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Monongahela
National
Forest

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Highland Scenic Highway Corridor Management Plan



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Executive Summary

The Highland Scenic Highway is a 43-mile National Scenic Byway located in the highlands of West Virginia on the Monongahela National Forest. A corridor management plan is a required component for national scenic byways, providing management strategies to conserve and enhance intrinsic qualities, public safety, and more. Designated in 1996, the Highland Scenic Highway National Scenic Byway has never had a corridor management plan, rather the Monongahela National Forest Land and Resource Management Plan (1986 and 2006 Forest Plan) has provided some general guidance. A Forest Service review of Forest Plan direction identified the need to complete a corridor management plan in order to maintain and enhance intrinsic qualities associated with the Highland Scenic Highway National Scenic Byway.

The Highland Scenic Highway Corridor Management Plan provides more specific management strategies, supplementing Forest Plan direction. A corridor management plan is a working document, and thus will continually be reviewed and revised as new information arises. An official Highland Scenic Highway Steering Committee comprised of the Forest Service, interested parties and partners will work to implement the Highland Scenic Highway Corridor Management Plan and update it as needed.



Figure 1 Tea Creek Meadow



Figure 2 Sunflower

All photographs within were taken by US Forest Service personnel or used with permission.

Table of Contents

| | |
|---|-----------|
| Executive Summary | i |
| Acknowledgements | vi |
| SECTION 1 INTRODUCTION | 1 |
| Description of the Highland Scenic Highway | 1 |
| Corridor Management Planning | 3 |
| Plan Contents | 3 |
| Goals | 3 |
| Public Participation | 4 |
| Designations | 5 |
| Defining the Highland Scenic Highway Corridor | 6 |
| Other | 7 |
| SECTION 2 EXISTING LAND USE | 8 |
| Monongahela National Forest | 8 |
| Non-Federal Lands | 12 |
| SECTION 3 HIGHWAY CONDITIONS | 13 |
| Seasonal Average Daily Traffic | 13 |
| Accidents | 14 |
| Roadway Maintenance and Safety | 14 |
| SECTION 4 INTRINSIC QUALITIES | 16 |
| Natural Quality | 16 |
| Scenic Quality | 19 |
| Archaeological, Historic, Cultural Qualities | 20 |
| Recreational Quality | 22 |
| SECTION 5 INTERPRETATION | 29 |
| Existing Information & Interpretive Opportunities | 29 |
| Interpretive Theme | 31 |
| SECTION 6 MANAGEMENT AND PROTECTION STRATEGIES | 33 |
| Intrinsic Qualities | 33 |
| Visitor Experience | 38 |
| SECTION 7 MARKETING AND PROMOTION | 43 |
| Present Marketing & Promotion Efforts | 43 |
| Future Marketing & Promotion Efforts | 44 |
| SECTION 8 FUNDING AND FINANCING | 46 |
| Federal | 46 |
| State | 46 |

| | |
|--|----------|
| Other | 46 |
| Literature Cited | 47 |
| SECTION 9 APPENDIX..... | I |
| Appendix A: Federal Highway Administration Corridor Management Plan Required Components..... | A |
| Appendix B: Vegetation Management Plan | B |
| Appendix C: Interpretive Plan & Media Design Guidelines | C |

List of Tables

| | |
|---|----|
| Table 1 Highland Scenic Highway Length..... | 6 |
| Table 2 2006 Forest Plan Highland Scenic Highway Language | 9 |
| Table 3 Characteristics of the Highland Scenic Highway | 13 |
| Table 4 2003 SADT Numbers for the Highland Scenic Highway | 14 |
| Table 5 Types of Injury from Vehicle Accidents on WV 39 | 14 |
| Table 6 Sites of Interest | 25 |
| Table 7 2006 Forest Plan Desired Conditions..... | 33 |
| Table 8 ROS Classifications & Characterizations Summary | 35 |

List of Figures

| | |
|--|-----|
| Figure 1 Tea Creek Meadow | i |
| Figure 2 Sunflower..... | ii |
| Figure 3 Winter at the Gauley Ranger Station | v |
| Figure 4 Trillium in the spring..... | vii |
| Figure 5 Highland Scenic Highway Map | 2 |
| Figure 6 Display of Fall Colors..... | 5 |
| Figure 7 Stretch of Road on HSH/WV 150 | 7 |
| Figure 8 Laurel Fork Vista..... | 10 |
| Figure 9 Existing Land Use Map..... | 11 |
| Figure 10 Ascending the Highway..... | 15 |
| Figure 11 Red Spruce at Black Mountain Overlook | 16 |
| Figure 12 Black Bear Cub | 17 |
| Figure 13 Example of Geologic Formations at Honeycomb Rocks..... | 18 |
| Figure 14 Tea Creek..... | 19 |
| Figure 15 Early Visitors to the Cranberry Glades | 21 |
| Figure 16 Cranberry Glades Botanical Area Boardwalk..... | 23 |
| Figure 17 Sites of Interest Map..... | 24 |
| Figure 18 Falls of Hills Creek..... | 26 |
| Figure 19 Cranberry Wilderness | 27 |

Figure 20 Cranberry Glades, Honeycomb Rocks, Williams River 28

Figure 21 Three Panel Kiosk at the North End of WV 150 29

Figure 22 Cranberry Mountain Nature Center 30

Figure 23 Mill Point Prison Site 32

Figure 24 View from Cranberry Glades Overlook..... 36

Figure 25 WV 150 No Snow Removal Sign..... 37

Figure 26 Red Lick Overlook Picnic Shelter..... 38

Figure 27 Kiosk Specifications..... 39

Figure 28 Accessible Fishing Pier at Summit Lake..... 40

Figure 29 Existing Portal Sign and Redesigned Portal Sign 41

Figure 30 Scenic Byway Designation Logo Signs..... 41

Figure 31 WV150/US 219 Portal Kiosk..... 42

Figure 32 Highland Scenic Highway Portal Sign at WV150/US 219 44



Figure 3 Winter at the Gauley Ranger Station

Acknowledgements

The Highland Scenic Highway Corridor Management Plan was prepared under the guidance of the Monongahela National Forest, with contributions and support from a variety of interested parties. This planning process includes funding from the Federal Highway Administration's National Scenic Byway Program administered by the West Virginia Department of Transportation, Division of Highways.

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Figure 4 Trillium in the spring

Section I Introduction

Description of the Highland Scenic Highway

The Highland Scenic Highway (HSH) is a 43-mile National Scenic Byway and National Forest Scenic Byway that traverses the mountainous terrain of the Allegheny Highlands and Plateau in West Virginia. Located almost exclusively on the Monongahela National Forest, it provides access to an area rich in scenic, cultural, historic, and recreational opportunities. Visitors can fish in adjacent streams and rivers, hike the Falls of Hills Creek, walk through the Cranberry Glades Botanical Area, explore any of over 100 miles of trails, backpack in the 47,815 acre Cranberry Wilderness, picnic at a scenic overlook, stay for days at one of the developed campgrounds, or come just for the drive itself. During winter months, the area is a winter wonderland for a variety of snow-based pursuits. The HSH, surrounded by the picturesque and mountainous landscape, is a beautiful and special place.

Starting from Richwood, the HSH coincides with West Virginia Routes 39 and 55 (referred to as WV 39) and heads east for 21 miles to the Cranberry Mountain Nature Center. This portion of the HSH parallels the North Fork Cherry River along the valley bottom, and then travels up and over Kennison Mountain. At the Cranberry Mountain Nature Center, the HSH turns northeast for 22 miles on West Virginia Route 150 (WV 150). Almost ninety-percent of WV 150 is above 3,500 feet, making it the highest major road in West Virginia, and providing breathtaking views of the surrounding landscape. The HSH ends atop Elk Mountain where WV 150 intersects with US 219, an estimated 7 miles north of Marlinton.. The HSH is located on both the Gauley and Marlinton Ranger Districts on the Monongahela National Forest.

The creation of the HSH was part of a larger concept of a scenic byway, integrating the existing WV 39 portion with the construction of an extensive parkway in the 1960s. Construction began on WV 150 in 1965 and was completed in 1980, and a grand opening was held in October 1981. While the entirety of the parkway was not constructed due to high costs and complicated land ownership, the 43-mile HSH is itself a treasure. A 1973 law (Section 161 of Public Law 93-87) designated the HSH and associated lands to be managed “solely for scenic and recreation use and passenger car travel”. Since its completion, the HSH has provided thousands of visitors with the opportunity to travel through unique spruce-northern hardwood forests, high elevation meadows, and vistas of surrounding ridges and valleys.

The HSH is shown in

Figure 5 on the following page.

Highland Scenic Highway Corridor Management Plan

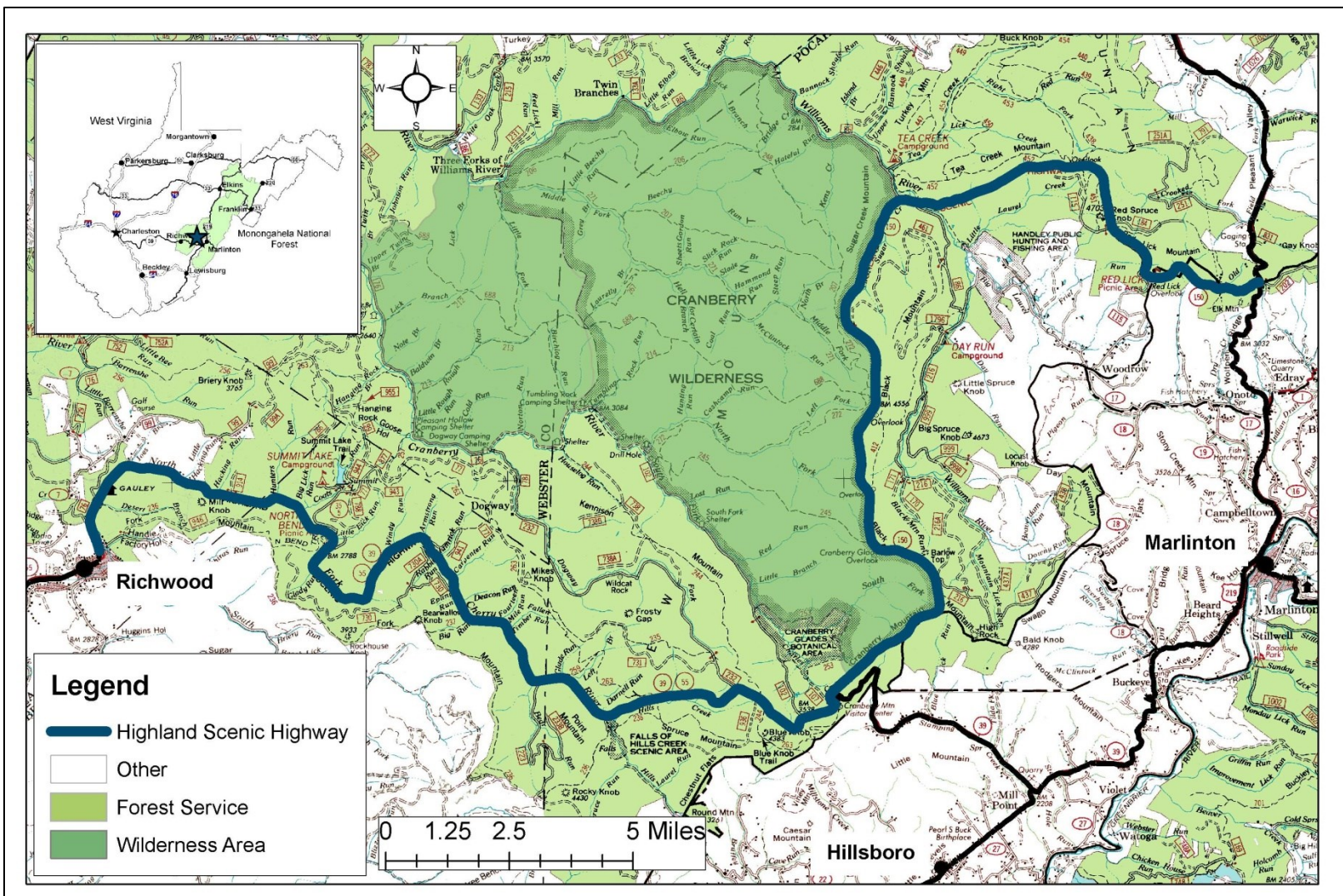


Figure 5 Highland Scenic Highway Map

Corridor Management Planning

A corridor management plan is a written document that specifies the actions, procedures, controls, operational practices, and administrative strategies to maintain the scenic, historic, recreational, cultural, archeological, and natural qualities of the scenic byway (FHWA 1995). The Federal Highway Administration (FHWA) provides 14 criteria (See Appendix A: Federal Highway Administration Corridor Management Plan Required Components) which must be included in all corridor management plans, including identification of intrinsic qualities and plans for enhancing and maintaining them, road safety designs, and public involvement.

Plan Contents

The Highland Scenic Highway Corridor Management Plan provides management strategies for protecting and enhancing the HSH. Direction found in the Highland Scenic Highway Corridor Management Plan supplements guidance in the 2006 Monongahela National Forest Land and Resource Management Plan.

This corridor management plan provides more specific direction for maintaining and enhancing the HSH and prescribes management strategies to:

1. Conservation of the HSH's intrinsic qualities,
2. Improve and enhance interpretive opportunities associated with the HSH,
3. Implementation of the CMP
4. Continuing public, land management agencies, highway agencies, and community participation

The plan has been prepared under the guidance of the Monongahela National Forest and funded by the West Virginia Division of Highway National Scenic Byway Program and the USDA Forest Service.

Goals

Goals are developed to identify attainable

- Identify strategies that protect, conserve, and enhance the intrinsic qualities associated with the HSH
- Develop partnerships to broad the base of support for the HSH
- Provide interpretive opportunities related to the natural, historic, and cultural features along the HSH
- Design and build interpretive facilities that enhance the visitor's knowledge, appreciation and enjoyment of the HSH

A goal of the Corridor Management Plan (CMP) is to identify strategies for managing winter use and access on WV 150 that will:

- Improve safety for all users
- Meet the needs of permitted uses, such as bear and small-game hunting
- Help prepare users for the conditions they may encounter
- Be generally supported by recreational users and stakeholders
- Reduce the likelihood that passenger vehicles and snowmobiles will be present at the same time, and
- Support desired winter uses, including permitted uses, snowmobiling, cross-country skiing, and snowshoeing

Public Participation

The HSH is a valuable community resource that provides local inhabitants and visitors with an unparalleled scenic drive through beautiful undeveloped forest and access to diverse recreational opportunities. The Forest Plan, which guides management of the national forest, was revised in 2006 with a formal public participation process. Through a collaborative effort between the Forest Service, public, stakeholders, and agencies, guidance was incorporated into the Forest Plan to limit private development along the corridor (Forest Plan Standard RC18), and to allow commercial traffic by permit only (Forest Plan RF51). This guidance has helped preserve the natural appearance and recreational travel experience on the HSH.

However, more could be done. The Forest Service interacts and collaborates with the public and stakeholders regarding projects in the HSH and entire national forest on a continuous basis. In the years since the Forest Plan was released, the Forest has heard from both the public and Forest employees that the scenic opportunities afforded by the HSH were not being fully explored and that the scenic quality and integrity of the HSH could be better addressed.

The Forest Service conducted a variety of outreach efforts during the development of the corridor management plan. In addition, stakeholders, local and county governments, businesses, and organizations were contacted via mail or email to inform and gather input to contribute to the corridor management planning process. Public meetings were held in Marlinton and Richwood. In April 2012, the Forest Service gathered information from a variety of stakeholders, helping to identify key resources for interpretation on and near the HSH.



Figure 6 Display of Fall Colors

Designations

The HSH has three scenic byway designations: West Virginia Scenic Byway, National Scenic Byway, and National Forest Scenic Byway. The numerous designations formalize what those familiar with the area have long known, that it is extraordinary. The designations also provide support to maintain and enhance a well-loved resource.

West Virginia Scenic Byway

The HSH showcases some of the most beautiful country the state has to offer. The HSH was designated a state scenic byway in August 1992. As part of the state's scenic byway program, the HSH is a destination unto itself. The HSH is not only enjoyed by visitors, but is a well-known resource for area residents as well. The HSH is a popular area to drive, ride, photograph, watch wildlife, picnic, hike, camp, and relax, and contributes to a sustainable quality of life for area residents.

