kingsberry Road Project EA is tiered to the Helena National Forest Plan (Forest Plan), including the Forest Plan FEIS and Record of Decision (1986). The Forest Plan consists of both forest-wide and area specific standards and guidelines that provide for land uses with anticipated resource outputs.

The proposed road relocation project is consistent with the management direction provided in the Helena Forest Plan (1986). The entire proposed project area is within the L-1 management allocation, which emphasizes production of forage for livestock. Goals, standards, management practices, and monitoring requirements for the L-1 management area are described on pages III/11 through III/13 of the Forest Plan. Motorized and non-motorized recreation activities are permitted; roads may be constructed to provide access. The livestock allotments within the project area are vacant at this time, with no current or anticipated proposal to restock them. They became vacant in 1988 due to non-use.

## **CHAPTER II. ISSUES AND ALTERNATIVES**

### **INTRODUCTION**

This chapter is divided into four sections which explain the process of developing, evaluating, and comparing alternatives. The first section outlines the scoping and public involvement process. The second section describes the environmental issues identified through scoping and the public involvement process. The third section describes alternatives that were considered but eliminated from detailed study. The fourth section provides details of the alternatives, including their purpose and their relationship to the issues.

### **SCOPING AND THE PUBLIC INVOLVEMENT PROCESS**

On November 30, 2006, a scoping document was mailed to some 43 area residents and entities with a known interest in the project. People were asked to comment on the proposal by December 21, 2006. One comment was received in response to the scoping letter.

### **ISSUES**

#### **Issues Considered but Eliminated from Detailed Study**

There was one issue which was identified which was not considered in this analysis. Namely, the single respondent asked that the Forest Service continue to explore a right-of-way or easement across the private property which would allow for adequate maintenance of the road. This issue was eliminated because the private property owner has remained firm in refusing to grant a right-of-way. His primary issue is that the fences which were constructed along the road to prevent public trespass onto his property have now become obstacles to the management of his property for livestock grazing.

#### **Issues to be considered in the analysis**

Comments received from the public scoping process, along with concerns identified by the ID team, were used in determining the scope of the issues to be addressed in the analysis. Within

some issues there are sub-issues which were given indicators to display potential effects relative to that issue and to measure how well each alternative responds to the purpose and need for the project. The issues are:

**1. How well is the public access maintained?**

The indicator is long-term public access to the Kingsberry – Oregon Gulch and Hedges Mountain areas of the Helena National Forest.

**2. What are the environmental effects associated with the road in its current location?**

The indicator is elimination or migration of the adverse effects of the road in its present location.

**3. What effects would the relocated road have on the area’s resources?**

The indicators are the effects of the road in a new location. The effects analysis describes the effects of the road relocation on the resources of the area.

Table 1 summarizes these issues and the indicators of potential effects.

**Table 1. SUMMARY OF HOW THE ALTERNATIVES RESPOND TO THE ISSUES**

ISSUE	INDICATOR	ALTERNATIVE 1	ALTERNATIVE 2
<b>Maintenance of Long-term Public Access</b>	<b>How long can public access be maintained</b>	<b>Indefinite and uncertain</b>	<b>Public access maintained until such time as other resource issues preclude it</b>
<b>Effects on area resources from new construction</b>	<b>Environmental Effects</b>	<b>No effects</b>	<b>New location results in effects on area resources similar to existing road with erosion and sedimentation greatly reduced</b>
<b>Effects on area resources from relocation of the road</b>	<b>Environmental Effects</b>	<b>Continued impacts from lack of road maintenance including erosion and sedimentation</b>	<b>New road is properly constructed and maintained reducing total erosion and sedimentation. Effects from existing road, namely erosion and sedimentation, are eliminated when the landowner reclaims the existing road and public traffic is eliminated.</b>

## **ALTERNATIVES CONSIDERED BUT DISMISSED FROM DETAILED STUDY**

### **1) Develop an alternative that would meet the purpose and need without relocation**

As discussed above the private landowner continues to refuse to grant a right-of-way. It would be possible to pursue a prescriptive right for continued use of the road, but that right would be for use of the road only and not for maintenance. Thus, while public access could continue, the road could not be adequately maintained, and the problems with drainage and potholes not corrected. In addition, the landowner would not be able to manage his lands as he wishes.

**2) Develop an alternative(s) that uses different location(s) for the road.** This was not considered because their locations would result in 1) increases in road length and acres of land disturbed, 2) increased costs and 3) being contrary to the North Belts Travel Management Plan Record of Decision.

## **ALTERNATIVES**

### **Alternative 1**

Alternative 1 is the no action alternative. Under this alternative, the Forest Service would not conduct any of the activities considered with the proposed action. Public use of the Kingsberry Road would continue until such time as the private landowner elects to deny it. Access for activities which currently take place on the National Forest in the Kingsberry – Oregon Gulch area, such as firewood cutting, and recreational pursuits including viewing scenery, camping and hunting, would continue until such time as the private land access route is closed.

Opportunities to implement the activities considered in the analysis would be delayed and possibly foregone.

The no action alternative also provides a baseline for effects comparison.

