

Recreation and Wilderness

INTRODUCTION

The Monongahela National Forest (MNF) holds a key position, both geographically and socially, in the preservation of the mountain ecology and culture important to the Appalachian region. It is revered in West Virginia as a special place. The motto of the State of West Virginia is, “Mountaineers are always free.” The mountains of the Monongahela, in a literal sense, define the character of the State embodied in that motto. The Forest consists of the largest expanse of undeveloped public land in West Virginia, and stands in sharp contrast to other areas of the State that have been impacted by extractive industries. In this sense, the Monongahela is a place where nature has been relatively free to exist without industrial intrusion for the past 70 years. In a human sense, the freedom of the mountaineers is represented by the unconfined, unrestricted recreation opportunities available on the Forest, which is a natural and inviting escape for those seeking dispersed or developed recreation in a natural setting.

The national importance of the recreation resource of the Monongahela has been recognized through the designation of the Spruce Knob–Seneca Rocks National Recreation Area (NRA), the first NRA in the Forest Service, National Scenic Byway status for the Highland Scenic Highway, five Congressionally designated Wildernesses, and seven National Natural Landmarks.

The desired condition for recreation management on the Monongahela, as specified in the 2006 Forest Plan, is to offer a wide spectrum of recreational opportunities. The Management Prescriptions (MPs) in the Forest Plan provide for a variety of recreational settings, from semi-primitive backcountry, to roaded areas with motorized access, to developed recreation complexes that include campgrounds, picnic areas, boating facilities, and visitor centers. Dispersed recreation opportunities abound for hiking, backpacking, fishing, hunting, mountain biking, horseback riding, and so on. Developed sites provide the tourism destination facilities and base camps important to the efforts of local convention and visitor bureaus, local communities, and other non-government agencies.

The Monongahela strives to be a good neighbor in our cooperation with surrounding communities and counties. The Forest supports tourism and recreation marketing efforts through partnerships, accessible recreation programs, and recreation opportunities in concert with the ecological capability of the land. This support benefits the economic and social fabric of the small communities that make up our local neighborhood. These efforts help enable the Forest to manage for quality recreation opportunities within the sustainable capabilities of the ecosystem, as in the Vision Statement of the National Recreation Agenda.

Need For Change

One of the major Need For Change topics that helped generate Forest Plan revision for the Monongahela was Backcountry Recreation. When asked to identify issues or concerns for revision during the scoping process, many people focused on opportunities to recreate in a backcountry setting. Some people were supportive of this type of use and wanted to see more

opportunities in the future, including large areas of the Forest recommended for Wilderness designation. Others felt that there were more than enough backcountry opportunities on the Forest now, and that Wilderness recommendation and designation would prevent them from using and enjoying the Forest in the traditional ways they have in the past.

Issues and Indicators

Issue Statement

Forest Plan management strategies may affect the amount of backcountry recreation areas offered by the Forest, including areas recommended for Wilderness.

Background

The 1986 Forest Plan emphasizes backcountry recreation on approximately 124,500 acres of primarily semi-primitive non-motorized (SPNM) landscapes, as described for MP 6.2. Over 78,000 acres of congressionally designated Wilderness (MP 5.0) also support this type of management emphasis. The combined MP 6.2 and 5.0 areas that emphasize backcountry recreation make up an estimated 22 percent of the Forest.

As one of the six decisions made in Forest Plan revision, the Forest re-inventoried its roadless areas in order to evaluate those areas for wilderness potential. The Roadless Area Inventory process looked at all existing MP 6.2 areas, Roadless Area Review and Evaluation (RARE II) areas, areas inventoried for the Roadless Area Conservation Rule and any area 5,000 acres or greater with less than ½ mile of improved road per 1,000 acres to determine if they qualified as Inventoried Roadless Areas (IRAs). We also reviewed other areas between 1,000 and 5,000 acres and not adjacent to existing Wilderness, but these areas were not evaluated in detail because they typically had a combination of characteristics that resulted in inadequate settings and opportunities for a wilderness experience. These characteristics included narrow or amoeba-like shape, miles of improved roads, and proximity to the sights and sounds of development.

The inventoried areas provide the best opportunities for 6.2 management, as well as the best pool for potential Wilderness recommendations. As there are no recommended Wilderness areas in the 1986 Forest Plan, a new MP (5.1) was created for Forest Plan revision to represent Wilderness Study Areas.

This issue explores the question of whether the current mix of management emphasis associated with backcountry recreation is an appropriate amount and distribution across the Forest. It also looks at how much if any area should be added to that mix in the form of recommended Wilderness. Finally, the analysis explores how backcountry recreation opportunities under each alternative would fit into and affect the overall context of recreation opportunities on the Forest and within the State of West Virginia.

Indicators

The indicators used to measure effects on this issue are:

- Acres of MP 6.2 (Backcountry Recreation) by alternative
- Acres of MP 8.1 SPNM (backcountry recreation within the NRA) by alternative
- Acres of MP 5.1 (Recommended Wilderness) by alternative
- Total Acres of Backcountry Recreation opportunities (5.0, 5.1, 6.2, 8.1 SPNM) by alternative
- Recreation Opportunity Spectrum (ROS) Class distribution by alternative
- Percent contribution to backcountry recreation opportunities in West Virginia by alternative.

Scope of the Analysis

The affected area for direct and indirect effects to recreation opportunities, including backcountry and Wilderness, are the lands administered by the MNF in West Virginia. This area represents National Forest System (NFS) land where backcountry recreation opportunities may occur, depending on MP allocations in the Forest Plan. The affected area for cumulative effects includes all public lands within the State of West Virginia that may provide backcountry recreation opportunities. Cumulative effects of backcountry opportunities on other public lands are addressed to lend a broader perspective to the importance of the opportunities and settings on the Forest. Effects are assessed for the next planning period (10-15 years) but may extend for longer duration, depending on future management or Congressional decisions.

CURRENT CONDITIONS

The affected environment includes an overview of national, regional, and local recreation trends, the ROS, and existing recreation opportunities and facilities available on the Forest.

Leisure and Outdoor Recreation Trends

National Recreation

By far the most popular forms of outdoor leisure are those that can be enjoyed close to home and that do not usually require large outlays of time and money or high levels of specialized skills. These forms of outdoor activity have remained popular for years. Only consumptive activities (such as hunting) have decreased in popularity (Cordell and Overdevest 2001). Based on the 2002 National Visitor Use Monitoring (NVUM) Report, over 214 million visits occurred on NFS land in 2001. Additionally, there were an estimated 215 million occasions of people viewing National Forest scenery from non-Forest Service roads.

Recently, there have been a number of new forms of outdoor recreational activities as well as acceleration in the growth of activities that have been popular for decades. The fastest growing outdoor recreation activities are hiking, backpacking, birding, off-road driving, snowmobiling, downhill skiing, walking, and swimming. New activities are often the result of advances in outdoor equipment technology and an increased interest in risk and sense of adventure. Overall, trends point to much greater interest in viewing and learning activities, trail activities, winter sports, motorized participation, and high technology activities. Among the four regions of the country, growth in recreation participation is highest in the South, next highest in the Northeast, and slowest in the North-Central (Cordell and Overdevest 2001).

The demographic makeup of outdoor recreation participants has been shifting. In part, these shifts reflect changes in the makeup of the U.S. population. However, some demographic changes also represent a shift in group preferences. Across demographic groups, Americans took more trips for outdoor recreation in the 1990s than the 1980s. Across a variety of activities, the percentage of participants who took trips away from home increased from 21 to 37 percent, and the number of trips taken per person has risen dramatically. During recreational trips from home, the number of places visited on the trip has also increased (Cordell et al. 1997). National participation trends among 21 selected outdoor recreation activities from 1983 to 2000 are displayed in Table RE-1.

Table RE-1. National Participation Trends in Outdoor Recreation Activities, 1983-2000
(In millions of participants 16 years and older)

Activity	1983	1995	2000	Change (1983-2000)	Percent Change (1983-2000)
Backpacking	8.8	15.2	27.9	19.1	217%
Bicycling	56.5	57.4	86.2	29.7	53%
Bird watching	21.2	54.1	38.2	17	80%
Boating (overall)	49.5	58.1	76.7	27.2	55%
Camping (developed)	30	41.5	41.3	11.3	38%
Camping (primitive)	17.7	28	25.8	8.1	46%
Cross-country skiing	5.3	6.5	8.8	3.5	66%
Downhill skiing	10.6	16.8	19.3	8.7	82%
Fishing	60.1	57.8	67.9	7.8	13%
Hiking	24.7	47.8	69.8	45.1	183%
Horseback riding	15.9	14.3	23.1	7.2	45%
Hunting	21.2	18.6	20.9	-0.3	-1%
Motorboating	33.6	47	48.2	14.6	43%
Off-road driving	19.4	27.9	35	15.6	80%
Picnicking	84.8	98.3	118.3	33.5	40%
Sailing	10.6	9.6	10.9	0.3	3%
Sightseeing	81.3	113.4	108.6	27.3	34%
Snowmobiling	5.3	7.1	10.7	5.4	102%
Swimming (river, lake, ocean)	56.5	78.1	94.8	38.3	68%
Walking	93.6	133.7	172.3	78.7	84%
Water skiing	15.9	17.9	15.7	-0.2	-1%

National Wilderness

Wilderness is an important component in global health, contributing to clean air and water, protecting ecosystems and gene pools, and helping to regulate world climates. In 1993 there were a total of 3,576,656 square miles of protected areas in the world. This represents about 6.3 percent of the total world land base. Hectares of wilderness represent 9 percent of the total protected areas and 0.6 percent of the total world land base.

