

Chapter 1 - Purpose and Need for Action

1.0 Introduction

This chapter:

- provides a summary of the proposed action;
- describes the project area;
- discusses Forest Plan direction related to this project;
- describes the existing vegetative condition of the area;
- explains why action is needed (referred to as the “purpose and need for action”);
- defines the scope of the analysis;
- identifies the decisions to be made with this project; and
- lists the applicable laws, regulations, and executive orders related to this project.

1.1 Summary of Proposed Action

The Cheat Potomac Ranger District of the Monongahela National Forest is proposing to implement vegetation management and associated activities within the Hogback project area over the next ten years to help meet direction in the Monongahela Land and Resource Management Plan (Forest Plan, 2006).

This vegetative management is being proposed to:

- improve age class distribution and habitat conditions for a variety of wildlife species;
- improve the health and vigor of mast-producing tree species;
- improve the conifer component;
- provide forest products; and
- manage access of licensed highway-legal vehicles on roads.

Actions associated with the proposed project include:

- regenerating timber stands and providing timber using harvest methods such as clearcut with reserves, shelterwood, and overstory removal;
- commercially thinning timber stands and providing timber;
- pre-commercially thinning, with herbicides or chainsaws, units that received regeneration cuts in the past;
- applying herbicides or hand-cutting non-merchantable vegetation in harvest units;
- fencing shelterwood units or using other methods to prevent deer browsing;
- treating non-native invasive species (NNIS) with herbicides;

- planting desired tree species;
- converting new landings into wildlife openings, and maintaining both existing and new openings to provide open habitat for wildlife species;
- maintaining, constructing, reconstructing, and decommissioning roads;
- rehabilitating areas negatively impacted by vehicle use; and
- managing road access (openings and closures).

1.2 Project Area Description

The 45,068 acre Hogback project area is located in northern Tucker and southern Preston Counties, West Virginia (Figure 1.1, Vicinity Map, on page 1-3). This project area is on the Cheat portion of the Cheat Potomac Ranger District (RD) of the Monongahela National Forest (MNF). Within the Hogback project area (Table 1.1), approximately 70 percent of the land is private and 30 percent is National Forest System (NFS) land.

The Hogback project area encompasses all lands within Compartments 2, 3, 4, 5, 6, 7, 11, 12, 13, 14, and 21. The project area is located primarily within the Horseshoe Run 5th level watershed (HUC 0502000408), but also includes small portions of two additional 5th level watersheds - Cheat River Direct Drains (HUC 0502000409) and Dry Fork (HUC 05020004070).

