United States
Department of
Agriculture

Forest Service
Southern Region

Summary

Environmental Impact Statement

Revised Land and Resource Management Plan

Jefferson National Forest

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SUMMARY OF THE FINAL EIS AND FOREST PLAN

Overview

The Final Environmental Impact Statement (FEIS) documents seven alternatives for revising the Land and Resource Management Plan for the Jefferson National Forest (1985 Plan). All seven alternatives represent feasible ways of managing the Forest for the next 10 to 15 years. These alternatives were developed to address major public issues and the purpose and need for the Revised Land and Resource Management Plan for the Jefferson National Forest (Forest Plan). The FEIS presents the effects on various resources from implementing each of these alternatives.

The Forest Plan provides detailed guidance for implementing the 'Selected Alternative' which is Alternative I in the FEIS.

What is the Forest Plan?

The Jefferson National Forest extends over 200 miles along the Appalachian Mountains of southwestern Virginia, slightly extending into West Virginia and Kentucky. The area includes approximately 723,300 acres. The Forest is located within seven major river basins—the James, Roanoke, New, Big Sandy, Holston, Cumberland, and Clinch Rivers.

The Revised Land and Resource Management Plan (Forest Plan) will guide the management of the Jefferson National Forest for the next decade or longer. To accomplish this, the Forest Plan does the following:

- Establishes the management direction and associated long-range goals and objectives for the Jefferson National Forest for the next 10-15 years.
- Establishes management areas, which reflect biological, physical, watershed, and social differences in managing each area of land; management prescriptions, which reflect different desired conditions and provide the specific information used to develop projects to implement the Forest Plan.
- Specifies the standards, which set the boundaries for achieving the goals, objectives and desired conditions.
- Identifies lands suitable for various multiple uses including timber production and establishes the Allowable Sale Quantity, which is set at 21 million board feet per year.
- Recommends to Congress 3 new stand-alone Wilderness Study Areas and 12 additions to existing Wilderness Areas.
- Consents to leasing 528,400 acres for federal oil and gas exploration and development, including 195,900 acres with a no-surface occupancy stipulation and 140,500 acres with additional stipulations like controlled-surface use and timing.
- Establishes the monitoring and evaluation requirements needed to ensure that the direction is carried out.

WHAT IS THE FOREST PLAN?

SUMMARY OF SIGNIFICANT ISSUES

The Forest Plan represents the preferred alternative for managing the land and resources of the Jefferson National Forest. It divides the Forest into "Management Areas" based primarily on using watersheds for boundaries. The map accompanying the Forest Plan displays the management areas and the management prescriptions to be used in each.

Forest Plans make broad-scale decisions, similar to city zoning allocations. They do not undertake site-specific projects; rather they establish overall goals and objectives that the Forest will strive to meet. The goals that are emphasized in the Jefferson Forest Plan are to: (1) ensure watershed health; (2) support viable populations of all native species; (3) restore the health of Forest communities; (4) protect existing old growth; (5) protect and enhance scenery; (6) provide backcountry recreation experiences; and (7) provide high quality sawtimber.

National Forest management is complex. The forests belong to all Americans and all have a stake in their management. Choosing the best course of action essentially involves trade-offs. As stewards of these important lands, we have a responsibility to be responsive to the whole collection of diverse interests that make up the American public as well as provide what is best for the Forest. Citizens have been instrumental in developing our new Forest Plan. Almost 200 people across southwestern Virginia have participated in 15 planning workshops over the past several years.

SUMMARY OF THE ENVIRONMENTAL IMPACT STATEMENT

Documentation of this Forest Plan's environmental impacts is contained in its accompanying Final Environmental Impact Statement (FEIS). The Final EIS is required by the National Environmental Policy Act to disclose the potential effects of alternatives on significant resource-related issues associated with administering the Jefferson National Forest Plan.

SIGNIFICANT ISSUES

Public involvement is a key part of the planning process. Providing for public comment helps identify what people want from the national forests in the form of goods, services, and environmental conditions. Issues submitted by the public, as well as from within the Forest Service, guided the need to change current management strategies. These issues were used to develop alternatives for the Forest Plan revision process. The first twelve issues are common across the five national forests in the Southern Appalachians currently revising their forest plans.

Terrestrial Plants and Animals and Their Associated Habitats. How should national forest retain or restore a diverse mix of terrestrial plant and animal habitat conditions, while meeting public demands for a variety of wildlife values and uses. These habitats range from early successional to late successional and include such conditions as old growth, permanent openings, forest interior and riparian habitats. All of the alternatives analyzed in detail provide a wide variety of habitat for the multitude of species that inhabit the JNF. Alternatives D and F provide the most early successional forest habitats. Alternatives G and E provide the most mature interior forest habitats. The following table compares successional habitats, interior habitats, permanent types of open habitats, and predicted population trends for the Management Indicator Species (MIS).

Threatened, En- Comparison of the Terrestrial Plants and Animals Issue by Alternative

	Alternative						
	A	B	D	E	F	G	I
Successional Habitats	Percent of Forested Acres						
Early Successional Habitat First Decade	2.9	2.3	4.4	0.5	2.9	0.4	2.1
Early Successional Habitat Fifth Decade	1.3	1.6	3.0	0.1	2.6	0.4	2.3
Mid- to Late-Successional Habitat First Decade	90	90	89	92	90	93	90
Mid- to Late-Successional Habitat Fifth Decade	91	92	80	98	89	99	92
Late Successional Habitat First Decade	72	72	71	74	72	75	72
Late Successional Habitat Fifth Decade	80	83	69	91	79	92	83
Interior Habitats	Percent of Forested Acres						
Mid- to Late-Successional Mesic Deciduous Forest in a Landscape with Greater than 70% Forest Cover	91	91	91	91	91	91	91
Mid- to Late-Successional Mesic Deciduous Forest with No Early Successional Habitat Objective	53	58	48	67	43	73	58
Permanent Openings, Old Fields and Balds	Acres In Thousands						
Current	12.0	12.0	12.0	12.0	12.0	12.0	12.0
First through Fifth Decade	11.8	9.3	11.8	11.8	11.8	6.8	12.1
Management Indicator Species	Expected Trends in Populations for the First Decade *						
Hooded Warbler	+	+	=	++	=	=	+
Scarlet Tanager	+	+	=	++	=	++	+
Pine Warbler	+	++	++	=	=	+	+
Eastern Towhee	=	=	++	- -	=	- -	=
Ovenbird	+	++	=	++	=	++	++
Acadian Flycatcher	+	+	+	+	+	+	+
Pileated Woodpecker	=	=	=	=	=	+	=

dangered and Sensitive/Locally Rare Species. What levels of management are needed to protect and recover the populations of federally listed Threatened, Endangered and Proposed species? What level of management is needed for Forest Service sensitive and locally rare species? All of the alternatives analyzed in detail protect and recover threatened, endangered, sensitive, and locally rare species and provide habitat for the wide variety of other species that also inhabit our Forest. Alternatives A, B, D, E, G, and I all designate areas around Indiana bat hibernacula and Peaks of Otter salamander habitat, as well as employ objectives and standards for managing these species and gray bats, Virginia big-eared bats, bald eagles, peregrine falcons, northern flying squirrels, and federally-listed plants. Each of these alternatives also includes the latest strategies for management and recovery of these species as a result of our close collaboration with the U.S. Fish and Wildlife Service. Two new Indiana bat hibernacula protection areas were added to Alternative I between the Draft and Final EIS.

Rare communities are a very important part of the strategy to protect and recover threatened, endangered, sensitive, or locally rare species. The Forest worked closely with the Virginia Department of Conservation and Recreation's Natural Heritage Program to identify rare communities and special biological areas because they contribute significantly to plant and animal diversity, particularly threatened, endangered, sensitive, or locally rare species. Alternatives A, B, D, E, G, and I all set aside these special areas for management to conserve and improve their natural composition, structure, and function in order to support the rare species associated with them.

SUMMARY OF SIGNIFICANT ISSUES

The following table displays the results of our terrestrial and aquatic viability analysis as a comparison of effects on threatened, endangered, sensitive, and locally rare species between alternatives.

Comparison of the Threatened, Endangered, Sensitive and Locally Rare Species Issue by Alternative

	Alternative						
	A	B	D	E	F	G	I
Terrestrial Species Viability	Number of Species/Habitat Relationships						
Species/Habitat Relationships Rated as Very High Risk	104	104	104	130	128	106	104
Species/Habitat Relationships Rated as High Risk	116	111	114	100	100	116	116
Species/Habitat Relationships Rated as Moderately High Risk	161	164	161	167	164	166	161
Total	381	379	379	397	392	386	381
Aquatic Species Viability	Number of Species/Number of Watersheds						
Low Risk	13/13	13/13	15/15	13/13	13/13	13/13	13/13
Moderate Risk, FS May Positively Influence	4/5	4/5	6/8	4/5	4/5	4/5	4/5
Potential High Risk, Little Opportunity for FS Influence	88/180	88/180	96/198	88/180	88/180	88/180	88/180
Potential High Risk, FS May Positively Influence	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Potential Very High Risk, Little Opportunity for FS Influence	1/2	1/2	1/2	1/2	1/2	1/2	1/2

Old Growth. The issue surrounding old growth has several facets including: How much old growth is desired? Where should old growth occur? How should old growth be managed? The public has expressed concerns and a variety of viewpoints about old growth forests on public lands. Some state the spatial distribution and linkages of patches with varying sizes are important, that old growth communities are underrepresented on private lands, and that the national forests have the best opportunity to provide for these communities. There is also a debate about how old growth should be managed, maintained, or restored. Many people state that old growth areas should be protected or "preserved" and that there should be no harvesting within these areas. Some expressed a concept of different levels of old growth management, including undisturbed "core" areas with more actively managed "buffers" of old growth around them. There are many values that people associate with old growth, some of which are compatible, and others that present conflict. Old growth provides both biological and social values.

Alternatives A, B, D, E, G, and I protect all 50,000 acres of existing old growth known to exist on the Forest as of today. Every Alternative also include areas that will develop old growth characteristics in the future because they are in wilderness, backcountry recreation areas, and other areas not suitable for timber harvesting. Alternatives G, E, and B have higher amounts of future old growth, Alternative D has the least.

Comparison of the Old Growth Issue by Alternative

	Alternative						
	A	B	D	E	F	G	I
Old Growth	Acres In Thousands						
Acres of Existing Old Growth Protected	50.0	50.0	50.0	50.0	0	50.0	50.0
Acres Allocated to Old Growth Emphasis Prescriptions (6A, 6B, 6C)	28.3	111.2	44.3	38.6	0	134.0	31.3
Acres of Future Old Growth Allocated in Large Blocks	143.6	140.7	93.5	186.1	179.9	233.3	193.7
	Percent of Total Forest Acres						
Percent of JNF With No Specific Objectives for Creating Early Successional Habitat Expected to Provide Future Old Growth Forest Conditions	45	54	37	60	39	69	49

Riparian Area Management, Water Quality and Aquatic Habitats. What are the desired riparian ecosystem conditions within national forests, and how will they be delineated, maintained and/or restored? What management direction is needed to help ensure that the hydrologic conditions are attained that are needed for the beneficial uses of water yielded by and flowing through National Forest System lands? What management is needed for the maintenance, enhancement, or restoration of aquatic habitats? Water is often referred to as our most precious resource. Although water supplies in the South are abundant, expanding urbanization and development are creating increased demands and impacts on the waters of the South. According to the Southern Appalachian Assessment, two-thirds of reported water quality impacts are due to nonpoint sources. Soil erosion and stream sedimentation—as well as nutrient, chemical, and bacterial contamination—can result directly or indirectly from land uses. Beneficial uses of water are often undesirably and unintentionally affected by water quality degradation created by land uses. National forest management should protect the beneficial uses, namely coldwater or warmwater fisheries, recreation and municipal water supplies, habitats for other indigenous aquatic life, and aquatic TES species.

The riparian and forestwide standards provide full protection for water quality in all of the alternatives. Every alternative considered in detail includes standards and best management practices to ensure recreation, timber, minerals, grazing, and other uses are regulated and controlled to protect the quality of the water flowing from the JNF.

Alternatives A, B, D, E, G, and I take this a step further to protect the riparian forests along our streams, lakes, rivers, and wetlands. New *state of the art* standards are employed to protect perennial, intermittent, and ephemeral stream channels. The riparian corridor is designed to not only maintain water quality and protect aquatic species, but to also maintain the actual riparian area and the terrestrial species that use this area.