Since passage of the Wilderness Act in 1964, the National Wilderness Preservation System has grown from about 9 million acres to 104 million acres in the United States. The National Park Service manages 43 million acres (45%), the Fish and Wildlife Service 21 million acres (20%), the Forest Service 35 million acres (29%), and the Bureau of Land Management 5 million acres (5%). The Forest Service manages an estimated 63 percent of the Wilderness in the lower 48 states, with almost 400 of the 630 units in the system. One acre in six of the National Forest System is now in the National Wilderness Preservation System. Wilderness and the most remote recreational opportunities are heavily concentrated in the Western United States. Due to fewer people and more wild lands, the effective availability of Wilderness and the majority of remote recreational opportunities are about 15 times greater in the West than the East.

National Forest Wilderness recreation use is predicted to grow from about 9 million visits in 1990 to an estimated 24.5 million visits in 2030 (Cordell 1999). Growth in recreation use of Wilderness is expected to be slow to moderate between 1990 and 2010, with an increase of 6 million visits over this 20-year period. The National Forest Visitor Use Monitoring (NVUM) Report indicates that there were 12.7 million visits to NFS-administered Wildernesses in 2002. This number represents about 6 percent of the total Forest Service recreation use. Recreation is one of the many values associated with Wilderness areas. Other values include but are not limited to long-term environmental monitoring, scenic backdrops for tourism, watershed protection, and fish and wildlife refugia.

Regional and Local Recreation

Table RE-2 shows the percentage of U.S. and Regional populations (16 years and older) participating in different types of land-based outdoor recreation activities in 1983 and 1995.

The West Virginia Department of Tourism Annual 2001 Report indicates that 22 million visitors traveled to the State and spent over \$3.1 billion dollars, with a total economic impact of \$4.86 billion. Included were 8.6 million visitors who stayed overnight, with an average stay of 3.72 days/person. Leisure expenditures were \$69.50/person/day. The 2001 Report included:

- The most popular outdoor recreation activities that visitors participated in were: Site-seeing (20%), Visiting Parks (17.8%), Hiking/Mountain Biking (15.5%), Visiting Historic sites (10.1%), Hunting/Fishing (8.6%), and Camping (6.8%).
- Visitors to West Virginia were primarily from the following states: Ohio (16.4%), Virginia (9.3%), Pennsylvania (8.1%) Maryland (7.5%), Kentucky (5.4%), North Carolina (4.9%) and Florida (4.65).
- The top five overnight metropolitan markets were: Washington D.C., Cleveland, Pittsburgh, Charlotte, and Columbus.
- The MNF is within a day's drive of one third of the United States population.

An Economic Impact of Travel on West Virginia from 2000-2004, completed by Dean Runyan and Associates and published in June 2005, indicates that travel in 2004 generated \$3.4 billion,

which is equivalent to \$9.3 million dollars per day. This is an increase of about 65 percent from the \$2.2 billion generated in 2000. The study also indicates that 49% of dollars spent was for day travel, 32% for hotels, motel, and resort, 16% for private homes, 2% for vacation homes, and 1% for campgrounds. The Arts, Entertainment and Recreation category generated about \$315 million in 2003. The Potomac Highlands Region, which includes most of the Monongahela National Forest, increased from about \$195 million in 2000 to about \$239 million in 2004.

Table RE-2. National and Regional Participation in Outdoor Recreation Activities, 1983 and 1995

Activity	Percent in 1983 National	Percent in 1983 Regional	Percent in 1995 National	Percent in 1995 Regional
Walking	53%	49%	67%	64%
Sightseeing	46%	41%	57%	54%
Picnicking	48%	40%	49%	45%
Swimming	32%	30%	39%	37%
Fishing	34%	39%	29%	32%
Boating (overall)	28%	24%	29%	29%
Bicycling	32%	27%	29%	25%
Bird watching	12%	27%	8%	26%
Motorboating	19%	18%	24%	24%
Hiking	14%	9%	24%	19%
Camping (developed)	17%	14%	21%	17%
Camping (primitive)	17%	14%	21%	17%
Off-road driving	11%	9%	14%	15%
Hunting	12%	15%	9%	11%
Water skiing	9%	10%	9%	9%
Horseback riding	9%	8%	7%	7%
Downhill skiing	6%	3%	8%	6%
Backpacking	5%	3%	8%	6%
Sailing	6%	4%	5%	4%
Snowmobiling	3%	0%	4%	1%
Cross-country skiing	3%	0%	3%	1%

The 2001 visitor survey (Shifflet 2002) indicates that one of the primary attractions of West Virginia is outdoor recreation activities, while areas of concern identified by visitors are the quality of restaurants and accommodations.

The MNF provides over 50 percent of the public land available for outdoor recreation in the State of West Virginia.

In 2001 over one million hunting and fishing licenses provided over \$15.5 million in revenues to the State, including 71,201 conservation stamps to non-residents.

There are 9 State forests and 41 State parks totaling over 200,000 acres in West Virginia. In general, State managed parks have significant development and provide more developed

recreation and leisure activities than most MNF facilities. Some State parks and forests have fairly large tracts of lands that currently offer backcountry recreation opportunities in a natural setting. However, the vast majority of these lands are available for timber harvest and other revenue-generating activities for the State.

Regional and Local Wilderness

As the remainder of the country becomes increasingly populated, it is reasonable to assume that the relatively uncrowded State of West Virginia will become more attractive for those seeking to recreate in a more remote and natural setting.

In West Virginia, NFS lands, and to a lesser extent State lands, are almost the exclusive providers of public SPNM recreation opportunities.

Designated Wilderness (MP 5.0) - The MNF contains five Wildernesses totaling over 78,000 acres, or about 8.6 percent of the entire Forest. Only Congress can create or change Wilderness status; therefore, all alternatives have the same amount of Designated Wilderness. Table RE-3 shows the official acres for each Wilderness as described in the 1986 Plan.

Table RE-3. Designated Wilderness for all Alternatives

Wilderness	Cranberry	Dolly Sods	Laurel Fork North	Laurel Fork South	Otter Creek	Total
Acres	35,864	10,215	6,055	5,997	20,000	78,131

For Forest Plan revision, we have consistently measured Dolly Sods to have about 550 acres more than the official figure shown above. We believe this is likely due to a mapping error that occurred when this area was originally designated. Apparently, the Scenic Area and General Forest Area within the Wilderness boundary were included in the original official acreage but two Special Areas (Fisher Spring Run Bog and Rohrbaugh Plains Bog) were not. These two areas comprise approximately 550 acres. We feel that because these areas are inside the Wilderness boundary they should be acknowledged and managed as Wilderness, so we have included them in our wilderness-related calculations for Forest Plan revision. Thus, the MP 5.0 acres are measured and rounded to 78,700, even though the official Wilderness acres are 78,131.

National Visitor Use Monitoring (NVUM) was completed on the Forest from October 1, 2002 to September 30, 2003. The results indicate an estimated 38,590 visits to the five Wildernesses on the Forest, which is about 3 percent of the total recreation use.

Semi-Primitive Non-Motorized (SPNM) Opportunities - There are currently 78,700 acres of the Forest in MP 5.0 (Designated Wilderness) and roughly 124,500 acres in MP 6.2 (Backcountry Recreation). Both of these prescriptions emphasize SPNM recreation opportunities, and together they represent about 22 percent of the Forest's land base.

Recreation Opportunities and Facilities on the Monongahela National Forest

The MNF is a major outdoor recreation attraction in the State of West Virginia. Visitor use estimates indicate that the Forest received about 1.3 million visits in fiscal year 2003. The Forest provides over 50 percent of the forested public recreation lands in the State of West Virginia. Forest Plan revision does not identify any major new developments, although existing facilities may be rehabilitated or reconstructed to meet visitor expectations and demand, correct health and safety issues, and provide accessible facilities. Many of the Forest's recreation facilities and activity units are listed in Table RE-4.