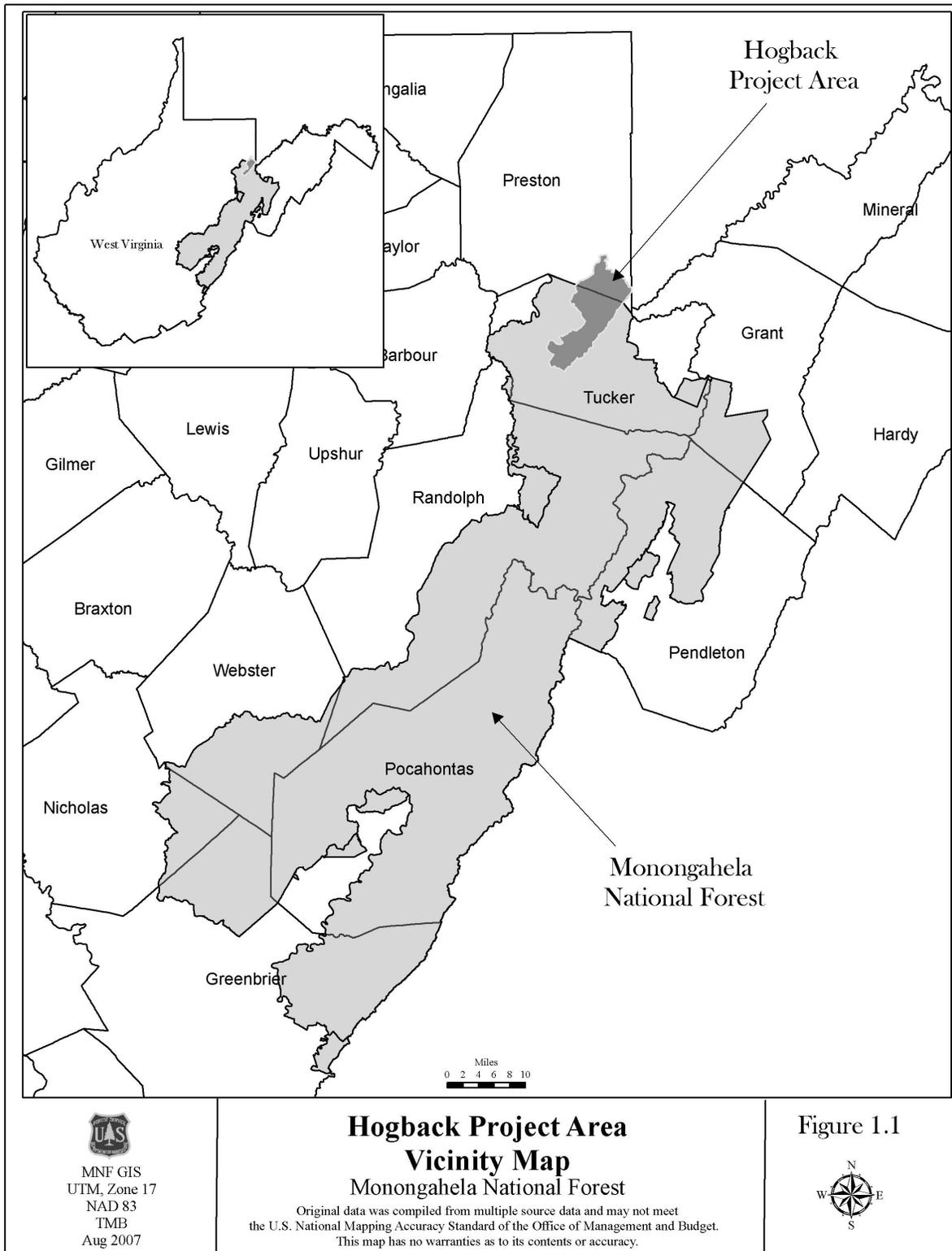
Table 1.1. Land ownership within the Hogback project area

Ownership	Acres ¹	Percent of Hogback Project Area
National Forest System (NFS) land	13,446	30 %
Private land	31,622	70 %
Total	45,068	100 %

¹Figures in this table are approximations.

National Forest Service (NFS) lands within the project area are managed in cooperation with the WV Division of Natural Resources (WVDNR), the U.S. Fish and Wildlife Service (USFWS), and other agencies and organizations.

Figure 1.1. Vicinity Map



1.3 Forest Plan Direction

The Monongahela National Forest began implementing its first Land and Resource Management Plan (Forest Plan) in July of 1986. The 1986 Forest Plan was revised recently, resulting in the current 2006 Forest Plan. The Record of Decision for the 2006 Forest Plan was signed on July 20, 2006, and implementation of the 2006 Forest Plan began on October 23, 2006. Unless specified otherwise, all references to “Forest Plan” refer to the current 2006 Forest Plan, not the previous 1986 Forest Plan.

The 2006 Forest Plan, and its accompanying Final Environmental Impact Statement and Record of Decision, specify direction for managing resources on the Forest. They contain Forest-wide and area-specific goals, objectives, standards, and guidelines that provide for land uses with anticipated resource outputs.

All lands within the Hogback project area are allocated to Management Prescription (MP) 3.0 (Forest Plan Environmental Impact Statement Maps) in the Forest Plan. Management of MP 3.0 lands is guided by Forest-wide and MP 3.0 standards and guidelines (Forest Plan, pp. II-5 through II-57 and pp. III-4 through III-8, respectively).