Alternatives A, B, D, E, G, and I set aside source (or municipal) watersheds for special management to protect drinking water. These same alternatives identify watersheds in need of restoration and use reference watersheds to help identify when a watershed needs restored. Between the Draft and Final EIS, The Forest worked closely with the U.S. Fish and Wildlife Service to develop a Fish and Mussel Conservation Plan that has been incorporated into Alternative I. New aquatic habitat areas were also designated as a result of these efforts.

Comparison of the Riparian, Water Quality and Aquatic Habitat Issue by Alternative

	Alternative						
	A	B	D	E	F	G	I
Soils	Acres In Thousands						
Short- and Long-Term Effects to Soil Productivity (first decade)	4.7	3.4	5.4	3.7	5.1	1.4	4.5
Water	Percent Increase						
Average Percent Increase in Sediment Yields from Forest Service Activities over Current Levels Across 36 Watersheds	0.44	0.34	0.80	0.18	0.47	0.07	0.47
	Acres In Thousands						
Acres Allocated to Watershed Emphasis Prescriptions (9A1, 9A2, 9A3, 9A4)	28.2	38.0	24.1	22.8	0	27.3	27.4
Aquatic Species Viability	Number of Species/Number of Watersheds						
Low Risk	13/13	13/13	15/15	13/13	13/13	13/13	13/13
Moderate Risk, FS May Positively Influence	4/5	4/5	6/8	4/5	4/5	4/5	4/5
Potential High Risk, Little Opportunity for FS Influence	88/180	88/180	96/198	88/180	88/180	88/180	88/180
Potential High Risk, FS May Positively Influence	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Potential Very High Risk, Little Opportunity for FS Influence	1/2	1/2	1/2	1/2	1/2	1/2	1/2

Wood Products. The issue surrounding the sustained yield production of wood products from national forests has several facets, including (1) What are the appropriate objectives for wood product management; (2) Where should removal of wood products occur, given that this production is part of a set of multiple use objectives, and considering cost effectiveness; (3) What should be the level of outputs of wood products; and (4) What management activities associated with the production of wood products are appropriate? Some people express a strong feeling that national forests are public lands that should be set aside, either for providing forest-related values other than timber, or as a reserve of timber. Others have similarly strong views of the purpose of national forests as primarily a support for local or regional wood processing facilities and their contribution to the local economies; as a place where there should be an emphasis on utilizing the current forest growth capabilities; or as a place where there is a community-based balance between wood production and recreation benefits. Still others see that the values they are concerned with, such as wildlife game species, can be best provided through habitat manipulation that includes the production of wood products. With recent policy changes of the Forest Service toward more ecology-based management, some people question whether the wood product role of national forests has changed. Others point out that the national forests still need to be managed to provide for multiple uses, including wood products.

Alternatives D and F have the highest amount of lands suitable for timber production and the highest Allowable Sale Quantity or ASQ. Alternative D comes closest to meeting demand for wood products from the JNF. Alternatives A, E, G, and I specifically emphasize the high quality sawtimber market, with Alternative A meeting more of this demand than the other alternatives. Alternatives B, E, and G only produce wood products as a result of meeting other resource objectives. The majority of Alternative I focuses on these other resource objectives as well, but does allocate 16,200 acres to management prescription 10B which does emphasize high quality forest products.

Comparison of the Wood Products Issue by Alternative

	Alternative						
	A	B	D	E	F	G	I
Age Class Distribution in 2030	Percent of Forested Acres						
0-10 (1% in 2000)	3	3	6	<1	3	<1	2
11-40 (9% in 2000)	6	5	10	2	7	2	5
41-80 (40% in 2000)	9	9	9	10	9	10	10
81-100 (31% in 2000)	15	16	15	16	15	16	15
101-130 (15% in 2000)	52	52	46	55	51	55	52
131-150 (3% in 2000)	8	8	7	9	8	9	9
150+ (1% in 2000)	7	7	7	8	7	8	7
Timber Management	Acres In Thousands						
Lands Suitable for Timber Production	278	250	303	189	303	125	259
	MMBF						
Allowable Sale Quantity (Total First Decade)	265	233	502	55	272	34	212
Timber Sale Program Quantity (Total First Decade)	278	233	502	77	272	38	218
	Percent of Current Annual Demand						
Timber Sale Program Quantity as a Percent of Demand	41	34	74	11	40	6	32

Aesthetics/Scenery Management. What scenic integrity should the national forests have in the future, and what scenic opportunities should they provide? Some people pointed out that natural-appearing landscapes of high-quality scenery are one of the main reasons tourists and recreationists come to the Southern Appalachians. Some think that a predominantly natural-appearing, nonindustrial-looking forest landscape character should be emphasized; and that certain areas of the national forests—such as travel and trail corridors, important viewsheds, and other places with recreation use—should provide a higher level of scenery. Others mentioned that while harvesting wood products does tend to cause a visual disruption, this effect is only temporary and that the harvest method used should be whatever is needed to meet resource objectives. Some commented that scenic quality could be restored through the use of salvage timber harvesting following disturbances like fires and insect outbreaks. Others said that the Forest Service should identify and implement methods that will reduce the visual impact of timber harvest so that harvesting can continue to be used as a management tool.

As a result of implementing the new Scenery Management System Alternatives A, B, D, E, G, and I all have much higher objectives for scenery than the 1985 Jefferson Forest Plan (Alternative F). This is primarily a result of recognizing that backcountry landscapes are highly valued even though they are not viewed as frequently as the foreground along major roads and trails. Under the old Visual Management System, these backcountry areas would frequently have low or very low objectives for managing scenic integrity. Under the new System, these areas are managed with high or very high scenic integrity objectives.

Comparison of the Scenery Management Issue by Alternative

	Alternative						
	A	B	D	E	F	G	I
Scenery	Percent of Total Forest Acres						
Scenic Integrity Objective Very High	12	12	11	20	8	32	14
Scenic Integrity Objective High	37	39	29	53	8	34	38
Scenic Integrity Objective Moderate	41	34	40	25	27	26	34
Scenic Integrity Objective Low	10	15	20	2	49	8	14
Scenic Integrity Objective Very Low					8		

SUMMARY OF SIGNIFICANT ISSUES

Recreation Opportunities/Experiences. How should the increasing demand for recreational opportunities and experiences be addressed on the national forests while protecting forest resources? This includes considering a full range of opportunities for developed and dispersed recreation activities (including such things as nature study, hunting and fishing activities, and trail uses). People are using trails today for much more than backpacking. Mountain biking, horseback riding, and off-highway vehicles are all used on national forest trails. Due to the limited sources of supply, these trails are often congested and have become sources of conflict between users. In many cases, there is a strong interest in increasing the trail networks for all these uses. Increases in the trail miles would increase trail use opportunities and reduce the congestion on existing trails. The challenge would be with developing a trail system that recognizes conflicting uses and minimizes resource damage. Of particular concern is a policy for managing OHV use. Trails of national interest and trail systems that connect adjacent national forests (e.g., the Appalachian Trail) need to have coordinated management direction.

Alternatives E, G, and I ensure protection of semi-primitive areas through a buffer zone designated semi-primitive 2. Alternatives A, E, and I have the highest levels of developed and motorized recreation, while Alternative G emphasizes non-motorized recreation opportunities.

Comparison of the Recreation Issue by Alternative

	Alternative						
	A	**B**	**D**	**E**	**F**	**G**	**I**
Adopted Recreation Opportunity Spectrum	Acres In Thousands						
Semi-Primitive Non-Motorized	117.3	117.3	117.3	117.3	89.7	117.3	117.3
Semi-Primitive Motorized	20.7	20.7	20.7	20.7	72.5	20.7	20.7
Semi-Primitive 2	0.0	0.0	0.0	98.8	0.0	98.8	98.8
Roaded Natural	580.7	580.7	580.7	481.9	556.5	481.9	481.9
Rural	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Developed Recreation	Percent Increase						
Estimated Increase in Capacity of Developed Recreation Areas	6-25%	<5%	<5%	6-25%	7852 PAOT	<5%	6-25%
Estimated Increase in Non-Motorized Trails	6-25%	<5%	<5%	6-25%	1,125 Mile	<5%	6-25%
Off-Highway Vehicle Roads and Trails	Miles						
Estimated Increase in OHV Miles in Designated Areas	60			30			30-60
	Percent Increase						
Estimated Increase in Motorized Roads and Trails	>51%	Decrease	11-50%	11-50%	100 Mile	Decrease	11-50%

Roadless Areas/Wilderness Management. What National Forest System lands should be recommended for wilderness designation? How should any roadless areas not recommended for wilderness be managed? How should areas recommended for wilderness designation be managed? How should the patterns and intensity of use, fire, and insects and disease be managed in the existing wilderness areas? The sufficiency of the existing wilderness areas continues to be debated. A wide spectrum of feelings and values for more, less, or the same exists among the national forests community of interests. People have indicated that all roadless areas should be recommended for wilder-

ness designation, while others have expressed that there is enough wilderness already and that the roadless areas should be managed to achieve other resource objectives.

People have expressed concern over the fate of any roadless areas not recommended for wilderness. Some have proposed that these areas be used to mitigate habitat fragmentation, or managed as scenic areas, or managed to provide a "remote" or "semi-primitive non-motorized" recreation experience. Others feel that an area does not have to be labeled as "roadless" or "wilderness" in order to provide biological diversity. They feel that in order to provide high-quality wildlife habitat, different types of disturbances are needed in order to create a variety of successional stages. Others would like to see the lands in roadless areas available for timber production.

For areas that are already congressionally designated as wilderness, concerns have been expressed about how they are managed. The recommendation of any new areas to the wilderness system may also have an impact on how any existing wilderness areas that are nearby are managed. These wilderness management concerns include patterns and intensities of uses, insect and disease management, fire management including the use of more management prescribed fire, incorporating limits-of-acceptable change concepts into plan direction, and the mitigation of air pollution effects on wilderness resources. Existing wilderness standards need to be reviewed to see if they are effective in achieving the desired future conditions of wilderness resources.

In some cases, not all of an individual roadless area's acres were allocated to the 1B (Recommended Wilderness Study) management prescription and therefore the acres may not be same across the alternatives for each roadless area. Also in several alternatives, recommendations for wilderness include areas that are not inventoried roadless.

See the following page for a comparison of this issue by alternative.

Forest Health. What conditions are needed to maintain forest capacity to persist and perform as expected or desired? Of particular concern are the impacts of exotic or non-native species and the presence of ecological conditions with a higher level of insect and disease susceptibility. A healthy, resilient forest includes clean water, clean air, fertile soils, and abundant fish and wildlife populations. By the same token, healthy forest vegetation determine the health of our watersheds and soils, our riparian and aquatic ecosystems, the quality of habitat for wildlife, the ability of our national forest to filter our air and provide beautiful scenery, bountiful recreation opportunities, and essential wood products.

Many aspects of this issue are covered under other issues. The remaining aspects to cover include restoration and maintenance of our native forest communities, non-native invasive species and insect and disease problems.

For those native and non-native insects and diseases that thrive in older aged forest conditions, Alternatives A, D, and F maintain more of the JNF in younger age classes than the other alternatives. All alternatives recognize the serious threat to forest health from non-native invasive species and seek to identify, slow the spread, suppress, and eradicate these unwelcome invaders to the extent possible.