National Scenic Byway Designation

The HSH's designation as a National Scenic Byway in 1996 recognized the unique travel experience that can be had along the corridor. Designation heightens the awareness of the HSH as a premier destination, and promotes preservation and enhancement of intrinsic values associated with the highway. To have a designated national scenic byway is a source of local pride and helps preserve a unique experience, for both residents and visitors. Funding is

available for use along the Highway that would not be available without the national scenic byway designation. These funds enhance interpretive and restroom facilities, and can provide for other needed byway improvements.

National Forest Scenic Byway Designation

The HSH was one of the first to be designated a National Forest Scenic Byway in 1989. The National Forest Scenic Byways Program has several emphases:

- Support and enhance rural community economic development
- Showcase outstanding national forest and grassland scenery
- Meet the growing demand of driving for pleasure as a significant recreation use
- Increase public awareness and understanding of national forest activities and the importance of sustaining healthy, productive ecosystems
- Ensure that people remain socially connected to public lands so they become better stewards of our natural resources
- Contribute to the Nation’s overall scenic byways effort

In the 20 years since the Forest Service began designating scenic byways, the system has grown to 137 National Forest Scenic Byways that encompass over 9,000 miles of highways and roads on National Forest System lands (USDA 2008).

Defining the Highland Scenic Highway Corridor

The defined length and width of the HSH corridor is intended to recognize the general area experience by a traveler on the HSH and provide a general focus area for corridor activities. Recommendations made in this corridor management plan only apply to National Forest System lands. Corridor definition is not intended to exclude those sites or individuals beyond its boundaries from being part of the National Scenic Byway process.

Length

The HSH is 43 miles long and travels through three counties (see below). WV 150 is exclusively located in Pocahontas County, whereas WV 39 travels through all three counties.

Table I Highland Scenic Highway Length

| County | WV 39/55* | WV 150* | Total Length* | % Length By County |
|---------------|------------------|----------------|----------------------|---------------------------|
| Greenbrier | 4 | 0 | 4 | 10% |
| Nicholas | 10 | 0 | 10 | 23% |
| Pocahontas | 7 | 22 | 29 | 67% |
| Total | 21 | 22 | 43 | 100% |

*All lengths are estimates

Width

The corridor width is generally defined as a ¼-mile buffer along the HSH, extending up to seven miles on either side of the designated roadway. Extending the width incorporates several nearby communities that contribute to the HSH's sense of place, and provides additional support services for highway visitors. The extension also allows the inclusion of attractions that are unique to the HSH.



Figure 7 Stretch of Road on HSH/WV 150

Other

Appalachian Water Scenic Byway

The Appalachian Waters Scenic Byway coincides with the Highland Scenic Highway for the entirety of WV 39. The Appalachian Waters Scenic Byway is a West Virginia Scenic Byway that follows various waterways throughout five counties in both Virginia and West Virginia, starting in Covington, VA and continuing to Summersville, WV. A goal of the Appalachian Waters Scenic Byway designation is to establish the area as a destination for outdoor recreation and heritage tourism.

Section 2 Existing Land Use

The HSH is primarily located on the Monongahela National Forest. The following sections detail Forestwide guidance, as well as specific designations, that occur within or directly adjacent to the Highway corridor.

Monongahela National Forest

The Monongahela National Forest (Monongahela) encompasses more than 921,000 acres of federal ownership in 10 counties of the Potomac Highlands region of West Virginia. It is the largest expanse of public land in the State, and fourth largest National Forest in the 20 northeastern states. It is located in proximity to major population centers of the region, including Washington, D.C., Baltimore, Philadelphia, and Pittsburgh. Despite being heavily affected by humans over the last two hundred years, the Forest retains a sense of seclusion and solitude. Rugged topography, expansive forest, fast-moving mountain streams, and small communities interspersed with pastoral farmland combine to create a sense of stepping back in time.

Economic contributions to the local and national economy from the Monongahela include receipts, fees, and employment opportunities from timber harvest, mineral development, livestock grazing, special uses, and the availability of products such as firewood and medicinal plants. One of the other important economic contributions to the local economy is to serve as the backdrop for local businesses, recreation, tourism, and guiding services, and as an added attraction for those coming to hunt, fish, hike, camp, ski, or golf in the area .

Our management philosophy is based on the belief that public land in the Appalachians is scarce and precious. As surrounding population centers expand, the Monongahela National Forest will become increasingly rare and valuable as a place of ecological, historic, cultural, and economic importance in the region. We believe we should manage the Forest for its special features, such as the HSH, and in ways desired by today's public and for future generations. Changes, including increased development, are expected to continue on private lands around the Forest, and these changes will likely create more demand for, and impacts on, Forest resources. To meet this challenge, the Forest will protect or restore soil and water resources, use vegetation management to sustain healthy forests and diverse wildlife habitat, maintain scenic quality, and provide a range of recreation settings and opportunities.

1986 Monongahela National Forest Land & Resource Management Plan

The 1986 Forest Plan was released prior to any formal highway designations, yet recognized the importance of providing specific direction to manage the scenic integrity of the National Forest adjacent to the HSH. The 1986 Forest Plan direction limited private development along the Highway and commercial use, maintaining and protecting the undeveloped and recreational nature of the Highway. Winter use was guided by the 1986 Forest Plan, stating that WV 150

will be closed from mid-December to early-March, plowed to allow use for deer rifle season and early spring fishing, subject to limitations imposed by snow conditions and available funding.

2006 Monongahela National Forest Land & Resource Management Plan

The 2006 Forest Plan contains desired conditions, goals, objectives, and standards for management of forest resources, such as cultural, recreational, scenic, air, soils and water resources. The Forest Plan strives to achieve desired outcomes for restoration or maintenance of vegetation and watershed conditions, including terrestrial, riparian, and aquatic habitats. The below table details Forest Plan guidance specific to the HSH.

Table 2 2006 Forest Plan Highland Scenic Highway Language

| Page | Language |
|--------|---|
| I-8 | Auto touring attractions include the 43 mile-long Highland Scenic Highway, and spectacular fall leaf color. |
| II-4 | The Forest cooperates with the Federal Highway Administration, West Virginia Department (Division) of Highways, and other agencies in the improvement, operation, and management of the Highland Scenic Highway, including law enforcement and traffic regulation. |
| II-7 | Visitors enjoy a variety of special attractions, including the National Recreation Area, Wilderness, Scenic Areas, The Highland Scenic Highway, recreational complexes, historic landmarks, and Botanical Areas. People have the opportunity to explore and learn about cultural heritage. Significant cultural sites are preserved and accessible. |
| II-33 | Private development of fuel, eating, camping, or other services shall not be permitted along the Highland Scenic Highway, unless clearly justified by site-specific corridor planning. |
| II-33 | Camping shall not be allowed within 300 feet of the Highland Scenic Highway |
| II-56 | Commercial traffic may only be allowed on the Parkway portion of the Highland Scenic Highway by written permission under one of the following conditions: a) The proposed use is advantageous for reasons of public safety, environmental protection, or resource management objectives. b) The proposed use is related to the construction, maintenance, or management of the Parkway, associated facilities, or the highway corridor. c) The proposed user has a legal right of access through deed, easement, or permit. |
| II-56 | Related recreation facilities and visual enhancement projects should be included in Highland Scenic Highway plans and projects. |
| III-11 | A number of visually sensitive viewpoints and travel ways occur within or adjacent to the prescription areas, including the Highland Scenic Highway and the Cass Scenic Railroad. |

The Forest is divided into smaller units called Management Prescriptions (MPs), each of which is organized around a common management emphasis. The MPs are shown on the following map.

Forest Closure Order #21-91

Use of snowmobiles on WV 150 is permitted, not by the Forest Plan, but by Forest Closure Order #21-91. Snowmobiling is prohibited on the remainder of the Forest, with the exception of WV 150. Per Forest Closure Order #21-91, signed December 17, 2008, permitted and prohibited uses include:

- Use a snowmobile or other tracked snow vehicle on Forest development roads, except from road shoulder to road shoulder of the Highland Scenic Highway FS150/SR150. (36 CFR 261.54 (a))



Figure 8 Laurel Fork Vista

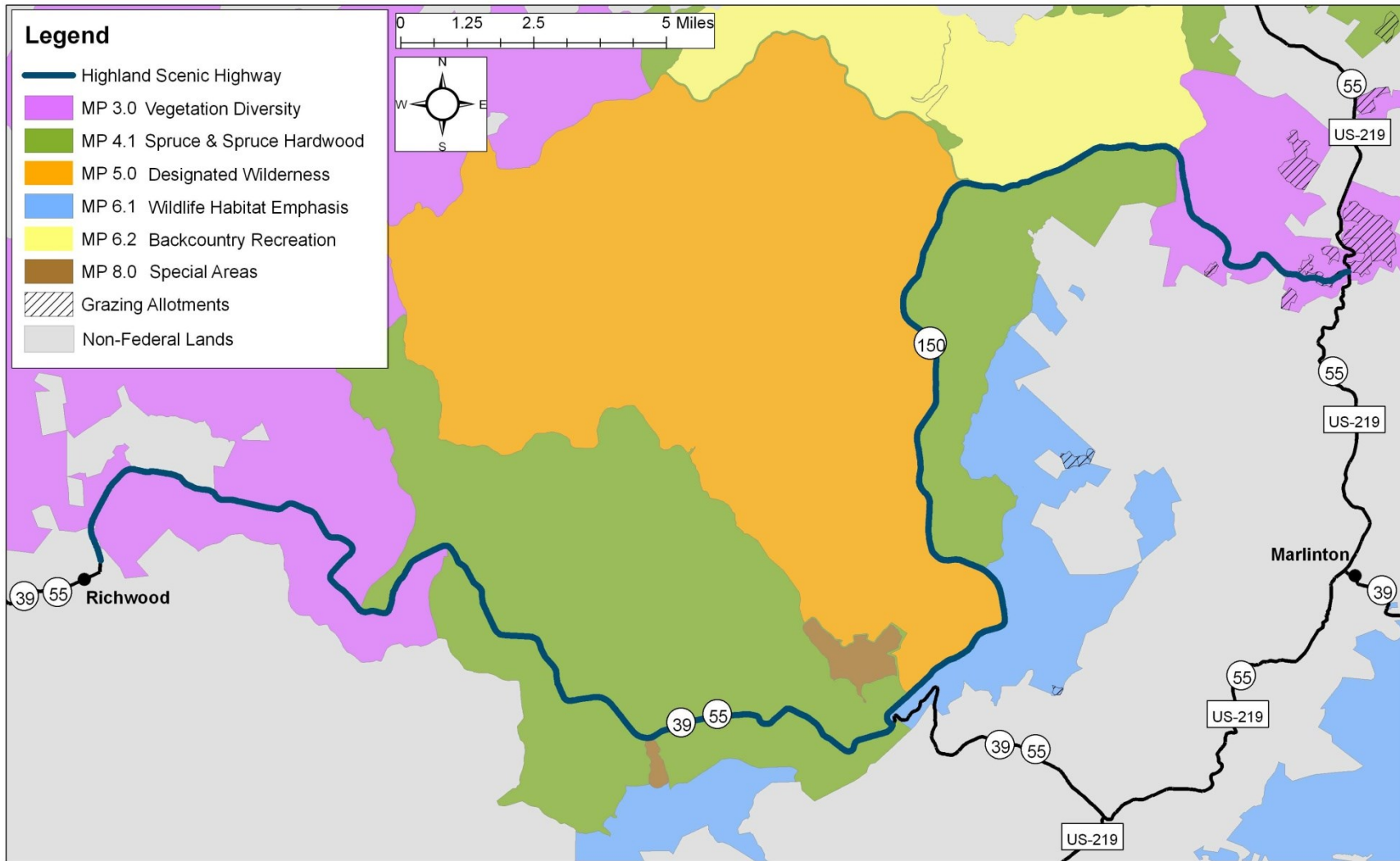


Figure 9 Existing Land Use Map

Grazing

National Forests allow livestock grazing by permit. Livestock grazing on the Forest is primarily cattle, but some horses also graze. Grazing is conducted in designated areas called grazing, or range, allotments. Most grazing allotments on the Forest are located at higher elevations. There are three permitted range allotments directly adjacent to WV 150, and no allotments on WV 39. Most grazing allotments were grazed prior to federal acquisition of the land, and the Forest is continuing an historic use. Grazing is to the benefit of the local economy and is used as a vegetation management tool to maintain wildlife habitat, visual diversity, and dispersed recreation.

Wilderness

Cranberry Wilderness is 47,815 acres, and is the second largest designated Forest Service Wilderness area east of the Mississippi River. Cranberry Wilderness borders WV 150 to the west for an estimated 12 miles. Cranberry Wilderness is designated for preservation and protection in its natural condition, without permanent improvement or human habitation, an area which generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable (USDA 1964/1975). Prohibited uses in Wilderness areas include the use of motorized/mechanized vehicles and equipment, bicycles, carts or other wheeled equipment.

Non-Federal Lands

Private property and residences are located directly north of the HSH for a one-mile stretch east of Richwood, WV in Nicholas County. There are no zoning ordinances or land use restrictions for these properties.

Section 3 Highway Conditions

HSH use and management is as varied as the landscapes that it traverses. Anything from a logging truck to a snowmobile can be found on the HSH, depending upon the location and the season. The entire lengths of the HSH, both WV 39 and WV 150, are classified as West Virginia routes.

The West Virginia Department of Transportation manages the WV 39 portion, which is a well-travelled east-west route that provides an important connection between communities and businesses in Pocahontas and Nicholas Counties. In addition to being a beautiful and mountainous drive, WV 39 section receives regular use from commercial traffic, including logging and gravel trucks.

WV 150’s primary function is as a scenic byway and is managed by the Forest Service. The winding highway was designed for recreational travel, and it has a reduced speed limit of 45 mph. Operators of commercial vehicles need to obtain a permit for travel on WV 150. The reduction of vehicle traffic, in combination with a lower speed limit, maintains the leisurely recreational travel nature of the route. WV 150 does not directly connect communities, rather it provides access to numerous developed, dispersed, and Wilderness recreation opportunities on the Monongahela National Forest. The WV 150 section of the HSH is impassible for much of the winter due to snowfall at this high elevation. During the winter, snowmobiling and other winter recreation takes place on WV 150.

Table 3 Characteristics of the Highland Scenic Highway

| Characteristic | WV 39 | WV 150 |
|--------------------------|-------------------------------------|-------------------------|
| Termini | Richwood- Cranberry Mountain/WV 150 | WV 39 – US 219 |
| Length (miles) | 21 | 22 |
| Pavement Width | 20’ | 24’ |
| Maximum Grade | 8.96% | 8% |
| Speed Limit | 55 mph | 45 mph |
| Commercial Use | Yes | By Permit Only |
| Management & Maintenance | WV Division of Highways(DOH) | US Forest Service/WVDOH |
| Winter Snow Removal | Yes | No |

Seasonal Average Daily Traffic

Seasonal Average Daily Traffic (SADT) data for points on the HSH are provided in Table 4. SADT is the average amount of daily traffic on the HSH when it is open. The count would likely be highest when people are travelling the Highway during fall foliage season. The month that the below numbers were recorded was not documented.

Table 4 2003 SADT Numbers for the Highland Scenic Highway

| Highway Count Location | SADT (vehicles/day) |
|---|---------------------|
| WV 150 ½ mile west of junction with US 219 | 100 |
| WV 150 ¼ mile north of junction with WV 39/55 | 150 |
| WV 39/55 ½ mile west of junction with WV150 | 650 |

Accidents

The Forest Service does not maintain accident records for WV 150. If a vehicle accident occurs on WV 150, the Forest Service would not be the agency contacted to respond to the accident. Thus, when a singular accident does happen on WV 150, the Forest Service is not always aware or notified. WV Department of Highways maintains WV 39 accident reports and records. Eighteen crashes were recorded during a 3-year period from January 2008 through December 2010.

Table 5 Types of Injury from Vehicle Accidents on WV 39

| Type of Injury | Quantity |
|----------------------------------|-----------|
| Type-A (life threatening) | 1 |
| Type-B (cuts, bruises, bleeding) | 6 |
| Type-C (complaint of injury) | 3 |
| Total number of injuries | 10 |

Roadway Maintenance and Safety

Road maintenance is an important aspect of managing a National Scenic Byway to ensure adequate road safety. The West Virginia Division of Highways is responsible for maintenance and improvement on WV 39. The Forest Service, with support from the state, provides maintenance and improvements on WV 150. Regular maintenance activities include painting lines and mowing. Mowing along WV 150 is necessary to maintain not only scenic quality along the HSH, but visitor safety as well. The high grass reduces visibility around bends, hiding roadside hazards such as deer and boulders that may have rolled on to the highway. Mowing is completed annually, or as funding allows. Optimally, mowing would be completed twice a year during the growing season. Additional recent maintenance activities on WV 150 include replacing the guardrails from the Williams River Bridge to the junction with US 219. Resurfacing of WV 150 occurs as needed or when funding is available, and was most recently occurred in 2005. Long-term maintenance and safety concerns will arise throughout the HSH corridor as the infrastructure ages.