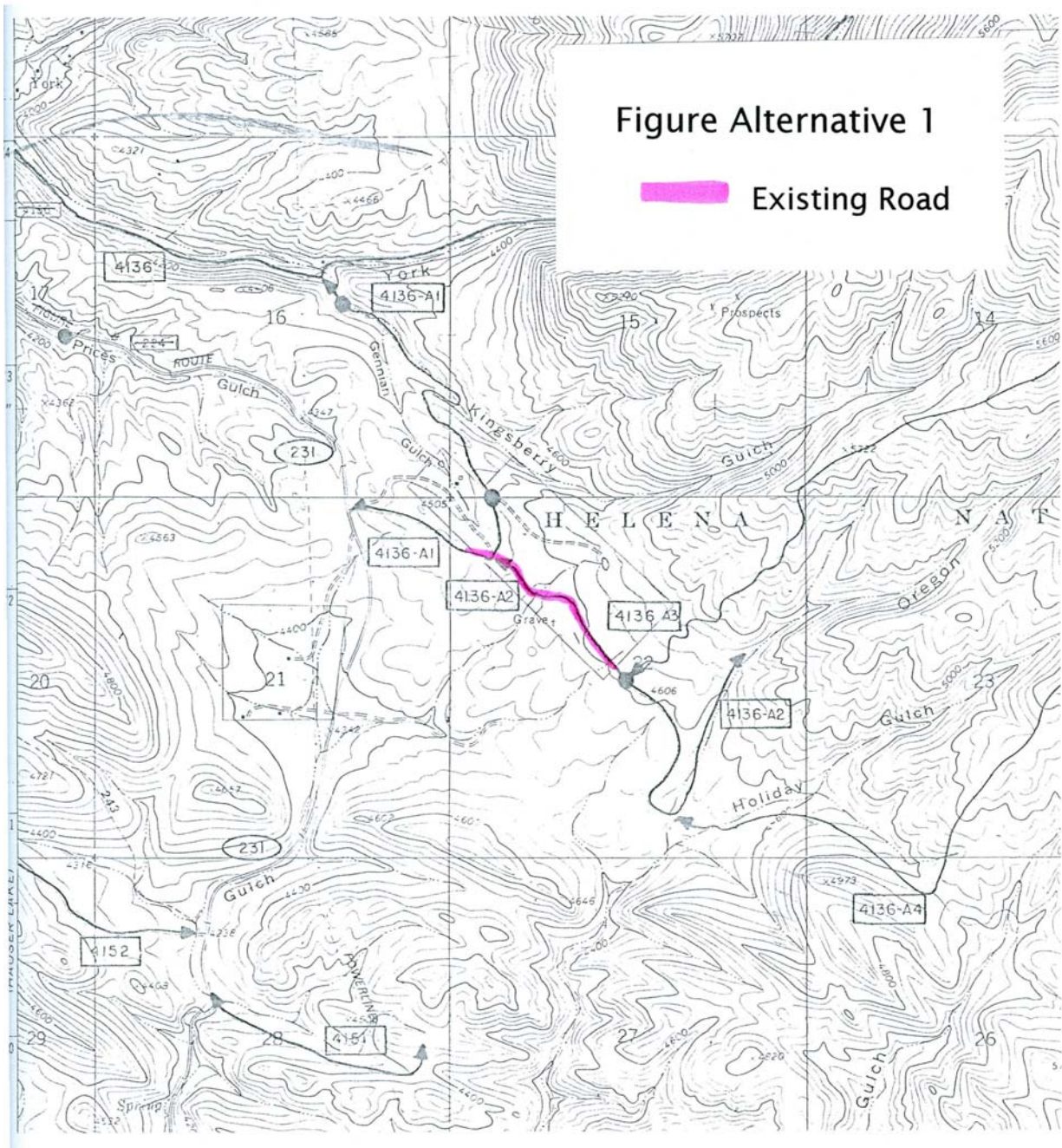
See the Figure 6, Alternative 1 Map

### **Alternative 2**

Alternative 2 is the proposed action and is designed to implement the Helena National Forest Land and Resource Management Plan (Forest Plan, April, 1986) and the North Belts Travel Management Plan (May, 2005). The overall objective of the road construction is to allow continued public access to the Kingsberry-Oregon Gulch area of the Helena National Forest. There would be no change in the season of use of the road (May 16 to December 1). The proposed action is:

- Construction with heavy equipment of 3500 feet of new native surface single lane road, 14 feet in width with intervisible turnouts which would allow the passage of full-sized vehicles
- Seeding of cut and fill slopes with native grass seed
- Installation of a closure gate at the northwest end of the new road
- Disturbance of approximately 1.2 acres of land
- Removal of some 50 to 60 green and fire-killed trees averaging about 12 inches in

Figure 6, Alternative 1 Map



diameter. Firewood would be made available to the public as a byproduct of the construction activity.

- The proposed road relocation would be accomplished through a service contract which would specify requirements for road construction and associated activities. The cost of construction of 3500 feet of new road is estimated to be \$15,000. Annual maintenance of the new road is estimated to be \$300.
- Alternative 2 is consistent with the desired future condition identified in the Helena Forest Plan (pages II/11 to II/14).

## Mitigation/monitoring and design features for Alternative 2

- Road construction activities would take place during periods of snow-free and dry conditions outside of the seasonal restriction period of December 2 to May 15. Best Management Practices (BMPs) and road construction contract specifications would be used to reduce, to the extent feasible, effects to soil productivity from road construction activities.
- Heritage resource assessments were conducted during the July 2006. No cultural resources were located. A provision for protection of cultural resources would be included the road construction contract should any be located during project implementation.
- Noxious weed mitigation efforts include pre- and post-construction weed treatments
- Road construction activities would be monitored by a contract administrator. This monitoring is conducted to ensure contractual requirements are being met and is done at a frequency necessary to assure compliance.
- Implementation of the project would include close coordination with the private landowners in the project area

See the Figure 7, Alternative 2 Map, and Figures 8, 9, 10 and 11, photos of proposed road location.

## **FOREST PLAN CONSISTENCY**

All activities are consistent with the Forest Plan, with the exception of the standard for hiding/road. This issue was addressed in the Jimtown EA, which included a site specific amendment which noted that even the “no action” fails to meet the standard. The situation today remains the same and neither Alternative 1 “No Action” or Alternative 2 meet the standard (see more discussion under the Wildlife Section on pages 25 and 26.