Management Emphasis: The prescription for MP 3.0 lands emphasizes the following: age class diversity and sustainable timber production; a variety of forest scenery; habitat for wildlife species tolerant of disturbances; and a primarily motorized recreation environment (Forest Plan, p. III-4).

Desired Conditions: The forest in MP 3.0 areas is a mosaic of stands of predominantly hardwood trees and associated understories that provide habitat for a variety of wildlife species. The stands vary in size, shape, height, and species depending on the silvicultural system applied. Management activities result in relatively high levels of sustainable timber and mast production. A system of roads and trails provides access within the area for public recreation and for administrative and management purposes, including transportation of forest products (Forest Plan, pp. III-6 through III-7).

Goals and Objectives: Forest-wide goals and objectives (Forest Plan, pp. II-8 through II-57) and goals and objectives specific to MP 3.0 areas (Forest Plan, pp. III-7 through III-8) provide direction and additional detail for achieving the desired conditions.

The Hogback project itself will not achieve all desired conditions and goals. That will take time and additional projects. The Hogback project is a start in the right direction, so that desired conditions and goals can be met over time.

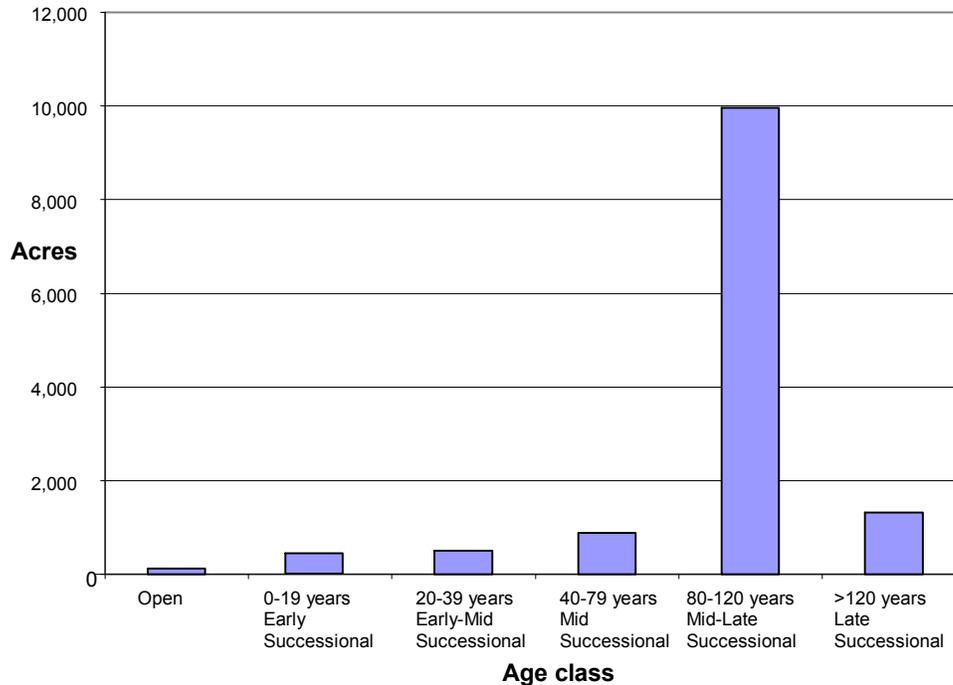
1.4 Vegetative Conditions

Vegetation in the project area is influenced by the cool temperatures and high amounts of rain and snow that are typical of the area. Without active management, forests in this area would tend to be dominated by shade-tolerant vegetation.

The vegetative conditions that dominate the Hogback area today are a product of both human-induced and natural events. In the early 1900s, before federal ownership, the area was extensively logged. Today stands are primarily 80 to 120 years old (Figure 1.2). Most stands are even-aged, meaning that trees are similar in age (although some residual trees remaining after early century logging may be scattered throughout). In many stands, individual trees are

growing close together, competing for light, moisture, and nutrients. This competition is hindering tree growth and mast production.