Law enforcement is an interagency effort, with the Forest Service providing the lead on federal lands, with support and cooperation from the State of West Virginia and appropriate county sheriff departments. Likewise, the Forest Service provides assistance on non-federal lands where agreements are in place for them to do so.

Because of the remote nature of the HSH, search and rescue efforts do occur. The Forest Service cooperates with state and local authorities, who bear the primary responsibility for search and rescue. In those cases where state and local officials have not had time to organize and act, the Forest Service may initiate search and rescue operations to reduce suffering and to save lives.

Highway Conditions Management Strategies:

1. Maintain and enhance public safety
 - a. Mow two times a year along WV 150 during the growing season.
 - b. Remove excess organic material (a process called peeling) from the shoulders of WV 150 every three to five years, or as needed.
 - c. Repaint as needed to maintain visibility of road edges, center line, and passing zones
2. Identify deteriorated roadway and associated structures requiring maintenance.
3. Secure funding to address maintenance issues that are a risk to public safety and to address potential environmental impacts



Figure 10 Ascending the Highway

Section 4 Intrinsic Qualities

To be designated a National Scenic Byway, a road must possess characteristics of regional significance within at least one of the following intrinsic qualities: natural, scenic, recreational, historic, cultural, or archaeological. Intrinsic qualities create a sense of place unique to an area. Upon designation as a National Scenic Byway, Highland Scenic Highway was recognized as possessing natural intrinsic qualities.

Natural Quality

The HSH is located almost entirely within the Monongahela National Forest, ensuring conservation of natural resources along the corridor. The Forest provides a natural refuge for a variety of wildlife and plant species, and contains ecosystems unique to both West Virginia and the region. The Forest works to protect and restore soil and water resources, and uses vegetation management to sustain healthy forests and diverse wildlife habitat, contribute to the recovery of listed and rare species, and provide a range of recreation settings and opportunities.



Figure 11 Red Spruce at Black Mountain Overlook

Vegetation

Vegetation along the HSH is dominated and characterized by trees. Most of the forests adjacent to the HSH are deciduous, providing abundant fall foliage viewing opportunities. The existing forest types are largely regrowth from intensive logging that occurred throughout the area in the early 1900s, and more recent timber harvests (see Historic section for more information).

The Forest contains the northern-most populations of certain southern species, and the southern-most populations of some northern species. From Richwood eastward along Route 39, the forest you see is typical of this region, but most of the HSH contains forest that are usually found further north. Black cherry trees, from which the Cherry River gets its name, are scattered throughout the forest. Maples, oaks, beeches, and birches are found throughout these forests.

Only two conifer species naturally occur along the Highway: hemlock and red spruce. Hemlock is mixed in with hardwoods at the lower elevations, but also persists at higher elevations alongside spruce. The montane coniferous spruce forest is distinctive and is confined to only the highest peaks of the Appalachian region. As you drive through the higher elevations, well-defined spruce forest visibly caps the ridgelines.

Sensitive Plants

The most important concentration of rare plant species occurs near the Cranberry Glades Botanical Area and the Falls of Hills Creek Scenic Area. The Cranberry Glades Botanical Area is one of the largest and most botanically significant bog complexes in the Appalachian Mountains. The Cranberry Glades environment forms a disjunct southern outpost for several northern plant species that are quite rare in the central Appalachians, including Canada yew, bog buckbean, heartleaf twayblade, oblongfruit serviceberry, and Appalachian Jacob's ladder.

The wet, mossy rock outcrops in the Falls of Hills Creek Scenic Area host two of the Monongahela National Forest's most easily overlooked Sensitive plant species: Appalachian bristle fern and Ammon's tortula moss. Ammon's tortula moss was discovered in 1979, and has since been found in the Great Smoky Mountains and in several far-flung locales, including Peru and South Africa.

Wildlife

The Highland Scenic Highway passes through several distinct habitat types, which provide for a diverse array of wildlife. The hardwood forests along the lower portions of the Highway offer productive habitat for many species: wild turkey, ruffed grouse, fox squirrel, black bear, coyote, bobcat, red fox, barred owl, pileated woodpecker, white-tailed deer, and numerous songbirds.

As the road follows the North Fork of the Cherry River to its headwaters, the river and its riparian area provide for brown, rainbow and native brook trout as well as river otter, mink, Indiana bat, belted kingfisher, broad-winged hawk, and red-shouldered hawk. After cresting Kennison Mountain, red spruce and northern hardwoods dominate the forest. The red spruce forests provide habitat for the endangered West Virginia northern flying squirrel. Species that are typically represented further north, such as the snowshoe hare, northern goshawk, brown creeper, red-breasted nuthatch, and winter wren reside in the high elevation forests. Beyond Kennison Mountain, the Cranberry Glades, a unique sphagnum bog, provides for beaver, bobcat, black bear, American woodcock, alder flycatcher, tree swallow, and northern waterthrush.

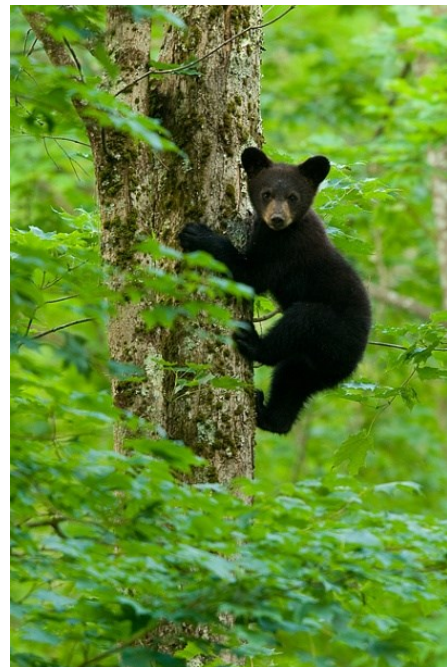


Figure 12 Black Bear Cub

The high mountain ridges along WV 150 are great places to spot migrating golden and bald eagles in the late winter and fall. With red spruce dominating these high elevations, red squirrel, magnolia warblers, Blackburnian warblers, and golden-crowned kinglets are abundant.

As the highway descends into the Williams River Valley, the surrounding habitat begins to change over to a northern hardwood dominated forest. White tailed deer, black bear, wild turkey, red-tailed hawk as well as red-eyed vireo, black-throated blue warbler and ovenbird can be found here. At the point where the highway crosses the Williams River, the slow flowing water allows for great blue heron, green heron, and many species of waterfowl to utilize the area.

Geology

The WV 39 portion shows geology of the Lower Pennsylvanian Period, comprised of Pocahontas, New River and Kanawha Formations. These formations are made up of sandstone, shales, and siltstone, and contain coal seams. Reclaimed coal mines are scattered throughout the Forest. Along much of WV 39 and WV 150, formations of the Mississippian Period are noticeable along the road cuts, especially the reddish Mauch Chunk Group comprised of inter-bedded red mudstones and olive grey sandstones. This formation is highly erosive and many stabilization efforts and millions of dollars have been spent over time due to Mauch Chunk

presence along the HSH and throughout the state of West Virginia.



Figure 13 Example of Geologic Formations at Honeycomb Rocks

Unique geological features within the corridor include Honeycomb Rocks and Falls of Hill Creek. Honeycomb Rocks shows rare quartz boxwork Hematite deposits where softer sandstone material has eroded out, leaving behind boulders with honeycomb features. At Falls of Hills Creek, water has worn away over time, leaving sandstone ledges that create three distinctive waterfalls.

Aquatic Resources

On clear days, overlooks along the HSH make it possible to observe high mountain ridgelines that serve as boundaries of ecological units called watersheds. Watersheds function like a funnel to capture falling precipitation, such as rain and snow, and direct the movement of this and other material within the watershed down the mountain slopes to form the streams and rivers that flow through the valley bottoms. The HSH is situated primarily within the Williams River and the Cherry River watersheds, although it intersects portions of neighboring

watersheds including the Elk River, the Greenbrier River, and the Cranberry River systems. Ultimately, the connectivity among watersheds forms drainage networks that are recognized as aquatic ecosystems.

Aquatic ecosystems offer a variety of special habitats such as seeps, springs, streams, rivers, and wetlands.

Numerous plants and animals are dependent upon these aquatic habitats for their existence. While traveling the HSH, visitors will be sure to notice the Williams River at the bridge crossing on WV 150, wetland habitat in the

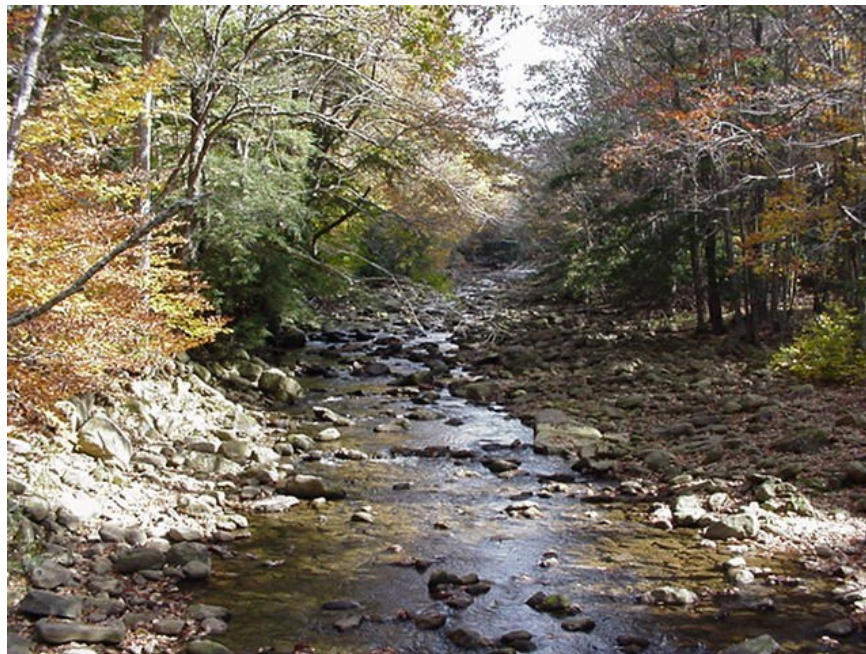


Figure 14 Tea Creek

headwaters of the Hills Creek watershed along WV 39, and the North Fork Cherry River that parallels the HSH for many miles along WV 39.

Those that choose to explore the various aquatic habitats located along or a short distance from the HSH may encounter aquatic flora and fauna. Aquatic insects, crayfish, amphibians, turtles, snakes, fish, and various aquatic plants contribute to the biological diversity of aquatic habitats that surround the HSH. More than thirty species of fish alone are known to inhabit streams and rivers near the HSH. Brook trout (*Salvelinus fontinalis*), West Virginia's only native trout species and the most well-known aquatic species in the State, still persist in streams that offer suitable habitat.

Scenic Quality

The HSH traverses two distinct landscapes: the valley bottom along WV 39 and high elevation mountainsides on WV 150. Forests line the entire corridor and both sections afford excellent opportunities to viewing fall foliage, both up close, and from afar.

At lower elevations along WV 39, the byway meanders along the North Fork of the Cherry River, at the bottom of a steeply sloped valley. There are several excellent views of the water cascading over the rocky streambed. Driving through a continuous corridor of dense northern hardwoods, one gets peeks of the surrounding mountains and hollows. This section also brings

travelers to two of the most popular and scenic areas along the HSH, Falls of Hills Creek, and Cranberry Glades.

The second landscape, along WV 150, travels between mountaintops and along plateaus. This section affords panoramic vistas of the surrounding mountains, ridges, and valleys. Four scenic overlooks provide travelers a chance to stop and rest, lunch, or just enjoy the scenery.

Archaeological, Historic, Cultural Qualities

The Shawnee were among the first historically recognizable residents of what is now West Virginia. Traces of prehistoric settlement are visible to the keen eye, including mounds, pottery, and arrowheads. To most, Native Americans that inhabited this area left little obvious visible impacts on the land, with the exception of their well-established trail system. Many modern roads and highways follow trails established by the Shawnee and others Indians. US Route 219, which marks the eastern end of the Highway where it junctions with WV 150, follows what is historically known as the Seneca Trail, a north-south route primarily used by the Iroquois.

Historic settlement in some of the area occurred as late as the 1790s, making it one of the last areas to be settled in West Virginia. The rugged and remote geography of the landscape made access and transportation difficult, and many settlers stayed only for a few years. Of those that stayed, subsistence farming culture evolved, with dispersed and isolated settlements occurring in the coves and hollows. Livestock foraged in the forests, consuming a variety of nuts, including the chestnut, the most prized food of the Appalachian forest.

The extension of the railroads into the mountains of eastern West Virginia led to the great logging era, with much of West Virginia's virgin forests gone by 1920. The area around the HSH was generally known as the "Back Country", and as the "Wilds of Pocahontas", since it was the last mountain area in the state to be logged, with timber activity lasting until the mid-1930s. Again, the rugged and remote geography of the land postponed the development and industry that had already come and gone in surrounding areas. Much of what was logged was hardwood, though the higher elevation red spruce forest was popular for pulpwood and aircraft construction. Forest fires burned in many areas during and after logging operations, resulting in some lands that are still rocky and infertile. Yet another assault of Appalachian forests was the introduction of the chestnut blight in 1904. Within a couple of decades, the chestnuts were dead or dying, and an important food source for wildlife was lost.

The last area to be cut-over was acquired by the Monongahela National Forest in 1934. The "Back Country" or the "Wilds" was set aside as the Cranberry Back Country. Fire prevention was a management focus in the Back Country and no fires were permitted for another decade, though access was allowed for spring fishing. Massive fires had burned much of the country, including large areas on Black and Spruce Mountains. The Civilian Conservation Corps had

several camps within the area and their efforts helped regenerate, and protect from fire, many of the forests that stand today.

Surrounding Communities

The following are brief descriptions of Richwood and Marlinton, two of the larger towns in close proximity to the HSH. Beyond these towns, the Monongahela National Forest provides an uninterrupted forested backdrop for the rural pastoral landscape. Additional small towns, communities, and farms are in close proximity to the HSH, located along the state highways and rural roads.

Richwood

Richwood was established in 1901 as a mill town by the Cherry River Boom and Lumber Company, at the confluence of the North Fork and the South Fork of Cherry River. Between 1910 and the 1930s, the logging peak for the area, the town's population ranged between 3,061 and 5,730 people, and was home to many other lumber companies (US Forest Service 2011). During this period a number of lumber-based industries flourished, including a broom handle factory, tannery, and clothespin factory. Large-scale logging in the area concluded in 1936. While timber was the primary resource industry in the area during the early 20th century, coal mining provided fuel for the trains and local heating needs. Both coal and timber continue to be produced today, but due to a series of economic, political, and safety factors, these industries never returned to boom levels. An estimated 2,051 people lived in Richwood as of 2010 (US Census 2010).



Figure 15 Early Visitors to the Cranberry Glades

Marlinton

Marlinton, formerly known as Marlin's Bottom, is named after Jacob Marlin, who settled in the area in 1749. Marlinton and the surrounding area were sparsely settled for over a century, with both economy and lifestyle based on agriculture. The expansion of the railroad, followed by timber harvest led to a rapid population boom just after 1900. The expansion of the railroad, combined with its location on the Greenbrier River, provided the basis for Marlinton's role in river logging, which became a prominent economic activity. In 1891, the Pocahontas county seat relocated from Huntersville to Marlinton, which had become the center of the local timber industry, and reflected the shift from agriculture to a timber-based economy. The construction of the Greenbrier Division of the Chesapeake and Ohio railroad from 1899 through 1905 resulted in 100 miles of track that allowed timbering on a scale previously unimaginable in the county. Since timber production declined in the 1920s, the state of West Virginia purchased many of the railroads and associated facilities. The conversion of the Greenbrier Division railroad grade to the 79-mile Greenbrier River Trail, managed as a state park, provides residents and visitors with a variety of recreation along the banks of the Greenbrier River. More recently, recreation and tourism are the biggest economic interests in Marlinton and surrounding Pocahontas County. Agriculture continues to be a part of people's livelihoods and the landscape, with agricultural commodities including beef cattle, sheep, corn, oats, and hay. An estimated 1054 people lived in Marlinton as of 2010, similar to the population one century earlier (US Census 2010).