# **CHAPTER III. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES**

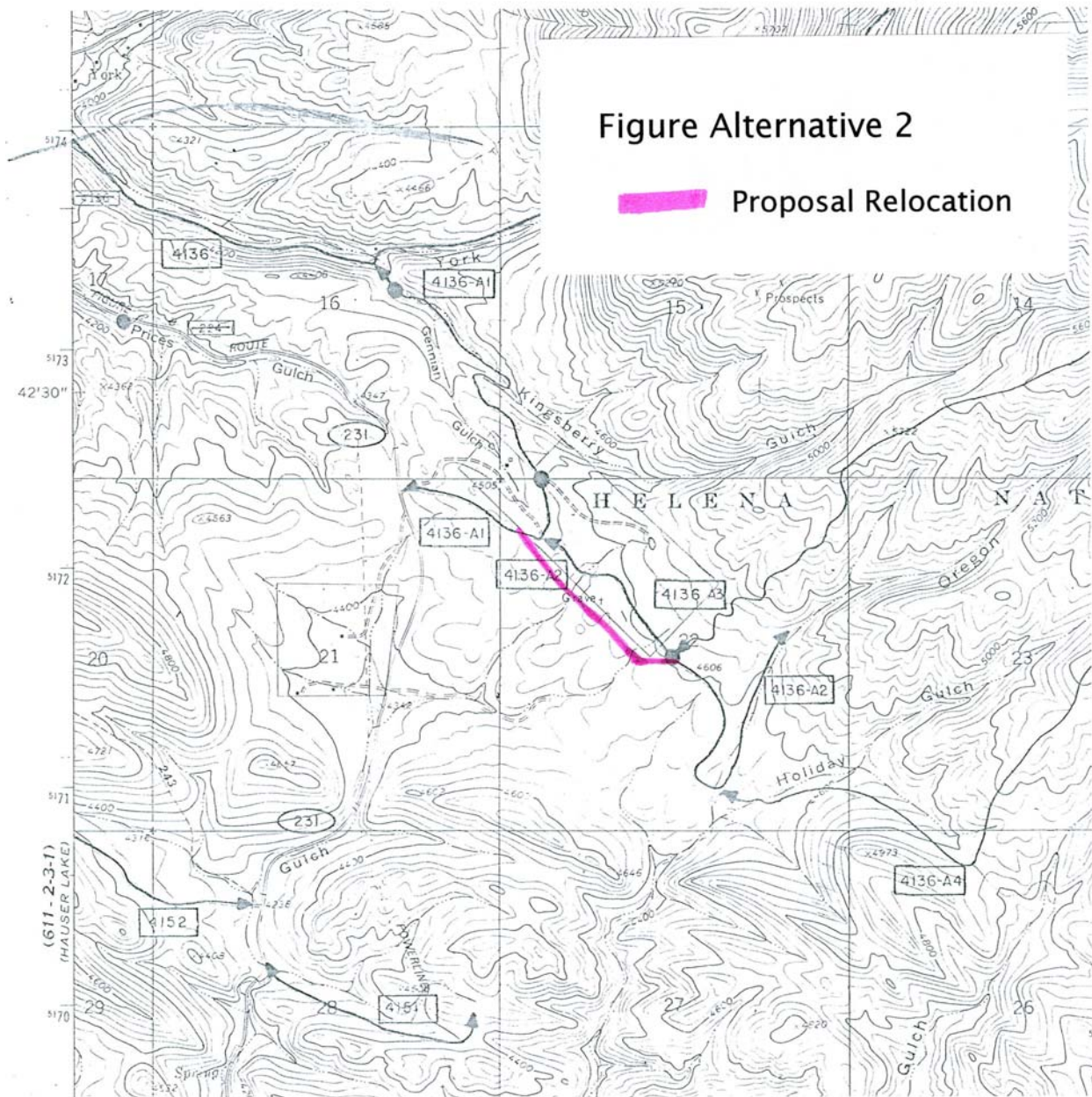
## **INTRODUCTION**

The purpose of this chapter is to describe the affected environment and to disclose the environmental consequences of implementing the alternatives described in Chapter II. Environmental consequences are the expected effects associated with selection of an alternative.

The North Belts Travel Management Plan Final Environmental Impact Statement (January 2005 and Project Record, the Jimtown Project EA (May 2001) and Project Record and the Jimtown Project Supplemental Information Report (September 2003) are incorporated by reference into this environmental assessment (EA).

In the course of alternative development, the Interdisciplinary Team used the issues developed from the scoping effort as guidelines for proposing measures which would address the concern expressed by an individual issue. The resource specialists were also charged with the

Figure 7, Alternative 2 Map



responsibility of identifying additional measures which would serve to mitigate or eliminate negative impacts.

The material presented in this chapter is based upon unpublished background reports which were prepared for each of the resources addressed. The background reports provide additional detail which is condensed in the EA. These reports are in the project file and are available for review by interested parties.

## EFFECTS ANALYSIS

The EA must provide interested parties information about what effects other activities--past activities, current activities, and reasonably foreseeable activities--have had and would have on



Figure 8. Alternative 2, view of proposed intersection with existing road on west side of project area looking southeast; private property lies on the left side of the fence

potentially affected resources. The effects of all relevant activities, regardless of land ownership, are considered in the analysis.

Considered in concert, the past, present, and future activities help to anticipate the future environment of the project area. Cumulative effects associated with this project will vary by alternative because cumulative effects include any future impacts expected from implementation of an alternative. Selection of the "No Action" Alternative 1 would result in no cumulative effects associated with the decision, but it must be recognized that the reasonably foreseeable activities described below would be as likely to occur.

## **PAST AND PRESENT ACTIVITIES**

Past and on-going activities within the project area include fire suppression, road construction, timber harvest, green and dead firewood cutting, livestock grazing, placer and hard-rock mining, trapping, hunting, noxious weed control, and motorized and non-motorized recreation. Powerlines are present and maintained within the area. A number of homes have been built on the private land inholdings. Activities which have taken place adjacent to the project area

include all of these same activities, with the addition of crop production, irrigation, and introduction of non-native plants.