Comparison of the Roadless Areas and Wilderness Issue by Alternative

	Alternative						
	A	**B**	**D**	**E**	**F**	**G**	**I**
Wilderness / Roadless	Acres In Thousands						
Recommended Wilderness Study Areas	28.2	15.6	15.7	81.6		156.1	25.2
Roadless Character Maintained	82.6	87.1	41.6	148.4	68.8	148.4	148.4
	Miles						
Bicycle and Motorcycle Trails Closed in Recommended Wilderness Study Areas	19.5		8.7	61.3		124.3	5.9
Roads Closed in Recommended Wilderness Study Areas	5.7	6.0	3.4	31.3		61.0	7.7
Roadless Areas Recommended for Wilderness Study (1B)	**A**	**B**	**D**	**E**	**F**	**G**	**I**
Barbours Creek Addition						700	
Bear Creek				18,200		18,200	
Beartown Addition A	1,400	1,400		1,400		1,400	
Beartown Addition B		2,000		3,200		3,200	
Beaverdam Creek *(CNF)						1,100	
Broad Run						10,900	
Brush Mountain				5,900		5,900	
Brush Mountain East			4,900	3,400		4,900	
Brushy Mountain			4,100			4,100	
Garden Mountain				2,700		4,000	3,500
Hoop Hole	4,600		3,600			4,600	
Hunting Camp Little Wolf Creek	8,600	8,250		8,900		8,900	8,800
James River Addition	1,100					1,100	1,100
Kimberling Creek Addition A	50		100	100		100	50
Kimberling Creek Addition B	200		200	200		200	200
Lewis Fork Addition	700	300		300		700	
Little Dry Run Addition	2,200			2,200		2,200	
Little Horse Heaven						4,700	
Little Walker Mountain				9,800		9,800	
Little Wilson Creek Addition A	50	50	50	50		50	50
Little Wilson Creek Addition B	1,700	1,700		1,700		1,700	1,700
London Bridge Branch *(CNF)						900	
Long Spur						6,000	
Mottesheard						6,600	
Mountain Lake Addition A	900		1,200	1,500		1,500	900
Mountain Lake Addition B	3,900			3,900		3,900	2,200
Mountain Lake Addition C	500	500		500		500	500
North Fork Pound							
North Mountain						8,400	
Patterson Mountain						4,900	
Peters Mountain Addition A	1,300	1,300	1,300	1,100		1,600	1,300
Peters Mountain Addition B	900			2,700		2,900	
Price Mountain						9,100	
Raccoon Branch				4,400		4,400	
Rogers Ridge *(CNF)			150	150		150	
Seng Mountain				6,400		6,400	
Shawvers Run Addition				1,000		1,900	1,200
Other Areas Recommended for Wilderness Study (1B)	**A**	**B**	**D**	**E**	**F**	**G**	**I**
	100	100	100	1,900		8,200	3,700

*(CNF) These areas are shared with the Cherokee National Forest

Comparison of the Forest Health Issue by Alternative

	Alternative						
	A	B	D	E	F	G	I
Gypsy Moth Risk Rating	Percent of Oak and Oak-Pine Forests						
Extreme Risk First Decade	26	27	26	27	26	27	26
Extreme Risk Fifth Decade	24	27	19	27	25	27	27
High Risk First Decade	36	37	36	36	36	36	43
High Risk Fifth Decade	43	46	41	44	43	44	45
Prescribed Fire	Acres In Thousands						
Maximum Burned per Year	14.1	19.3	14.9	9.4	2.9	15.7	15
Maintenance and Restoration of Forest Communities	Acres in Thousands						
Acres Allocated to a Forest Health Emphasis (9G1, and 9H)	0.1	121.3	114.5	0.1	0	10.4	25.0

Special Areas and Rare Communities. What special areas should be designated, and how should they be managed? Areas can be designated for special or unique aesthetic, archaeological, biologic, geologic, historic, paleontological, scientific resource values; or areas can be designated that provide unique and exceptional recreation experiences.

Rare communities are assemblages of plants and animals that occupy a small portion of the landscape, but contribute significantly to plant and animal diversity. They generally are characterized by relatively discrete boundaries and are small in area. Rare communities are frequently associated with areas of unusual geology or hydrology. Because of their importance to biological diversity and the small area affected, maintenance and restoration of these areas, as well as inventory and monitoring are a high priority under all alternatives. Special biological areas containing rare species have also been protected under all alternatives.

All rare communities are protected under all alternatives. Differences in acres shown are due to the fact that rare communities may be allocated to another management prescription like backcountry recreation or recommended wilderness study that will equally protect them. This is also the case for some other special area designations as well.

Comparison of the Special Areas and Rare Communities Issue by Alternative

Special Area Designations	Alternative						
	A	B	D	E	F	G	I
	(thousands of acres)						
Research Natural Areas (4B2)	0	2.1	0	0	0	2.1	0
Special Geologic Areas (4C1 & 4C2)	13.3	0	1.1	12.5	0	0	1.5
Special Biological Areas (4D)	5.3	6.0	4.9	4.0	0.7	4.8	4.7
Special Cultural Heritage Areas (4E1a & 4E1b)	7.2	0.2	0.2	1.5	1.1	0.2	1.7
Scenic Areas (4F)	4.9	1.8	2.8	41.8	16.1	0.2	1.0
Other Special Areas (4K)	0	0	0	0	0	0	29.5
Rare Communities (9F)	6.3	10.0	8.5	5.3	0	8.4	7.4
Total Acres of Special Designations	37.0	20.1	17.5	65.1	17.9	15.7	45.8

SUMMARY OF SIGNIFICANT ISSUES

Wild and Scenic Rivers. Which rivers are suitable for designation into the National Wild and Scenic River System and how should rivers that are eligible, but not suitable, be managed? The designation of wild and scenic rivers (W&SR) is a multistage process. "Eligibility" is determined through an inventory of streams and rivers that have outstandingly remarkable values (ORVs). Eligible streams then are classified as wild, scenic, or recreational. Next, "suitability" studies of the streams are accomplished to determine which streams can be recommended to Congress for possible designation.

The outstandingly remarkable values of all eligible wild and scenic rivers are protected under all Alternatives, with the exception of F (1985 Forest Plan). None of these eligible rivers have been evaluated for their suitability for designation as part of the National Wild and Scenic Rivers System. Almost all of them contain some private lands that will require coordination with Virginia Department of Conservation and Recreation (VA-DCR) as well as private landowners. VA-DCR will likely take the lead on several of these rivers. Those that are predominately within Forest Service jurisdiction will be evaluated within the planning period.

Access/Road Management. How do we balance the rights of citizens to access their national forests with our responsibilities to protect and manage the soil and water resources, wildlife populations and habitat, aesthetics, forest health, and desired vegetative conditions? System roads are the primary means of national forest access; however, they are also a source of many concerns. These concerns predominantly center on the environmental effects of roads (which will be addressed in other issues, such as riparian, threatened and endangered species, etc.)

Some people would like to see the motorized access to the national forests increased, especially during hunting seasons for big game, for other recreational uses, or to meet forest management needs. Other people, however, feel that road construction should be limited and some existing roads decommissioned. Other comments were made that new roads should not be constructed for the purposes of logging or for OHV use. The amount of motorized access will need to be balanced with wildlife habitat needs, the need to provide both motorized and non-motorized recreational opportunities, the need to protect the soil and water resources, and the need to have management access.

By and large the road system of the JNF is complete, but there are still occasional needs for new roads to access trailheads, manage vegetation, or facilitate mineral development. These new roads are offset somewhat by decommissioning other roads that are no longer needed. Standards for road construction and maintenance are specified to ensure that water quality and wildlife habitat are protected under all Alternatives.

A forest-wide Roads Analysis was completed for the Jefferson National Forest in January 2003. Roads analysis is an on-going process. The transportation inventory is continually updated as roads are constructed, reconstructed, relocated, reclassified, or decommissioned. In sensitive areas, decisions related to roads will be informed by watershed-scale or project-scale roads analysis. Roads analysis will be conducted concurrently with watershed analysis in priority watersheds. The Forest Supervisor or District Ranger may also decide to perform a watershed-scale or project-scale roads analysis in other areas based on site-specific conditions or issues.

Comparison of the Access and Road Management Issue by Alternative

	Alternative						
	A	B	D	E	F	G	I
Transportation System	Acres In Thousands						
Construction and Reconstruction Prohibited	154.6	157.2	101.5	225.5	128.7	245.8	209.2
Construction Prohibited, Limited Reconstruction	14.7	14.1	17.9	17.2	77.4	18.7	22.4
Limited Construction and Reconstruction	172.6	172.3	106.1	237.3	71.6	180.7	126.8
Construction and Reconstruction Allowed, No increase in Open Road Density	155.4	203.7	73.1	79.0	157.0	203.0	206.9
Construction and Reconstruction Allowed	226.0	176.0	424.7	164.3	288.6	75.1	158.0

Minerals. How will the mineral resources of the National Forests be managed considering public demand for a wide variety of minerals? What areas will be made available for the exploration and development of federal leasable minerals and mineral materials? The use of mineral resources is essential to the local, regional and national economy as well as to the public use, management, and sustainability of the National Forest. Congress has passed various laws providing for the exploration and development of mineral resources, including oil and gas, on National Forest System lands. Federal mineral resources are divided into two categories: 1) leasable minerals and 2) mineral materials. Leasable minerals are managed in cooperation with the U.S. Department of Interior Bureau of Land Management (BLM), and include oil, gas, coal, metallic minerals, and other hardrock leasable minerals. Mineral materials are managed by the USDA Forest Service, and include road aggregate, landscaping rock, riprap, and other earthen construction materials. Mineral materials are used to build and maintain trails, roads, campgrounds; to control erosion and sedimentation; to restore riparian and aquatic habitat; to repair flood damage; etc.

The 1987 Onshore Oil and Gas Leasing Reform Act indicates two decisions to be made regarding leasing of federally-owned oil and gas resources: 1) What lands are administratively available for oil and gas leasing and under what conditions or stipulations, and 2) What specific lands does the Forest Service authorize the BLM to offer for oil and gas leasing. The BLM, in turn, issues an invitation for competitive bid on these lands. This invitation may or may not result in an actual lease, depending on interest.

The federal government owns the rights to all minerals on about 88 percent of the Forest acreage. Mineral rights on the remaining 12 percent of the Forest acreage are privately owned.

Some people have expressed that oil and gas leasing and mining are inappropriate activities on National Forest lands. They are particularly concerned about the effects of these activities on water quality and other resource values. Other people asked that mining and leasing activities not occur in sensitive areas like riparian zones, key recreation areas, and old growth areas. Some people recommended that stipulations of "no surface occupancy" apply to all or part of the Forest and several people noted that the Plan needs to consider opportunities for leasing of various minerals important to society.

Aside from standard and additional stipulations and Federal laws governing mining activities, all alternatives also have forest-wide standards to minimize potential effects to other resources, while ensuring an efficient and effective mineral leasing process.

Comparison of the Minerals Issue by Alternative

	Alternative						
	A	B	D	E	F	G	I
Federal Oil and Gas Leasing Availability and Consent Decision	Acres In Thousands						
Congressionally Withdrawn (No Consent)	55.7	55.7	55.7	55.7	55.7	55.7	55.7
Administratively Unavailable (No Consent)	32.5	27.1	24.7	82.4	0.0	157.8	44.6
Available/Consent with No Surface Occupancy Stipulation	101.1	102.0	67.2	133.2	0.0	63.0	195.9
Available/Consent with Additional Stipulations like Controlled Surface Use	253.0	231.9	181.7	252.1	0.0	196.7	140.5
Available/Consent with Standard Stipulations	186.4	212.0	299.4	105.3	573.0	155.5	192.0
Other Federal Leasable Minerals Availability	Acres In Thousands						
Congressionally Withdrawn	55.7	55.7	55.7	55.7	55.7	55.7	55.7
Administratively Unavailable	70.6	67.8	63.9	117.8	0.0	195.4	81.2
Available on a Case-by-Case Basis	333.4	293.2	209.7	321.3	0.0	221.7	282.0
Available	169.0	212.0	299.4	133.9	573.0	155.9	209.8
Federal Mineral Materials Availability	Acres In Thousands						
Unavailable for Commercial, Personal, and Free Uses	231.8	302.2	191.9	286.1	58.2	392.2	250.6
Unavailable for Commercial and Personal Uses, Available for Free Use	71.2	77.1	83.9	103.5	0.0	76.6	102.2
Available for Commercial, Personal, and Free Use	420.3	344.0	447.5	333.7	665.1	254.5	370.5

Special Uses. How should the Forest Plan address special uses of the National Forest? The Forest Service receives many requests for special uses including linear rights-of-way, military exercises, electronic/communication sites and commercial services. Although the Forest planning process cannot predict with certainty the kinds and locations of these special use requests, an attempt has been made to determine what requests may occur and where such use can be appropriately integrated with other forest uses. Whether or not to permit such use is a site-specific project decision. The Forest Plan alternatives identify where there are any types of special uses that would not be compatible with achieving the desired conditions established for a particular area.

Section 302 of the Federal Land Policy and Management Act of 1976 provides the Forest Service's authority to issue leases and permits for the use, occupancy, and development of the public lands. Authorizations for access through national forest to private land are special uses, as are military exercises and training, recreational activities such as outfitting & guiding and competitive events such as fishing tournaments, foot races, horse endurance races, and mountain bike races.