Recreational Quality

Developed Recreation

All developed recreation facilities along the HSH offer three-season services, and many are closed in the winter months. Three developed campgrounds offer rustic camping facilities and provide a base camp for a range of outdoor activities. Dispersed campsites are located on WV 39 and along the Williams River. Picnic areas are located at North Bend, and at four scenic overlooks. Educational displays, picnic tables, merchandise, and visitor information are available at the Cranberry Mountain Nature Center. (See Figure 17 Sites of Interest Map and Table 6 Sites of Interest for a complete location and listing of both developed and dispersed recreation opportunities along the HSH)



Figure 16 Cranberry Glades Botanical Area Boardwalk

Two natural attractions that are unique to West Virginia, Falls of Hills Creek and Cranberry Glades Botanical Area, are key sites of interest along the HSH. Visitors walk through Cranberry Glades Botanical Area on a raised accessible boardwalk. Interpretive signs are located along the boardwalk, allowing visitors to view the bog and learn about the unique flora and fauna that are there. The Falls of Hills Creek trail is a series of boardwalks and stairs that brings people above, below, and around three waterfalls, ranging in height from 25 feet to 45 feet to 63 feet. An accessible boardwalk allows all to view the beauty of the first waterfall. Here, interpretive signs provide users a glimpse of what the lower two falls look like, as well as the geologic forces that created them.

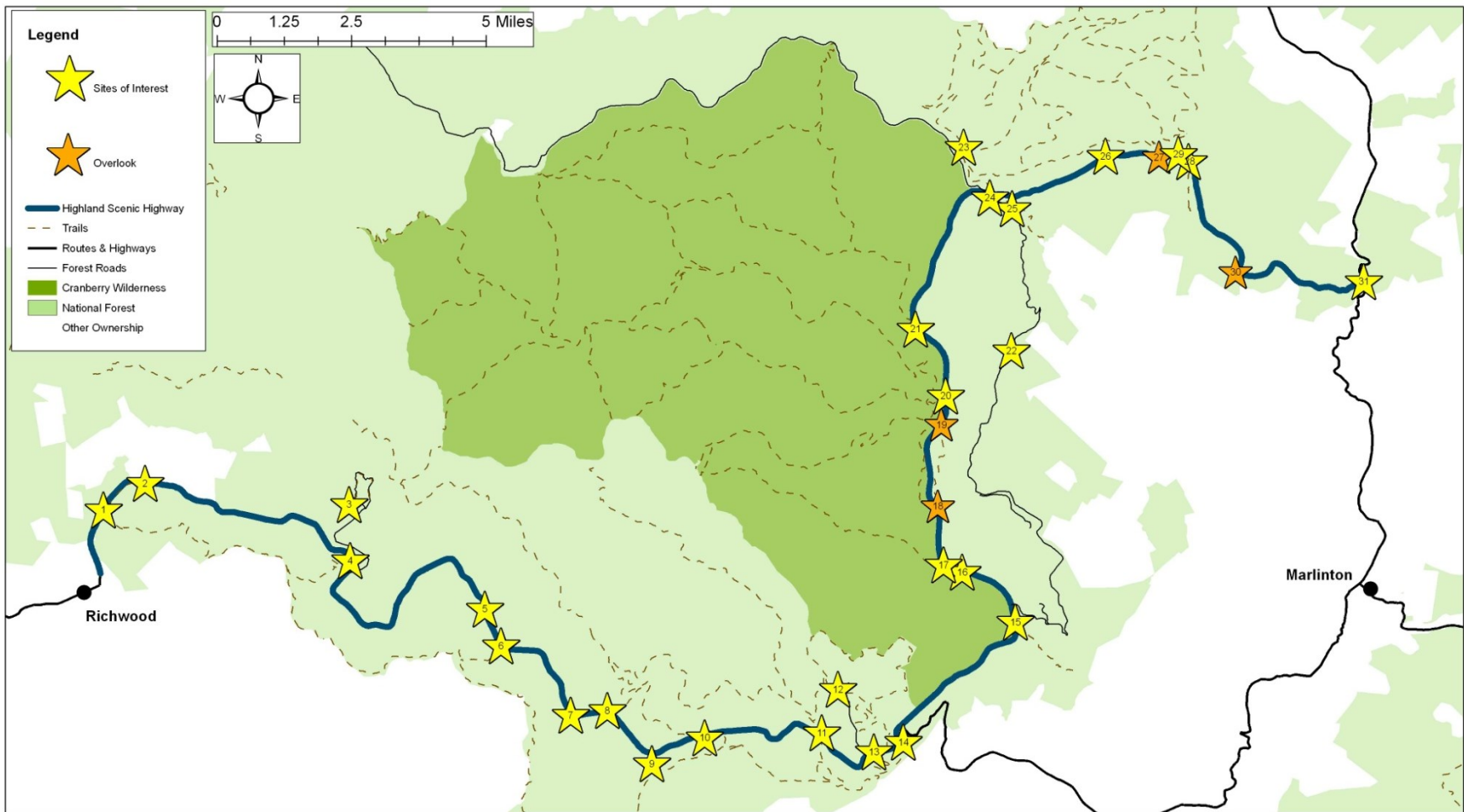

















Figure 17 Sites of Interest Map

Table 6 Sites of Interest

| Site number | Site Name |  |  |  |  |  |  |  | Site number | Site Name |  |  |  |  |  |  |  |  |
|-------------|--|---|---|---|---|---|---|---|-------------|--|---|---|---|---|---|---|---|---|
| 1 | WV 39 Gateway | | | X | X | | | | 17 | Forks of the Cranberry Trail | | | X | | | | | |
| 2 | Fork Mountain Trail | | | X | | | | | 18 | Williams River Overlook / Black Mountain Trail | | | X | X | | X | X | X |
| 3 | Summit Lake Recreation Area | X | X | X | X | X | X | X | 19 | Big Spruce Overlook / Black Mountain Trail | | | X | X | | X | X | X |
| 4 | North Bend Picnic Area / North Bend Dispersed Sites/North Bend Trail | X | X | X | X | X | X | X | 20 | North-South Trail | | | X | | | | | |
| 5 | Third Bridge | X | X | X | | X | | | 21 | North Fork Trail (Big Beechy Trail) | | | X | | | | | |
| 6 | Big Run Trail | | | X | | | | | 22 | Day Run Campground | X | X | | | X | X | | X |
| 7 | Bear Run Dispersed Camping | X | | | | | | | 23 | Tea Creek Campground/Tea Creek Trail/Williams River Trail/Tea Creek Mountain Trail/Bannocks Shoals Trail | X | X | X | | X | X | | X |
| 8 | Eagle Camp Trail | | | X | | | | | 24 | Williams River Fishing Pier/Williams River Trail | | X | X | | | X | | |
| 9 | Falls of Hills Creek | | | X | X | | X | X | 25 | Dispersed Campsites | X | X | | | X | X | | X |
| 10 | Pocahontas Trail / Rt 39 | | | X | | | | | 26 | Honeycomb Rocks | | | X | X | | | | |
| 11 | Kennison Mountain Trail | | | X | | | | | 27 | Little Laurel Overlook / Tea Creek Meadow Trail/Right Fork Tea Creek / Tea Creek Mountain | | | X | X | | X | X | X |
| 12 | Cranberry Glades Botanical Area | | | X | X | | X | X | 28 | Gauley Mountain Trail | | | X | | | | | |
| 13 | Bruffey Reserve Trail | | | X | | | | | 29 | Red Spruce Knob Trail | | | X | | | | | |
| 14 | Cranberry Mountain Nature Center/Mill Point Prison Site/Charles Creek/Bruffey Reserve Trail/Pocahontas Trail | | | X | X | X | X | X | 30 | Red Lick Overlook | | | | | | X | X | X |
| 15 | High Rocks Trail | | | X | | | | | 31 | WV 219 Gateway/ X-Country Ski Trail | | | X | X | | | | |
| 16 | Cranberry Glades Overlook Trail | | | X | | | | | | | | | | | | | | |

Dispersed Recreation

The Highway is a popular destination for driving for pleasure and viewing scenery. Visitors travel the highway to view wildflowers, catch a glimpse of wildlife, watch birds, and simply experience a large expanse of undeveloped forest. The Highway is especially known for its fall color display.

The Highway provides access to a variety of recreational pursuits. Hunting and gathering of forest products are popular, as is angling in the miles of mountain streams. An estimated 105 miles of trails are available for non-motorized uses, including hiking, biking, snowshoeing, and cross-country skiing. Five short interpretive trails located along WV 150 provide visitors with information about the local environment and history.

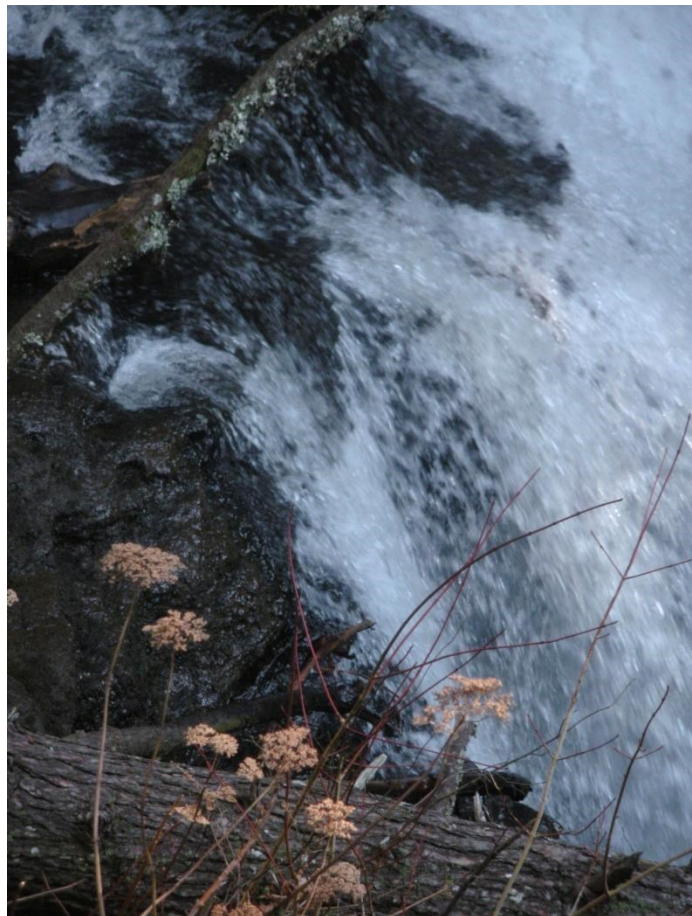


Figure 18 Falls of Hills Creek

Winter Recreation

The Forest Service does not plow or maintain WV 150 during the winter months, and the accumulation of snow on the high-elevation highway provides a variety of winter recreation opportunities. Snowmobiling is popular, particularly because WV 150 is the only road on the Monongahela National Forest where snowmobiling is permitted. Cross-country skiing and snowshoeing are also prevalent, both on the HSH, and on nearby trail systems. Some drive WV 150 for enjoyment, in four-wheeled drive vehicles heavily equipped for the challenges of the winter road. As mentioned earlier in the CMP, managing winter access between the different user types, and the potential safety issues, is a challenge for the Forest. See the Recreation Resource Management Strategies.



Figure 19 Cranberry Wilderness

Wilderness

WV 150 forms the eastern boundary of the 47,815-acre Cranberry Wilderness. This Wilderness is one of the largest wilderness areas in the eastern United States. A 75-mile trail system traverses this remote area, and is directly accessible from trailheads located along WV 150, and indirectly from along Highway 39. The Cranberry Wilderness is well known for hiking, fishing, hunting, and backcountry camping.



Figure 20 Cranberry Glades, Honeycomb Rocks, Williams River

Section 5 Interpretation

The HSH offers visitors an amazing opportunity to travel through a largely undeveloped expanse of the Monongahela National Forest, to witness a forest in recovery, to ride beside the Cranberry Wilderness, to view wildlife, and to have unparalleled vistas of the surrounding mountains and valleys. Interpreting the natural, cultural, historic, and recreational qualities along the Highway is important to helping visitors understand and appreciate the resources.

In the 30 years since the completion of the Highway, numerous interpretive opportunities have been created based on its rich and abundant resources. These interpretive opportunities have been completed as ideas arise and funding is available. The Monongahela and its stakeholders recognize that there is a lot of potential for additional interpretive opportunities along the Highway. The intent of this section is to provide an overview of existing interpretive opportunities, identify a comprehensive theme, and highlight future opportunities for expanding interpretation using a variety of media. For detailed information regarding existing interpretive sites, site recommendations, and prioritization see Appendix C: Interpretive Plan & Media Design Guidelines.

Existing Information & Interpretive Opportunities

Overlooks

Three of the four developed overlooks have informational signs about the landscape around them. Information focuses on natural and historic resources, as well as identifying geographic features. The design and content of the signs were implemented from Wayside Exhibit Plan for the Highland Scenic Highway completed in 1993 (Gross & Zimmerman 1993).

Signs & Kiosks

Kiosks are located at major junctions along the HSH. Information available at kiosks includes outdoor etiquette, maps, and area information. Signs are located at almost all trailheads, and kiosks are located at Cranberry Wilderness trailheads. At a minimum trailhead signs include detailed and overview maps and emergency information.



Figure 21 Three Panel Kiosk at the North End of WV 150

Trails

There are numerous interpretive trails located along the HSH. Trail planning, development and interpretation are completed as funding allows, primarily on an individual basis. The signs along Black Mountain Fire Trail were conceived as part of a Wayside Exhibit Plan for the Highland Scenic Highway completed in 1993 (Gross & Zimmerman 1993). Interpretive trails along the HSH include:

- Black Mountain Fire Trail
- Honeycomb Rocks Trail
- Mill Point Prison Site
- Tea Creek Interpretive Trail
- Cranberry Glades Boardwalk
- Cranberry Nature Trail
- Falls of Hills Creek Scenic Area

Cranberry Mountain Nature Center

Cranberry Mountain Nature Center is the primary visitor center located on the HSH. A variety of interpretive and interactive displays educates visitors about area wildlife, plants, and more. The Nature Center is also the base for a series of nature, historic, and culture based interpretive programs, including snakes of West Virginia, nature photography, historic murder mysteries, and native plants.



Figure 22 Cranberry Mountain Nature Center¹

¹ Photo Credit: Pocahontas County Convention & Visitors Bureau

Interpretive Theme

The comprehensive interpretive theme will guide the interpretive program for the entire HSH. Theme-based interpretation will enable visitors to make meaningful connections with the HSH's resources. One theme will provide a common thread that ties the whole experience together. This theme is particularly important for the HSH, which is comprised of two very distinct landscapes. The HSH theme incorporates input from stakeholder responses to letters and public meetings. Application of this theme, and supporting subthemes and storylines, will help unify the HSH experience and strengthen its identity.

Theme

The Forest Is Our Future.

The theme for the HSH is *The Forest Is Our Future*. As you travel the HSH, you are either surrounded by forest or overlooking it. The forest is essential to historic settlement of the area, and it also includes the intriguing and related stories of how it has evolved through time, why it looks the way it does now, and where it is going.

Sub-themes

Three sub-themes have been developed based on the past, present, and future of the forest. Below are the three sub-themes, with examples of storylines that may be appropriate.

- 1) *Past: Our forest has a rich history.*
 - a) Storylines will explore past uses and historic settlement in the area and how they were shaped by the surrounding forests and mountains.
 - i) Historic settlement: Subsistence farming, pastimes, and daily life in a remote mountainous area.
 - ii) Logging: Railroad logging, timber-based industry and manufacturing, logging camps and towns.
 - iii) Post-Logging: Wildfire, fire suppression efforts, forest restoration, Mill Point Prison
- 2) *Present: Our forest is resilient.*
 - a) Storylines will explore how the forest is comprised of recovering ecosystems, subject to a variety of influences and management strategies.
 - i) Influences: The forest is subject to influences beyond our control such as weather, acid rain, natural succession, and elevation
 - ii) Natural Resource Management: The diverse landscape contains a variety of wildlife and vegetation and forest products that are managed on a regular basis.
 - iii) Ecosystem Services: The area provides air and water filtration, variety of recreation settings, and solitude.

3) *Future: Our forest is dynamic.*

- a) Storylines will explore how current forest trends and how they may shape our forests in the future, and the challenges and benefits of change.
 - i) **Forest Health:** Overall forest health considers species composition, invasive species, and forest management.
 - ii) **Water:** The high elevation of the HSH and surrounding area is the origin of several rivers, providing habitat for fish and a host of other aquatic organisms, and drinking water for nearby communities.
 - iii) **Geology:** Several features tell stories of unique geological processes.