Figure 9. Typical view of proposed road location looking southeast (dead trees from Jimtown Fire)

A decision on a Forest Service project in the project area was made recently. The decision for the Jimtown Project was signed in May 2001. The decision authorized 860 acres of forest thinning by timber harvest, 1080 acres underburning, 500 acres of dispersed noxious weed control and opportunities for public gathering of green firewood. Timber harvest began in the winter of 2007/2008 and is complete. Two other recent decisions were for projects affecting the Kingsberry Road Relocation Project. In May 2005, a decision was signed for the North Belts Travel Plan which identified area closures with designated routes open for motorized as well as routes to be closed and methods of closure. That decision is currently being implemented in the Kingsberry project area. A decision was signed in May 2006 for the Helena National Forest Noxious Weed Treatment Project, which allows the use of newly approved herbicides and aerial application of herbicides. Weed control continues in the project area under the 2006 decision.

The Cave Gulch Fire was ignited on 7/23/00 and was ultimately contained at 29,187 acres on 8/16/00. 27,659 acres were Helena National Forest lands. A "Burned Area Emergency Rehabilitation" plan was completed for the fire on 8/23/2000. The plan considers the direct effects of the fire to a number of resources, and projects expectations for future effects related to

the fire, such as sediment delivery to area streams after a significant rain or run-off event and the potential for noxious weed spread. Only a small amount of land within the project area burned.



Figure 10. View looking southeast along proposed road location. Note small drainage in foreground which requires a culvert.

The Jimtown Fire was ignited on July 23, 2003 and burned approximately 1000 acres of the project area.

Currently, the mountain pine beetle infestation which is epidemic across most of the Forest is at moderate levels in the North Belts area.

The cumulative effects of past and present activities have helped to create the existing environment of the project area, which is further described in this chapter.



Figure 11. Near proposed intersection with existing road looking northwest. Private property on right side of fence.

**REASONABLY FORESEEABLE ACTIVITIES WITHIN THE PROJECT AREA**

Vegetation management projects similar to the Jimtown Project will likely be proposed in future years within similar ponderosa forests near the project area. In 12-15 years, it is expected that stands treated at in the Jimtown Project will be considered for prescribed fire underburning to maintain the conditions created with the project.. The 12-15 year cycle could continue long-term into the future.

The Jimtown livestock allotment has been vacant since 1988. The Beaver-Soup AMP decision on this allotment was to permit grazing not to exceed 300 AUMs if an acceptable application for permit to graze was submitted. However, receipt of such an application is considered possible rather than reasonably foreseeable.

Smaller lode and placer mines are located within the project area. Operations are sporadic and difficult to project into the future, and are largely dependent upon the price of gold.

It is expected that recreation uses, including hunting and trapping, will continue at levels consistent with local population trends.

## **OTHER REASONABLY FORESEEABLE ACTIVITIES POTENTIALLY OF INFLUENCE TO THE ANALYSIS**

Timber harvest on adjacent private lands takes place, though levels of harvest are not intensive due in part to lower timber values in these drier forests. Timber harvest effects are considered primarily within the context of project area-wide cumulative effects to big-game habitat.

There is a growing awareness of the threat of wildfire by area residents. Some have taken steps to make their structures more defensible from fire and the forests on their property less prone to stand-replacing fire. This trend is expected to grow.

Other uses within the project area and within the areas of influence of the various resources and issues considered are expected to be traditional in nature and to remain stable.

Each resource specialist considered past, present, and reasonably foreseeable activities in preparing their background report.

## **Recreation, Affected Environment**

### **Introduction**

Outdoor recreation provides valuable quality-of-life benefits to Montanans and citizens throughout the United States. It also contributes to the health and well being of individuals and communities. According to a national study, two-thirds of the American public engages in some type of outdoor recreation at least several times a month (Roper and Starch 2000). Obviously, access to the National Forest via roads is essential to the outdoor recreation experience.

### **Analysis Area**

The analysis area encompasses the north Big Belt Mountains from the Gates of the Mountains Wilderness Area in the north, to Magpie Gulch in the south. The Helena Ranger District of the Helena National Forest manages this area.

## **Recreation, Environmental Consequences**

### **Effects Common to All Alternatives**

The effects of having a designated route for vehicular travel to the Kingsberry-Oregon Gulch area are common to all alternatives. Both the No Action and Proposed Action would continue to limit motorized travel to designated routes. Use of the road in both alternatives would continue to be restricted during the period of December 2 to May 15 and open to licensed vehicles only.

### **Effects of the Alternatives**

#### **Alternative 1 – No Action**

Motorized use on the Kingsberry Road would continue to be managed per the ROD for the North Belts Travel Management Plan (May 2005). The existing road would remain open until such time as the private landowner chooses to restrict public access. Because this road was never designed or constructed to standard, it would continue to cause resource damage on the private land and would not meet standards for safety or user convenience.

With the closure of the road, no vehicular access would be available to the Kingsberry-Oregon Gulch area from the Jimtown Road. Consequently, there would be a reduction in motorized opportunities in this area of the Big Belt Mountains. As a result, it would be expected that some motorized users would either use non-designated (closed) routes or attempt cross-country travel, both of which would be illegal and would create law enforcement problems.

#### **Alternative 2 – Proposed Action**

Motorized use on the relocated Kingsberry Road would continue to be managed per the ROD for the North Belts Travel Management Plan (May 2005). There would be no reduction in motorized opportunities under the Proposed Action and no increase in law enforcement problems would be expected. Because the new road would be designed and constructed to standard, it would not cause resource damage and would meet standards for safety and user convenience.

#### **Cumulative Effects**

The cumulative effects of the both alternatives are described in the North Belts Travel Management FEIS, which is incorporated by reference in this EA.