Table RE-4. Recreation Facilities and Activity Units on the Forest

Facility, Unit, or Activity	Number
Campgrounds	29
Picnic Areas	14
Information/Observation Sites	24
Trailheads	79
Developed Fishing Sites	4
Cabins	1
Visitor Centers	2
Developed Dispersed Sites	44
Scenic Highway	1
General Forest Areas (Concentrated Use Areas)	60
General Forest Areas (Individual Sites)	250
Caves	257
Significant Caves	11
Wilderness Areas	5
Official Wilderness Acres	78,131
Trails (total miles)	852
Trails (miles in Wilderness)	148
Trails (miles of motorized)	0
Recreation Special Uses	78
Eligible Wild and Scenic Rivers	12
Eligible Wild and Scenic Rivers (miles)	260

Recreation activity participation statistics in Table RE-5 are the results of the NVUM Program. The numbers are averages based on surveys completed on the MNF in fiscal year 2003. Only the top 10 activities have been listed.

Table RE-5. Most Popular Recreation Activities on the Forest

Activity	Percent Participation
1. Viewing Natural Features (scenery, flowers, etc)	59%
2. Viewing Wildlife, Birds	55%
3. Hiking/Walking	47%
4. General/ Other (relaxing, hanging out, escaping noise and heat)	46%
5. Driving for Pleasure	35%
6. Fishing	26%
7. Nature Center Activities	20%
8. Camping, Developed Sites	15%
9. Picnicking	15%
10. Downhill Skiing	11%

Note. Bicycling (mountain biking) was 5.1%, and horseback riding was 0.25%.

The Recreation Opportunity Spectrum (ROS) is a national recreation-planning framework that combines physical, social, and managerial settings to help define a range of outdoor recreation conditions, activities and opportunities. Table RE-6 summarizes the general recreation opportunities and settings expected by ROS Class. Complete descriptions are located in the 1982 ROS Planning Guide, pages 6-8.

Table RE-6. ROS Class Setting Descriptions

ROS Class	Description of Recreation Opportunity Setting
Primitive (P)	Very high probability of solitude, closeness to nature, challenge and risk; essentially unmodified natural environment; minimal evidence of others; few restrictions evident; non-motorized access and travel on trails or cross country.
Semi-Primitive Non-Motorized (SPNM)	High probability of solitude, closeness to nature, challenge and risk; predominantly natural or natural-appearing environment; some evidence of others; minimum of subtle, on-site controls; non-motorized access and travel on trails, some primitive roads or cross-country.
Semi-Primitive Motorized (SPM)	Moderate probability of solitude, closeness to nature, and degree of challenge and risk when using or not using motorized equipment; predominantly natural-appearing environment; few users but evidence on trails; minimum of subtle, on-site controls.
Roaded Natural (RN)	Opportunity to be with other users in developed sites, little challenge or risk; predominantly natural-appearing environment as viewed from sensitive roads and trails with moderate evidence of human sights and sounds; moderate concentration of users at campsites; some obvious user control; access and travel is standard motorized vehicles; resource modification and utilization practices are evident but harmonize with the natural environment.
Roaded Modified (RM)	Opportunity to get away from other users, easy access, little challenge or risk; substantially modified environment (roads, timber harvest units, slash, etc.); little evidence of other users except on roads; little regulation of users except on roads; standard motorized use.
Rural (R)	Opportunity to be with others is important as is facility convenience; little challenge or risk except for activities like downhill skiing; natural environment is culturally modified; high interaction among users; obvious on-site controls; access and travel facilities are for intensified motorized use.

ROS Class	Description of Recreation Opportunity Setting
Urban (U)	Opportunity to be with others is very important as is facility and experience convenience, challenge and risk are unimportant except for competitive sports; urbanized environment that may have a natural appearing backdrop; high interaction among large number of users; intensive on-site controls; access and travel facilities are highly intense motorized use often with mass transit supplements.

The current inventory of ROS makeup (based on 2003 inventory for Forest Plan revision) of NFS land on the Forest is described in Table RE-7 below.

Table RE-7. Current Inventoried ROS Acres on the Forest

ROS Class	Primitive	Semi-primitive Non-Motorized	Semi-primitive Motorized	Roaded Natural	Rural	Urban
Acres	0	188,000	318,000	401,000	8,000	20
Percent of Forest	0%	21%	35%	44%	<1%	<1%

The Monongahela Forest's ROS Inventory currently has little if any lands that qualify as Primitive or Urban under the descriptions below, and only 8,000 acres that are classified as Rural. An estimated 79 percent of the Forest is currently inventoried in ROS Classes that are either Roded Natural (RN) or Semi-Primitive Motorized (SPM). However, the SPM areas typically have roads that are not open for public motorized use for a variety of reasons, but usually due to wildlife habitat concerns. The estimated 56 percent of the Forest that is classified as SPNM or SPM offer semi-primitive recreation opportunities in settings where motorized use is either absent or very low.

Figure RE-1 displays the current ROS classes on the Forest, representing the existing conditions of the ROS settings described in Table RE-6, above. The map shows all lands within purchase units and the proclaimed boundary of the Forest, including private lands, which are primarily depicted by the Rural ROS Class. As noted in Table RE-7, there are only about 8,000 acres of Rural settings on NFS land within the Forest boundaries. Thus, almost all of the Rural settings (lightest shade on the map) are on private lands.

Figure RE-1. Current ROS Classes Within the Monongahela Forest Boundaries



Backcountry Recreation, Inventoried Roadless Areas, and Wilderness

There are currently an estimated 80,858 acres of federally designated Wilderness in West Virginia, including five areas totaling 78,131 acres on the MNF and an estimated 2,727 acres in the Mountain Lake Wilderness administered by the George Washington and Jefferson National Forest in Virginia. An estimated 124,500 acres are in MP 6.2. Management Prescription 6.2 is managed primarily for SPNM recreation opportunities. There are also 123,629 acres of the George Washington and Jefferson National Forests located in West Virginia, with an estimated 12,400 acres currently being managed for SPNM recreation opportunities.

Table RE-8 identifies the areas and acres that are currently being managed primarily for Remote Backcountry Recreation (SPNM). The acres in this table are slightly different than the acres reported for Alternative 1 in the Environmental Consequences section because the acres in the Environmental Consequences section have been rounded off to the nearest 100 acres.

Table RE-8. Backcountry Recreation Areas Under the 1986 Forest Plan

Remote Backcountry Areas (MP 6.2)	Acres
North Fork/Hopeville	4,637
Flat Rock/Roaring Plains	7,772
Cheat Mountain	7,527
Seneca/Gandy Creek	19,644
East Fork of Greenbrier	7,637
Laurel Fork	3,151
Canaan Mountain	13,532
Smoke Hole	2,670
Little Mountain	10,407
Peters Mountain	2,350
Tea Creek Mountain/Turkey Mountain	10,358
Cranberry Backcountry	7,890
Spice Run	7,698
Big Draft	8,006
Upper Middle Mountain	8,175
Laurel Run	3,037
Total MP 6.2 (13.5% of Forest)	124,491
Designated Wilderness (MP 5.0)*	Acres*
Cranberry Wilderness	35,900
Dolly Sods Wilderness	10,800
Laurel Fork North Wilderness	6,000
Laurel Fork South Wilderness	6,000
Otter Creek Wilderness	20,000
Total Wilderness Acres (8.6% of Forest)	78,700
Total Acres Managed Primarily for Backcountry Recreation Opportunities on the Monongahela NF (22% of Forest)	203,200

*Total acres for Wilderness in 1986 were given at 78,131. However, GIS technology now measures the total to be closer to 78,700 (see explanation on page 3-387). We have chosen to use the updated numbers for consistency with the other GIS generated numbers that we are using in plan revision.

ENVIRONMENTAL CONSEQUENCES

Resource Protection Methods

Below are the mitigation or management requirements common to all alternatives that will be used to protect recreation resources and areas, including Wilderness and Backcountry Recreation. Resource protection methods come in the form of laws, regulations, policies, FSM and FSH direction, and Forest Plan direction.

Laws, Regulations, and Policies

Numerous laws, regulations, and policies govern the management of recreation resources on NFS land. National laws and regulations have also been interpreted for implementation in Forest Service Manuals, Handbooks, and Regional Guides. All recreation management activities and facilities must comply with these laws, regulations, and policies, which are not only intended to provide general guidance for implementation, but also protection of recreation-related resources. Some of the more influential laws, regulations, and policies governing recreation management on federal lands are referenced in Table RE-9.