Interpretive Management Strategies

The HSH currently has a variety of interpretive opportunities available. Comprehensive interpretation is key to bringing meaning to the HSH and its resources. The following recommendations will improve the overall interpretation of the HSH:

- 1. Obtain additional interpretive training for employees and partners
- 2. Improve interpretive opportunities and programs along the HSH
- 3. Replace interpretive signs as needed. After completion of an interpretive plan, replacements should be consistent with recommendations in the plan
- 4. Provide consistent HSH information (background, designations, special regulations) at each portal and at the Cranberry Mountain Nature Center
- 5. Consider developing thematic tours emphasizing the unique intrinsic qualities
- 6. Implement recommendations in Appendix C: Interpretive Plan & Media Design Guidelines
- 7. Seek additional funding for interpretive development and implementation



Figure 23 Mill Point Prison Site

Section 6 Management and Protection Strategies

This section provides specific management and protection strategies for all aspects of the HSH: intrinsic qualities, interpretation, built features, signage, public safety, and public participation. These recommendations supplement Forest Plan direction. If there are no management or protection strategies associated with a quality or characteristic, Forest Plan direction is considered to be sufficiently managing the resource. Some management strategies are supplemented by additional information about the existing condition of the resource.

Intrinsic Qualities

The natural, scenic, historical, cultural, archaeological, and recreational resources associated with the HSH are at the core of the visitor experience and are important components of the quality of life for nearby residents. The Forest Plan provides goals, objectives, and guidelines to move the HSH and surrounding national forest system lands toward stated desired conditions (See Table 7 for examples of Forest Plan direction). Management and protection strategies in the corridor management plan will supplement existing Forest Plan direction to protect, conserve, and enhance intrinsic qualities found along the corridor.

The 2006 Forest Plan provides guidance along the HSH corridor, and surrounding lands primarily via management prescriptions. All of these management prescriptions contain desired conditions that are supportive of maintaining the natural and scenic values found along the Highway corridor. Management and protection strategies are provided where review or changes in condition require supplemental direction to maintain or enhance the intrinsic quality.

Table 7 2006 Forest Plan Desired Conditions

| Intrinsic Value | Management Area | 2006 Forest Plan Desired Conditions |
|------------------------------------|-----------------|--|
| Natural | 3.0 | The Forest is a mosaic of stands of predominantly hardwood trees and associated understories that provide habitat for a variety of wildlife species. |
| Natural (Vegetation) | Forestwide | Forested lands exhibit variable patterns of size classes, densities, structural stages, and species composition due to a combination of successional development, disturbance regimes, and management activities. |
| Scenic | Forestwide | Scenic integrity is maintained or enhanced in areas of high scenic value and other highly used recreation areas. In general, management activities blend in with the natural environment. |
| Historic, Cultural, Archaeological | Forestwide | As visitors travel through landscapes and experience diverse environments and cultures, they can make a personal connection with the land and people and have the opportunity to reflect on the relevance of the past and the land to their daily lives. |
| Recreation | Forestwide | Accessibility is incorporated into facility and program access projects, while maintaining the development scale and setting of the area. |
| Recreation | Forestwide | Collaboration among users results in decisions that reduce conflicts |

| Intrinsic Value | Management Area | 2006 Forest Plan Desired Conditions |
|-----------------|-----------------|--|
| | | between recreational and environmental needs. Local communities, partners, and volunteers are involved and benefit from their roles in providing recreational opportunities. |

Natural Resource Management Strategies

Protection of natural resources along the HSH is important. Currently, natural resources are afforded a high level of protection through the Forest Plan, as well as federal regulations. Additional recommendations designed to complement ongoing natural resource protection strategies include:

1. Minimize visitor impacts on natural resources by designing interpretive facilities that educate tourists and recreation visitors about proper behavior regarding sensitive plants, animals, and other natural resources.
2. Protect and enhance overlooks and other areas by planting a variety of native vegetation to prevent off road driving and increase aesthetic diversity. (See Planting Site Designs in the project record)
3. Educate visitors about disposing trash properly and “Leave No Trace” land ethics.
4. Support land managers in their efforts to minimize impacts to natural resources on public lands.
5. Support land managers in their efforts to maintain and restore native ecosystems.

Historical, Cultural, and Archaeological Resource Management Strategies

Similar to natural resources, the historical, cultural, and archaeological resources are protected through the Forest Plan, as well as federal regulations. The area has rich historical and cultural resources, representing a variety of themes related to early logging practices, railroad expansion, settlement of the area, and forest restoration. Strategies for enhancing and protecting some of the historic and cultural resources along the corridor include:

1. Recognize and interpret the activities of early European settlers and how they relate to the Highland Scenic Highway and surrounding area.
2. Support land managers in their effort to protect cultural, historic, and archaeological resources on public lands.

Scenic Resources Management

The Forest Plan directs that scenic integrity be maintained or enhanced in areas of high scenic values, such as the HSH. In addition, management activities throughout the forest should blend with the natural environment. In the Forest Plan, the Recreation Opportunity Spectrum guides scenery management. The Recreation Opportunity Spectrum (ROS) is a framework for defining the types of outdoor recreation opportunities the public might desire, and identifies that portion of the spectrum a given National Forest might be able to provide. Each ROS classification is defined in terms of its combination of activity, setting, and experience opportunities (USDA 1982). ROS can be used to guide the whole experience that people have

with the land. The HSH and most adjacent lands are classified as Roded Natural. This designation guides the Forest Service in maintaining the area as predominantly natural appearing environments, with moderate evidence of man. The Roded Natural classification supports developments that contribute to the scenic byway experience, while ensuring that the surrounding landscape remains natural. Cranberry Wilderness is classified as Semi-Primitive Non-Motorized. This ROS classification, in combination with Forestwide direction (see above table) and supporting direction in applicable Management Prescriptions, are supportive of maintain and enhancing scenic quality along the Highland Scenic Highway.

Table 8 ROS Classifications & Characterizations Summary

| Activity Characterization | Setting Characterization | Experience Characterization |
|---|---|---|
| Roded Natural | | |
| Viewing scenery Automobile Bicycling Camping Picnicking Snowcraft X-country skiing/snow shoeing | Area is characterized by predominantly natural appearing environments with moderate evidences of the sights and sounds of man. Such evidences usually harmonize with the natural environment. | Opportunity to have a high degree of interaction with the natural environment. Opportunities for both motorized and non-motorized recreation are possible. |
| Semi-Primitive Non-Motorized | | |
| Viewing scenery Hiking and Walking Nature Study X-country skiing/snow shoeing | Area is characterized by a predominantly natural environment of moderate to large size. The area is managed in such a way that minimum on-site controls and restrictions may be present but are subtle. Motorized use is not permitted. | High, but not extremely high, probability, of experiencing isolation from the sights and sounds of humans. Independence, closeness, to nature, and tranquility through the application of outdoor skills. |

Scenic Resource Management Strategies

While the ROS provides the framework for the general setting along the HSH, the Forest Plan does not provide management recommendations on how to maintain the scenic quality. In the decades that the HSH has been completed and designated as a scenic byway, little vegetation management has been conducted directly along the HSH. Forests have matured, reducing the overall scenic quality and eliminating some of the panoramic opportunities. Site visits to the HSH throughout the planning process helped identify locations where vegetation treatments would be an appropriate strategy to manage scenic resources. Please refer to Appendix B: Vegetation Management Plan for specific locations that would maintain, enhance, and improve scenic visibility along the HSH.

Strategies for maintaining and enhancing the scenic quality and integrity along the corridor include:

1. Analyze and implement appropriate recommendations in Appendix B to retain and enhance scenic quality.
2. Conduct further assessments on opportunities to maintain and enhance scenic quality.
3. Evaluate and monitor treatment areas, maintain periodically as needed.



Figure 24 View from Cranberry Glades Overlook

Recreation Resource Management

The HSH has numerous resources for recreation and tourism. These include developed recreation, dispersed recreation, scenic driving, and access to wilderness. Recreation management strategies in the Forest Plan are sufficient for providing a comprehensive approach to most of the recreation opportunities along the HSH. Winter access and use on WV 150 is unique because of the dependable quantity of snow for non-motorized and motorized recreational activities.

Winter Use & Access Management

A reliable snowpack on WV 150 has led it to become a destination for a variety of winter pursuits including cross-country skiing, snowshoeing, and snowmobiling. The high elevation of WV 150 often results in a higher snowpack that will last through most of the winter and sometimes well in to the spring. Developed winter recreation facilities along WV150 include a warming hut and cross-country skiing and snowshoe trails. The 22-mile stretch is the only route on the Forest that permits use of snowmobiles (Forest Order 21-91). The lack of plowing also provides management challenges and concerns as to how to manage winter recreation and access on WV 150.

Motorized use by passenger vehicles (trucks, SUVs, sedans, etc.) is not prohibited when snow is present, but there are signs at both ends of WV 150 informing users that there is no snow removal and that the road may be blocked. Many users are not deterred from travelling this section of the Highway when snow is present. Mixed motorized use, passenger vehicles and snowmobiles, in combination with non-motorized recreation all within the Highway corridor is an unsafe combination of concurrent uses.

An additional challenge is that WV 150 appears no different from other state routes on a map. WV 150 appears to be open to thru traffic year-round. This results in travelers attempting to use WV 150 as a route during the winter, when snow may be present. Once at higher elevations, unprepared drivers may encounter winter conditions that can quickly jeopardize their safety.

There is spotty cellular service on WV 150, making it difficult to contact anyone to an emergency. In the past, stranded parties have resorted to walking out for help, but that too may be dangerous due to the wintry conditions. Difficult access and extreme winter conditions that can be present deter many commercial tow companies from responding to stranded vehicles on WV 150. These factors may lead to a delayed rescue of unprepared travelers, who often have to wait and rely on the kindness of local residents.



Figure 25 WV 150 No Snow Removal Sign

An additional challenge is that since there have never been defined dates associated with winter conditions; WV 150 is shown no differently on maps than other state routes. The inability to accurately inform the public via maps of the winter conditions leads to unprepared users travelling WV 150 during winter conditions, endangering both themselves and responders.

Recreation Resource Management Strategies

1. Maintain recreation opportunities that contribute and support the visitor experience.
2. Establish etiquette guidelines to promote safe use among motorized and non-motorized users.
3. Develop winter use and access management options that would address the following factors:
 - a. Improve public and employee safety
 - b. Allow for continued snowmobile use and non-motorized winter recreation
 - c. Include public input and involvement throughout
 - d. Improve information sharing with local and state government, media, and partners

Visitor Experience

Commerce

Commercial uses of the national forest system lands are only permitted when compatible with the areas objectives, and in general private uses do not occur on national forest system lands. Forest Plan direction places further commercial and private restrictions along the HSH:

- Private development of fuel, eating, camping, or other services shall not be permitted along the Highland Scenic Highway, unless clearly justified by site-specific corridor planning.
- Commercial traffic may only be allowed on the Parkway (WV 150) portion of the Highland Scenic Highway by written permission under one of the following conditions:
 - The proposed use is advantageous for reasons of public safety, environmental protection, or resource management objectives.
 - The proposed use is related to the construction, maintenance, or management of the Parkway (WV 150), associated facilities, or the highway corridor.
 - The proposed user has a legal right of access through deed, easement, or permit.

These standards reduce the commercial development and use of the HSH. WV 150 parallels the Cranberry Wilderness for 12 miles, where no development is permitted.

Visitor Services

Minimal visitor services are available along the HSH. Restroom facilities are available at several recreation areas, scenic overlooks, and the Cranberry Mountain Nature Center. Picnic tables and trash receptacles are located at overlooks and along the HSH. All picnic areas and restroom facilities are accessible. There is little cellular coverage along the HSH, except for a few spots along WV 150. The Forest Service manages all visitor service facilities on the Monongahela National Forest.



Figure 26 Red Lick Overlook Picnic Shelter

The nearby towns of Richwood and Marlinton, and the community of Hillsboro provide the necessary user services to facilitate year-round motorized and non-motorized use of the HSH. Fuel, lodging, dining, and emergency services are available within these communities. Pay phones are available in any of the nearby towns, and most have cellular service.

Built Features

Existing built features are primarily built out of natural materials, including wood and stone. Maintenance of existing built features and construction of new features and developments for the HSH should be aesthetically appropriate for their natural setting. They should utilize the materials outlined for the Southeast Mountain Province in the Built Environment Image Guide. These materials include wall materials such as log, lap siding, and board and batten, roofing materials such as cedar shake and seamed metal, and local stone. Synthetic or composite materials may be used when natural in appearance, and are more durable or cost effective. Buildings, such as toilet facilities, visitor centers, and picnic shelters, and signs should have prominent high-pitched roofs, and strong, solid bases made of materials such as stone or heavy timber. Where stonework is prescribed, local stone should be utilized wherever possible. Maintenance and construction of built features will comply with recommendations as funding allows.

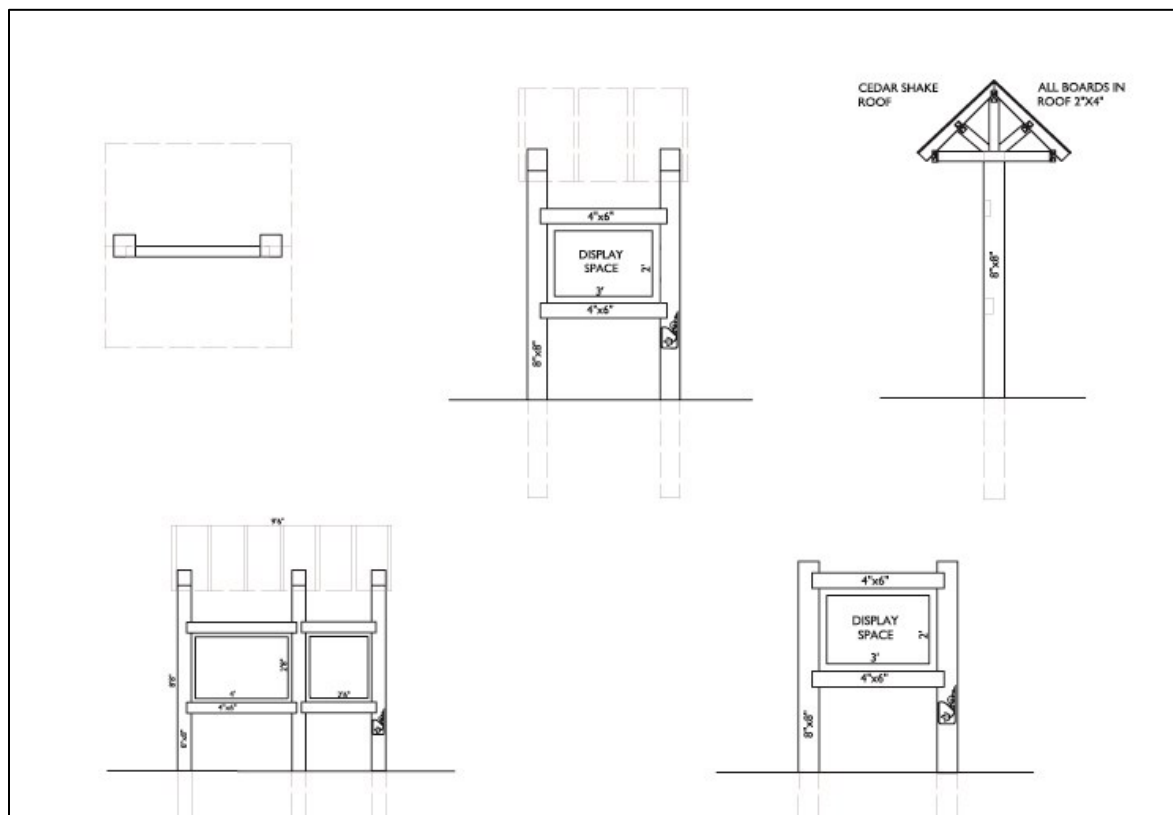


Figure 27 Kiosk Specifications



Figure 28 Accessible Fishing Pier at Summit Lake

Accessibility

As new features are installed along the highway, or as existing features are updated, all features must comply with the Forest Service Outdoor Recreation Accessibility Guidelines the Forest Service Trail Accessibility Guidelines, and Architectural Barriers Act as applicable.

Visitor Services & Built Features Management Strategies

- I. Support efforts to enhance visitor services within the HSH corridor.
2. Maintain and construct visitor services and built features to required standards, and to a level that contributes and supports the scenic byway visitor experience.