### **Transportation Affected Environment**

#### **Introduction**

The Big Belt Mountains are accessed by an extensive road and trail system. Most of the early roads were developed primarily for mining and its associated activities. Many of these roads were first used in the mid-1800's as wagon roads and then improved in the early 1900's to accommodate motorized vehicles. Roads developed to harvest timber were primarily used for hauling mining timbers and fuel wood until the 1950's. Since the 1950's, roads have been built to access commercial timber sales or for mineral exploration. These roads have been built to a higher standard than the old mining roads. Several of the old mining roads have been reconstructed since the 1960's. The road system now consists of a mixture of old and new roads, with many of the older roads in disrepair. The Kingsberry Road falls into the category of an older road in disrepair.

#### **Analysis Area – Oregon and Cave Gulches**

##### **Travel Restrictions**

Travel restrictions for the Jimtown/Kingsberry/Oregon Gulch area are shown on the Helena National Forest Map (2006). Motorized travel is restricted to the routes shown on that map

##### **Specific Route Restrictions**

Kingsberry Road – Open to licensed vehicles 5/15 to 12/1.

Jimtown Road – County road open to licensed vehicles year long. This road accesses private land and connects the community of York with the Canyon Ferry area.

Lower York Gulch Road and Johnny's Gulch Road - These roads are open to licensed vehicles year-long and access private land.

## **Road Conditions**

The Jimtown Road is in good condition, but all of the other roads in the area are in poor or very poor condition, with poor drainage (which leads to surface erosion and rutting) and steep grades and blind curves.. The Cave Gulch Road was washed out by a series of floods in 2001 and 2002. The road was unusable has been rebuilt and relocated in places. The other roads in the area were not significantly damaged during the Cave Gulch Fire or the subsequent floods. The lower portion of the Kingsberry Gulch Road passes through private land and is very rough and narrow.

## **Enforcement**

The area attracts youth parties, particularly during the summer when activity is high around Canon Ferry Reservoir. As with most areas of the Forest some off route use by ATV's and full sized vehicles occurs along with motorized use during closure periods. This situation has improved with implementation and enforcement of the North Belts Travel Decision.

## **Transportation Environmental Consequences**

### **Effects Common to All Alternatives**

See discussion in recreation section.

### **Effects of the Alternatives**

#### **Alternative 1 - No Action**

The road remains in poor condition with numerous potholes and muddy areas during periods of wet weather and continuing erosion. Impacts continue from lack of road maintenance including erosion and sedimentation

#### **Alternative 2 – Proposed Action**

New road is properly constructed and maintained reducing total erosion and sedimentation. Effects from existing road, namely erosion and sedimentation, are eliminated when the landowner reclaims the existing road and public traffic is eliminated.

### **Cumulative Effects**

The cumulative effects of the both alternatives are described in the North Belts Travel Management FEIS, which is incorporated by reference in this EA.

## **Heritage Resources Affected Environment**

### **Heritage Environmental Consequences**

#### **Effects of the Alternatives**

#### **Alternative 1 - No Action**

No direct, indirect or cumulative effects are expected from the no action alternative.

#### **Alternative 2 – Proposed Action**

There would be no effect on cultural resources by the implementation of this project. No direct, indirect or cumulative effects are expected to the heritage resources with implementation of the project.. The proposed action complies with the National Historic Preservation Act. A

comprehensive evaluation of historic resources was conducted for the project area.. There are no known heritage sites that would be impacted. If heritage sites are discovered, the sites would be inventoried and then protected if found to be of historic significance.

## **Lands/Special Uses, Affected Environment**

### **Introduction**

The majority of National Forest System (NFS) lands located within the North Belts Travel Plan Boundary were first reserved from the Public Domain for National Forest purposes by Presidential Proclamation on October 3, 1905. This proclamation established the Big Belt Forest Reserve, which included lands located east of the Missouri River. These lands were then transferred to the Helena National Forest by Executive Order 881 on July 1, 1908.

### **Priority Rights-of-Way to Pursue**

As identified in the North Belts Travel Management FEIS, there are several open/designated road segments that are not under the jurisdiction of the Forest Service or another public road agency. Continued public use of these private road segments was identified as being important to the success of the Helena National Forest's overall transportation plan. A right-of-way for the Kingsberry road across the private property was not identified as a priority in the North Belts FEIS because of past negotiations with the landowner and his refusal to grant a right-of-way.

## **Lands, Special Uses Environmental Consequences**

### **Effects of the Alternatives**

#### **Alternative 1 - No Action**

The road on private property is currently open to the public, but there is no public right-of-way for the road. The Record of Decision (ROD) for the North Belts Travel Plan identified this route as being open year-round to motorized travel. Public use of the road would continue until such time as the private landowner decides to no longer allow it and closes the road.

#### **Alternative 2 – Proposed Action**

The relocation would allow continued motorized and non-motorized access to the Kingsberry – Oregon Gulch and Hedges Mountain areas. When the road is relocated the landowner would remove the fences and reclaim the road to allow him full use of that portion of his property for grazing and other uses. Relocating the road would also eliminate the need for an existing agreement between the Forest Service and the private landowner for a closure gate on the road.

### **Cumulative Effects**

The cumulative effects of the both alternatives are described in the North Belts Travel Management FEIS, which is incorporated by reference in this EA.

## **Fire Affected Environment**

### **Introduction**

The project area is a dry ponderosa pine forest. This type of forest has typically had an historic fire return interval from 5 to 25 years. The normal fire regime was to have relatively frequent non-lethal fires that kept undergrowth in check, removed ladder fuels, generally eliminated large amounts of downed fuel, and recycled nutrients. The forest canopy was open and promoted the growth of large “yellow pine” (ponderosa). Due to successful fire suppression this forest has missed several naturally occurring fire cycles.

Access for fire suppression and fuel management activities is always an important issue.

## **Fire Environmental Consequences**

### **Introduction**

The quantitative effect of travel management on fire suppression and human-caused fire starts is difficult, if not impossible, to measure. Intuitively it can be stated that the more routes that are open for fire vehicle access, the better the suppression opportunities will be. Following that same logic, those same routes, if open to the public, will provide an increase in the *risk* of human-caused fire starts under the right fuel and weather conditions, while also providing more opportunities for detection of new fire starts by forest users. No historical evidence or current methodology exist that can provide any quantitative measure of these effects, due in large part to the random nature of fire and the many variables such as fuel conditions, weather, insect infestations, disease epidemics, and other factors that enter into a dynamic equation for fire starts, behavior, and effects.