Comparison of the Special Uses Issue by Alternative

	Alternative						
	A	B	D	E	F	G	I
Special Uses	Acres In Thousands						
Unsuitable for Linear R-O-W and Comm Sites	173.7	167.8	113.8	248.6	57.8	254.2	218.0
Unsuitable for Linear R-O-W	3.7	24.7	0	43.9	0	77.3	0
Restrict Linear R-O-W and Comm Sites	309.0	279.8	210.3	286.6	665.5	252.4	221.3
Suitable for Linear R-O-W and Comm Sites - See Forest-wide Standards	236.9	251.0	399.2	144.2	0	139.4	284.0

Fire Management. How will fire be used in land management activities such as wildlife management, fuels management, silviculture, and ecosystem restoration and maintenance? What measures should be taken to minimize air pollution impacts from prescribed fire? The current Forest Plan provides direction for fire suppression strategies along with prescribing fire for a variety reasons including silviculture, fuels treatment, and wildlife habitat improvement. The greater emphasis on ecosystem management has resulted in a need to consider prescribed fire for ecosystem restoration, enhancement and maintenance, particularly in fire-dependant or associate ecological communities and wilderness areas. On the Jefferson NF, controversy surrounds the use of prescribed burning to maintain pastureland and the balds on the Mount Rogers National Recreation Area.

Wildland fires historically burned every 7 to 12 years on dry ridgetops and south-facing slopes, creating an open woodland condition with older aged oaks and pines and a grassy or shrubby understory. This open, savannah-like, woodland is now largely missing from the landscape due to fire suppression and the subsequent ecological changes that favor species that flourish in shadier, fire-free conditions. Restoring and maintaining this open forest woodland that is now in decline provides important habitat conditions for supporting federally-listed threatened and endangered species such as Indiana bat and other high priority species in need of conservation attention such as Appalachian yellow-bellied sapsucker and golden-winged warbler.

In addition, table mountain pine, a fire-dependant species native to JNF, has serotinous cones that are sealed tight until the heat of a wildland fire opens the cone, releasing the seeds inside. Table mountain pine, pitch pine, and other native southern yellow pines are slowly being replaced on the landscapes of the Forest.

Comparison of the Fire Management Issue by Alternative

	Alternative						
	A	**B**	**D**	**E**	**F**	**G**	**I**
Prescribed Fire	Acres In Thousands						
Maximum Burned per Year	14.1	19.3	14.9	9.4	2.9	15.7	15

The JNF Effect on Local Communities & People's Effect on the JNF. What is the role of the Jefferson in supporting local communities in a changing economic environment? Can a balance be found between commodity-related jobs and tourism-based jobs and the amenity related values important to quality of life? How should the changing demographics, attitudes, and needs of people around the Jefferson National Forest be reflected in a changing mix of goods and services? How will management respond to the changes in population and social structures occurring within and adjacent to the national forest? The Jefferson National Forest contributes to local communities in many different ways--through jobs, quality of life, and a sense of place. The people and social structures of these communities are changing as the urban/suburban population continues to grow and our society continues to move away from an agriculture and manufacturing based economy towards a technology and retail based economy. These changes have and will continue to affect national forest management.

The Jefferson National Forest's importance to community economies varies according to the size of the community, its proximity to the Forest, and the diversity of its economy. Typically, the residents of rural communities in close proximity to National Forest lands have used the Forest for both their livelihood and for recreation. The economic well being of the local community has generally been involved in manufacturing and processing of resources.

SUMMARY OF SIGNIFICANT ISSUES

The Forest Service has a rural economic development responsibility as part of the Department of Agriculture. Some comments emphasized the importance of the timber industry to local community base economies, while others noted the importance of the tourism industry and quality of life factors in building a strong economy. Sustainable community forestry was mentioned as one way we might accommodate both of these views.

Social effects on local quality of life are hard to measure. One person's definition of quality of life may directly conflict with someone else's. In our revision outreach efforts, we heard from a diverse set of constituents that the Jefferson NF is very important from personal, societal and spiritual perspectives. These quality of life measures can be related to many of the other issues.

Comparison of the Local Communities Issue by Alternative

	Alternative						
	A	B	D	E	F	G	I
Percent Change in Employment from Current	-9%	-9%	-2%	-11%	---	-14%	-7%
Percent Change in Labor Income from Current	-11%	-11%	-2%	-15%	---	-18%	-9%
Payments to States/Counties (millions of dollars)	2.3	2.2	3.2	1.6	2.7	1.4	2.1
Cumulative Decadal Present Net Values of Benefits and Costs (millions of dollars, 4% discount rate cumulative to midpoint of 5th decade)	$2,531	$2,228	$2,322	$2,431	$2,293	$2,211	$2,312

Subsurface Property Rights. How will subsurface property rights, reserved and outstanding, and mineral leases held by production be taken into consideration when looking at alternative land allocations? Private mineral rights (reserved and outstanding) underlie about 12% of the Forest. Forest Plan regulations (36 CFR 219.22) require that outstanding and reserved mineral rights shall be recognized to the extent practicable in forest planning. Land allocation and management decisions made through the forest planning process can inadvertently affect the rights of these property owners if not taken into account. Some mineral leases are "held by production" meaning the lease is in effect for as long as a well is producing, or capable of producing, oil or gas.

Private property rights, in general, are important to the citizens living around the Jefferson National Forest. The subsurface aspect is important because areas colored in green on Forest Service maps give the appearance of public ownership when this is not entirely true. Subsurface property rights were considered when making any restrictive land allocations, particularly wilderness study recommendations. Management prescriptions, desired conditions, and standards acknowledge where private subsurface property rights exist and specify that restrictions are subject to valid rights and leases.

Comparison of the Subsurface Property Rights Issue by Alternative

	Alternative						
	A	B	D	E	F	G	I
	Acres In Thousands						
High Potential for Conflict	14.9	14.3	12.3	21.5	2.5	21.8	23.1
Moderate Potential for Conflict	49.1	42.8	31.4	52.8	0	45.8	36.8
Low Potential for Conflict	30.6	37.5	50.9	20.3	92.1	27.0	34.7

Mount Rogers National Recreation Area. What mix of goods and services are appropriate on the Mount Rogers NRA considering the qualities of the area that established its special designation? How should the Crest Zone be managed?

The following table shows the allocation of management prescriptions used on the Mount Rogers National Recreation Area for each alternative. Alternatives B and G would both cease managing the high country of the NRA to maintain the high elevation open pastoral setting. Alternative I restores key areas of spruce-fir forest for the northern flying squirrel. Alternative F (current management) is not shown because no attempt was made to map the current Mount Rogers Management Plan.

Comparison of the Mount Rogers NRA Issue by Alternative

Prescription	Alternative					
Code	A	B	D	E	G	I
0.B	0.5	0.5	0.5	0.5		0.5
1A	12.3	12.3	12.3	12.3	12.3	12.3
1B	4.7	2.0	0.2	15.5	22.6	2.1
2C3	4.0			1.2	1.5	1.2
4A	11.8	13.7	14.7	11.7	11.6	6.4
4B2		0.4			0.4	
4C1	0.9		0.8	0.8		0.8
4D	0.5	0.5	0.5	0.5	0.5	0.5
4E1a	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4F	4.4	0.6	0.6	6.9		0.1
4K						14.2
5A	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
5B						<0.1
5.C						0.1
6A	0.6	1.0	0.4	0.6	2.9	0.2
6B	0.4	0.1	0.1	0.5	1.9	0.2
6C	1.8	22.4	4.7	5.1	33.7	3.3
7A	1.9		0.5	1.6		1.8
7B	38.8		1.4	36.6		11.5
7D	6.2	3.2	3.3	11.1	2.3	2.6
7E1	1.9			3.9		3.4
7E2	10.9		24.4	4.4		23.3
7G	6.3	0.6		3.6		3.6
8A1		23.0	2.5		0.1	7.1
8A2	3.7	2.3			15.2	
8C	2.2	8.5			7.9	20.4
8E1	2.5			1.8		2.2
8E5	<0.1	0.1	0.1	<0.1	0.1	
8E6		2.4			2.1	
9A1	4.8	4.8	4.8	4.8	4.8	
9A3	0.3	7.4	0.3	0.3	1.5	0.6
9B2		1.0				
9B3		7.4	8.9		10.7	
9F		1.1			1.1	
9H		23.0	4.7		0.1	3.3
10A			31.2			
10B	7.9		19.5	1.9		
10D			4.4			
12A				6.1	7.3	7.4
12B	11.5	2.5		9.1	0.2	11.7
Total	140.8	140.8	140.8	140.8	140.8	140.8

SUMMARY OF SIGNIFICANT ISSUES

Lands: Priorities for Acquisition, Deposition, and Exchange. What are the priorities for land adjustments including acquisition, deposition, and exchange? Many priorities for land adjustment are spelled out in existing federal law and regulation including consideration of manageability; economic development; recreation and scenic values; biological values including threatened, endangered and sensitive species habitat; existing and potential land uses; and mineral potential. The Revision should display how these priorities might affect the land adjustment plan for the forest.

All alternatives have similar land adjustment programs aimed at consolidating National Forest ownership. Priorities for land adjustment are primarily set through national direction and carried out as lands become available for acquisition or exchange. Although it is possible to rearrange priorities by alternative, in reality land adjustments are driven more by what opportunities become available than by priorities.

Air Quality. How will the revised Forest Plan guide monitoring and mitigation of air pollution effects on forest resources and facilitate interaction with the regulatory community? How will Forest management prescriptions incorporate air pollution considerations? Air pollution is having negative effects on the Jefferson National Forest. Sulfur compounds in the atmosphere are primarily responsible for the haze that obscures visibility. Sulfur compounds and sometimes nitrogen compounds cause acidification of headwater streams and can cause nutrients to leach out of soils. Ozone causes visible injury to plant leaves, and can also cause reduced plant growth. Because the pollutants originate from many sources over a wide geographic area, regional approaches to air pollution emission reductions are necessary to improve air quality and resource conditions. Under all Alternatives, the Forest will work cooperatively with air management agencies, Visibility Improvement State and Tribal Association of the Southeast (VISTAS), and other regional planning organizations in order to reduce air pollution impacts to resources on the Forest.

The projected emissions from prescribed fires under all Alternatives are not expected to be a large contributor to total fine particulate matter mass nor exceed any of the fine particle National Ambient Air Quality Standard (NAAQS). Nevertheless, the Forest will work with state air quality regulators to develop emissions inventories and other information.

Comparison of the Air Quality Issue by Alternative

	Alternative						
	A	**B**	**D**	**E**	**F**	**G**	**I**
Air	Percent Increase						
Maximum Percent Increase in $PM_{2.5}$ Emissions over Current Levels (first decade) from prescribed fire	4	6	4	2	—	5	4

ALTERNATIVES

Seven alternative ways of addressing the significant issues were developed in detail in the Environmental Impact Statement. A brief description of each alternative follows. (For a detailed chart on the comparison of alternatives, refer to Chapter 2 in the Final EIS.)

Alternative A. Alternative A emphasizes production of goods and services beneficial to local economies and communities. Timber management provides sustained yield of wood products with emphasis on high quality sawtimber and public-demand species including game and other species.

Alternative B. Alternative B is biologically driven, emphasizing restoration of vegetation to potential natural vegetation (plant associations) based on ecological potential and capability of the land and providing a mix of the wildlife habitats for game and non-game species. Prescribed fire, wildland fire use, and timber harvesting are used to restore natural ecosystem processes and maintain fire-dependant communities. The long-term goal provides old growth conditions by old growth community types within the ecological province or section similar to that existing before large-scale, extensive pioneer settlement and land uses.

Alternative C. Alternative C was not considered in detail but would emphasize resource management with minimal human intervention to the natural resources. Active management would only occur for the protection of resources, for meeting legal requirements, and for maintaining current recreation opportunities. However, it was determined that this alternative as originally envisioned could not meet all the legal requirements of the National Forest Management Act of 1976 (NFMA), the Multiple-Use Sustained-Yield Act of 1960 (MUSYA) and the Endangered Species Act of 1973 (ESA) but other alternatives were considered in detail that provided for relatively low levels of management activities. Alternative C was also eliminated from consideration because it only addressed some, but not all, of the forest planning issues that were identified by the public.

Alternative D. Alternative D strives to reach and maintain a balanced age class for tree growth. All suitable lands are available for sustained-yield management. Production of both commercial wood products and a variety of aquatic/wildlife habitats are also emphasized. Old growth is provided only on unsuitable land, on steep slopes, riparian areas, or similar areas.