Figure 1.2. Age class distribution for National Forest System land in the Hogback area



As Figure 1.2 indicates, forested habitat conditions dominate the project area and are fairly similar throughout. Timber sales have been implemented in the area since the 1970s. They created some early successional habitat from older stands to help balance age classes, and thinned some stands to reduced vegetative competition. Age classes are not balanced as desired. Early successional habitat continues to be under-represented. More mid to late-successional growth habitat exists than any other age class. As Table 1.2 indicates, mixed hardwoods prevail in the area today.

Table 1.2. Summary of existing forest types for National Forest System land in the Hogback area

Forest Type	¹ Acres	¹ Percent
Yellow-Poplar White Oak Northern Red Oak	452	3
Mixed Oak	4,328	32
Mixed Hardwoods	7,336	55
Conifers	246	2
Black Cherry, Maple, White Ash	278	2
Black Oak, Scarlet Oak, Hickory	686	5
Open	120	1
Total	13,446	100%

¹ Figures are approximations. They represent conditions on NFS land, not private land

Table 1.3. Acres of existing forest types by age class for National Forest System land in the Hogback area

Forest Type	Age Class (in years)					Total Acres
	0-19	20-39	40-79	80-120	>120	
Yellow-Poplar White Oak Northern Red Oak	26	14	13	399	0	452
Mixed Oak	104	233	86	3,108	797	4,328
Mixed Hardwoods	314	191	626	5,811	394	7,336
Conifers	0	0	93	43	110	246
Black Oak, Scarlet Oak, Hickory	0	60	57	342	227	686
Cherry Maple Ash	0	11	12	255	0	278
Open	----	----	----	----	----	120

Species diversity is changing in the project area. Existing overstories contain primarily mixed hardwood species, whereas shade-tolerant species such as beech, red maple, and striped maple, prevail in the understory. Shade-intolerant species such as black cherry, red oak, yellow-poplar, and white ash are uncommon in the existing understories. Beech bark scale disease and heavy deer browsing are factors preventing perpetuation of existing overstory vegetative diversity.

Deer like to browse on species such as black cherry, red oak, and yellow-poplar. They do not prefer to browse on beech and striped maple. Their selective browsing, which has been excessive at times in the project area, has hindered the successful establishment of black cherry, red oak, and yellow-poplar tree seedlings. This impact on seedling development and survival influences this project area's future stand overstory. The proliferation of shade-tolerant species in the understories further contributes to the decline of the overall numbers and diversity of understory vegetation. Shade-intolerant tree species such as black cherry, red oak, and yellow-poplar are reduced or missing from the understory.

1.5 Purpose and Need for Action

The purpose of taking action in the Hogback project area is to help meet the desired conditions of the area described on pages III-6 and III-7 of the Forest Plan.

- **Improve the age class distribution of forested stands to maintain a variety of wildlife habitats, including early successional habitat.** The age class distribution in this area is skewed towards mid to late successional (80 to 120 year old) forests. The MP 3.0 prescription has a desired condition of 12 to 20 percent of the forest in early successional (0 to 19 years old) habitat (Forest Plan, p. III-6). Currently, approximately 3.5 percent of this area is in early successional habitat. Harvesting needs to be done in the project area in order to provide early successional habitat over time. Harvested areas are expected to provide habitat for wildlife species dependent on early successional habitat, such as white tail deer, turkey, and ruffed grouse.
- **Maintain or improve the health and vigor of mast-producing tree species.** Due to the advanced age of many of the stands in the project area, the health and vigor of mast-producing species such as red oak and black cherry are declining. In younger stands (less than 30 years old), mast-producing tree species are being damaged by grapevines and

over-topped by competing trees. To provide sustainable production of hard mast into the future, older stands need to be regenerated, and younger stands pre-commercially released within the project area.