Prescribed fire relies to a great extent, on the ability for fire managers to access target burn areas by ground vehicles for both mechanical treatment and prescribed fire application and all subsequent control and mop-up operations. This is especially true in the lower elevation Ponderosa Pine ecosystems (such as those in the project area) where historical natural fire return intervals are frequent (0-35 years) and fires are of low intensity.

From a fire and fuels management standpoint, the two main issues related to the Kingsberry Road Relocation Project are:

- Vehicle access for personnel involved in fire suppression and fuels management projects such as timber and brush thinning, ladder fuel removal, building firebreaks, and prescribed burning projects.

- Vehicle access by the public. Human-caused risk of fire starts increases as public access becomes more available.

### **Effects of the Alternatives**

#### **Alternative 1, No Action**

Assuming the private landowner would allow Forest Service personnel access across his property for fire management activities when the road is closed, there is no effect for fire suppression and fuels management. If the road is closed and no other access is developed, there would be a decrease in public use and a subsequent reduction in the risk of human-caused fire starts.

### Alternative 2, Proposed Action

Under the proposed action alternatives there would be no appreciable change in access to the Kingsberry-Oregon Gulch area and therefore no change in access for fire management activities and the same level of risk for human-caused fire starts.

### **Cumulative Effects**

The cumulative effects of the both alternatives are described in the North Belts Travel Management FEIS, which is incorporated by reference in this EA.

## **Forested Vegetation Affected Environment**

Since the early 1950's, roads have been built to access and haul commercial timber. These roads have provided continued access for forest management and opportunity for the public to gather firewood and other forest products. "Forest products" vary by locale and their inherent availability. Generally, forest products includes, but is not limited to, firewood, posts and poles, Christmas trees, boughs, cones, mushrooms, berries, and decorative rock.

## **Forested Vegetation Environmental Consequences**

### **Introduction**

The effects indicators for timber resources are discussed as the change in opportunity for management of timber resources on suitable lands and public opportunity to collect firewood.

### **Effects of the Alternatives**

#### Alternative 1 – No Action

Opportunities to manage forests for vegetation management objectives with this alternative would be reduced. Vehicle access to conduct ongoing monitoring and evaluation of forest stands would require alternative access. Since the existing access is not suitable for log haul, there would no effect on access to commercial timber sales.

#### Alternative 2 – Proposed Action

Opportunities to manage forests for vegetation management objectives with this alternative would continue. Vehicle access to conduct ongoing monitoring and evaluation of forest stands would continue. The new road would be suitable for log haul. Fifty to sixty trees (a few green, but mostly dead), would be removed and made available for commercial firewood gathering.

The existing roads would continue to provide a means to access the Big Belts for management activities on the suitable timber base and to provide routes for log trucks as needed.

### **Cumulative Effects**

The cumulative effects of the both alternatives are described in the North Belts Travel Management FEIS, which is incorporated by reference in this EA.

## **Sensitive Plants Affected Environment**

There are a total of 25 sensitive plant species known or suspected to exist on the Helena National Forest. Six sensitive species are known or suspected to occupy habitat within the Big Belt Mountains (Poole and Heidel 1993; Barton and Crispin, 2002): *Cirsium longistylum*, *Juncus hallii* and *Polygonum douglasii* ssp. *austinae*. *Cirsium longistylum* and *Polygonum douglasii* ssp. *austinae* are known to exist within the North Belts Travel Plan area. *Juncus hallii* is not known to occupy habitat within the travel plan area, but there is potential that it does exist. It is possible that three more species, *Botrychium paradoxum*, *Goodyera repens* and *Phlox kelseyi* var. *missoulensis* could be present, although these species have never been found in the Big Belts. *Goodyera repens* has not been found anywhere on the Helena National Forest to date.

## **Sensitive Plants Environmental Consequences**

### **Effects of the Alternatives**

There have been numerous past sensitive plant surveys in the project area. There is a population of *Polygonum douglasii* var. *austinae* to the east of the project area, but no plants have been found near the area proposed for the road relocation, therefore there will be no effect to sensitive plants under either alternative.

### **Cumulative Effects**

The cumulative effects of the both alternatives are described in the North Belts Travel Management FEIS, which is incorporated by reference in this EA.

## **Soils Affected Environment**

In general, roads and trails are a “dedicated use” for lands that comprise the road prism. In this context, impacts to soil productivity resulting directly from the presence of roads and trails are not evaluated for compliance with Region 1 soil quality standards, because the affected land is managed for transportation uses and is not managed for vegetation production. Soil effects resulting from development and use of forest roads have been relatively well documented in the scientific literature.

Soil effects from roads include removal of vegetative cover, compaction, degradation of soil structure, decreased infiltration and water holding capacity, reduction in organic material, accelerated surface erosion, and exacerbation of mass failure, such as landslides or slumps. These types of soil impacts can occur on the prism of all roads..

## **Soils Environmental Consequences**

### **Effects of the Alternatives**

#### **Alternative 1 – No Action**

Since the current road is not located on the National Forest its poor condition is not an issue from a soils standpoint..

### Alternative 2 – Proposed Action

The new road would disturb about 1.2 acres of level ground. Use of Best Management Practices for road construction would mitigate any concerns with the soil resource.

### **Cumulative Effects**

The cumulative effects of the both alternatives are described in the North Belts Travel Management FEIS, which is incorporated by reference in this EA.

## **Weeds Affected Environment**

Invasions by non-native plants degrade biological communities and threaten survival of native species world wide. These plants, commonly known as “weeds” or “exotic species”, use water, nutrients, and sunlight that would normally be utilized by native species, thus altering communities and ecosystems. The invasiveness of weeds is due to their genetic make-up which enables them to exploit a resource “niche”, and the lack of natural enemies such as insects, diseases, and pathogens (Herbold and Moyle, 1986; Randall, 1995).