Table RE-9. Major Laws and Regulations Influencing Management and Protection of Recreation Resources on the Forest

Act/Law/Regulation/Policy	Date	Law/CFR/FSM/FSH Number
Organic Administration Act	06/04/1897	30 Stat. 11
Weeks Law	03/01/1911	P.L. 61-435
Granger-Thye Act	04/24/1950	P.L. 81-478
Wilderness Act	09/03/1964	P.L.88-577
Land and Water Conservation Fund Act	09/03/1964	P.L. 88-578
Architectural Barriers Act of 1968	08/12/1968	P.L. 90-480
Wild and Scenic Rivers Act	10/02/1968	P.L. 90-542
National Trails System Act	10/02/1968	P.L. 90-543
Volunteers in the National Forests Act of 1972	05/18/1972	P.L. 92-300
Eastern Wilderness Act	01/03/1975	P.L. 93-622
Code of Federal Regulations for Recreation, Wilderness, and Trail Resources		36 CFR 219.21
General Prohibitions		36 CFR 261
Forest Service Manual, Recreation, Wilderness and Related Resource Management	Updated as needed	FSM 2300
Forest Service Handbook, Recreation, Wilderness and Related Resource Management	Updated as needed	FSH 2300

Forest Plan Direction

Forest Plan direction for the management and protection of recreation resources occurs at two levels, Forest-wide and Management Prescription. For Forest Plan revision, Forest-wide direction has been expanded to include additional goals, and a clearer description of desired

conditions. Objectives, standards, and guidelines have also been rewritten in some instances to provide more concise and clearer direction, and better integration between recreation and other resources. Some 1986 Forest Plan direction has been removed, including items that were process-oriented, or that were repeating existing law or policy, or that conflicted with other resource management. In addition, the Forest will use the ROS system and Scenery Management System (SMS) on a Forest-wide basis to integrate recreation and visual concerns into all Forest management activities.

Direction for all MPs will be applied to help ensure that appropriate recreation settings and opportunities are provided for a wide range of uses and activities. MPs 6.2 and 7.0 are specifically designed to provide areas where recreation resources and uses are emphasized. Management Prescription 6.2 (Backcountry Recreation) emphasizes dispersed recreation opportunities in a predominantly SPNM ROS setting. Management Prescription 7.0 (Developed Recreation) occurs in the 1986 Forest Plan and Alternative 1, but was dropped in the 2006 Forest Plan and incorporated into other prescriptions in Alternatives 2 through 4. It was felt that these relatively small recreation complexes would be managed for developed recreation regardless of which MP encompassed them.

Management Prescriptions 5.0 (Designated Wilderness) and 5.1 (Recommended Wilderness) can also be said to have a recreation emphasis, as recreation is the primary use or activity that is managed within them. These prescriptions contain direction to manage recreation settings to their ROS classifications, to protect recreation resources, and to protect other resources from recreation activities.

Forest Plan Implementation

Almost all management activities and uses of the Forest have the potential to alter recreation settings, resources, and experiences. As a result, effects on the following recreation elements will be assessed during all project proposal analyses:

ROS Classification – Project proposals will be evaluated relative to their consistency with the ROS strategy and maps for the Forest. In most cases, projects will be designed to maintain or enhance the desired ROS classification. When a deciding official accepts a project that is not consistent with the ROS strategy, a determination is made as to whether the effects of the project to the ROS strategy warrant a Forest Plan amendment. The full effects of either of these outcomes will be analyzed.

Recreation Improvements and Developments - Proposed resource projects will be designed to protect developed recreation sites, National Forest System trails, and their associated high-quality recreation experiences. Avoidance of developed sites and improvements during site-disturbing activities will be the preferred mitigation. Facility and trail re-location, decommissioning, or closure may be other options in cases of overriding developments.

Dispersed Use – Potential effects on dispersed recreation experiences will be analyzed during new project design and analysis. When possible, adjustments to proposed activities and uses to protect dispersed recreation experiences will be the preferred mitigation.

Effects Common to All Alternatives

Recreation-related Effects Common to All Alternatives

Recreation opportunities occur on virtually every acre on NFS land. Given this, almost every management activity, as well as a wide array of disturbance events, can potentially affect recreation opportunities and experiences. Effects on these opportunities and experiences are generally the result of changes to recreation settings or level of access, or both. The relative amount of these effects may, in some cases, vary by alternative. However, they are likely to be present to some extent in all alternatives.

Effects from obvious development activities—such as timber harvest, road construction, mineral development, or special use facility construction—are potentially the greatest in areas where no evidence of such activities previously exists. The intensity of the effects also varies greatly with the intensity of the development activity. Concentrated even-aged harvests have a much greater impact on recreational settings, for example, than dispersed individual tree selection cuts. Short-term and temporary effects are created by all such activities during development operations. Effects can include increased noise and dust levels, and increased use of narrow back roads by large equipment and vehicles. Most users are displaced to other locations during these active operation periods. Facility development typically creates long-term effects to recreation settings.

Development with associated road construction also improves access to an area, which can lead to increased use, and displacement of some users who prefer less developed settings and more primitive opportunities. These shifts in opportunities can be long term, as roads are typically long-lasting features. However, actions such as road closures, decommissioning, or travel restrictions can mitigate these shifts to some extent.

Development activities can also have beneficial effects to recreationists. Timber harvests can remove dead and diseased trees, and add diversity to the visual landscape over the long term. They can also provide firewood-gathering opportunities. Improved roads and campgrounds can increase user comfort and safety. New roads and trails can facilitate access into areas for recreation, or create new opportunities for motorized recreation. Prescribed burning can have the temporary effect of displacing users, but it can also reduce understory vegetation and improve sight distances, settings, and off-trail access over the short and long term.

In addition, general effects to and from the Forest's recreation program are highlighted below.

Recreation System Planning - Recreation system planning will continue to emphasize semi-primitive forms of recreation requiring a large land base, and developed sites will continue to be provided to support that use where the private sector is unlikely to meet visitor demand. The ROS system will be the primary tool used for all recreation planning. Recreational settings will be managed to provide a mix of recreation opportunities, protect natural resource values, and promote visitor safety.

Developed Recreation - The Forest will give priority to the rehabilitation and upgrading of existing sites and provide additional recreation facilities where needed and the private sector is not likely to meet the demand. Developed sites will be designed to compliment adjacent ROS settings. Accessible facilities are provided based on the ROS setting and development scale for the area.

General Forest Environment Areas - Management of general forest areas will remain consistent with the 1986 Forest Plan management direction. Camping will be limited to 14 days in a specific location unless approved by the line officer. Dispersed camping will be permitted unless resource damage or visitor conflicts cannot be mitigated. Unacceptable or irresolvable activities may be prohibited by a closure order. Facilities are permitted but will be consistent with the ROS class. Caves are available for public recreation unless prohibited or restricted by a closure order.

Trails - A system of trails that supports a wide variety of recreation opportunities and settings continues to be a goal. The maintenance and/or relocation of existing trails should take priority over new trail construction. The 2006 Forest Plan has a new objective to develop a Forest-wide trail management plan to establish trail classes, permitted uses, and construction, reconstruction, and maintenance priorities. This trail planning is scheduled to occur in 2005 and 2006.

Scenery Management and Recreation Opportunity Spectrum - Landscape Aesthetics, The Scenery Management System Handbook will replace the National Forest Landscape Management Handbook as the primary tool use to manage scenery and landscapes across the Forest. Because the Forest was mapped by scenery concern levels (high, medium, and low) and not by MP, the Scenic Integrity Objectives do not change by alternative. Site-specific scenic effects will be analyzed on a project-level basis. The ROS will continue to be used as the primary tool to manage recreation opportunities and settings across the Forest.

Recreation Special Uses - Recreation special use permit applications will continue to be considered, analyzed, processed and administered consistent with national policy, management direction, and Forest protocols.

Spruce Knob-Seneca Rocks National Recreation Area (NRA) - The NRA will continue to be managed in accordance with the Act of September 28, 1965, with an emphasis to provide a range of high quality recreation opportunities in the appropriate Rural, RN, and SPNM ROS settings. Existing and desired future ROS conditions can be used to manage the area over time.

Effects to Backcountry Recreation Opportunities

Applied to any alternative, MPs 5.0, 5.1 and 6.2 would provide high-quality backcountry recreation opportunities in a SPNM setting. The same can be said for SPNM areas within MP 8.1 (the NRA). Trail systems in most areas facilitate challenging activities such as hiking, backpacking, mountain biking, hunting, orienteering, and equestrian use. Rivers and creeks provide fishing and float-boating opportunities. Tent camping may generally occur throughout these areas with some local restrictions for resource protection.

Other signs and sounds of development activities are generally low to non-existent. Facilities and structures are generally prohibited or absent. Programmed commercial timber harvest and road construction are typically not allowed. For the most part, ecological processes would affect vegetation, although some prescribed burning or low-level restoration treatments could occur under MPs 6.2, 5.1, and 8.1 SPNM. Any treatments would have to be designed so that they do not alter the overall undeveloped character of the area. For those seeking a natural setting in which to recreate, the lack or scarcity of management would be a benefit. However, the vegetation would likely trend toward a decrease in age class diversity and an increase in age, density, and fuels, resulting in increased insect and disease activity, which could negatively affect the visual landscape.

Public motorized use would not occur. Very low levels of intermittent administrative motorized use may occur in MPs 5.1, 6.2, and 8.1 SPNM areas. The amount of NFS lands in 5.0, 5.1, 6.2, and 8.1 SPNM MPs indirectly affects the amount of NFS lands that are available for public motorized use elsewhere on the Forest.

