CHAPTER 1
PURPOSE AND NEED

I. INTRODUCTION

Organization of this Environmental Assessment

The Forest Service has prepared this Environmental Assessment (EA) in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This EA discloses the direct, indirect, and cumulative environmental impacts that would potentially result from the Proposed Action (Alternative 2) and the other alternatives.

This document is organized into three Chapters:

Chapter 1. Chapter 1 outlines the project area, the purpose of and need for the proposed project, the scope of the Proposed Action and analysis, how the Firefighter Project relates to the Flathead National Forest Land and Resource Management Plan (Forest Plan), and decisions to be made.

Chapter 2. Chapter 2 presents detailed descriptions of the Proposed Action (the Forest Service's initial proposal) and public involvement, identifies significant issues, and describes alternatives to the proposal (including taking no action). The alternatives were developed to address or resolve environmental issues related to the proposal that we identified through public and agency comments on the Proposed Action.

Chapter 3. Chapter 3 describes the natural and human environments potentially affected by the Proposed Action and other alternatives, and discloses potential effects. Chapter 3 is organized by resource area.

Following Chapter 3, there is a list of preparers of the EA; a list of agencies, organizations, and individuals involved in public scoping; a list of literature cited; and a glossary of terms.

The EA is supported by information in the Firefighter Project File (Project File). It includes field investigations and notes, pubic involvement information, and other documents used for developing alternatives and background for the resource specialists' analysis. These records are available for public review.

Copies of this EA are available at the Flathead National Forest Supervisor's Office (650 Wolfpack Way, Kalispell, MT 59901) and the Hungry Horse/Glacier View Ranger District Office (10 Hungry Horse Drive, PO Box 190340, Hungry Horse, Montana 59919). Copies may be requested by calling the Forest Supervisor's Office at 406-752-5200 or the Ranger District at 406-387-3800. The Project File is located at the Hungry Horse/Glacier View Ranger District Office in Hungry Horse.

II. PROJECT AREA

The Firefighter Project is located on the Hungry Horse Ranger District of the Flathead National Forest, Flathead County, Montana. The portion of the district affected by the vegetation treatments in this project is generally located between Forest Road 38 (the main east side reservoir road) and the Hungry Horse Reservoir near Firefighter Mountain (note: two proposed vegetation units are located just north of Forest Road 38). Road access changes are located within this area and beyond within the Emery Firefighter Grizzly Bear Subunits**.** This subunit is bounded by the Flathead Range to the east, Emery Ridge to the northwest, Hungry Horse Reservoir to the southwest, and Murray Bay to the south (refer to Map 1-1). All project activities would occur on National Forest System lands.

III. PURPOSE AND NEED

The need for the Firefighter Project was derived from the difference between the desired landscape condition and the current condition related to elk habitat, wildlife security, and forest diversity and productivity. The Flathead National Forest Land and Resource Management Plan (Forest Plan) provides the primary management direction related to the goals/desired future conditions of these resources.

Elk Habitat

An important purpose of this project is to continue ongoing management of elk habitat in the Firefighter Mountain area. The goal is to consider both short- and long-term seasonal habitat needs of elk. Therefore, maintaining an appropriate amount of forest cover (important for snow interception and summer thermal cover) and forest openings (important as foraging areas) is the desired long-term outcome of managing elk habitat in the Firefighter area.

Elk habitat/winter range occurs on the westerly facing slopes from Riverside Creek south to Deep Creek (refer to Maps 3-4 and 3-5 in Chapter 3 of this EA). A high-severity wildfire swept through these areas in 1926, essentially killing all of the trees; the existing 80-year-old forest stands that dominate elk habitat in the area are the result. In the southern portion of the Firefighter Project area, dense forest stands of lodgepole pine predominate, resulting in sparse understory vegetation. These types of stands would be the primary target for regeneration and reforestation treatments to achieve a mix of species that would include Douglas-fir and western larch. Additionally, in the late 1940s and early 1950s, the Hungry Horse Dam was constructed, creating the 23,600-acre Hungry Horse Reservoir. This resulted in the flooding and permanent loss of much of the prime elk winter range along the South Fork Flathead River in the Firefighter Project area.

The Montana Department of Fish, Wildlife and Parks (FWP) estimated that 8,750 acres of elk and mule deer winter range were flooded and permanently lost by the creation of the Hungry Horse Reservoir; approximately 6,260 acres of that loss occurred on the Firefighter Mountain Winter Range (Casey and Malta 1990). In 1990, the Hungry Horse District Ranger signed and authorized the implementation of the Firefighter Mountain Winter Range Project. This project (implemented 1991-1996) was the result of the Northwest Power Planning Council's direction to

develop a program to "protect, mitigate and enhance" wildlife and wildlife habitats affected by development of the Columbia Basin hydroelectric system. In 1987, the Council amended its Fish and Wildlife Program to include a measure to enhance up to 6,650 acres of elk winter habitat on Flathead National Forest lands to mitigate for impacts from the construction of the Hungry Horse Dam; this was the impetus for the planning and implementation of the Firefighter Mountain Winter Range Project in the early 1990s.