Alternative E. A natural setting and concentrated facilities are provided that attract a variety of recreation users, with an emphasis on backcountry recreation. Most areas maintain a continuous forested canopy. Large blocks of the forest would be maintained in a roadless condition to provide remote, backcountry recreation. Active resource management is concentrated in certain locations and supports recreation use and visual quality.

Alternative F. This is the "No Action Alternative" (Current Management). This is the management under the existing 1985 Forest Plan, as amended. This alternative was developed to address the 'aging forest' condition. Management activities are designed to improve the age class distribution in all forest types and provide a balanced market and non-market resource program to maintain a broad geographic distribution of socio-economic benefits.

Alternative G. Alternative G emphasizes linking together movement corridors and large undisturbed areas, and concentrates on threatened, endangered and sensitive species. National Forest system lands provide habitat for area sensitive species and a wide diversity of native plants and animals, particularly late-successional species. Old growth restoration areas around clusters of existing old growth and mature forests with old growth characteristics provide natural old growth dynamics. Road network mileage is reduced through closure and decommissioning of roads not needed for ecosystem stewardship or restoration.

Alternative H. Alternative H was not considered in detail but would provide for active resource management to achieve multiple-use objectives with all lands classified as unsuitable for timber production. There would be timber harvest, but not under a sustainable harvest schedule as is done on suitable forest land. This alternative was eliminated from consideration because the land allocations were identical to Alternative A, and therefore, the environmental effects would be essentially the same. The only significant difference between the two alternatives was that in Alternative A, the majority of those acres being managed through silvicultural harvesting methods were classified as acres 'suitable for timber production', while in Alternative H, those same acres and same management activities would be classified as 'unsuited for timber production.' Since the main difference is primarily an administrative classification change, and there would be no differences in the overall outputs and environmental effects, it was decided that this alternative did not need to be considered further in detail in the FEIS.

Alternative I - This is the Selected Alternative. Alternative I recognizes and balances the wide diversity of interests and values in management. This alternative emphasizes watershed health, water quality, semi-primitive and remote recreation opportunities, threatened and endangered species recovery, sustainable forest ecosystem management on lands suitable for timber production, habitat for wide-ranging species, and a high quality forest transportation network. This alternative provides high quality, nature-based recreation opportunities, emphasizing non-motorized settings with natural appearing landscapes and those that are not widely available on non-Federal lands. Diverse ecosystems are sustained that support viable plant, wildlife and fish populations including habitats for those species needing large contiguous forested landscapes, like the ovenbird, and those species needing openings, like the eastern towhee. All existing inventoried old growth is protected, as well as large blocks of future old growth. Forest health is a priority to ensure a forest that is resistant to large-scale, catastrophic plant mortality from insects or disease, especially from non-native organisms. Prescribed fire, wildland fire use, and timber harvesting are used to restore natural ecosystem processes, maintain fire-dependant communities and reduce fuel loading. The total allowable sale quantity (maximum amount) for timber is estimated at 21 million board feet per year, or about 2,000 acres per year through various methods of harvest.

SUMMARY OF THE REVISED FOREST PLAN

The Forest Plan is based on the Selected Alternative from the Environmental Impact Statement. It lays out the desired conditions, goals, objectives, and standards (or rules we will follow) in managing the Jefferson National Forest for the next ten to fifteen years.

The Forest Plan is based on a subdivision of the Forest into Management Areas based on watershed, ecological, biological, and socio-economic factors. Each Management Area is allocated to management prescriptions designed to specifically address citizen and management issues and concerns based on the capability and suitability of lands for various resource activities. Each management prescription is focused on the desired condition of the land, and provides for multiple uses, resources, services, and values. Each National Forest in the Southern Appalachians has similar management prescriptions adjusted to fit local conditions and issues.

The Forest Plan is divided into the following sections:

Forest-wide Direction describes Forestwide goals, objectives, and standards.

Management Prescriptions describe desired conditions, objectives, and standards for specific land allocations.

Management Area Direction displays the distribution of land allocations by geographic areas of the Forest, and describes local conditions, as well as additional objectives and standards.

Implementation of the Plan contains information on how the Forest Plan will be implemented, details the requirements for monitoring and evaluating the Forest Plan, and discusses how amendments or revisions will occur.

Appendices contain additional detailed information relating to the Forest Plan.

MANAGEMENT AREAS

The Jefferson national Forest is separated into 11 management areas. These are generally based on the boundaries of watersheds. For more detailed information related to the Management Area descriptions and direction, see Chapter 4 of the Forest Plan.

Management Area 1 – Northern Blue Ridge

This management area contains the Glenwood Ranger District, except for the Smith Flats area. The area lies within the Northern Blue Ridge Ecological Subsection. Congressionally-designated features include the James River Face and Thunder Ridge Wildernesses in its north portion. The Appalachian National Scenic Trail and Blue Ridge Parkway traverse the area.

The area contains high quality timber growing sites including numerous cove sites. The area also contains the entire known global range of the rare terrestrial Peaks of Otter Salamander.

This area has very high value for recreation, wildlife habitat, and timber production. These high resource values have often led to conflicting demands on resources. And management activities, in recent years, have often been highly controversial.

This management area includes the Upper Roanoke, Upper James, and Middle James-Buffalo watersheds.

Desired Conditions. The good access and high site productivity in Arnolds Valley and Middle Creek are used to emphasize wildlife habitat management with creation of early successional habitat. The northern end of this management area is Wilderness and remote. Dispersed recreation opportunities are also highlighted in the eastern end where access is not as well established. The North Creek area's rich diversity of resources is a special management area where water quality, Peaks of Otter salamander, recreation and habitat management are all highlighted. The Habitat Conservation Agreement for the Peaks of Otter Salamander and the standards found in Management Prescription 8E2 are followed to protect this rare species. Visual resources are very important and managed to maintain the spectacular views, especially along the Blue Ridge Parkway, Appalachian Trail, Peaks of Otter and other major roads.

Management Area 2 – Upper James River

This management area contains the entire New Castle Ranger District, the Smith Flats portion of the Glenwood Ranger District and the portions of the New River Ranger District that flow into Potts Creek, Craig Creek and the North Fork Roanoke River. The area lies within the Ridge and Valley Ecological Subsection. Congressionally-designated features include the Shawvers Run and Barbours Creek Wildernesses and most of the Mountain Lake Wilder-

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ness. A segment of the Appalachian National Scenic Trail is located along the southeastern portion of the area.

Vegetation has historically been managed for both timber and wildlife throughout most of this area. The James spiny mussel, a federally endangered mussel species, is found in Johns Creek and in the south Fork of Potts Creek. Dragons Tooth, a unique geological feature, and Millers Cover are both in the area.

Hunting is an important part of the culture here and that is the primary recreation use in this area. The only all-terrain vehicle trail area on the Forest is located on Patterson Mountain. Many dispersed recreation opportunities are centered around historic sites. The Catawba and North Fork of Roanoke areas are more urban than Craig County, as they are adjacent to the cities of Blacksburg and Roanoke. The area typifies the "wildland-urban" interface.

This management area is in the Upper James River watershed.

Desired Conditions: Restoration of the more open oak and oak-pine woodlands on the drier south-facing slopes and ridgetops through reintroduction of wildland and prescribed fire will benefit many of the wildlife species found throughout this management area Both early and late successional forest species can find important elements of their habitat needs in these historically widespread communities. Increased use of fire will also reduce potential wildland-urban interface problems along the Forest boundary where communities are developing.

Clean water and gravels will be provided in streams inhabited by and upstream of the James spinymussel, Atlantic pigtoe and their host fish, as well as the roughhead shiner and orangefin madtom so that populations can be maintained, protected and restored.

The traditional emphasis of this management area on creation of wildlife habitat is continued with a focus on early successional habitat and a mix of habitats especially in the Broad Run, Johns Creek, Fenwick areas and along roads in Patterson Creek. Tub Run will continue to be managed for ruffed grouse and Craig Creek for quail. Habitat for more remote wildlife, like bear, continues to be the emphasis in the Potts Creek drainage and the west slope of Upper Craig Creek. The upper end of Potts Creek and Johns Creek also has the Mountain Lake Wilderness. Remote conditions continue in the two Wildernesses and a large block of the North, Caldwell and Price Mountain is devoted to remote backcountry recreation.

Management Area 3 – New River

This management area contains the portion of the New River Valley Ranger District that is within the New River watershed. It lies within the Ridge and Valley Ecological Subsection. Congressionally-designated features include Peters Mountain Wilderness, Kimberling Creek Wilderness, and a portion of the Mountain Lake wilderness. The Appalachian National Scenic Trail runs through most of the northern part of this area.

Stony Creek and the lower reaches of Dismal Creek contain the candy darter, a Forest Service Sensitive fish species.

Use of public lands in this Management Area is greatest during hunting season, primarily by local residents. The Appalachian Trail heavily influences this management area. Two major attractions are Pandapas Pond and the Cascades recreation areas. Interstate 77 cuts through the middle of the management area from north to south. The area typifies the "wildland-urban" interface found on the more developed parts of the Forest.

This management area includes the Upper New River and the Middle New River watersheds.

Desired Conditions: Restoration of the more open oak and oak-pine woodlands on the drier south-facing slopes and ridgetops through reintroduction of wildland and prescribed fire will benefit many of the wildlife species found throughout this management area. Both early and late successional forest species can find important elements of their habitat needs in these historically widespread communities. Increased use of fire will also reduce potential wildland-urban interface problems along the Forest boundary where communities are developing.

Clean water and gravels will be provided in streams inhabited by and upstream of the Tennessee heelsplitter and its host fish in Wolf Creek, as well as the candy darter in Laurel Creek, Stony Creek, and Dismal Creek so that populations can be maintained, protected and restored. The water quality from streams draining into Hunting Camp Creek will be improved through restoration on NFS lands and working cooperatively with local landowners.

Remote characteristics are emphasized north of the New River, with Mountain Lake and Peters Mountain Wildernesses and bear habitat on the more remote ridges. More accessible areas, like Clendenin, are managed for a mix of wildlife habitats. Recreation is a strong emphasis at Cascades and Poverty Creek, while fishing, recreation and protection of aquatic species are the focuses along Stony Creek.

Wilderness and backcountry recreation is the emphasis along the Appalachian Trail from Garden Mountain to Brushy Mountain. Readily accessible areas at Crab Orchard and between Kimberling Creek Wilderness and Brushy Mountain will be used to create a mix of habitats. This is also true for Round Mountain and Dismal Creek. Crawfish Valley is managed to provide old field and early successional habitat while the surrounding slopes are managed for backcountry recreation. Backcountry recreation is also the focus of the Long Spur and Tract Fork areas, while developed and dispersed recreation are featured in Stony Fork and municipal watershed management in Peak Creek.

Management Area 4 – North & Middle Fork Holston

This management area contains the western portion of the New River Ranger District that drains into the Holston River. The area lies within the Ridge and Valley Ecological Subsection. Congressionally-designated features include the Beartown Wilderness and a segment of the Appalachian National Scenic Trail that runs through the area.

The entire area receives considerable use during hunting season. Illegal 4-wheel-drive vehicle use is heavy throughout the area including the Beartown Wilderness. The close proximity of the area to population centers in Wytheville, Rural Retreat and Marion, and the ease of access from Interstate 81 and various federal highways, state secondary roads and Forest Service roads make the area a popular destination for dispersed recreation on the Forest.

The management area includes the North Fork Holston River and the South Fork Holston River watersheds.

Desired Conditions: Remote backcountry and Wilderness continue from the adjoining New River Management Area along Garden Mountain and Beartown. The more accessible areas are managed to create a mix of wildlife habitats and Bear Creek is a mix of bear management and backcountry recreation.

Clean water and gravels in streams inhabited by and upstream of the Tennessee dace are provided so that populations can be maintained, protected and restored.

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Management Area 5 – Glade Mountain/Pond Mountain

Glade Mountain/Pond Mountain is a crossroads management area. It is the only management area in the Great Valley Ecological Subsection. It is administered by the Mount Rogers National Recreation Area, though it is not part of the National Recreation Area, but is part of the old Wythe Ranger District. The only Congressionally designated feature is the Appalachian Trail that crosses through the center of the area where it leaves the Blue Ridge for the Ridge and Valley.