Signage

There are many types of signage within the HSH corridor. These include byway signage, directional and safety signage, and interpretive signage. Signage is intended to facilitate traveler safety, awareness, and education as they relate to the resources in the HSH corridor. Billboards or commercial advertisements are not permitted on national forest system lands.

Signage is sufficient so as not to detract from the overall visitor experience, and there are locations where signs need to be added, removed, or replaced. Because of the high number of junctions and areas of interest, the Forest is cautious about recommending additional signage due to the potential for the quantity of signs detracting from the visitor experience and natural environment.

Byway Signage

The identity of the HSH could be greatly enhanced through the clear use and appropriate design of signage. Portal signs are currently located at three of the four entry points. The existing portal signs are inconsistent with the material and design that is desirable for the HSH corridor signage.



Figure 29 Existing Portal Sign and Redesigned Portal Sign

Throughout the corridor a metal HSH logo sign, supplied by WV Department of Highways, is consistently located with the state route signs. These signs do not indicate that the HSH is a National Forest Scenic Byway or National Scenic Byway. It is recommended that National Forest Scenic Byway and National Scenic Byway designation logos be visible at the four entry points, in close proximity to the portal signs.



Figure 30 Scenic Byway Designation Logo Signs

Byway Signage Management Strategies

- 1) Replace and update portal signs to meet Sign Plan recommendations (see project file).
- 2) Install National Forest Scenic Byway and America's Byway designation signs near the portal signs. Install only at these location to inform visitors of the HSH's designation, so as to limit sign pollution along the corridor.
- 3) Replace byway signs as they start to show wear, vandalism, or are no longer up to standard.
- 4) As Forest Service signs are replaced, they should meet the most current sign regulations standards.

Directional & Safety Signage

Directional and safety signs help orient travelers and promote safe travel for motorists and non-motorists alike. Directional signage is located at either end of the HSH, and the junction of WV 39 and WV 150. These signs indicate the mileage to outlying communities and nearby sites of interest. State route signs are located at differing distances and sizes based on what is required by the speed limit, which is 55 mph on WV 39 and 45 mph on WV 150.

Approach signs inform travelers when they are coming upon a site of interest, such as an overlook, picnic area, or trailhead. These signs alert the traveler that some traffic, including the viewer, may be reducing their speed and turning ahead.

Directional & Safety Signage Management Strategies

1. Support signage that informs drivers of sharing the road with bicyclists.
2. Replacement entry signs for Falls of Hills Creek, Cranberry Glades, Summit Lake Campground, and other major attractions should include a placard or routed version of the Highland Scenic Highway.
3. Where not already in place, approach signs should be installed one quarter of a mile in advance of each of these features in order to enhance visitor safety as they approach feature driveways.
4. As Forest Service signs are replaced, they should meet the most current sign regulations standards.
5. Evaluate overall sign presence before proposing additional signage.

Interpretive Signage

See Appendix C Interpretive Plan & Media Design Guidelines.



Figure 31 WVI50/US 219 Portal Kiosk

Section 7 Marketing and Promotion

The Highland Scenic Highway provides phenomenal views of the surrounding mountains and valleys, and access to a spectrum of nature-based recreation opportunities. The HSH and the surrounding Monongahela National Forest attract visitors from the local area, throughout the county, and other nations around the world. Gateway communities, such as Richwood, Marlinton, and Hillsboro, benefit from the tourism dollars that are generated from these visitors. Since there are no commercial services on the HSH, people stop at gateway communities for food, lodging, fuel, and supplies.

Present Marketing & Promotion Efforts

Informational Brochures and Visitor Guides

Information is available to visitors in advance of a visit to the HSH, or for those that want to know more about the area's resources. A variety of brochures are produced by the Forest Service. The following brochures detail the HSH, nearby resources and interpretive opportunities:

- Highland Scenic Highway
- Honeycomb Rocks Trail
- Mill Point Prison
- Cranberry Glades Botanical Area
- Falls of Hills Creek Trail
- Cranberry Wilderness Area
- Williams River Area
- Tea Creek Area Hiking Trails
- Campgrounds (Tea Creek, Williams River Area, Day Run, Cranberry)

The Pocahontas County Convention and Visitors Bureau (CVB) annual visitor guide features the HSH as one of the main attractions on the Monongahela National Forest. The Pocahontas County CVB also highlights the variety of recreation opportunities that are available from the HSH: fall foliage viewing, cross-country skiing and snowmobiling, hiking, motorcycling, birding and biking.

The Monongahela brochures are available at Forest Service district offices, Cranberry Mountain Nature Center, the Forest Service website, and local chamber of commerce visitor centers. The Pocahontas County CVB annual visitor guide is available locally, statewide, and may be downloaded on their website or mailed to the public upon request. The Richwood, WV Chamber of Commerce provides visitors with a variety of information about the Monongahela National Forest and the HSH.

Internet Information

Information about the HSH is available on numerous websites. The Monongahela National Forest has a page dedicated to the HSH. It is difficult to find the HSH on the Forest's website and little information is available there. The Forest would like to improve the ease of finding the website, and the availability of information. Additional information is located at the America's Byways website and the West Virginia Byways websites.

Future Marketing & Promotion Efforts

The Forest Service is interested in maintaining and improving marketing and promotion for the HSH, but funding is limited. Expansion or improvements would likely require partnerships with local organizations or grants for additional funding. The Pocahontas County CVB is very supportive of the Highland Scenic Highway and area resources, and birding maps for the HSH area are already available on their website. Tourism is the primary industry in Pocahontas County, and the natural beauty of the area is the main attraction. Pocahontas County CVB includes the HSH and several area attractions in their annual visitor guide, and this will likely continue.



Figure 32 Highland Scenic Highway Portal Sign at WV150/US 219²

² Photo Credit to Pocahontas County Convention and Visitors Bureau

Marketing & Promotion Management Strategies

The following strategies are recommended for marketing and promoting the HSH:

1. Implement Appendix C: Interpretive Plan & Media Design Guidelines to improve the identity and branding of the HSH, visitor experience, and marketability.
2. Update and incorporate additional information on the Monongahela National Forest website.
3. Upload the HSH audiotour to the forest website and provide link to partners. Work with partners, at area partners such as the Pocahontas County CVB and Richwood and Marlinton Chambers of Commerce, to have the audiotour available.
4. Market and promote the Highland Scenic Highway as a national scenic byway and national forest scenic byway, emphasizing its unique natural, scenic, recreational, cultural, historical qualities.
5. Build upon existing partnerships with the local Chambers of Commerce in Marlinton and Richwood, as well as the Pocahontas County Convention & Visitors Bureau.
6. Develop new partnerships with local and state governmental agencies that may offer financial support in the future.
7. Seek partnerships and opportunities for additional funding for marketing and promotion.

Public Participation Management Strategies

The Forest Service would like to increase community involvement and interaction in managing and maintaining the HSH, a valuable community resource. Increasing information sharing and involvement with the public will increase support and awareness of the resource, increase visibility, and may have positive effects on funding and marketing opportunities. The following recommendations will help increase public participation:

1. Create a Highland Scenic Highway Steering Committee, comprised of Forest Service employees, partners, and community members within the scenic byway corridor. The steering committee would provide support, guidance, and approval for new projects associated with the HSH. The Forest Service will first inquire the level of interest in parties that contribute to the HSH CMP process. The Forest Service will work to have a steering committee meeting within six months of the completion of the CMP.
2. Provide regular updates, at least twice a year, sharing with the public information about the HSH and associated resources.

Section 8 Funding and Financing

As a National Scenic Byway and National Forest Scenic Byway, the Highland Scenic Highway is eligible for several funding and financing options. Three main sources of funding opportunities exist for the HSH– federal, state, and other. Many of the options below, while available, have specific eligibility requirements and stipulations as to how the monies can be spent.

Federal

Several different sources of federal funding are available for maintaining and enhancing the HSH and associated resources.

U.S. Department of Transportation - Federal Highway Administration

- National Scenic Byways Program Grants
- Forest Highway Funds
- Public Lands Highway Funding

U.S. Department of Interior

- Historic Preservation Fund
- Land and Water Conservation Fund

U.S. Department of Agriculture – U.S. Forest Service

- Challenge Cost Share Funds
- Recreation Enhancement Act

State

West Virginia has two programs that have provided funding and assistance for the Highland Scenic Highway and projects along the corridor.

- Department of Transportation/Division of Highways
- Division of Natural Resources

Other

The Monongahela National Forest maintains positive partnerships with a number of organizations and is always looking for new opportunities to complete projects that meet the Forest Service mission, and maintain and enhance the HSH area. Examples of past and present partners include:

- Pocahontas County Convention and Visitor's Bureau
- Trout Unlimited
- Wild Turkey Federation
- International Mountain Biking Association (IMBA)
- Elk River Touring

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Section 9 Appendix

Appendix A: Federal Highway Administration Corridor Management Plan Required Components

The fourteen items listed below are the Federal Highway Administration's requirement for inclusion in a national scenic byway corridor management, per the Federal Register, Vol. 60, No. 96, item 9.

1. A map identifying the corridor boundaries, location of intrinsic qualities, and land uses in the corridor. U. S. Geological Survey maps of your corridor region are ideal and inexpensive base maps for your corridor management planning group.
2. An assessment of the byway's intrinsic qualities and their context (the area surrounding them). The end product is typically a catalogue of the byway's scenic, historic, natural, archeological, cultural, and recreational qualities.
3. A strategy for maintaining and enhancing each of the byway's intrinsic qualities. Ask what you want the byway corridor to look like in 10-15 years and develop goals and strategies to help you get there.
4. A list of the agencies, groups, and individuals who are part of the team that will carry out the plan. Be sure to include a description of each individual's responsibilities and a schedule of when and how you will review their progress.
5. A strategy for how existing development along the corridor might be enhanced and how to accommodate new development while preserving the byway's intrinsic qualities. Many communities have long-term land use plans that can be adapted for this purpose.
6. A plan for on-going public participation. This might include forming a CMP steering committee made up of local citizens, a schedule of regular public meetings, or a byway management planning forum.
7. A general review of the road's safety record to locate hazards and poor design, and identify possible corrections. Identify ways to balance safety with context-sensitive highway design practices that accommodate safety needs while preserving the road's character.
8. A plan to accommodate commercial traffic while ensuring the safety of sightseers in smaller vehicles, as well as bicyclists, joggers, and pedestrians. Some CMP's incorporate plans to apply for Federal Transportation Enhancement funds to pay for the installation of special bicycle lanes along the byway or the creation of hiking trails.

9. A listing and discussion of efforts to minimize anomalous intrusions on the visitor's experience of the byway. This might include landscaping to screen an industrial site, relocating utility wires and poles, or planning for the sensitive location of wireless telecommunications towers along the byway.

10. Documentation of compliance with all existing local, state, and federal laws about the control of outdoor advertising. Federal regulations prohibit all new billboards along designated scenic byways that are classified as federal-aid primary, national highway system, or interstate roads. States are free to impose stricter controls on billboards along scenic byways. Your CMP should also address the continuous designation of the road to ensure that billboard companies will not be able to find a loophole in your byway designation that would allow them to erect billboards along the corridor.

11. A plan to make sure that the number and placement of highway signs will not get in the way of scenery, but still be sufficient to help tourists find their way. This includes, where appropriate, signs for international tourists who may not speak English fluently.

12. Plans for how to market and publicize the byway. Most marketing plans highlight the area's intrinsic qualities and promote interest in the byway that is consistent with resource protection efforts and maintenance of the byway's desired character.

13. Any proposals for modifying the roadway, including an evaluation of design standards and how proposed changes may affect the byway's intrinsic qualities. Byway groups should work with their state department of transportation to adopt context-sensitive highway design standards for the byway. Context-sensitive design takes into account the area's built and natural environment; the environmental, scenic, aesthetic, historic, community, and preservation impacts of a road project; and provides access for other modes of transportation.

14. A description of what you plan to do to explain and interpret your byway's significant resources to visitors. Interpretation can include visitor centers, leaflets, audio tours, information panels, and special events. In this category, creativity makes a big difference.

Appendix B: Vegetation Management Plan

Introduction

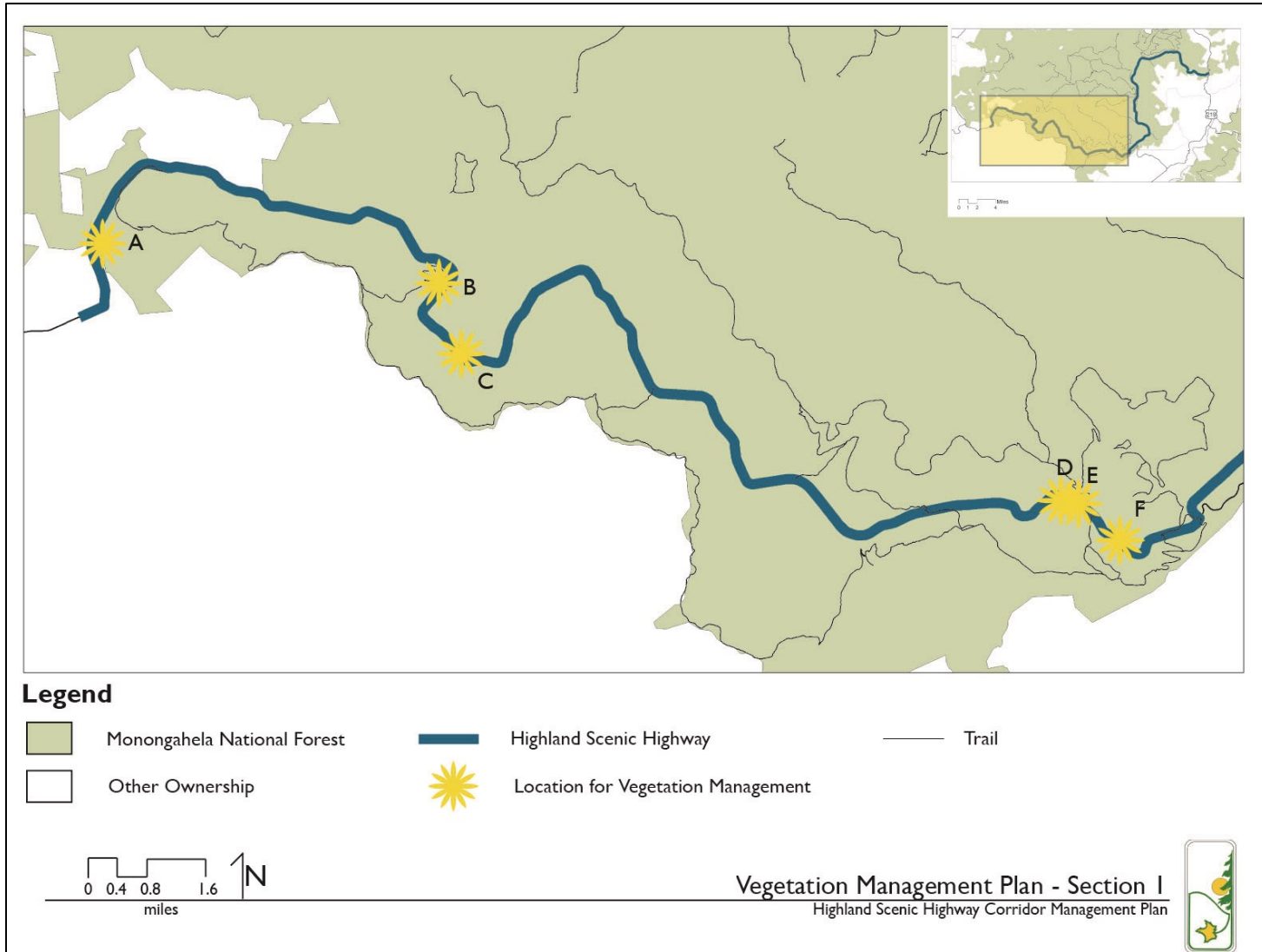
Overgrown vegetation is the primary threat to the scenic integrity along the Highland Scenic Highway. Appendix B: Vegetation Management Plan details locations where vegetation treatments would maintain or enhance the scenic integrity. Opportunities to create new scenic vistas were also identified.

Because the natural environment surrounding the HSH is dynamic and changes over time, additional opportunities and needs to enhance and maintain the scenic integrity of the HSH are expected to occur in the future. All vegetation management strategies should be consistent with all federal laws and the Forest Plan. Varying levels of resource analysis would be required prior to implementing the included scenic resource management strategies.