Range allotments and cattle grazing are largely non-existent in current and proposed backcountry recreation areas. Mineral exploration and development have been withdrawn from MP 5.0 areas, although these activities may occur in MPs 5.1, 6.2, and 8.1 areas, particularly where mineral rights are privately owned. Federal gas and oil leasing is subject to a no surface occupancy stipulation that would greatly reduce the potential for surface disturbance from mineral activities. Special use authorizations may occur but should be designed to be consistent with the recreation emphasis and direction of the area. Watershed and most wildlife management improvements are generally small and localized, and would have a negligible effect on undeveloped character or wilderness attributes. Maintained wildlife openings may have an impact, particularly during maintenance operations.

All of the above effects are assumed to be long term, in that the prescription allocations should last at least through the planning period, 10-15 years, and potentially much longer. It is possible that Congress could designate MP 5.1 areas, or even some MP 6.2 areas, as Wilderness during this period. However, this designation would not substantially change the landscape character or resource protection provided by the current prescriptions. Designation, however, would affect certain uses or forego potential values. For example, bicycling would be considered a non-conforming use, and any potential value from timber harvest or federal mineral leasing would not be realized.

Direct and Indirect Effects by Alternative

Effects to Backcountry Recreation Opportunities

This assessment focuses on those areas that, based on their overall size and management emphasis, would provide the best opportunity for backcountry recreation on the Forest. They are divided into three MP categories below: 6.2, 8.1 SPNM areas, and 5.1.

Management Prescription 6.2

Table RE-10. MP 6.2 Areas by Alternative

Alternative 1		Alternative 2		Alternative 2M		Alternative 3		Alternative 4	
Area	Acres	Area	Acres	Area	Acres	Area	Acres	Area	Acres
Big Draft	8,006	Big Draft	5,395	Big Draft	5,395	Big Draft	2,611	Cheat Mtn.	7,955
Canaan Mountain	13,532	Canaan Loop	7,850	Canaan Loop	7,850	Beaver Lick Mountain	18,611	Cranberry Expansion	12,165
Cheat Mountain	7,527	Dolly Sods North	7,215	Dolly Sods North	7,215	Canaan Mountain	13,532	Dolly Sods North	7,215
Cranberry Backcountry	7,890	East Fork Greenbrier	10,153	East Fork Greenbrier	10,153	Cranberry Backcountry	5,127	Dry Fork	739
East Fork of Greenbrier	7,637	Gaudineer	6,727	Gaudineer	6,727	Dolly Sods North	7,215	Roaring Plains North	3,119
Laurel Fork	3,151	Gauley Mtn. East	7,780	Gauley Mtn. East	7,780	Falls of Hills Creek	5,474	Roaring Plains West	6,825
Laurel Run	3,037	Gauley Mtn. West	6,624	Gauley Mtn. West	6,624	Gaudineer	6,773	Seneca Creek	13,001
Little Mountain	10,407	Middle Mountain	12,197	Lower Laurel Fork	3,177	Gauley Mtn. East	7,780		
North Fork/ Hopeville	4,637	Seneca Creek	13,001	Middle Mountain	12,197	Gauley Mtn. West	6,624		
Upper Middle Mountain	8,175	Spice Run	6,171	Roaring Plains North	3,119	Glady Fork	2,759		
Peters Mountain	2,350	Tea Creek Mountain	8,272	Roaring Plains East	2,962	Greathouse Hollow	9,729		
Flat Rock/ Roaring Plains	7,772	Turkey Mountain	6,111	Seneca Creek	13,001	Kennison Mountain	23,717		
Seneca Creek/ Gandy Creek	19,644			Spice Run	6,171	Laurel Fork	1,172		
Smoke Hole	2,670			Tea Creek Mountain	8,272	Laurel Run	3,032		
Spice Run	7,698			Turkey Mountain	6,111	Little Allegheny	6,155		
Tea Creek/ Turkey Mtn.	10,358					Little Mountain	8,072		
						Lockridge Mtn. North	8,169		
						Lockridge Mtn. South	6,541		
						Lower Laurel Fork	3,177		
						Marlin Mtn.	9,347		
						McGowen Mtn.	10,522		
						Meadow Creek North	9,682		
						Meadow Creek South	5,465		
						Middle Mtn.	12,197		
						Peters Mtn.	2,347		
						Roaring Plains East	2,962		
						Roaring Plains North	3,199		
						Spice Run	1,527		
						Tea Creek	8,272		
						U. Shavers Fork East	8,218		
						U. Shavers Fork West	5,975		
Areas	16	Areas	12	Areas	15	Areas	31	Areas	7
Total Acres*	124,500	Total Acres	97,500	Total Acres	106,800	Total Acres	225,900	Total Acres	51,000

*Rounded to the nearest 100

MP 6.2 areas emphasize backcountry recreation in a SPNM setting. Direction for these areas includes numerous constraints on management actions in order to maintain undeveloped character and backcountry recreation opportunities. Evidence of development is expected to be very low. The MP 6.2 allocations vary by alternative as seen in Table RE-10.

Alternative 1 - Allocations for the No Action Alternative 1 are based on the 1986 Forest Plan MP 6.2 allocations (see Table RE-8), and total 124,500 acres.

Alternative 2 – Allocations are based on a new Roadless Area Inventory that was conducted as part of the Need for Change in Forest Plan revision (see Appendix C to the EIS). The new inventory identified the 16 IRAs shown in Table RE-11 in the DEIS. Four of the 2006 IRAs are assigned the 5.1 MP (see Recommended Wilderness section). Eleven of the 2006 IRAs are assigned the 6.2 MP under this alternative. The remaining IRA is Seneca Creek. The portion of the Seneca Creek IRA outside of the NRA (13,001 acres) is assigned a 6.2 MP. The portion within the NRA 8.1 MP would be managed as SPNM, with similar management direction as 6.2. In addition, the North Fork Mountain (9,391 acres) and Smoke Hole (3,567 acres) areas, which did not qualify for the 2006 inventory, would also be managed as SPNM within the 8.1 MP.

A number of areas managed as MP 6.2 in the 1986 Forest Plan have been assigned a different MP under this alternative. Peters Mountain (2,350 acres), Little Mountain (10,404 acres), Lower Laurel Fork (3,151 acres), and Laurel Run (3,037 acres) are assigned a 6.1 MP, and Roaring Plains North (3,119 acres) and Cranberry Backcountry (7,890 acres) are assigned a 4.1 MP. Roaring Plains East (2,962 acres) is assigned a combination of MP 4.1 and MP 6.1. However, MP 6.2 also has several new areas that were not in the 1986 Plan, including Dolly Sods North (7,215 acres), Gaudineer (6,727 acres), Gauley Mountain East (7,780 acres), and Gauley Mountain West (6,624 acres).

Alternative 2 Modified – Alternative 2 was modified between the Draft and Final EIS based on public comments to create Alternative 2M. Thus, Alternative 2M has all of the 6.2 and 8.1 SPNM areas as Alternative 2, plus three additional areas. Roaring Plains North and Roaring Plains East were added to the Roadless Area Inventory and assigned a 6.2 MP. Although each of these areas is well under 5,000 acres, they are located on a high-elevation plateau where the sights and sounds of nearby development would be moderated by the topography. They are also buffered from development to the south and west by Roaring Plains West and to the north by Dolly Sods Wilderness. Lower Laurel Fork did not qualify for the Roadless Area Inventory, but is assigned a 6.2 primarily because of the eligible Wild and Scenic River corridor that occupies much of the area. These three areas add over 9,200 acres to MP 6.2 in Alternative 2M compared to Alternative 2.

Alternative 3 - Because this alternative emphasizes backcountry recreation, it includes the maximum potential acres and areas of MP 6.2 based on the 1986 Forest Plan areas, the 2006 Roadless Area Inventory described above in Alternative 2, and areas identified by interest groups as potential roadless areas. Eleven of the 2006 IRAs are assigned MP 5.1 (see Recommended Wilderness section) and seven of the 2006 IRAs are assigned the 6.2 MP under this alternative. In addition, the North Fork Mountain and Smoke Hole areas, which are not in the 2006 Inventory, would be managed as a SPNM ROS classification within the 8.1 MP. Areas managed

as MP 6.2 in the 1986 Forest Plan that were not included in the 2006 Inventory include Peters Mountain, Laurel Fork, Little Mountain, Cranberry Backcountry, and Laurel Run, but they would be managed as MP 6.2 under Alternative 3. Additional areas are listed in Table RE-10.