Interstate 81 is along the northern boundary of the area. The southern boundary is State Routes 614 and 670. Private lands surround this management area on all sides except for the national forest lands that form a corridor along the Appalachian Trail in the southwest corner of the management area.

Prominent features within the management area include Glade Mountain and Pond Mountain. Use of the area primarily is by dispersed recreationists such as hunters and hikers. The Appalachian National Scenic Trail is the most prominent recreation resource within this management area. Illegal all-terrain vehicle use in this area is also a problem that appears to be growing annually.

This management area is located in the Upper New River and the South Fork Holston River watershed.

Desired Conditions: Bear management is the focus of this area along with continued monitoring and restoration of past mining impacts. Soil and water quality are restored through soil and water improvement activities. Those improvements that have been implemented continue to be monitored to speed the recovery of the abandoned mines in the area. Place a high priority on maintaining all of these improvements until the lands are fully recovered.

Management Area 6 – East Iron Mountain (Mount Rogers)

This management area contains the portion of the Mt. Rogers National Recreation Area that drains into the Upper New River, except for the High Country. The East End Management Area is in the Southern Blue Ridge Ecological Subsection. Mt. Rogers is one of only 12 national recreation areas within the nation. Congressionally-designated features include the National Recreation Area itself and the Little Dry Run Wilderness.

The main recreational uses on the east end on the East Iron Mountain Management Area are horseback riding, hunting, fishing, and camping. This management area shares the regionally significant Virginia Highlands Horse Trail with the West End Management Area. The New River Trail State Park, a 57-mile long former railroad grade, is adjacent to the east end of this management area. Illegal all-terrain vehicle use on this area is a serious problem that continues to grow annually.

This management area is in the Upper New River watershed.

Desired Conditions: The focus in this area is primitive to modestly developed recreation; offering areas for people who want to stay away from the crowds. Most of the area is managed for dispersed recreation ranging from Wilderness to backcountry to low level developed campgrounds, many with an emphasis on horse use. A few areas are managed for restoration of woodland and southern yellow pine communities, as well as the creation of early successional and a mix of successional habitats. All of the area is also managed to protect and enhance scenery.

As part of the Mount Rogers National Recreation Area, East Iron Mountain is managed to best provide for (1) public outdoor recreation benefits; (2) conservation of scenic, scientific, historic, and other values contributing to public enjoyment; and (3) such management of natural resources as will promote, or is compatible with, and does not significantly impair the purposes for which the NRA was established.

Horse use is maintained and managed to meet the recreational needs of the horseback riders while maintaining the resource needs of sensitive areas. Recreation use in Bournes Branch is managed to reduce impacts on the riparian resources.

Grazing allotments showcase sound range management practices that maintain and restore vegetated riparian areas and stable streambanks, along with a pleasant rural setting reminiscent of an earlier period in time.

Management Area 7 – High Country (Mount Rogers)

This management area is composed of the "high country" of the Mount Rogers National Recreation Area, so called because much of the area is located at elevations over 4,000 feet. Mount Rogers and Whitetop Mountain, the highest and second highest mountains in the State, respectively, are located within this management area. The area lies within the Southern Blue Ridge Ecological Subsection.

Mt. Rogers is one of only 12 national recreation areas within the nation. Congressionally-designated features include the National Recreation Area itself, Lewis Fork Wilderness, Little Wilson Creek Wilderness and the Appalachian National Scenic Trail.

The northern boundary runs along the crest of Straight Mountain, Grave Mountain, and Iron Mountain; the eastern boundary follows State Routes 16 and 730 along the proclamation boundary. The southern boundary follows the proclamation boundary just north of U.S. Highway 58; the western boundary follows U.S. Highway 58 from Green Cove to Beartree Gap.

Most of this area is significant because it contains a very diverse assemblage of plants and animals. The northern extent of such plant species as the Fraser fir and Umbrella-leaf, and animal species, such as Weller's salamander and the Pygmy salamander, are in the area. Federally listed species such as the Virginia northern flying squirrel and Gray's lily are also found here.

This area contains the mountaintop balds that are the central attraction for high numbers of visitors. These balds provide habitat for numerous rare plant species and also serve as the greatest visual attraction to the area, offering views in a unique setting not found elsewhere in Virginia. The mountaintop balds are kept open through grazing by ponies and cattle, the use of prescribed fire, and manual brush control.

The most popular trails in the area include the Appalachian National Scenic Trail, Virginia Highlands Horse Trail and Rhododendron Gap Trail. Day hiking, backpacking, horseback riding and pony watching are the primary dispersed recreation activities, with hunting, fishing and blueberry picking also being primary uses seasonally. Whitetop Mountain has a history of recreation use dating back to early 1900's. Adjacent to the management area is Grayson Highlands State Park. Several annual festivals, as well as the annual Wilburn Ridge Pony Association's pony auction, attract thousands of people to the area.

Land uses in this management area are mostly agricultural. Pasture land continues to be converted to Christmas tree production.

The area is one of two on the Forest that is not defined by watershed divides. This area is

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located in the South Fork Holston River and Upper New River watershed.

Desired Conditions: Management focuses on the special biological and recreational attributes of the High Country, almost entirely allocated to special area management prescriptions and Wilderness. Rare communities and the habitats of listed and rare species are protected and expanded.

As the heart of the Mount Rogers National Recreation Area, the High Country is managed to best provide for (1) public outdoor recreation benefits; (2) conservation of scenic, scientific, historic, and other values contributing to public enjoyment; and (3) such management of natural resources as will promote, or is compatible with, and does not significantly impair the purposes for which the NRA was established.

Horse use is maintained and managed to meet the recreational needs of the horseback riders while maintaining the resource needs of sensitive areas.

Grazing is used to control vegetation. Allotments showcase sound range management practices that preserve rare communities, maintain and restore vegetated riparian areas and stable streambanks, along with a pleasant rural setting reminiscent of an earlier period in time.

Management Area 8 – West Iron Mountain (Mount Rogers)

This management area contains the portion of the Mt. Rogers National Recreation Area that drains into the South Fork Holston River, except for the High Country. It lies within the Southern Blue Ridge Ecological Subsection. The boundary between the West Iron Mountain Management Area and the High Country Management Area is along U.S. 58 from Green Cove to Beartree Gap and along the ridge of Iron Mountain.

The federally threatened Virginia round-leaf birch is located within the headwaters of the South Fork Holston River drainage. Whitetop Laurel Creek and the headwaters of the South Fork of Holston River are two of the better trout streams in Virginia.

Regionally popular and heavily publicized trails within this area are the Virginia Highlands Horse Trail and the Whitetop Laurel Accessible Fishing Trail; trails with national significance are the Virginia Creeper National Recreation Trail and the Appalachian National Scenic Trail. Unique to this area are motorcycle trails in the Feathercamp area, one of only two areas across the national forest.

This management area is in the South Fork Holston River watershed.

Desired Conditions: The emphasis for this Management Area is on providing a wide variety of recreation experiences. These include hiking, bicycling, motorized trail use, backcountry hiking, horseback riding, camping, fishing and hunting all at a very high level of quality.

As part of the Mount Rogers National Recreation Area, West Iron Mountain is managed to best provide for (1) public outdoor recreation benefits; (2) conservation of scenic, scientific, historic, and other values contributing to public enjoyment; and (3) such management of natural resources as will promote, or is compatible with, and does not significantly impair the purposes for which the NRA was established.

Horse use is maintained and managed to meet the recreational needs of the horseback riders while maintaining the resource needs of sensitive areas.

Allotments showcase sound range management practices that maintain and restore vegetated riparian areas and stable streambanks, along with a pleasant rural setting reminiscent of an earlier period in time.

Management Area 9 – Clinch River

This management area is located on the Clinch Ranger District and is the portion draining into the Clinch River. It lies in the Eastern Coal Fields Ecological Subsection of the Northern Cumberland Mountain Section. Although considered part of the Northern Cumberland Mountain Section, the area lies within a transition zone between this section and the Appalachian Ridge and Valley Section.

Within this management area, the Environmental Protection Agency has identified the Clinch River as the most biologically diverse aquatic system in the nation. Kelly and Rocky Hollow caves are located in Powell River/Stone Mountain Management Area and have know populations of Indiana bats.

Outdoor recreation is an important use of the national forest land in this area. Some of the most popular recreation sites in this area include Bark Camp, High Knob, High Knob Tower, Guest River Gorge, Flatwoods Picnic, Chief Benge Scout Trail, Wallen Ridge Trail and Little Stony National Recreation Trail. Hunting and fishing are the most popular forms of recreation in this management area.

This management area is located in the "coalfields region" of southwestern Virginia, which has a history of resource extraction and exploitation. Over the last 20 years, timber markets have been strong and wood products industries have provided stable employment and income. Due to high site productivity, national forest lands have been looked to as a primary source for high quality sawlogs in this area. The majority of the mineral ownership in this management area is reserved or outstanding. The Coeburn Gas Field is located in this management area. Thirty-eight new well sites and associated pipelines are currently in the application and environmental analysis process.

This management area is in the Upper Clinch River watershed.

Desired Conditions: The emphasis is to protect habitat for rare species, particularly aquatic species. This includes two Wild and Scenic River study areas, old growth, rare community and biologic areas. While protecting that habitat, the good access and high site productivity in Big Flat Top, Stone Mountain, Stock Creek, Cove Creek, and Wallen Ridge are used to emphasize wildlife habitat management with creation of a mix of successional habitat. The High Knob to Bark Camp area is managed to enhance its recreation value. Devils Fork is managed for backcountry recreation.

The aquatic diversity of fish and mussels are maintained, enhanced and restored into previously occupied habitat where suitable. Beneficial uses are maintained or improved while recreation use continues and while natural gas exploration and development proceeds. Roads are located and maintained so as to maintain slope stability. Forest Service activities will not contribute to impaired water segments. The landslide areas in lower Stony Creek are managed to reduce further impacts and encourage rapid recovery.

Management Area 10 – Powell River/Stone Mountain

This management area is located on the Clinch Ranger District and is the portion draining into the Powell River. It lies in the Eastern Coal Fields Ecological Subsection of the Northern Cumberland Mountain Section.

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Roaring Branch is the major stream attraction with Stone Mountain Trail adjacent to it and the Roaring Branch watershed a Special Management Area. Roaring Branch is the only river eligible for Wild and Scenic status as a "Wild" river. The Powell River was designated by EPA as the second most biological diverse aquatic system in the nation. Kelly and Rocky Hollow caves are located in this management area and have known populations of Indiana bats.

This management area is located in the "coalfields region" of southwestern Virginia, which has a history of resource extraction and exploitation.

This management area is in the Powell River watershed.

Desired Conditions: Most of this Management Area emphasizes dispersed or remote recreation with the Cave Springs wilderness study and Roaring Fork Wild and Scenic Study areas along with the existing Keokee Land and Cave Springs recreation areas.

The aquatic diversity of fish and mussels are maintained, enhanced and restored into previously occupied habitat where suitable. Beneficial uses are maintained or improved while recreation use continues and while natural gas exploration and development proceed. Roads are located and maintained so as to maintain slope stability. Road maintenance and watershed improvement funding are emphasized due to high road density in combination with high aquatic diversity. Forest Service activities will not contribute to impaired water segments.

Management Area 11 – Pine Mountain

This management area contains the northernmost portion of the Clinch Ranger District. It lies in the Eastern Coal Fields Ecological Subsection of the Northern Cumberland Mountain Section. The geology of Pine Mountain is unique, since it is a single, long (125 miles) mountain ridge resulting from geologic events. Although considered part of the Northern Cumberland Mountain Section, the mountain ridge's vegetation is more typical of that found in the Appalachian Ridge and Valley Section.

The two most dominant water features are North Fork of Pound Lake and Flanagan Lake. Poor Fork is a headwater system for the Cumberland River and supports trout and Black Dace, a listed T&E fish species. The area includes the North Fork of Pound inventoried roadless area; the North Fork of Pound Recreation Area complex—consisting of Cane Patch Campground, Phillips Creek, Bee Bottom Picnic, Laurel Creek Primitive Campground and Wise/Pound boat launches; and Cumberland Mountain Trail.

This area is located in the "coalfields region" of southwestern Virginia, which has a history of resource extraction and exploitation. Over the last 20 years, timber markets have been strong and wood products industries have provided stable employment and income. Due to high site productivity, national forest lands have been looked to as a primary source for high quality sawlogs in this area.

The majority of the mineral ownership in this area is in federal ownership and leased. The Forest Service is currently evaluating a proposal to develop gas wells in the North Fork of Pound area.