This current Firefighter Project can be seen as a continuation of the earlier Firefighter Mountain Winter Range Project. This project seeks to continue to create a diversity of forest age classes, species composition, and stand structures in elk habitat that would result in maintaining sufficient forest canopy cover for snow interception and summer thermal cover while increasing potential forage production. The desired condition is to provide the size, age, diversity, and distribution of vegetation conditions suitable for elk habitat in both the short- and long-term, considering the dynamic nature of forested ecosystems.

To achieve the desired condition in Forest Plan designated elk winter range, the project would be designed to:

- Maintain a sufficient amount of existing closed canopied forests that function as snow interception and summer thermal cover for elk while diversifying forest age, structure classes, and species composition. This would provide for future suitable elk winter/summer range stand conditions and, in the interim, could function as foraging areas.

Wildlife Habitat Security

Another purpose of this project is to increase habitat security for grizzly bears. Motorized access has been shown to displace grizzly bears and other wildlife. Amendment 19 to the Forest Plan includes management direction for maintaining or improving security for grizzly bears via three parameters: open motorized access density (OMAD), total motorized access density (TMAD), and security core. In grizzly bear subunits where at least 75% of the area includes National Forest System lands, the objective is to limit high-density OMAD (greater than 1 mile/mile^2) to no more than 19%; to limit high-density TMAD (greater than 2 miles/mile^2) to no more than 19%; and to provide at least 68% of a subunit as security core in at least 2,500 acre blocks.

The Paint Emery Project decision was signed in 1999. This decision encompassed the Firefighter Project area and included actions to reduce motorized access. The decision made progress toward meeting Amendment 19 standards. There is a desire to continue that progress and increase security for grizzly bears in the project area.

To achieve these desired conditions, this project would be designed to:

- Improve grizzly bear security by decreasing wheeled motorized access.

Forest Diversity and Productivity

A third purpose of the Firefighter Project is to address the current condition of relatively low tree species diversity and timber productivity across portions of the project area at the landscape and

stand levels. Much of the area is dominated by dense lodgepole pine forests that regenerated after the 1926 wildfires. These trees, while mature, are of small diameter; the result of greatly reduced growth rates due to dense stocking and intense competition experienced over the past 70 years. Many of these stands are susceptible to mountain pine beetle infestation and mortality.

The desired forest stand condition would be a mix of vigorously growing, healthy, native tree species. On a landscape scale, the desired condition would consist of a variety of forest age classes, structures, and species, increasing the overall diversity of vegetation conditions. This condition would provide a greater diversity of wildlife habitat values and increase the resistance of the forest to severe effects of insects, disease, and fire. It would also lower the risk of severe and intense wildfire should a fire occur in the future.

Most of the dense lodgepole dominated stands are located in areas identified as mule deer and elk winter habitat, where timber harvest is considered suitable and can be used to improve or maintain the desired habitat conditions. Treatment of these stands would provide foraging habitat for elk as well as the desired improvement in forest diversity. According to the Forest Plan, some of these lodgepole pine stands are located in areas where timber management is a primary goal, and harvest in these areas would increase timber productivity and improve forest diversity.

To achieve the desired condition, the project would be designed to:

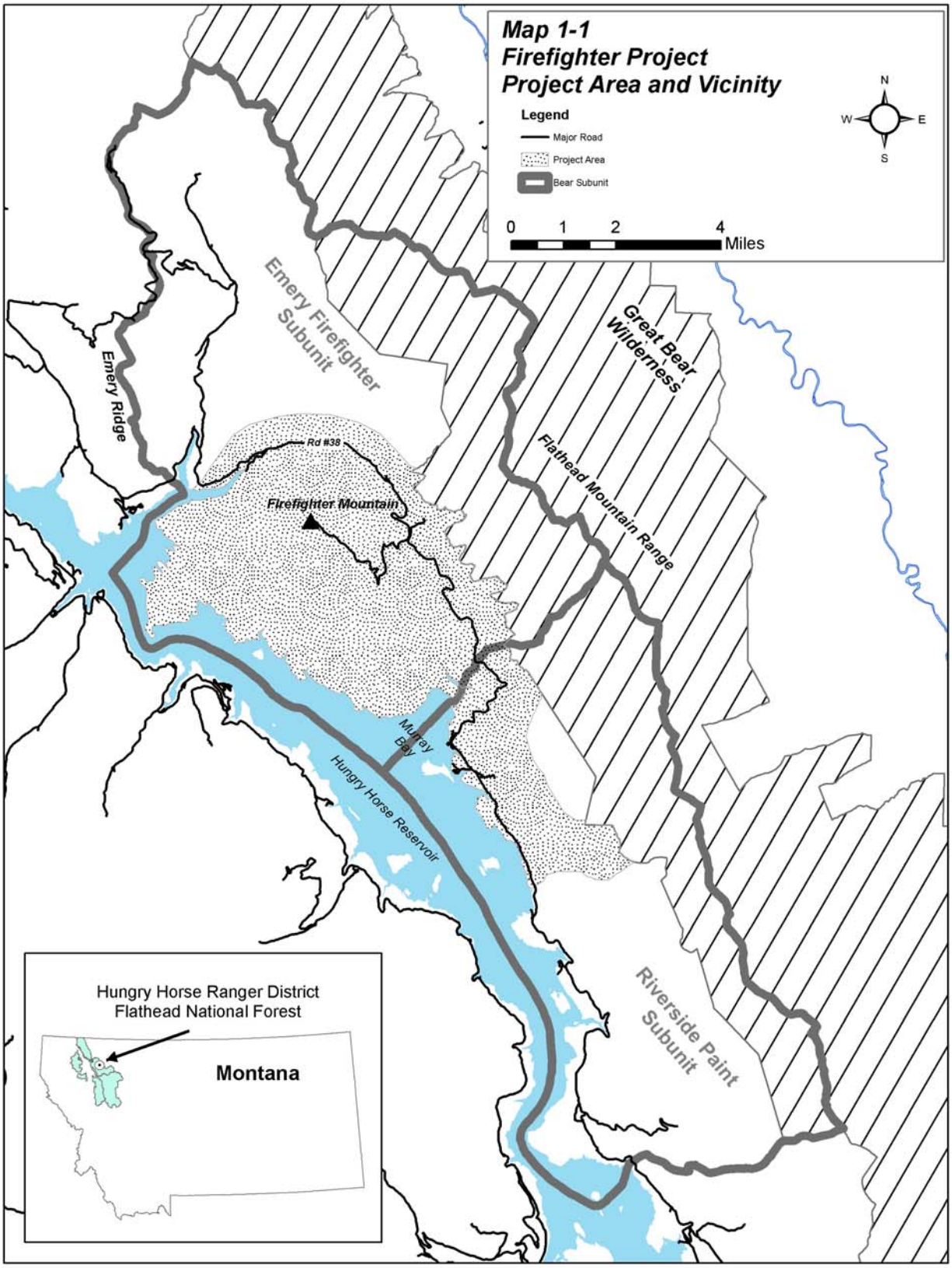
- Increase forest structural and species diversity at the stand and landscape scales, favoring the regeneration and growth of desired early successional species such as western larch, Douglas-fir, and western white pine.
- Reduce fuel loading by removing trees, and by reducing slash and surface fuel loading with prescribed fire and biomass removal.

Douglas-fir Test-Tree Plantation

A final purpose of the project is to ensure that Douglas-fir trees in a genetic test-tree plantation are free to grow. The plantation was established in 1995 within an 8-acre area that had just been harvested. The planted Douglas-fir trees are now being crowded by the lodgepole pine that has naturally regenerated within the stand. Genetic tests provided by these plantations are the mainstay of the Inland Empire Tree Improvement Cooperative (IETIC) program. The IETIC is a diverse group of 19 organizations in eastern Washington, northern Idaho, and western Montana. Information gathered over the years from the test plantations allows the identification of genetically superior tree families and individuals, the estimation of the increased growth and disease resistance expected from improved plantations, and the improvement of seed orchards so they will continue to produce high quality, genetically improved seed for reforestation. It is important that these plantations receive proper care and maintenance so the trees can continue to grow freely.

To achieve this purpose, the project would be designed to:

- Maintain and enhance growth of the planted Douglas-fir in the genetic test-tree plantation.


Map 1-1
Firefighter Project
Project Area and Vicinity
Legend
Major Road
Project Area
Bear Subunit
0 1 2 4
Miles
N
W
E
S
Emery Firefighter Subunit
Great Bear Wilderness
Emery Ridge
Rd #38
Firefighter Mountain
Flathead Mountain Range
Murray Bay
Hungry Horse Reservoir
Riverside Paint Subunit
Hungry Horse Ranger District
Flathead National Forest
Montana

IV. PROJECT SCOPE

Scope of the Proposed Action

Forest planning takes place at several levels: national, regional, forest, and project. The Firefighter Project is a project-level analysis; its scope is confined to addressing the significant issues and possible environmental consequences of the project. The project does not attempt to address decisions made at higher levels; however, it could implement direction provided at those higher levels.