Alternative 4 – This alternative emphasizes vegetation restoration and has the least amount of MP 6.2 because it does not include any of the 1986 areas that did not qualify for the 2006 roadless inventory. Seven (Cheat Mountain, Cranberry Expansion, Dolly Sods North, Dry Fork, Roaring Plains North, Roaring Plains West, Seneca Creek) of the eighteen 2006 IRAs are assigned MP 6.2 under this alternative. No areas are assigned MP 5.1 (see Recommended Wilderness section, below). The breakdown for the remaining 12 IRAs is as follows; three areas (Middle Mountain, Big Draft, Spice Run) are assigned a 6.1 MP, seven (Canaan Loop, Gaudineer, Gauley Mountain East, Roaring Plains East, East Fork Greenbrier, Tea Creek, Turkey Mountain) are assigned a 4.1 MP, and one area (Gauley Mountain West) is assigned 3.0 MP. The remaining IRA is Seneca Creek, which would be managed as MP 6.2 outside of the NRA and as MP 8.1 SPNM within the NRA. In addition, the North Fork Mountain and Smoke Hole areas, which are not on the 2006 Inventory, would also be managed as SPNM within 8.1.

Management Prescription 8.1 SPNM

A minor Need For Change identified for Forest Plan revision was assigning the Spruce Knob – Seneca Rocks National Recreation Area (NRA) its own Management Prescription in order to highlight its national, regional, and local importance. Thus, under the action alternatives, the NRA has an 8.1 MP, but under the No Action Alternative it is represented by a mix of MPs.

The action alternatives also have MP 8.1 SPNM areas that emphasize backcountry recreation in a SPNM setting. Management direction for these areas includes numerous constraints on management actions in order to maintain undeveloped character and backcountry recreation opportunities. Evidence of development is expected to be very low, and the areas would be managed similarly to MP 6.2 (see management direction for MP 8.1 SPNM in the 2006 Forest Plan). The MP 8.1 SPNM allocations vary somewhat by alternative as seen in Table RE-11.

Table RE-11. MP 8.1 SPNM Acres by Alternative

Alternative 1		Alternative 2		Alternative 2M		Alternative 3		Alternative 4	
Area	Acres	Area	Acres	Area	Acres	Area	Acres	Area	Acres
None	0	Seneca Creek	11,973	Seneca Creek	11,973	North Fork Mountain	9,391	Seneca Creek	11,973
		North Fork Mountain	9,391	North Fork Mountain	9,391	Smoke Hole	3,567	North Fork Mountain	9,391
		Smoke Hole	3,567	Smoke Hole	3,567			Smoke Hole	3,567
Total Acres	0	Total Acres	24,900	Total Acres	24,900	Total Acres	13,000	Total Acres	24,900

Alternative 1 – The NRA does not have a separate prescription under Alternative 1, so the SPNM areas within the NRA have their original 6.2 MP allocation and are described under the MP 6.2 section below.

Alternatives 2, 2M, and 4 - MP 8.1 SPNM allocations for these alternatives are based on the three areas within the NRA that have a 6.2 MP under the 1986 Plan. Both North Fork Mountain and Smoke Hole have expanded acres compared to the 1986 Plan areas. Thus there are about 5,700 more acres that emphasize backcountry recreation in the NRA under Alternatives 2 and 2M than under Alternative 1, which represents the 1986 Plan as amended.

Alternative 3 – This alternative has two areas in MP 8.1 SPNM, totaling around 13,000 acres. The Seneca Creek area is assigned a 5.1 MP (Recommended Wilderness) under Alternative 3. Both North Fork Mountain and Smoke Hole have expanded acres compared to the 1986 Plan areas. Thus there are about 5,700 more acres that emphasize backcountry recreation in the NRA under Alternatives 3 and 4 than in Alternative 1.

Management Prescription 5.1 (Areas Recommended for Wilderness Study)

Recommended Wilderness by Alternative - MP 5.1 emphasizes maintaining wilderness character in a SPNM setting. Direction for this MP includes strong constraints on management actions that could enhance the SPNM setting or the wilderness character of each area. Evidence of development is expected to be extremely low. Although MP 5.1 does not prohibit certain activities that may be considered non-conforming under a wilderness designation, like mountain biking or wildlife opening maintenance, this allocation may increase the likelihood that these areas are eventually designated by Congress, at which time prohibitions or restrictions would apply. Appendix C includes a general effects assessment of a Wilderness vs. a non-Wilderness designation. The MP 5.1 allocations were made from the pool of the 18 Inventory Roadless Areas listed in Table RE-13. The allocations vary by alternative as seen in Table RE-12.

Table RE-12. Recommended Wilderness (MP 5.1) Areas by Alternative

Alternatives 1 and 4		Alternatives 2 and 2M		Alternative 3	
Area	Acres	Area	Acres	Area	Acres
None	0	Cheat Mountain	7,955	Big Draft	5,395
		Cranberry Expansion	12,165	Cheat Mountain	7,955
		Dry Fork	739	Cranberry Expansion	12,165
		Roaring Plains West	6,825	Dry Fork	739
				East Fork Greenbrier	10,153
				Gaudineer	6,727
				Middle Mountain	12,197
				Roaring Plains West	6,825
				Seneca Creek	24,974
				Spice Run	6,171
				Turkey Mountain	6,111
Areas	0	Areas	4	Areas	11
Total Acres	0	Total Acres	27,700	Total Acres	99,400

Alternative 1 – The No Action alternative represents no change from the 1986 Forest Plan, which has no Wilderness recommendation. Thus, 0 acres are recommended for Wilderness study under Alternative 1.

Alternatives 2 and 2M – As part of the Need for Change for plan revision, a new Roadless Area Inventory was conducted to determine the best pool of wilderness potential areas on the Forest. As noted above, 18 areas qualified for the inventory. Four of those areas are recommended for Wilderness study under Alternatives 2 and 2M, totaling an estimated 27,700 acres. This represents a potential 35 percent increase over existing Wilderness. Two of the areas, Dry Fork and Cranberry Expansion, would have the added effect of expanding contiguous Wilderness areas if they are designated by Congress. Roaring Plains West, though not contiguous with Dolly Sods Wilderness, would contribute to a block of MPs 5.0, 5.1, and 6.2 SPNM land of nearly 30,000 acres in that portion of the Forest.

Alternative 3 – Allocations are based on the theme of the alternative, which is maximum backcountry. Allocations include all areas in the latest IRA inventory that were considered to have good wilderness potential. The rest of the IRAs were given a 6.2 MP to help maintain their roadless attributes over time. The total of 99,400 acres recommended in 11 areas represents 11 percent of the Forest, and would more than double the amount of Wilderness that currently exists on the Forest should Congress designate all of the areas.

Alternative 4 – No areas are recommended for Wilderness under this alternative, which emphasizes vegetation restoration. Additional Wilderness was considered to be an impediment to achieving the vegetation restoration objectives of this alternative, due to constraints on road-building and timber harvest in a Recommended Wilderness MP, and the added difficulty of conducting prescribed burns without road-related access and fuel breaks.

Roadless Area Inventory and Wilderness Evaluation

A Roadless Area Inventory and Wilderness Evaluation were completed as part of the Forest Plan revision process (see Appendix C). Forty-one areas (326,539 acres) were initially identified and evaluated against the eight criteria for potential Wilderness in the East. Eighteen areas met all eight criteria and became the new Roadless Area Inventory. These 18 areas (143,234 acres) were evaluated based on their availability, capability and need for potential Wilderness. The 18 areas and their acreages are listed in Table RE-13.

Table RE-13. The Monongahela National Forest 2006 Inventoried Roadless Areas

Area	Acres	Area	Acres
Big Draft	5,395	Gauley Mountain West	6,624
Canaan Loop	7,850	Middle Mountain	12,197
Cheat Mountain	7,955	Roaring Plains North	3,119
Cranberry Expansion	12,165	Roaring Plains East	2,962
Dolly Sods North	7,215	Roaring Plains West	6,825
Dry Fork	739	Seneca Creek	24,974
East Fork Greenbrier	10,153	Spice Run	6,171
Gaudineer	6,727	Tea Creek Mountain	8,272
Gauley Mountain East	7,780	Turkey Mountain	6,111

Seven inventoried areas (Canaan Loop, Dolly Sods North, Gauley Mountain East, Gauley Mountain West, Roaring Plains East, Roaring Plains North, and Tea Creek Mountain) were not recommended for Wilderness under any alternative at this time due to: 1) their relatively lower values for wilderness attributes, and/or 2) their well-established pattern of non-conforming uses, and 3) the preferred alternative assigns them a 6.2 MP that would help maintain their roadless attributes over time. These values represent the relative development potential for managing the area based solely on its allocated MP. Specific information, and development potential for each area by alternative, are located in Appendix C – Roadless Area Inventory and Wilderness Evaluation. Appendix C also includes a general effects assessment of a Wilderness vs. a non-Wilderness designation, which is incorporated here by reference.

Table RE-14 displays the management disposition in the Roadless Area Inventory and Wilderness Evaluation, for each alternative in estimated acres. As the table numbers indicate, Alternatives 2, 2M, and 3 would have very low potential for developing any of the Inventoried Roadless Areas. Alternative 1 would have moderate potential for development, and Alternative 4 would have relatively high potential for development, as this alternative is designed to actively restore oak ecosystems, which comprise all or parts of a number of the roadless areas.