- **Maintain or increase the conifer component.** Eastern hemlock and eastern white pine are the two main conifer species within the project area. Presently, hemlock wooly adelgid is in the southern half of the project area. It is expected that over the next few years, most, if not all the eastern hemlock in the project area will be killed by the hemlock wooly adelgid. White pine was once more common within the project area; due to deer browsing and wildfires, it has been eliminated from most sites. Due to the demise of the eastern hemlock and the desire to maintain and restore white pine for wildlife and timber, the white pine component needs to be increased within the project area.
- **Provide timber through commercial timber sales.** The forest products industry is very important to the local economies near the project. Many of the people who live in the area are employed by logging contactors, sawmills, and other forest products companies. Harvesting needs to be done in the project area in order to ensure a sustainable flow of timber products over time. This project will provide the raw materials these companies need through commercial timber sales.
- **Manage access of licensed highway-legal vehicles on roads.** Currently, most National Forest System roads in the project area are closed. Parts of Forest Roads (FR) 929 and 929D are open seasonally for fall hunting. FR 929D is a Class Q road. Part of FR 929 is open all year. This project provides the opportunity to review the roads in the area and determine whether or not to open any additional roads to licensed highway-legal vehicles or to change existing access on NFS roads. Review will also help identify roads and areas impacted by vehicles that need improvement or rehabilitation, along with roads no longer needed for future use.

Over time, natural succession, windstorms, insects, disease, etc. will continue to influence vegetative conditions in the project area. While these naturally occurring events may create some of the desired habitat conditions that were previously described, such events are random and unpredictable. Proposed actions identified in Chapter 1 and detailed in Chapter 2 are well-established methods of achieving desired habitat conditions for wildlife species and providing forest products.

1.6 Scope of the Environmental Analysis

National forest planning takes place at several levels: national; regional; forest; and project levels. Analysis for the Hogback project is a project-level analysis. Its scope is confined to addressing the purpose and need of the project and possible environmental consequences of the proposal and alternatives. It implements direction provided at higher levels, but does not attempt to address decisions made at higher levels.

Where appropriate, this Hogback EA tiers to the 2006 Forest Plan Final Environmental Impact Statement (FEIS), as encouraged by 40 CFR 1502.20. This is because the Forest Plan embodies the provisions of the National Forest Management Act (NFMA), its implementing regulations, and other guiding documents, and sets forth in detail the direction for managing the land and resources of the Forest. This EA evaluates and documents the effects caused by the proposed

activities and various alternatives. The site-specific proposed action and alternatives to it are identified in Chapter 2. The administrative scope of this document can be defined as the laws and regulations that provide the framework for analysis.

1.7 Responsible Official and Decisions to be Made

The Cheat Potomac District Ranger of the Monongahela National Forest is the Responsible Official for the Hogback decision. Given the information collected to date, the District Ranger determined an EA is the appropriate format for documenting the possible environmental impacts of proposed actions. This determination was based on a review of existing resource information and issues. The Cheat Potomac District Ranger or designated representative will answer the following three questions based on the environmental analysis:

- 1) Will the proposed action proceed as proposed, as modified by an alternative, or not at all?
- 2) If it proceeds, what mitigation measures and monitoring requirements will be implemented?
- 3) Will the project require a Forest Plan amendment?

The decision will be documented in a Decision Notice and made available to the public.

1.8 Applicable Laws and Executive Orders

The following is a partial list of federal laws and executive orders pertaining to project-specific planning and environmental analysis on Federal lands that are addressed in Chapter 3 of this EA:

- Multiple-Use Sustained-Yield Act of 1960;
- National Historic Preservation Act of 1966 (as amended);
- Wild and Scenic Rivers Act of 1968, amended 1986;
- NEPA of 1969 (as amended);
- Clean Air Act of 1977 (as amended);
- Endangered Species Act (ESA) of 1973 (as amended);
- Forest and Rangeland Renewable Resources Planning Act (RPA) of 1974 (as amended);
- NFMA of 1976 (as amended);
- Clean Water Act of 1977 (as amended);
- American Indian Religious Freedom Act of 1978;
- Archeological Resource Protection Act of 1979;
- Cave Resource Protection Act of 1988; Executive Order 11593 (cultural resources);
- Executive Order 11988 (floodplains);
- Executive Order 11990 (wetlands);
- Executive Order 12898 (environmental justice);
- Executive Order 12962 (aquatic systems and recreational fisheries)
- Executive Order 13112 (invasive species).