This management area is in the Upper Levisa River watershed. However, the 800-acre national forest Butler tract is also included in this area and is located on the far southwest side within the Cumberland River watershed flowing into the Tennessee River system.

Desired Conditions: This Management Area is generally managed for dispersed recreation. The North Fork of Pound is managed to maintain its remote characteristics to the extent possible while allowing the development of a natural gas lease for the area. A portion of Pine Mountain is managed to create a mix of wildlife habitat. The rest of the Management Area is managed for municipal watershed management and management of rare communities, biological areas and geological areas.

Beneficial uses of potable water in the municipal watershed are maintained or improved while recreation use around North Fork of Pound Reservoir meets demand and contributes to the economic health of the community. Beneficial uses of potable water in the municipal watershed are maintained or improved while natural gas exploration and development proceed. New road construction is designed with future recreation trail use in mind to minimize disturbance from access.

Within the North Fork Pound roadless area, access is provided for intermittent minerals management activities and primarily maintained for non-motorized recreation in the long-term. Manage horse use to meet the recreational needs of the horseback riders while maintaining the resource needs of sensitive areas.

PRESCRIPTIONS FOR MANAGEMENT AREAS

Management Prescriptions are assigned numbers. Please refer to the Management Area Map in the Forest Plan to see how the prescriptions will be applied on the ground. Colored areas on the maps display the management prescriptions assigned to certain land areas or management areas. Similar to a medical prescription, the management prescriptions represent a range of management actions (i.e., treatments) designed to meet the Forest's goals and objectives. For detailed information on the Management Area descriptions and direction, see Chapter 3 of the Forest Plan.

0B Custodial Management - Small, Isolated Land Areas

This management prescription is allocated to approximately 3,500 acres. These areas are managed at a minimum level prior to disposal or land exchange. No expenditures are involved, except those required by law to fix environmental problems, or to protect human health or safety. No resource is emphasized.

1A Designated Wilderness

Congress has designated 11 wilderness areas on the Jefferson National Forest: James River Face, Thunder Ridge, Barbours Creek, Shawvers Run, Mountain Lake, Peters Mountain, Kimberling Creek, Beartown, Little Dry Run, Little Wilson Creek, and Lewis Fork. These areas encompass 57,645 acres of the Jefferson National Forest.

The emphasis is to allow ecological and biological processes to progress naturally with little to no human influence or intervention, except the minimum impacts made by those who seek the wilderness as a special place offering opportunities to experience solitude in as primitive surroundings as possible.

1B Recommended Wilderness Study Area

Areas recommended to Congress for wilderness study include: Little Wolf Creek, Garden Mountain, Little Wilson Creek Wilderness Addition A and B, Kimberling Creek Wilderness Additions A and B, Peters Mountain Wilderness Additions A, Mountain Lake Wilderness Additions A, B, and C, Shawvers Run Wilderness Addition, James River Face Wilderness Addition, Cave Springs, Stone Mountain (addition to Little Wilson Creek Wilderness), and Helton

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Creek (addition to Lewis Fork Wilderness). These areas total 25,200 acres across the Jefferson National Forest.

These areas are managed to protect their wilderness characteristics pending legislation as to their classification and provide for existing uses where compatible with protecting wilderness character.

2C1 Recommended Wild River

Three miles of Roaring Branch on the Clinch Ranger District were identified as eligible to be considered for designation as part of the National Wild and Scenic Rivers System. Roaring Branch is not suitable for National Wild and Scenic River designation due to private subsurface mineral rights. Under this management prescription, Roaring Branch is managed as a wild river; however, these private mineral rights are acknowledged and reasonable access to develop these rights are granted.

The primary emphasis along Roaring Branch and its associated corridor is to protect and enhance the outstandingly remarkable scenic and geologic values as well as perpetuating the undeveloped setting and non-motorized access that led to the “wild” classification. Roaring Branch will be preserved in a free-flowing condition for the benefit, use, and enjoyment of present and future generations.

2C3 Eligible Recreational River

This prescription includes rivers found to be eligible for consideration as potential Wild and Scenic Rivers with a Recreational Classification. Little Stony on the New River Valley Ranger District, the Clinch River, the Guest River, and Little Stony on the Clinch Ranger District are allocated to this management prescription.

Stony Creek is managed under management prescription 9A4 – Aquatic Habitat Areas. National Forest System lands make up a very small proportion of Russell Fork and the James River. Russell Fork is managed under the adjacent management prescription 4C – Special Geologic Area. The James River is managed under management prescriptions 9G1 – Bottomland Hardwoods, 7E2 – Dispersed Recreation, 9F – Rare Communities, and 8E5 – Old Field Habitat. North Creek and Whitetop Laurel/Green Cove both lie within 4K – Special Areas.

The outstandingly remarkable values of all eligible rivers will be protected regardless of their management prescription allocation.

These river segments and their associated corridors are eligible to be a part of the National Wild and Scenic Rivers System. They are managed to protect and perpetuate the outstandingly remarkable values that led to their eligibility status and classification as "recreational.”

4A Appalachian Trail Corridor

This prescription area consists of those lands mapped as the foreground area visible from the Appalachian National Scenic Trail footpath, and—as designated on a case-by-case basis—associated trail shelters, overnight use sites, viewpoints, water sources and spur trails. The entire Appalachian Trail corridor encompasses approximately 63,000 acres on the Jefferson National Forest. Approximately 30,700 acres are found in this prescription area. The remainder is within wilderness, recommended wilderness study, backcountry recreation, special areas, old growth, special biological areas, aquatic habitat areas, pastoral areas and recreation/administrative/special use sites. Approxi-

mately 320 miles of the AT and 32 associated shelters and designated overnight-use sites lie within the Forest on the Glenwood, New Castle, and New River Valley Ranger Districts, as well as the Mount Rogers National Recreation Area. This prescription area also includes all National Forest System lands acquired by the National Park Service for the Appalachian Trail and administratively transferred to the USDA Forest Service by the National Park Service under a Memorandum of Agreement.

The Appalachian National Scenic Trail is administered by the Secretary of the Interior in consultation with the Secretary of Agriculture, managed as a partnership between the Forest Service, the National Park Service Appalachian Trail Park Office, the Appalachian Trail Conference, and Appalachian Trail Conference-affiliated local AT clubs.

Management practices are designed to protect the AT experience, strengthen the role of the volunteer, provide opportunities for high quality outdoor recreation experiences, and provide for the conservation and enjoyment of the nationally significant scenic, historic, natural and cultural qualities of the land through which the Trail passes. Lands adjoining the prescription area seen from the AT will be managed for multiple use under the provisions of this plan, in a manner that will reasonably harmonize with and be complementary to the AT experience.

4C1 Geologic Areas

Two areas are designated as Geologic Areas, the Raven Cliff karst area on the Mount Rogers NRA, and the Russell Fork boulder field area on the Clinch District. This management prescription is allocated to approximately 1,500 acres across the Jefferson National Forest.

Geologic Areas are managed to highlight and protect unique geologic resources as well as to develop public understanding of, and appreciation for, the influence of geology on the ecology and human history. Management focus is on protection in the Raven Cliff area and on showcasing the unique and scenic geologic resources in the Russell Fork area.

4D Botanical - Zoological Area

This management prescription is allocated to approximately 4,700 acres. These lands contain individual threatened, endangered, sensitive, and locally rare plant or animal communities found within major forest communities, not within a rare community. Rare communities are managed according to Prescription 9F.

These lands serve as a network of core areas for conservation of significant elements of biological diversity. The goal of designation and management of these areas is to perpetuate or increase existing individual plant or animal species and communities that are of national, regional, or state significance and identified as threatened, endangered, sensitive, or locally rare.

4E Cultural/Heritage Areas

Four areas are designated as Cultural/Heritage Areas; the Settlers Museum on the Mount Rogers NRA, the Lignite and Fenwick Mines areas on the New Castle District and the Glenwood Iron Furnace areas on the Glenwood District. This management prescription is allocated to approximately 1,700 acres across the Jefferson National Forest.

Cultural/Heritage Areas are managed to highlight and protect unique historic resources as well as to develop public understanding of, and appreciation for, the influence of human history on the forest ecosystem. Sites are preserved and protected as appropriate in accordance with the law. Management focus is providing public access and education.

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4F Scenic Areas

This 1,000-acre Devil's Fork Scenic Area is found on the Clinch Ranger District. This area is known for its rock outcrops, cliffs, cascades, small waterfall, and the Devil's Bathtub.

The primary emphases for this area are to protect and enhance the scenic qualities and natural beauty found there.

4J Urban/Suburban Interface

This management prescription is allocated to approximately 3,900 acres. Wildland Urban Interfaces occur where forestland adjoins human developments.

These areas emphasize a "defensible space" that provides a buffer between human developments and forestland, reducing the risk of wildfire. This prescription recognizes that these areas are people's "backyards," so a long-term goal of high quality, fire resistant scenery is also emphasized. The goal of this prescription to reduce wildfire risk to neighboring communities by involving regularly scheduled vegetation management activities.

4K Special Areas - North Creek, Crest Zone, Whitetop Laurel, Hoop Hole, Whitetop Mountain, and North Fork of Pound

This management prescription is allocated to approximately 29,500 acres. Each Special Area is described separately in the Forest Plan where specific standards and desired future condition for each of the six areas are discussed. Portions of the North Creek area are suitable for timber production.

These four areas contain a variety of unique natural resources where a mixture of compatible management emphases is deemed the wisest management. Because of their unique features, complexity, and degree of interest, these areas are designated as Special Areas.

5A Administrative Sites

This management prescription is allocated to approximately 200 acres.

Sites include work centers, lookout towers, Forest Service owned houses and offices. Sites are managed to serve/support resource programs and are maintained to protect capital investment.

5B Designated Communication/Electronic Sites

This management prescription is allocated to approximately 72 acres.

These uses serve a public benefit and include ridgetop towers and other related facilities to provide for the nation's communication and electronic network. These designated areas are managed to minimize adverse impacts on other resources.

5C Designated Utility Corridors

This management prescription is allocated to approximately 3,700 acres.

These uses serve a public benefit and include long linear features like high voltage elec-

tric transmission lines and buried pipelines for public drinking water or natural gas. These designated corridors serve uses that require at least 50 feet of right-of-way. Local distribution lines are not included in this prescription area, but rather are part of the prescription area in which they are physically located.

6A Old Growth Forest Communities – Emphasize Natural Processes

This management prescription is allocated to approximately 300 acres.

This prescription is part of an overall network of large (2,500+ acres), medium (100 to 2,499 acres), and small old growth patches not dependant upon or associated with a disturbance regime. Management of these areas emphasizes protection, restoration, and management of old growth forests and their associated wildlife, botanical, recreational, scientific, educational, cultural, and spiritual values. Within this prescription, no forest management activities or intervention will take place. The exception is for forest health considerations when threatened, endangered, sensitive, and locally rare species habitats may be threatened.

6B Areas Managed To Restore/Maintain Old Growth Characteristics

This management prescription is allocated to approximately 800 acres.

This prescription is part of an overall network of large (2,500+ acres), medium (100 to 2,499 acres), and small old growth patches dependant upon a disturbance regime. Management of these areas emphasizes protection, restoration, and management of old growth forests and their associated wildlife, botanical, recreational, scientific, educational, cultural, and spiritual values. Within this prescription, forest management activities are allowed in order to restore or maintain old growth conditions.

6C Old Growth Areas Managed with a Mix of Natural Processes and Restoration Activities

This management prescription is allocated to approximately 30,200 acres across the Jefferson National Forest.

This prescription is part of an overall network of large (2,500+ acres), medium (100 to 2,499 acres), and small old growth patches associated with a disturbance regime. Management of these areas emphasizes protection, restoration, and management of old growth forests and their associated wildlife, botanical, recreational, scientific, educational, cultural, and spiritual values. Within this prescription, most of the area will contain forest communities where no forest management activities or intervention will take place. On a smaller portion of the area, forest management activities are allowed in order to restore or maintain old growth conditions.

7A Scenic Byway Corridor

This management prescription is allocated to approximately 1,800 acres.

Scenic byway corridors are managed to provide visitors with enjoyment of outstanding scenery of natural and cultural landscapes along a well-maintained road. The area may also contain recreational and interpretive trails. The area visible during leaf-off for up to 1/2 mile from either side of the road defines the byway corridor, unless other criteria are established in the specific scenic byway management plan. Management is focused on protecting and showcasing the unique and scenic natural and cultural resources that were the basis for the scenic byway designation.