Table RE-14 . Management Disposition by Alternative for the 2006 Roadless Area Inventory Areas

Management Disposition	Alt. 1	Alt. 2	Alt. 2M	Alt. 3	Alt. 4
Recommended Wilderness (MP 5.1)	0	27,700	27,700	99,400	0
Very low potential for development (MP 6.2, 8.1, 8.2, 8.3, 8.4, 8.5 Candidate Research Natural Areas)	104,500	115,600	115,600	43,900	63,100
Low to moderate potential for development (4.1, 6.3, 7.0)	12,700	0	0	0	48,400
Available for full range of development (2.0, 3.0, 4.0, 6.1, 8.6)	26,100	0	0	0	31,900

Note: Acres are rounded to the nearest 100 acres

Effects to the Forest Recreation Opportunity Spectrum (ROS)

Assigning 5.1, 6.2, and 8.1 SPNM MPs directly affects how much land is available for other MPs on the Forest, and indirectly affects how these lands would be managed over the planning period, and what other types of recreation opportunities may be available. The recreation settings and opportunities can be estimated to a relative degree by comparing the ROS class distribution that would be created by alternative.

See Table RE-6 in the Current Conditions section for summary descriptions of each ROS Class. The following assumptions were used to determine the desired condition percentages by ROS Class in Table RE-15. These assumptions were based on professional judgment, current and desired conditions, and the types of activities and ROS objectives emphasized by each MP. They have been refined from the broader assumptions presented in the DEIS.

- There are no Primitive ROS acres on the Forest due to existing and future road patterns.
- There are little or no Urban ROS acres of the Forest due to the general lack of urban-type development.
- There are some Rural ROS acres, but they are not associated with any particular MP, and any estimates by MP would be too small to register as a whole percentage.
- MPs 2.0, 3.0, and 4.0: 100% RN; primarily suited lands with a high degree of development.
- MP 4.1: 20% RN (suited lands), 40% SPM, 40% SPNM.
- MPs 5.0, 5.1, 6.2, and 8.1 SPNM: 100% SPNM.
- MP 6.1: 50% RN (suited lands), 25% SPM, 25% SPNM.
- MP 6.3: 33% RN, 33% SPM, 33% SPNM.
- MP 8.1 outside of SPNM: 70% SPM, 30% RN due to patches of development.
- MPs 8.2, 8.3, 8.4: 100% SPM; lands are largely undeveloped but are too small to be SPNM.
- MP 8.5 Fernow and Loop Road Research Areas: 50% RN, 50% SPM.
- MP 8.5 CRNAs: Pike Knob (1,950 ac.) is SPNM, the remaining areas (290 ac.) are SPM.
- MP 8.6: 100% SPM; areas features management but are not suited lands, many closed roads.

Table RE-15 provides a summary of existing and desired condition changes to the ROS by alternative, based on MP allocation.

Table RE-15. ROS Class Distribution by Alternative in Percent of Forest

ROS Class	Existing Condition	Alt. 1 Desired Condition	Alt. 2 Desired Condition	Alt. 2M Desired Condition	Alt. 3 Desired Condition	Alt. 4 Desired Condition
Primitive	0	0	0	0	0	0
Semi-Primitive Non-Motorized	21%	40%	40%	41%	54%	34%
Semi-Primitive Motorized	35%	19%	18%	18%	13%	21%
Roaded Natural	44%	41%	42%	41%	33%	45%
Rural	<1%	<1%	<1%	<1%	<1%	<1%
Urban	0	0	0	0	0	0

The existing condition percentages lean rather heavily toward the RN and SPM Classes due primarily to the legacy of roads, most of which were created during the extensive logging period of 70-120 years ago. The desired conditions recognize that many roads will continue to disappear or be decommissioned over time. Thus, all alternatives would have more potential SPNM Class in the future. The amount, however, differs by alternative, reaching a high point of 54 percent of the Forest in Alternative 3, and a low point of 34 percent in Alternative 4. Conversely, there is less SPM Class than present in all alternatives, ranging from 13 percent in Alternative 3 to 21 percent in Alternative 4. The RN Class is substantially associated with suited timberlands as well as roads, and it therefore varies in rough proportion to the suited lands by alternative.

In terms of recreational opportunities, SPNM would provide the potential for more challenging and non-motorized experiences in essentially undeveloped settings, whereas RN would provide

the potential for both motorized and non-motorized experiences in a natural setting that would also have signs of development. SPM would restrict motorized opportunities but there may still be signs of development, such as recent timber harvest. Alternatives 1, 2, and 2M all show a relative balance between the RN and SPNM ROS Classes, with Alternative 2M showing a virtual one-to-one relationship. Alternative 3 would provide more backcountry recreation opportunities than any other alternative, while Alternative 4 would have the highest percentage of RN opportunities for those more interested in motorized recreation.

It is difficult to predict what effects the alternatives' ROS opportunities would have on recreation use or tourism. People recreate all over the Forest for many different reasons. Although an increase in backcountry recreation opportunities could attract those who prefer to camp and hike in undeveloped settings, it could also have a negative effect on those who enjoy motorized recreation or who want more motorized access for hunting or other activities. More discussion on visitor use related to backcountry recreation can be found in the Cumulative Effects section.

Effects to tourism are even more problematic to address, as potential influences on tourism patterns are complex and are not necessarily connected to Forest management activities or opportunities. For example, tourists may drive through the Forest on their way to nearby or distant destinations or events that have nothing to do with the Forest. We received comments on the DEIS to the effect that the visual effects from timber harvest would have a detrimental effect on tourism. However, in order to have any significant effect on the scenic backdrop of the Forest, very large amounts of harvest would have to occur in concentrated areas of visual sensitivity, and this scenario is highly unlikely to occur under any alternative due to management constraints in the 2006 Forest Plan and public involvement in Forest proposals under NEPA.

Cumulative Effects

Total Backcountry Recreation Opportunities

The total or cumulative backcountry recreation opportunities on the Forest are calculated by adding up the amount of land allocated to MPs 5.0 (Designated Wilderness), 5.1 (Recommended Wilderness), 6.2 (Backcountry Recreation), and the 8.1 areas that would be managed for a SPNM setting within the Spruce Knob-Seneca Rocks NRA. The totals for these areas are displayed in the Table RE-16, along with the percentage of NFS land they represent.

Table RE-16. Total Backcountry Recreation Opportunity Acres by Alternative

Recreation Opportunity Area	Alt. 1	Alt. 2	Alt. 2M	Alt. 3	Alt. 4
Designated Wilderness (5.0)	78,700	78,700	78,700	78,700	78,700
Recommended Wilderness (5.1)	0	27,700	27,700	99,400	0
Backcountry Recreation (6.2)	124,500	97,500	106,800	225,900	51,000
SPNM Acres within NRA (8.1)	0	24,900	24,900	13,000	24,900
Total Acres	203,200	228,800	238,100	417,000	154,600
Percent of Forest	22%	25%	26%	45%	17%

Results range from 17 percent of the Forest under Alternative 4, to 45 percent of the Forest under Alternative 3. Alternatives 2 and 2M represent modest increases (25,600 acres and 34,900 acres, respectively) over the current opportunities portrayed by Alternative 1. Dispersed recreation enthusiasts would find more than twice the backcountry lands in Alternative 3 than are available under Alternative 1. People who favor road-related recreation would find the most opportunities available under Alternative 4.

As noted previously, there are additional backcountry recreation opportunities in the State of West Virginia provided primarily by State parks and Forests, and NFS land on the GW-Jefferson National Forests. Tables RE-17 through RE-21 compare the cumulative acres of national forest and state backcountry recreation opportunities, and the Monongahela contribution to those opportunities by alternative. For this exercise, backcountry recreation opportunities were considered SPNM areas such as MP 5.0, 5.1, 6.2, or 8.1 SPNM allocations.