Currently weeds are found in the project area, with a significant increase in the level of infestation occurring after the Jimtown Fire of 2003. The main species of concern are spotted and diffuse knapweed and Dalmatian and common (or yellow) toadflax. Newly disturbed areas are particularly susceptible to invasion by noxious weeds. The rate of spread of these weeds, especially Dalmatian toadflax, is about 10% per year.

## **Weeds Environmental Consequences**

### **Effects of the Alternatives**

#### Alternative 1 – No Action

In the absence of disturbance under the no action alternative weed populations are expected to stay fairly constant. The greatest threat from noxious weeds under this alternative would be the introduction of new and potential invader species because the area is popular for multiple types of recreation.

#### Alternative 2 – Proposed Action

The ground disturbing activities associated with construction of the new road would provide an opportunity for weed spread, especially along the road’s shoulders. The spread of weeds would be mitigated with by spraying herbicides before and after construction and by grass seeding the shoulders of the road. The greatest threat from noxious weeds under this alternative would be the introduction of new and potential invader species because the area is popular for multiple types of recreation.

### **Cumulative Effects**

The cumulative effects of the both alternatives are described in the North Belts Travel Management FEIS, which is incorporated by reference in this EA.

## Wildlife Affected Environment

### Big Game Hiding Cover

As a result of the Jimtown Fire of 2003 and the pasture land immediately adjacent to the current road hiding cover in the project area is lacking.

Currently, few elk make use of the project area during the hunting season. The high road density affords too many hunters easy access. Rather, elk move to more secure areas outside the project area: (1) small security enclaves upslope to the south and southwest, (2) large bonafide security areas in the direction of Hedges Mountain to the northeast (mostly-forested areas larger than 200 acres and more than ½ mile from motorized routes), and (3) large blocks of private land along Hauser Lake further to the southwest.

A number of mule deer, on the other hand, continue to frequent the project area through the hunting season, ducking into local pockets of hiding cover to escape detection. Some of these animals retreat upslope into more rugged terrain immediately south and southwest of the project area and then make regular forays back down toward the Jimtown Road, possibly to feed and to occupy home territory during the rut.

Outside the hunting season, elk, deer, and other large animals in the project area take advantage of screening cover provided by sapling conifers and pockets of dense mature timber to rest and conceal young. The primary draw of the project area for these animals, however, is the modest food source it provides, rather than its security characteristics.

### Species, Habitats, and Components of Special Interest

*Bald Eagle* The bald eagle is a threatened species. Bald eagles are present along the Missouri River much of the year. The closest active nest to the project area is below Hauser Dam about 8 miles to the northwest. From October through December migrating eagles congregate below Canyon Ferry Dam, less than 3 miles from the project area, to feed on spawning Kokanee salmon. At night, most of these birds roost in stands of mature Douglas-fir and ponderosa pine at Brown's Gulch about 2½ mile west of the project area.. There are know of no eagle nests, suitable roosting sites, or active perch trees within project area. (field monitoring 1995-2000).

*Northern Goshawk* The northern goshawk is a *sensitive species* and a *management indicator species* for old-growth forest. In the summer of 2000, a pair of goshawks established a nest on a thickly timbered slope within ½ mile of the project area. These birds fledged at least two young. The nest is located on a north-facing slope in a stand of mature multi-storied ponderosa pine and Douglas-fir. The nest stand does not extend into the project area, but the goshawks probably forage through project area forests, which are a source of red squirrels, robins, Townsend's solitaires, and other mid-sized prey species. Great-horned owls and red-tailed hawks in the more open project area forest may deter the goshawks from making more regular use of these stands.

*Hairy Woodpecker* The hairy woodpecker is a *management indicator species* for snags. Hairy woodpeckers are the most common woodpeckers in the project area. They are evident in all habitats with mature trees—both open and closed stands—and have been observed in the Cave Gulch and Jimtown burns. Large snags (> 8 inches dbh) capable of supporting nest cavities are

not abundant in the project area but are apparently sufficient to support a local population of hairy woodpeckers. .

*Black-backed Woodpecker* The black-backed woodpecker is a *sensitive species*. Black-backed woodpeckers are nomadic and opportunistic. They focus on large concentrations of newly dead trees that support wood-boring insects. When the insect supply deteriorates (typically 5-7 years after a stand-replacing fire) the woodpeckers move on to other suitable sites. Currently, no black-backed woodpeckers inhabit the project area, but they will probably begin appearing in the next year or two to take advantage of the Cave Gulch burn.

## **Wildlife Environmental Consequences**

### **Effects of the Alternatives**

Under either alternative there is no change in open road density or hiding cover. Under either alternative, a single road remains open for public access to the Kingsberry-Oregon Gulch area. Thus there is no change in open road density. Since practically all the trees to be removed are dead, with many of them already fallen and the rest to soon follow, there will be no change from the current situation, and hence, the no action alternative.

Under either alternative, no significant effects are projected for sensitive terrestrial species. There are no sensitive aquatic species in the project area.

#### **Alternative 1 – No Action**

As long as the current road remains open, the no action alternative would have no effect on wildlife in the area. If the road is closed and a new road is not constructed, human interactions in the area would decrease which could result in benefits to some wildlife species as the distance from the Jimtown Road increases.

*Hiding Cover/Open Road Density.* Alternative 1 (no action) would not comply with the Forest Plan standard for hiding cover/road density. However, selection of Alternative 1, which would not modify the existing situation, would not require amendment of the Forest Plan. The no action alternative is otherwise consistent with the Forest Plan.

#### **Alternative 2 – Proposed Action**

*Bald Eagle* This alternative would have *no effect* on the bald eagle.