A total of 29 locations have been identified as opportunities to improve the scenic integrity of the HSH. Because of the scope and scale of the HSH, this document divides those 29 locations into six segments. Each section is comprised of three components, which together provide a comprehensive information for each potential vegetation treatment location.

1. Map: Shows the location of each recommendation in relation to the HSH
2. Treatment Description: Provides the exact coordinates of the site, goal and description of vegetation treatment, and additional notes where applicable.
3. Location Images: Includes photographs from each location. All photos were taken spring 2011.

Section B I





Section I Map



Section I Treatment Description



| Point Letter ID | Latitude | Longitude | Miles from last point | Goal of Treatment | Description of Treatment | Other Site Treatments or Notes |
|-----------------|-----------|------------|-----------------------|---|---|---|
| A | 38.241433 | -80.529417 | N/A | Improve the view of the river upstream; create a more dramatic view at the western gateway to the highway | Looking southeast from the current parking lot, clear vegetation between the trail and a line perpendicular to the middle of the parking lot. Keep anything above a 20" DBH, flowering trees and rhododendron. Grind stumps to improve aesthetics | A two to three panel kiosk should be installed here with information about the highway. The entrance sign to the highway should be moved to the patch of grass adjacent to the parking lot to the west. |
| B | 38.231498 | -80.441925 | 6.2 | Open the view to the river for passing motorists and picnickers arriving at the site | On the western most trail to creek: Prune Rhododendron back approximately 5' on either side to open view to stream. | Simple re-grading of several of the trails to picnic areas could greatly enhance the accessibility of this site. |
| C | 38.2187 | -80.4399 | 1.2 | Open and maintain views to the river | For 400' along the river*, thin all beech under a 2" DBH. Repeat every 5 years | N/A |
| D | | | 11.3 | Open views to the mountains and valley to the south of the road | South of road, using commercial thinning to remove about 1/2 or more of the basal area on the 2-5 acres down slope. Avoid disruption in riparian buffer. Treatment should be for 200' to the west of the berm adjacent to the road | Points D and E are separated by a natural berm. |

| Point Letter ID | Latitude | Longitude | Miles from last point | Goal of Treatment | Description of Treatment | Other Site Treatments or Notes |
|---|----------|------------|---------------------------|---|---|---|
| E | 38.1878 | -80.286767 | 0.2 | Open views to the mountains and valley to the south of the road | South of road, using commercial thinning to remove about 1/2 or more of the stand on the 2-5 acres down slope. Avoid disruption in riparian buffer and ephemeral streams. Treatment should be for 200' to the east of the berm adjacent to the road | N/A |
| F | 38.180 | -80.2768 | 0.4-0.6, 0.7-0.8, 0.9-1.0 | Open views to the mountains and valley to the north of the road | North of road, using commercial thinning to remove about 1/2 or more of the stand on the 2-5 acres down slope. Avoid disruption in riparian buffer and ephemeral streams | Each of these stretches is separated by a natural berm. |
| * When a distance along road is given for thinning, assume point given is center of the stretch to be treated unless otherwise indicated. | | | | | | |

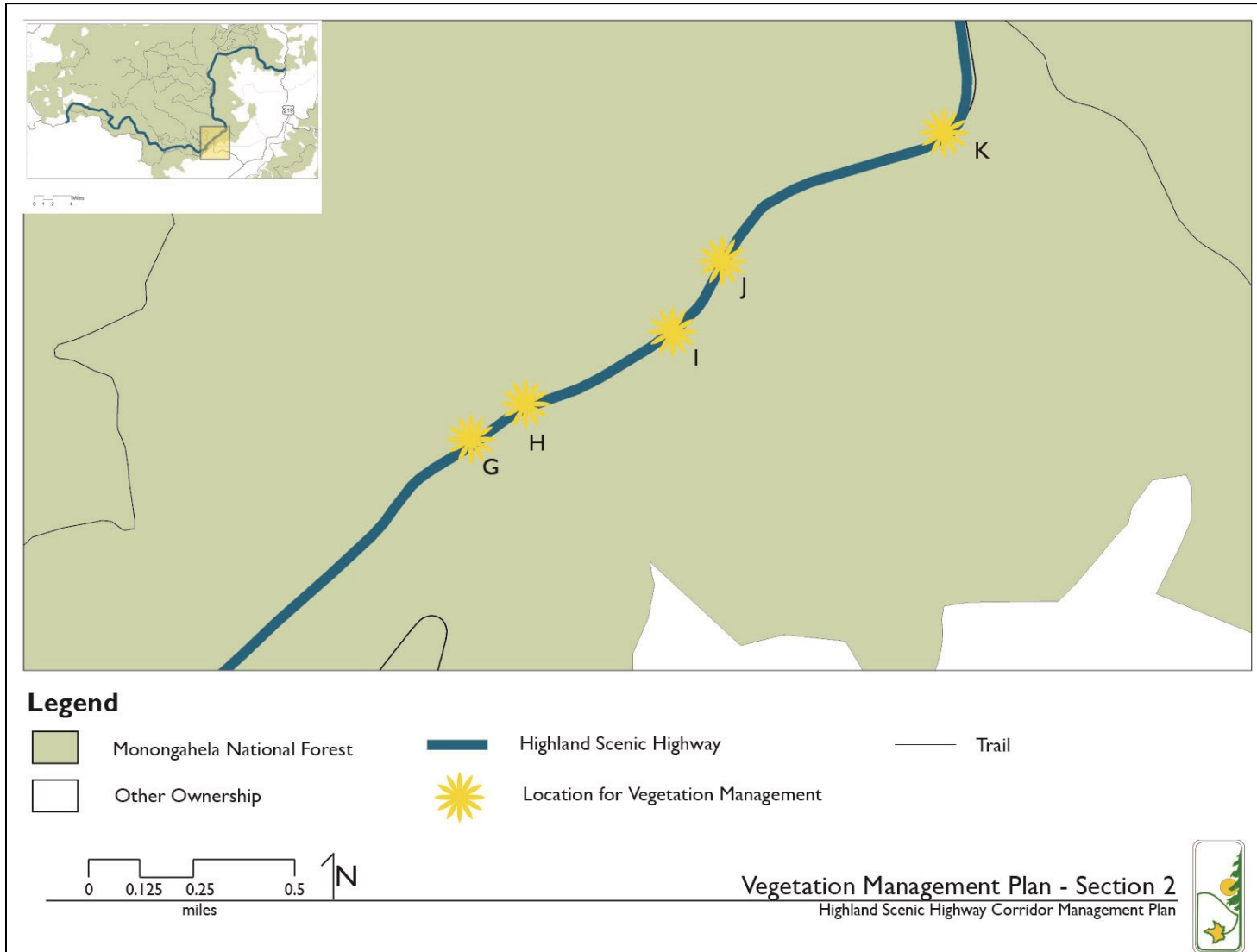
Section I Location Images

| Point Letter ID | Goal | Image |
|--------------------|--|--|
| A | <p>Improve the view of the river upstream; create a more dramatic view at the western gateway to the highway</p> |  |
| B | <p>Open the view to the river for passing motorists and picnickers arriving at the site</p> |  |

| | | |
|---|---|--|
| C | Open and maintain views to the river |  |
| D | Open views to valley and mountains to the south of the road |  |

| | | | | |
|---|---|--|--|--|
| E | Open views to valley and mountains to the south of the road | |  | |
| F | Open views to valley and mountains to the north of the road | |  | |

Section B2





Section 2 Map

Section 2 Treatment Description

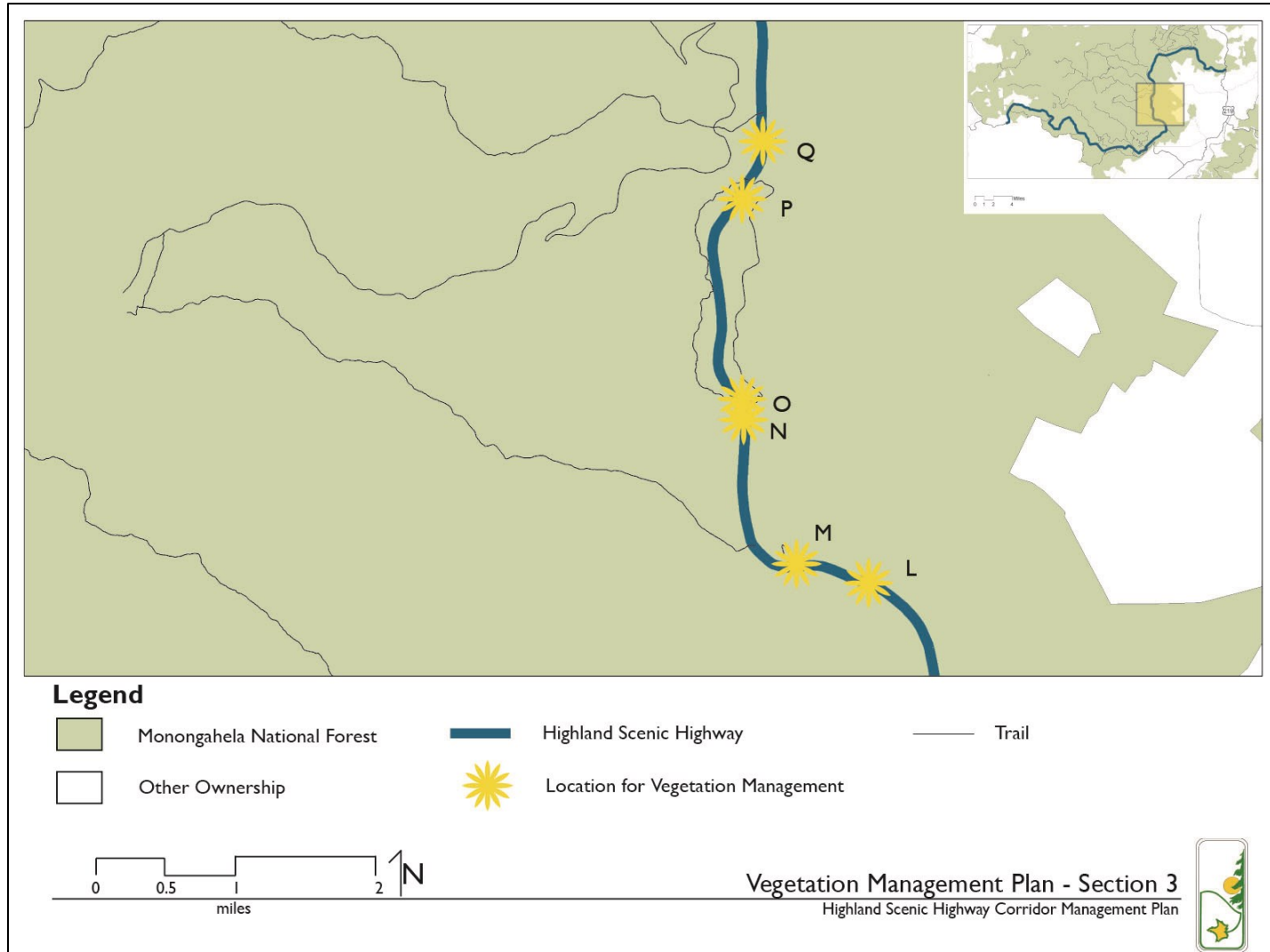
| Point Letter ID | Latitude | Longitude | Miles from last point | Goal of Treatment | Description of Treatment | Other Site Treatments or Notes |
|---|-----------|------------|--------------------------|---|--|--------------------------------|
| G | 38.200633 | -80.2359 | 3.0 from last point of F | Open views to mountains currently visible just over tree tops | For 200' along east side of road*, thin the mid-ground to 1/2 basal area of sugar maple and white ash. If done in a commercial sale, cut what you can and leave the rest with nicely formed stems. May be access problems for commercial sale. Keep thus below eye level | N/A |
| H | 38.2016 | -80.2336 | 0.1 | Open view to mountains | For 200' along east side of road, clear black locust from road to 100' with a commercial sale. Fell trees for 100-200' from road. | N/A |
| I | 38.20435 | -80.22735 | 0.4 | Open views to mountains | For 200' along east side of road, maintain brush below eye level, maintain mid ground trees at current height by selective thinning of largest trees every few years | N/A |
| J | 38.206483 | -80.225067 | 0.15 | Maintain views to mountains | For 200' along east side of road, maintain brush below eye level | N/A |
| K | | | 0.8 | Maintain views to mountains | For 200' along east side of road, maintain brush below eye level | N/A |
| * When a distance along road is given for thinning, assume point given is center of the stretch to be treated unless otherwise indicated. | | | | | | |

Section 2 Location Images

| Point Letter ID | Goal | Image |
|-----------------|---|--|
| G | Open views to mountains currently visible just over tree tops |  |
| H | Open views to mountains |  |

| | | | | |
|---|-----------------------------|--|--|--|
| I | Open views to mountains | |  | |
| J | Maintain views to mountains | |  | |
| K | Maintain views to mountains | | | |

Section B3





Section 3 Map



Section 3 Treatment Description



| Point Letter ID | Latitude | Longitude | Miles from last point | Goal of Treatment | Description of Treatment | Other Site Treatments or Notes |
|-----------------|-----------|------------|-----------------------|---|---|---|
| L | 38.22408 | -80.218676 | 1 | Create a savannah feel; low density of trees with wildflowers below | For 200' on both sides of the road*, remove suppressed trees and maintain over story dominant and co-dominant trees. to the edge of the natural topographic shelf. Mulch downed wood. | Garlic mustard has been spotted and pulled along the road here. This problem should be addressed each spring until the problem is eliminated. |
| M | 38.228854 | -80.23525 | 0.5 | Open views to the Cranberry Glades | Cranberry Glades Overlook. For 200' along west side of road, remove small yellow birch, possibly for small pupwood or firewood sale. Leave anything of 18" and Red Spruce. Clear approximately 100' back off road to the natural drop off. | install bulletin board, interpretive sign |
| N | 38.240974 | -80.240377 | 1.3 | Open views to mountains | For 100' along road, clear beech less than 4' DBH. Leave Red Spruce | |
| O | 38.246981 | -80.240508 | 0.3 | Create clearer and wider views of the mountains and valleys | Williams River Overlook. Clear all non-evergreen trees in the stretch from the toilet building to the clump of red spruce to the north. Clear from the bottom of the slope to the mid ground views (approximately 300'). Species to be cleared include but are not limited to yellow birch, red maple, and black cherry | Install bulletin board, replace interpretive sign |
| P | 38.268984 | -80.239702 | 1.6 | Open views of mountains and valley beyond | Big Spruce Overlook. Clear deciduous shrubs and trees in the middle ground (about 300' or more from pavement) between the toilet building to the north and the large spruce clump to the south. Maintain red spruce, serviceberry and mountain ash. Clear yellow birch, red maple and sugar maple | Install bulletin board, replace interpretive sign |
| Q | 38.27355 | -80.236017 | 0.5 | Maintain middle ground view | For 200' along both sides of road, create/maintain a jagged spruce edge. Clear uphill, maintaining low density of red spruce. Maintain jagged edge. | N/A |

* When a distance along road is given for thinning, assume point given is center of the stretch to be treated unless otherwise indicated.