Table RE-17. Backcountry Recreation Potential in West Virginia for Alternative 1

Indicator	Total Acres Public Land	Backcountry Acres (Desired Condition)	Percent of Total Backcountry Acres
Municipal/ County Backcountry	22,050	0	0%
West Virginia State Park/Forest Backcountry	416,863	0	0%
GW-Jefferson NF Wilderness Backcountry	123,629	12,400	6%
National Park Service Backcountry	66,159	0	0%
Army Corps of Engineers Backcountry	168,109	0	0
Monongahela NF 5.0, 5.1, 6.2, 8.1 Areas – Alternative 1	916,700	203,200	94%
Total Acres	1,713,510	215,600	100%
Percent of Total WV Public Lands with Backcountry Recreation Settings			12.6%

Table RE-18. Backcountry Recreation Potential in West Virginia for Alternative 2

Indicator	Total Acres Public Land	Backcountry Acres (Desired Condition)	Percent of Total Backcountry Acres
Municipal/ County Backcountry	22,050	0	0%
West Virginia State Park/Forest Backcountry	416,863	0	0%
GW-Jefferson NF Wilderness Backcountry	123,629	12,400	5%
National Park Service Backcountry	66,159	0	0%
Army Corps of Engineers Backcountry	168,109	0	0
Monongahela NF 5.0, 5.1, 6.2, 8.1 Areas – Alternative 2	916,700	228,800	95%
Total Acres	1,713,510	241,200	100%
Percent of Total WV Public Lands with Backcountry Recreation Settings			14.1%

Table RE-19. Backcountry Recreation Potential in West Virginia for Alternative 2M

Indicator	Total Acres Public Land	Backcountry Acres (Desired Condition)	Percent of Total Backcountry Acres
Municipal/ County Backcountry	22,050	0	0%
West Virginia State Park/Forest Backcountry	416,863	0	0%
GW-Jefferson NF Wilderness Backcountry	123,629	12,400	5%
National Park Service Backcountry	66,159	0	0%
Army Corps of Engineers Backcountry	168,109	0	0
Monongahela NF 5.0, 5.1, 6.2, 8.1 Areas – Alternative 2	916,700	238,100	95%
Total Acres	1,713,510	250,600	100%
Percent of Total WV Public Lands with Backcountry Recreation Settings			14.6%

Table RE-20. Backcountry Recreation Potential in West Virginia for Alternative 3

Indicator	Total Acres Public Land	Backcountry Acres (Desired Condition)	Percent of Total Backcountry Acres
Municipal/ County Backcountry	22,050	0	0%
West Virginia State Park/Forest Backcountry	416,863	0	0%
GW-Jefferson NF Wilderness Backcountry	123,629	12,400	3%
National Park Service Backcountry	66,159	0	0%
Army Corps of Engineers Backcountry	168,109	0	0
Monongahela NF 5.0, 5.1, 6.2, 8.1 Areas – Alternative 3	916,700	417,000	97%
Total Acres	1,713,510	429,400	100%
Percent of Total WV Public Lands with Backcountry Recreation Settings			25.1%

Table RE-21. Backcountry Recreation Potential in West Virginia for Alternative 4

Indicator	Total Acres Public Land	Backcountry Acres (Desired Condition)	Percent of Total Backcountry Acres
Municipal/County Backcountry	22,050	0	0%
West Virginia State Park/Forest Backcountry	416,863	0	0%
GW-Jefferson NF Wilderness Backcountry	123,629	12,400	7%
National Park Service Backcountry	66,159	0	0%
Army Corps of Engineers Backcountry	168,109	0	0
Monongahela NF 5.0, 5.1, 6.2, 8.1 Areas – Alternative 4	916,700	154,600	93%
Total Acres	1,713,510	167,000	100%
Percent of Total WV Public Lands with Backcountry Recreation Settings			9.7%

Based on the tables above, the alternatives would contribute anywhere from 93 percent (Alternative 4) to 97 percent (Alternative 3) of the backcountry recreation settings on public lands in West Virginia. As there are no comparable opportunities on private lands within the State, these figures apply equally to the entire State land base. Under any of the alternatives considered, therefore, the Monongahela would continue to be the primary provider of backcountry recreation settings and opportunities in the State of West Virginia.

The total acres contributed by each alternative would result in a much wider percentage range of backcountry recreation areas available in West Virginia. Alternative 1, which represents the 1986 Forest Plan as amended, would contribute to backcountry areas comprising an estimated 12.6 percent of all the public lands in the State. Alternatives 2 and 2M would raise the percentages to 14.1 and 14.6 respectively, Alternative 3 would effectively double the percentage to 25.1, and Alternative 4 would lower the current percentage to 9.7. People seeking backcountry recreation opportunities in West Virginia would have the most SPNM settings available by far in Alternative 3. Backcountry opportunities in Alternatives 2 and 2M would be substantially more than what they are currently (Alternative 1). Alternative 4 would lower the current backcountry recreation settings in the State by a substantial amount, which would likely be perceived as a step backward by Wilderness and other backcountry recreation enthusiasts, and a step in the right direction by those who feel the Forest and State already have more than enough backcountry recreation opportunities.

ROS and Visitor Use

The MNF Niche Statement describes the Forest as “the largest expanse of public land in West Virginia” and states that “the Forest provides the best opportunities for challenging and remote dispersed recreation in the State.” The desired condition for Recreation Resources on the Forest is to offer “a wide spectrum of recreation opportunities,” which includes settings ranging from SPNM to Rural.

National Visitor Use Monitoring (NVUM) was conducted on the MNF in 2003. The results indicate that about 16 percent (207,000 site visits) of the 1,303,000 annual site visits to the Forest are for activities primarily associated with backcountry recreation. These activities include 100 percent of primitive camping, backpacking and other non-motorized activities, and an estimated percentage of other activities that can occur either within or outside of backcountry areas. These estimated percentages include 50 percent of nature study and wildlife viewing, 25 percent of fishing, 20 percent of hunting, and 58 percent of hiking, walking, mountain biking and equestrian use. These percentages may be generous, as backcountry recreation areas comprise about 22 percent of the Forest, and opportunities for these types of activities exist throughout the Forest.

Wilderness use accounted for about 38,600 visits or 3 percent of the total Forest recreation use, and about 19 percent of the 207,000 backcountry site visits. Responding to the 2003 NVUM questions about crowding in Wilderness, visitors on the average felt that there were few people there. Nobody said the Wilderness they visited was overcrowded and 17.4 percent said there was hardly anyone there. User mean perception of General Forest Areas indicated that visitors who use the current backcountry areas felt that the areas were not overcrowded, and about 28 percent said that hardly anyone was there. Based on these findings, it appears that the Forest’s

existing Wilderness and backcountry recreation opportunities are meeting the current supply and demand of our visitors.

Projections for outdoor recreation participation by activity through 2050 show that activities associated with backcountry are expected to increase at a rate of 0.5 percent to 1.5 percent per year. These projections also indicate that many activities associated with non-backcountry recreation opportunities—such as developed camping, sightseeing, picnicking, visitor centers, etc.—along with activities that can occur in all ROS settings, are expected to increase at about this same overall average rate (Cordell 1999).

All acres of backcountry areas are not used the same. Some are more popular than others, many are seasonal, and most use is concentrated on trails and adjacent use areas. Because recreation use is not spread equally over backcountry areas and acres, specific areas such as Dolly Sods, Cranberry or Otter Creek are likely to see larger increases in visitation than areas like Middle Mountain, Spice Run, and other lesser-known areas. More popular areas may experience more crowding, but lesser known areas can supply opportunities for individuals seeking more solitude and semi-primitive recreation. These trends are likely to occur in non-backcountry areas as well.

The 1986 Forest Plan's current existing ROS classes are based on a 2003 ROS mapping exercise. The Forest currently provides for about 188,000 acres in a SPNM setting, about 318,000 acres in SPM and 401,000 acres in a RN setting. Based on the above NVUM information, this make-up of various ROS settings is meeting existing demand for recreational use.

Table RE-22. Projected Visitors Per 1,000 Acres of Backcountry Over Time

Alternative	Acres of Backcountry (MA 5.0, 5.1, 6.2, and 8.1 managed as SPNM)	2003 Backcountry Visitors per Year per 1,000 Acres (estimated 207,000 site visits)	2013 Backcountry Visitors per Year per 1,000 Acres (estimated 229,000 site visits)	2023 Backcountry Visitors per Year per 1,000 Acres (estimated 253,000 site visits)	2033 Backcountry Visitors per Year per 1,000 Acres (estimated 279,000 site visits)
1	203,200	1,019 (2.8 per day)	1,127 (3.1 per day)	1,245 (3.4 per day)	1,373 (3.8 per day)
2	228,800	905 2.5 per day	1,001 2.7 per day	1,105 3.0 per day	1,219 3.3 per day
2M	238,100	869 (2.4 per day)	962 (2.6 per day)	1,062 (2.9 per day)	1,172 (3.2 per day)
3	417,000	496 (1.4 per day)	549 (1.5 per day)	607 (1.7 per day)	669 (1.8 per day)
4	154,600	1,339 (3.7 per day)	1,481 (4.1 per day)	1,636 (4.5 per day)	1,805 (4.9 per day)

Table RE-22 compares annual visitors per 1,000 acres based on use projections over time by alternative. This assessment assumed an average annual increase of 1.0 percent. The acres are based on backcountry MP desired conditions for SPNM ROS settings. The range of use

concentration varies considerably by alternative, with Alternative 3 having less than half the use predicted than Alternative 4. For those recreationists seeking a semi-primitive uncrowded experience, Alternative 3 would provide the best overall opportunities, followed in descending order by Alternatives 2, 1, and 4. However, even under Alternative 4, the maximum projected use—4.9 visitors per 1,000 acres a day by 2033—would be relatively uncrowded. Even at double the use, or with a 6-month season of use factored in, maximum visitation is projected at less than 10 people per 1000 acres a day, still relatively low. Based on visitor use projections, visitor responses to crowding, and land allocations in the alternatives, it is likely that overall backcountry supply will meet demand over the next two to three decades for all alternatives.