*Northern Goshawk* The proposed action would not affect goshawks nesting in adjacent stands, would have no effect on population viability and would not contribute to the species being listed as threatened or endangered. The project area contains no suitable nesting habitat for goshawks.

*Hairy Woodpecker* Because they make use of all mature forest habitats in the project area regardless of stand density, hairy woodpeckers would be unaffected by the proposed road construction. This alternative would have minimal impact on the availability of large snags or other cavity bearing trees.

*Black-backed Woodpecker* The proposed action would have no effect on the ability of black-backed woodpeckers to colonize burned habitat around the project area.

*Hiding Cover/Open Road Density.* Alternative 2 would also not comply with the Forest Plan standard for hiding cover/road density. However, since Alternative 2 closes the existing road to the public and is taken off the transportation system, there is no net increase in open road density. In addition the removal of the dead trees associated with the road construction is only a minor change from the existing condition, as many of the dead trees in the area are now on the ground and the rest will soon fall. Removal of the trees associated with the new road would result in only a very negligible loss of hiding cover, would not modify the existing situation, and thus would not require amendment of the Forest Plan.

### **Cumulative Effects**

The current conditions in the project area have been shaped by a number of past events and trends, some of them dating back to the 19<sup>th</sup> century. The Jimtown area was once the site of concentrated mining activity and accompanying settlement. Many of the old diggings remain as prominent features of local terrain. By 1900, most large trees in the area had been logged off, elaborate road/trail systems had been woven through the landscape, and virtually all large game animals, predators, furbearers, and game birds had been extirpated. Most of these populations were re-established by reintroduction later in the 20<sup>th</sup> century. Fire prevention and suppression efforts became effective enough by the 1930s to prevent either high- or low-intensity fires from moving through the project area.

Recent actions, projects, or events that have a bearing on wildlife in the Kingsberry project area include the Jimtown Road Fuel Reduction project (1993-97) and the Cave Gulch Fire (July-August 2000), the Jimtown Fire (July 2003), the Jimtown Project (2008-2009), the North Belts Travel Management Decision

Ongoing actions that may impact wildlife in the area include the Bull-Sweats Vegetation Manipulation project (1996-present), the Beaver-Soup Allotment Management Plan revisions (1998-present), the Hauser Lake eagle management program, rehabilitation efforts associated with the Cave Gulch fire, ongoing fire suppression, the noxious weed treatment program, removal of dead trees by firewood cutters, and pioneering of new motorized trails by OHVs.

### **CONFLICTS WITH PLANS AND POLICIES OF OTHER AGENCIES**

No conflicts have been identified.

### **PROBABLE ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED**

Both of the alternatives would have environmental effects, including the No Action alternative. Mitigation measures, such as BMPs, are included with the action alternative to minimize impacts. Impacts are usually most evident shortly after implementation. Examples of such impacts include soil disturbance, modification of wildlife habitat, and modifications of scenic qualities. With the passing of time and the application of specified mitigation measures, all impacts from management actions will be within acceptable limits specified by law and the Forest Plan.

## **IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES**

The only identified irreversible and irretrievable commitment of resources that have been identified are the use of petroleum products and the vegetative production lost

## **SUMMARY OF THE RELATIONSHIP BETWEEN SHORT-TERM USES AND LONG-TERM PRODUCTIVITY**

While there will be impacts from both alternatives in both the short and long term, overall productivity of the land will be maintained.

## **SPECIFICALLY REQUIRED DISCLOSURES**

**Effects on Social Groups** - There are no identified differences in effects on Indians, women, or the civil liberties of any American citizen. Both of the alternatives would have similar effects on all people, regardless of race, religion, and sex.

**Effects of Alternatives on Prime Farmland, Range Land, and Forest Land** - None of these lands, as defined in the law, are located on the public lands in this project area: thus, no effects on these lands are projected.

**Effects to Threatened and Endangered Species** - No significant impacts to any threatened or endangered terrestrial species are expected under any of the alternatives. There are no threatened or endangered aquatic or plant species in the project area or potentially affected by the proposed activities.

**Effects On Wetlands and Floodplains** - The project area is extremely dry, and no wetlands or floodplains would be affected by the project.

**Effects on Heritage Resources** - The action alternative is designed to meet the legal requirements for protection of, or the mitigation of impacts to, significant cultural resources. A heritage survey was completed for this project during the summer of 2006. Design and mitigation requirements will result in a "no effect" to these resources.

**Energy Requirements** - The action alternative would require the use of petroleum products for implementation to proceed. The impacts on energy resources are insignificant considering national and worldwide petroleum resources.

**Environmental Justice** - Implementation of any alternative would not result in disproportionate impacts to any minority or low-income communities. The effects on social groups would be similar for each alternative.

## **Chapter IV - Appendices**

### **Appendix A - IDT Members**

Heritage – Carl Davis  
Soils – Sue Farley  
Sensitive Plants – Lois Olsen  
Wildlife – Brent Costain  
Weeds – Jay Winfield  
Vegetation – Sharon Scott  
Recreation – Dave Payne  
Transportation – Charlie McKenna  
Lands, Special Uses – Larry Cole  
Fire – Dave Larsen

### **Appendix B – Literature Citations**

Barton and Crispin. 2002. Sensitive Plant Species in Weed Management Areas on the Helena National Forest

Helena National Forest Plan (Forest Plan), including the Forest Plan FEIS and Record of Decision (1986)

Herbold and Moyle. 1986. Introduced Species and Vacant Niches. American Naturalist 128:751-760

Jimtown Project Environmental Assessment, Decision Notice/FONSI and Project File (May 2001)

North Belts Travel Management Plan Final Environmental Impact Statement and Record of Decision and Project File (May 2005)

Poole and Heidel. 1993. Sensitive Plant Surveys in the Big Belts and Elkhorn Mountains, Helena National Forest

Randall. 1995. Weeds and natural areas management.

Roper and Starch. 2000. Outdoor Recreation in America 2000: Addressing Key Social Issues