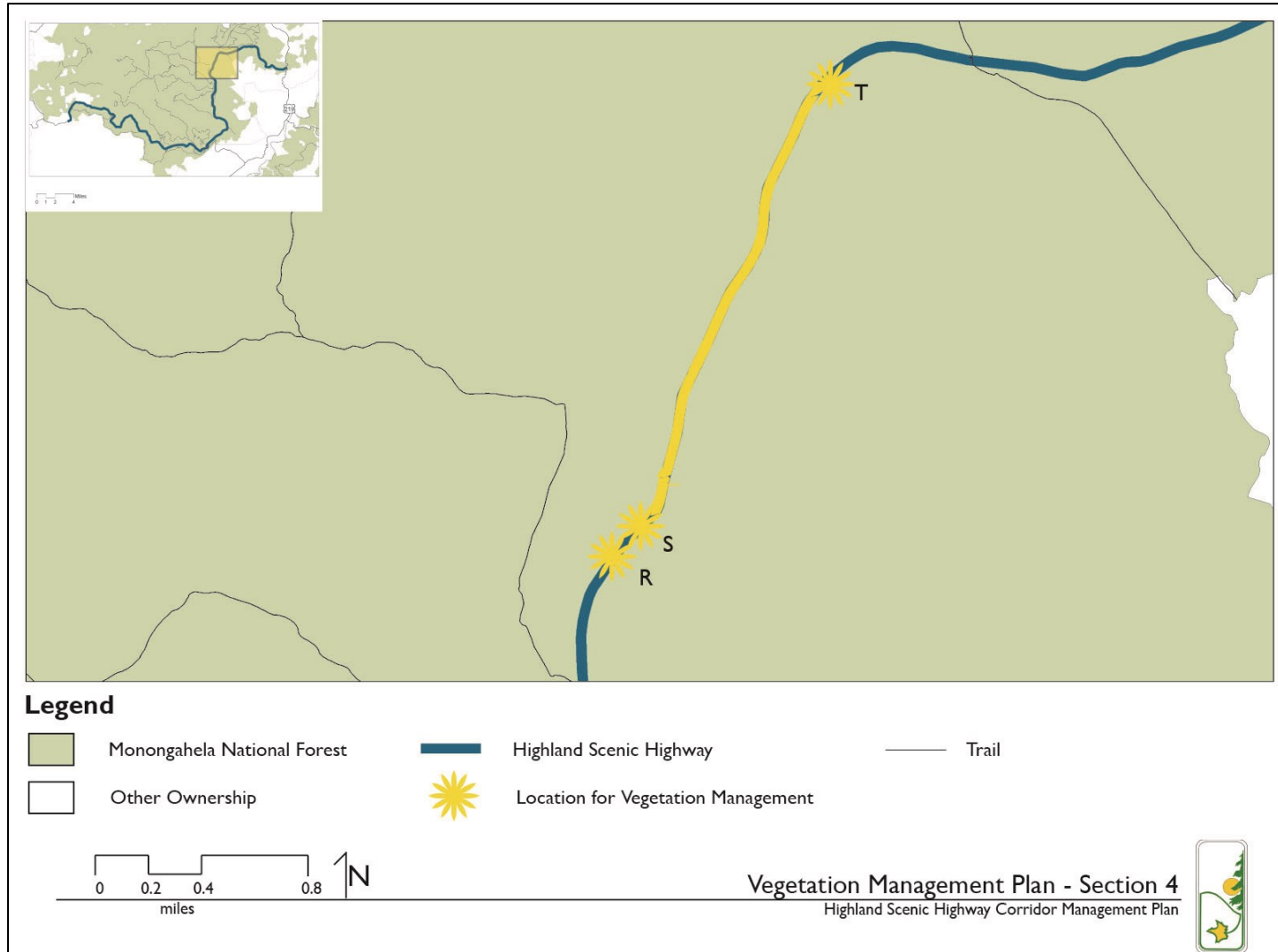
Section 3 Location Images

| Point Letter ID | Goal | Image |
|-----------------|---|--|
| L | Create a savannah feel; low density of trees with wildflowers below |  |
| M | Open views to the Cranberry Glades |  |

| | | | | |
|---|---|--|--|--|
| N | Open views to mountains | |  | |
| O | Create clearer and wider views of the mountains and valleys | |  | |

| | | | | |
|----------|--|--|--|--|
| <p>P</p> | <p>Open views of mountains and valley beyond</p> | |  | |
| <p>Q</p> | <p>Maintain middle ground view</p> | |  | |

Section B4





Section 4 Map

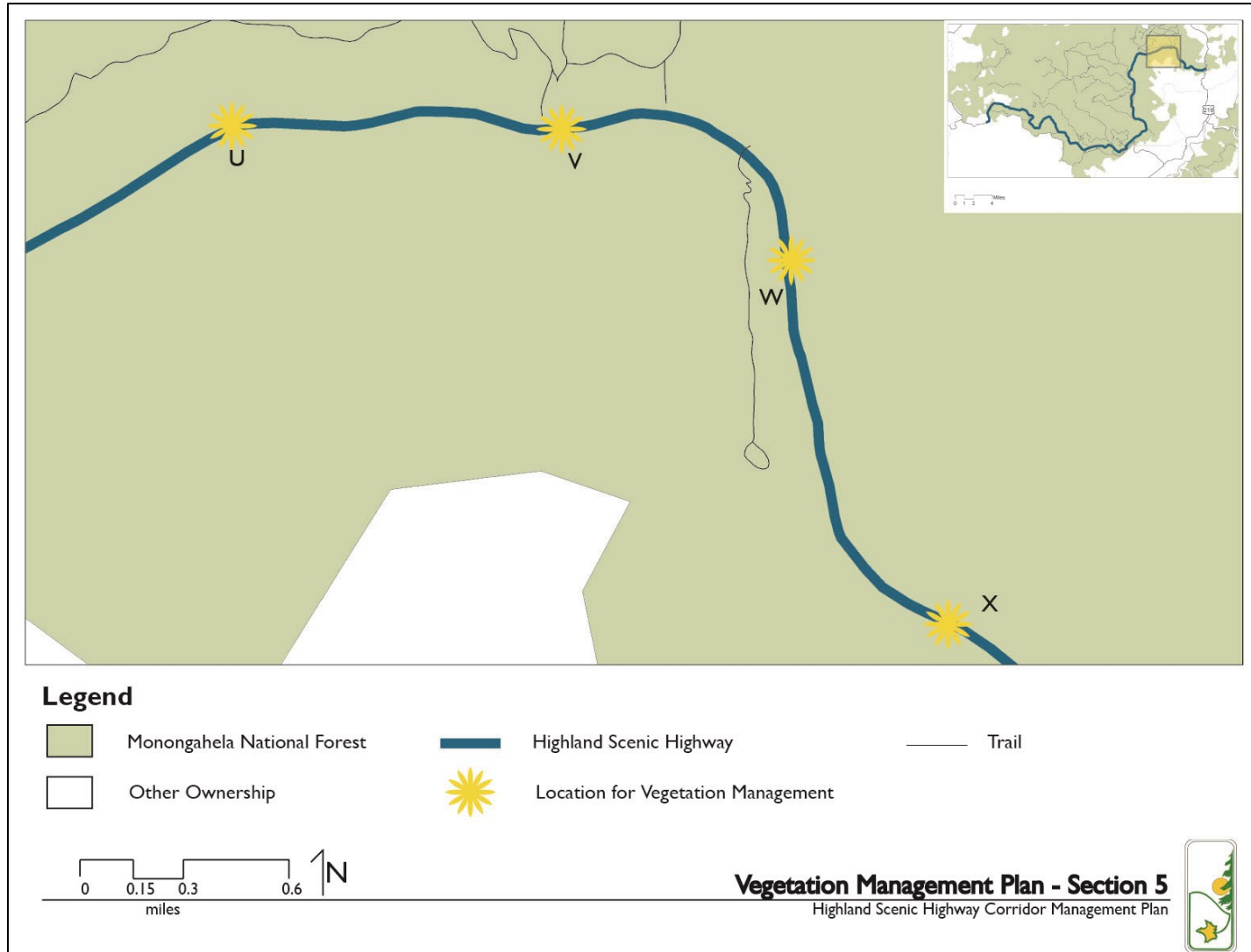
Section 4 Location Descriptions

| Point Letter ID | Latitude | Longitude | Miles from last point | Goal of Treatment | Description of Treatment | Other Site Treatments or Notes |
|---|---------------------|------------------------|-----------------------|--|--|--------------------------------|
| R | 38.303817 | -80.246567 | 2.2 | Open views to mountain below | For 200' along east side of road, clear to within 100' of stream (maintain riparian buffer). Leave red spruce, trees greater than 18" DBH, magnolia, black cherry and service berry. | N/A |
| S, T | 38.307291, 38.32931 | -80.242855, -80.232038 | 0.1-1.6 | Allow a clear view of the adjacent mountains as you descend or ascend the hill | On east side of road, clear to within 100' of stream (maintain riparian buffer). Leave red spruce, trees greater than 18" DBH, magnolia, black cherry and service berry. | N/A |
| * When a distance along road is given for thinning, assume point given is center of the stretch to be treated unless otherwise indicated. | | | | | | |

Section 4 Location Images

| Point Letter ID | Goal | Image |
|-----------------|--|--|
| R | Open views to the mountains below |  |
| S,T | Allow a clear view of the adjacent mountains as you descend or ascend the hill |  |

Section B5






Section 5 Map

Section 5 Treatment Descriptions

| Point Letter ID | Latitude | Longitude | Miles from last point | Goal of Treatment | Description of Treatment | Other Site Treatments or Notes |
|---|-----------|------------|-----------------------|--|---|---|
| U | 38.3406 | -80.182717 | 3.1 | Enable viewing of higher mountain ridges | For 200' along south side of road, strategically thin trees at bottom of slope to remove trees at eye level or above. May be within existing sale area. | N/A |
| V | 38.340258 | -80.164186 | 0.9 | Open views of valley and mountains | Little Laurel Overlook. Clear deciduous trees and shrubs about 100' down slope from toilet to large sugar maple to east. | Install bulletin board, replace interpretive sign |
| W | 38.334716 | -80.151867 | 1 | Maintain vista to Crooked Fork | For 500' along north of road, maintain trees at or below eye level. This may be merchantable. | N/A |
| X | 38.319667 | -80.144017 | 1.2 | Maintain view of pastoral landscape | For about 200' along north of road, harvest-merchantable size- about 20 of largest trees. Maintain trees at eye level. | N/A |
| * When a distance along road is given for thinning, assume point given is center of the stretch to be treated unless otherwise indicated. | | | | | | |

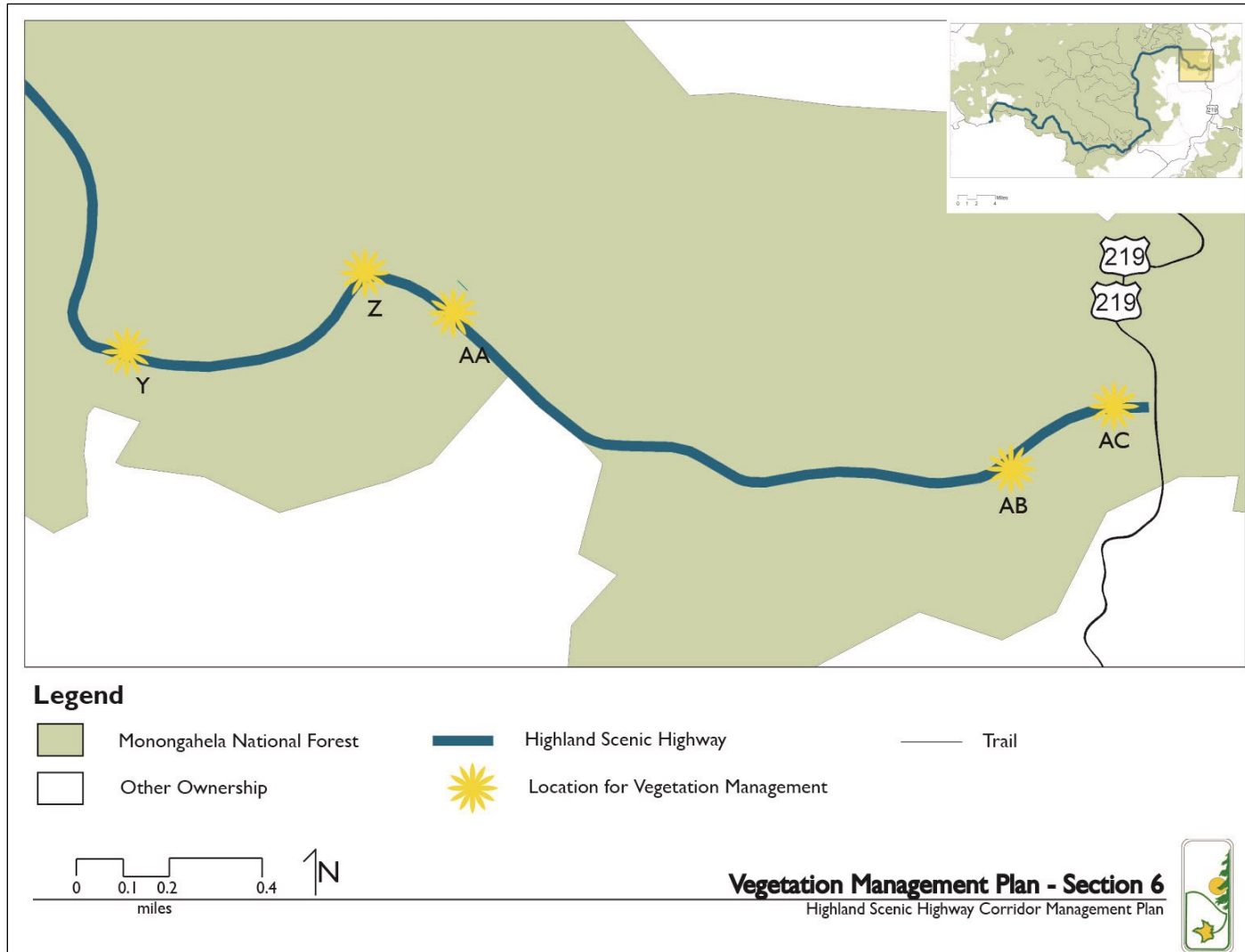
Section 5 Location Images

| Point Letter ID | Goal | Image |
|-----------------|--|--|
| U | Enable viewing of higher mountain ridges |  A photograph showing a view of a mountain ridge covered in dense green forest. In the foreground, a brown metal guardrail runs along the edge of a road. The sky is overcast and grey. |

| | | |
|---|------------------------------------|--|
| V | Open views of valley and mountains |  |
| W | Maintain vista to Crooked Fork |  |

| | | |
|---|-------------------------------------|---|
| X | Maintain view of pastoral landscape |  |
|---|-------------------------------------|---|

Section B6






Section 6 Map


Section 6 Treatment Descriptions

| Point Letter ID | Latitude | Longitude | Miles from last point | Goal of Treatment | Description of Treatment | Other Site Treatments or Notes |
|---|-----------|------------|-----------------------|---|---|--|
| Y | 38.309514 | -80.137205 | 0.6 | Maintain the view to the valley and mountains | Red Lick Overlook. Clear locust to the left and right of parking area to create a 180 degree view. Remove brush from parking area to current cut line down slope, and maintain trees beyond cut area at eye level or below. When heading east on HSH for 0.1 miles, trees should also be maintained at or below eye level | Install bulletin board, replace interpretive sign |
| Z | 38.310967 | -80.125516 | 0.4 | Open views of valley and distant mountains | For 200' along south of road*, maintain trees at eye level or below for 100' from road, 200' stretch. | N/A |
| AA | 38.31045 | -80.1218 | 0.2 | Maintain views of valley and mountains | For 200' along north road and for 300' down slope, the shrubs should be maintained below eye level. Trees located at 300' down slope should also be maintained below eye level. | N/A |
| AB | 38.30455 | -80.10023 | 1.4 | Open views of pastoral landscape | For 200' along north of road, fell trees above eye level north of road and east of riparian zone. Merchantable timber with limited access | N/A |
| AC | 38.306765 | -80.096113 | 0.3 | Open views to the northwest of parking lot and create dramatic views for the eastern gateway of the highway | East Gateway. Thin tallest trees to northwest of parking area so ridgeline is visible. Leave diverse mix of trees. | Replace entrance sign, replace kiosk to match standard design. |
| * When a distance along road is given for thinning, assume point given is center of the stretch to be treated unless otherwise indicated. | | | | | | |

Section 6 Location Images

| Point Letter ID | Goal | Image | |
|-----------------|---|-------|--|
| Y | Maintain the view to the valley and mountains | |  |
| Z | Open views of valley and distant mountains | |  |

| | | |
|-----------|---|---|
| <p>AA</p> | <p>Maintain views of valley and mountains</p> |  |
| <p>AB</p> | <p>Open views of pastoral landscape</p> |  |

| | | |
|-----------|---|--|
| <p>AC</p> | <p>Open views to the northwest of parking lot and create dramatic views from the eastern gateway of the highway</p> |  |
|-----------|---|--|

Appendix C: Interpretive Plan & Media Design Guidelines

Executive Summary

To assist in the completion of the Highland Scenic Highway Corridor Management Plan, this Interpretive Plan guides our managers on how and what stories and concepts to tell visitors of the Monongahela National Forest as they travel across the Highland Scenic Highway. The foundations of this plan were developed from partner, public, and USDA Forest Service input. Through the implementation of the thematic approach to interpretation, the Forest hopes to reach out to both local communities and visitors to encourage a greater understanding and appreciation of the land's history and current management.

The design guidelines aim to provide guidance for the physical design and related considerations for site planning of interpretive facilities. They seek to improve the image, aesthetics, sustainability, cohesiveness, and overall quality and visitor experience of the Highland Scenic Highway National Scenic Byway. The guidelines provide defining characteristics for specific elements within the Highland Scenic Highway interpretive model. The guidelines seek to assist in the creation of visual consistency and create a lasting sense of place.