Scope of the Analysis

The Council of Environmental Quality regulations implementing the National Environmental Policy Act of 1969 (NEPA) require that all federal agencies consider the following three types of actions to determine the scope of an EIS (40 CFR 1508.25):

Connected Actions. These are closely related actions that automatically trigger other actions that may require NEPA analysis; that cannot or would not proceed unless other actions are taken previously or simultaneously; or are interdependent parts of a larger action and depend on the larger action for their justification.

Connected actions are part of the Proposed Action. The Proposed Action includes all activities that are needed to complete the proposed project and provide for resource protection during and after project completion. Connected actions contained in the Proposed Action include but are not limited to the following:

- Temporary road construction and obliteration
- Noxious weed control
- Post timber sale activities (e.g. burning, piling, etc)
- Tree planting and monitoring of reforestation success
- Best management practices
- Monitoring of activities and the results of treatments (e.g. soils impacts, weeds, etc)

Similar Actions. These are actions with similarities to other actions that provide a basis for evaluating their environmental consequences together, such as similar timing or geography. A number of similar actions have been identified and evaluated in the analysis of environmental consequences (Chapter 3). These are current and reasonably foreseeable actions described in the following section.

Cumulative Actions. These are past, present, and reasonably foreseeable actions that may have cumulatively significant impacts when considered along with the Proposed Action. Actions considered in the cumulative effects analysis are presented in more detail in Chapter 3. Further documentation of cumulative effects is included in the Project File.

V. RELATIONSHIP TO THE FOREST PLAN

Forest Plan Direction

The Forest Plan embodies the provisions of the National Forest Management Act (NFMA), its implementing regulations, and other guiding documents. The Forest Plan sets forth in detail the direction for managing the land and resources of the Flathead National Forest. Where appropriate, this EA tiers to the Forest Plan Final Environmental Impact Statement and Record of Decision, in compliance with 40 CFR 1502.20.

Forest Plan Management Areas

The Forest Plan uses "management areas" to guide management of National Forest System lands. Each management area (MA) provides a unique combination of activities, practices, and uses. Chapter 3 of the Forest Plan contains a detailed description of each management area. Proposed treatment areas within the Firefighter Project would affect four management areas. Brief descriptions of the MAs involved in the Firefighter Project are included below.

MA 7 This MA consists of timberlands in areas of high scenic value. Manage the timber resource with roads in a manner that compliments and protects high scenic values. Maintain or create natural-appearing, diverse patterns of vegetation using various silvicultural systems. Designated as suitable for timber management and timber harvest will be scheduled. Units 5, 8, and a portion of 56 would occur on MA 7 lands.

MA 13 This MA consists of timberlands capable of providing mule deer and elk winter habitat. Provide the size, age, diversity, and distribution of habitat units (both cover and forage) suitable for mule deer and elk winter habitat. Management of other resources will generally be compatible with the mule deer and elk winter habitat management goals. Units 3, 6, 7, 9b, part of 9c, 11, 13, 14, 15, 18, 19, 20, 21, 23, 26, 29, 30, 60, 61, and 70 would occur on MA 13 lands.

MA 15 This MA consists of timberlands where timber management with roads is economical and feasible. A major goal is to emphasize cost-efficient production of timber while protecting the productive capacity of the land and timber resource. Units 2a, 2b, 16, 40, 41, 43, 47, 49, 50, and part of 56 would occur on MA 15 lands.

MA 16 This MA consists of timberlands where timber management is feasible using aerial logging systems. The lands are generally steep breaklands where roading may be economically prohibitive or environmentally unsound. A major goal is to emphasize cost-efficient production of timber while protecting the productive capacity of the land and timber resource. Roadless logging methods will be used, unless site-specific analysis determines that a roaded system is economically and environmentally prudent. A portion of Unit 9c would occur on MA 16 lands.

VI. DECISIONS TO BE MADE

Based on findings in this EA, the Deciding Official would decide whether and how to manage elk habitat in the Firefighter Mountain area, improve wildlife security, improve forest diversity and productivity, reduce fuel loadings, and ensure the Douglas-fir in the genetic test-tree plantation are free to grow. This decision would include the following:

- Does the selected alternative meet the purpose and need for action?
- Does the selected alternative meet laws and regulations governing natural resource management activities?
- Whether a project-specific forest Plan amendment is required, the nature of the amendment, and whether the amendment would be a significant change to the Forest Plan?
- The Deciding official may choose any of the alternatives analyzed in this document, including the No-Action Alternative or some combination of the elements of the Action Alternatives (Alternatives 2 and 3) as long as they are within the range of effects of the alternatives that have been analyzed.