MANAGEMENT PRESCRIPTIONS

7B Scenic Corridors

This management prescription is allocated to approximately 23,500 acres across the Jefferson National Forest.

The emphasis is on providing, through maintenance or restoration and design, high quality scenery in sensitive recreational and travelway settings. Examples include areas adjacent to "gateway" communities, areas around lakes, rivers and streams, and "backdrop" areas viewed from State-designated byways and major travelways.

7C OHV Routes and ATV Use Areas

This management prescription is allocated to approximately 1,500 acres. The only ATV use area currently designated on the Jefferson National Forest is the Patterson Mountain ATV area on the New Castle Ranger District. Demand exists for additional areas on the New River Valley and Clinch Ranger Districts, as well as the Mount Rogers NRA. ATV use areas are suitable for timber production. Other OHV routes lie within larger prescription areas, which govern their surrounding vegetation management and desired conditions.

Provide for motorized recreation opportunities in designated areas and along designated routes. These use areas and corridors contain routes designated specifically for four-wheel drive, ATV, and motorcycle users. Four-wheel-drive routes are existing system roads designated for their challenging terrain and low impact to other resources. Licensed motorcycle routes include both designated system roads and trails. Designated ATV use areas are managed to mitigate soil, water, and wildlife impacts. Facilities such as trailheads are provided to enhance the quality of the recreational experience and provide access to designated routes.

7D Concentrated Recreation Zone

This management prescription is allocated to approximately 6,000 acres.

Concentrated Recreation Zones are managed to provide the public with a variety of recreational opportunities in visually appealing and environmentally healthy settings. Developed recreation areas, concentrated-use areas, and areas of high density dispersed recreation activity form Concentrated Recreation Zones. Facilities are provided to enhance the quality of the recreational experience and/or to mitigate damage to the affected ecosystems. These areas also serve as "gateways" to the wide diversity of recreation opportunities on the remainder of the forests.

7E1 Dispersed Recreation Areas

This management prescription is allocated to approximately 19,600 acres.

These are areas of non-formal camping and recreational use in various locations across the forest. Dispersed recreation demand is managed to provide the public with a variety of recreation opportunities in a setting that provides quality scenery, trails, and limited facilities. Frequently these are areas of low recreation use, low hunting use, and poor access.

7E2 Dispersed Recreation Areas

This management prescription is allocated to approximately 51,800 acres.

These areas receive moderate to high recreation use and are managed to provide a variety of dispersed recreation opportunities, improve the settings for outdoor recreation, and enhance visitor experiences, in a manner that protects and restores the health, diversity, and productivity of the land. These areas provide a sustained yield of timber products, however, timber harvest methods used are compatible with the recreational and aesthetic values of these lands.

7F Blue Ridge Parkway Visual Corridor

This management prescription is allocated to approximately 3,900 acres. The Blue Ridge Parkway was established June 30, 1936, as a recreation-oriented motor road connecting the Shenandoah National Park in Virginia with the Great Smoky Mountains National Park in North Carolina. The Parkway itself is administered by the USDI Park Service as an elongated park for public use and enjoyment through safe, uninterrupted, leisure motor travel, which provides for the conservation and interpretation of the natural and cultural resources of the Southern Appalachian Mountains. The Blue Ridge Parkway is known for spectacular mountain and valley vistas, quiet pastoral scenes, sparkling waterfalls, colorful wildflower and foliage displays, and its interpretation of mountain history and culture.

The emphasis of this management prescription is to manage National Forest System lands, which can be seen from the Blue Ridge Parkway, in a manner that contributes positively to the Parkway visitor's experience along this motorized national treasure. Views from Parkway overlooks appear natural and retain high to very high scenic integrity.

7G Pastoral Landscapes

This management prescription is allocated to approximately 3,700 acres.

The emphasis is on providing, through maintenance or restoration, high quality, generally open landscapes with a pastoral landscape character, frequently found in visually important travel corridors. These areas include those landscapes identified on the Jefferson National Forest as part of the Landscapes for the Future program initiated in the mid 1970's. Many of these previously privately owned pastured farmsteads, which were acquired on the Mount Rogers National Recreation Area, were earmarked to maintain their pastoral landscape character in support of the Rural Americana theme of the NRA. These landscapes are frequently found in visually important travel corridors.

8A1 Mix of Successional Habitats in Forested Landscapes

This management prescription is allocated to approximately 112,600 acres across the Jefferson National Forest. These areas lie within extensive (>75,000 acres) forested landscapes (public and private lands) with 70 percent or greater forest cover, and are managed for a broad suite of animals and plants. Species associated with mid- to late-successional forest habitats, area-sensitive species, and those species which use a mix of habitats to fulfill different needs are all provided for in this prescription. Maintenance, enhancement and restoration of native forest communities, particularly southern yellow pine and the wide variety of oak forest communities, are closely related to the primary goal of this prescription area. These communities are needed in order to provide important habitat components like hard mast and thermal cover to maintain energy reserves of species and support winter survival.

These areas provide habitat for plants and animals associated with mid- to late-successional forest habitats. Management activities are designed to: 1) retain forest cover across the prescription area, 2) increase spatial heterogeneity by increasing both early and late successional habitat conditions, 3) increase vertical vegetative diversity (canopy, sub-

canopy, shrub, herbaceous layers all present and fairly well developed), 4) maintain or enhance hard and soft mast production, and 5) limit motorized access across the prescription area.

8B Early Successional Habitat Emphasis

This management prescription is allocated to approximately 19,600 acres.

This area emphasizes providing optimal to suitable habitat for a variety of upland game species and plant and animal populations associated with early successional forest habitats. Management activities are designed to: 1) sustain a distribution of early successional habitat conditions interspersed throughout a forested landscape, 2) maintain a habitat structure which provides both horizontal and vertical diversity, 3) optimize hard and soft mast production, and 4) control access to protect habitat when necessary.

8C Black Bear Habitat Management

This management prescription is allocated to approximately 57,300 acres. Commercial timber harvest is appropriate within this management prescription.

This area emphasizes providing optimal habitat for black bears and other wide-ranging area-sensitive species. Management activities are designed to: 1) provide a secluded and diverse habitat; 2) ensure adequate den sites, and 3) maintain hard and soft mast production.

8E1 Ruffed Grouse Habitat Emphasis

This management prescription is allocated to approximately 16,100 acres.

This area emphasizes providing optimal habitat for the ruffed grouse, an economically important small game bird that has experienced population declines throughout its range. Management activities are designed to: 1) sustain a distribution of early successional habitat conditions interspersed throughout a forested landscape, 2) provide dense stands of saplings in the 5 - 20 year age group for hiding and thermal cover, 3) provide regenerating stands 3 – 7 years of age that still have a significant herbaceous component along creek bottoms, damp swales, and lower north or east slopes for brood habitat, 4) optimize hard and soft mast production, 5) provide drumming platforms, and 6) control access during critical nesting and brood-rearing seasons.

8E2 Peaks of Otter Salamander

This management prescription is allocated to approximately 7,700 acres on the Glenwood Ranger District. The area is divided into a primary habitat conservation area (2,400 acres) unsuitable for timber production and a secondary habitat conservation area (5,300 acres) suitable for timber production. The Peaks of Otter salamander (*Plethodon hubrichti*) is a USDI Fish and Wildlife Service “species of special concern,” a species of “special concern” in Virginia, and a Forest Service “sensitive” species. The worldwide range of this species is restricted to Virginia in the counties of Bedford, Botetourt, and Rockbridge, primarily on lands of the Jefferson National Forest and the Blue Ridge Parkway.

The entire Peaks of Otter salamander Habitat Conservation Area is 20,686 acres and includes Blue Ridge Parkway lands, as well as management prescriptions 1A, 4A, 4K1, 5B, and 12A. This desired condition and standards are incorporated into these other management prescriptions by reference.

8E2a Peaks of Otter Salamander Primary Habitat Conservation Area

Management of these lands emphasizes maintaining and enhancing Peaks of Otter salamander habitat to assure its continued survival and reproduction on the Jefferson National Forest. Management is in accordance with the guidelines of the *Habitat Conservation Agreement for the Peaks of Otter Salamander* (August 26, 1997) between the USDA Forest Service, the USDI Park Service, and the USDI Fish and Wildlife Service. Connectivity of unaltered or enhanced habitat for the Peaks of Otter salamander is emphasized.

8E2b Peaks of Otter Salamander Secondary Conservation Area

Management of these lands emphasize maintaining Peaks of Otter salamander habitat to assure its continued existence on the Jefferson National Forest. It also provides wildlife habitat for other species and takes a more active role in maintaining and enhancing the health of oak and mixed oak forest communities through vegetation management. Research and monitoring to determine the effects of multiple use management activities on the Peaks of Otter salamander are an important component of this prescription. Management is in accordance with the guidelines of the *Habitat Conservation Agreement for the Peaks of Otter Salamander* (August 26, 1997) between the USDA Forest Service, the USDI Park Service, and the USDI Fish and Wildlife Service.

8E4 Indiana Bat Hibernacula Protection Areas

Indiana bat "hibernacula" protection areas are divided into two management prescriptions: the Primary Cave Protection Area (900 acres) and the Secondary Cave Protection Area (8,800 acres).

The Indiana bat *(Myotis sodalis)* is a Federally listed endangered species that occurs in several locations across western Virginia. Indiana bats are known to be hibernating in two caves located on the Jefferson National Forest: Shire's Cave on the New Castle Ranger District; and Kelly Cave on the Clinch Ranger District. Both of these caves are gated to protect Indiana bat hibernaculum. In addition, portions of the primary and secondary cave protection areas surrounding caves located on private land include Rocky Hollow Cave (Wise County, VA), Newberry-Bane Cave (Bland County, VA), and Patton Cave (Monroe County, WV) are also located on the Jefferson National Forest. To provide protection for Indiana bats and their habitat, this management prescription is allocated to approximately 9,700 acres across the Forest.

These prescription areas are intended to contribute to the goals of reversing population declines and reestablishing healthy populations of Indiana bats across the eastern United States. Management is based on the guidelines of the Indiana Bat Recovery Strategy for the George Washington and Jefferson National Forests (April, 1997).

Management activities are designed to: 1) protect hibernacula (caves in which the bats spend the winter); 2) maintain and enhance upland and riparian swarming and foraging areas; and 3) identify and protect summer roosting and maternity site habitat.

8E4a Indiana Bat Primary Cave Protection Area

Within this prescription area, habitats are managed to maintain, restore, and enhance Indiana bat populations. Management of the primary cave protection area is focused on protecting the watershed of the cave along with maintaining and enhancing the surrounding environment where bats swarm, forage, and roost. Timber harvest is not appropriate within this prescription area.

MANAGEMENT PRESCRIPTIONS

8E4b Indiana Bat Secondary Cave Protection Area

Within this prescription area, habitats are managed to maintain, restore, and enhance Indiana bat populations. The goals of the secondary cave protection area (to maintain and enhance swarming, roosting, and foraging habitat), involve regularly scheduled vegetation management activities to maintain and enhance mid- to late-successional oak-hickory forests and the trees that are most likely to develop and retain slabs of exfoliating bark. Commercial timber harvest is frequently the most practical and economical method of achieving these goals.

8E6 Old Field Habitat Emphasis

This management prescription is allocated to approximately 1,300 acres. The emphasis of this prescription is to provide optimal to suitable habitat for species associated with habitats known as "old fields." This habitat structure is becoming increasingly rare as abandoned farmsteads grow up into mature forests and working agricultural lands are managed more efficiently. The National Forest has an important role to play in providing this form of habitat for the steadily declining suite of species that either requires it or uses it heavily, including golden-winged and blue-winged warblers, chipping and field sparrows, and northern bobwhite. Management activities are designed to: 1) maintain and restore areas interspersed with grass/forbs areas (warm or cool season), shrubby patches, and areas with a scattering of trees of varying species, sizes, and ages; 2) provide a diversity of successional classes in the surrounding forested communities; and 3) control access to protect habitat when necessary.

9A1 Source Water Protection Watersheds

This management prescription is allocated to approximately 19,200 acres. Safe drinking water is essential to protect public health. Managing land to prevent source water contamination is often more cost-effective and may better protect human health than treating water after it has been contaminated. National forests yield water relatively low in contaminants when compared with urban and agricultural land uses. Nevertheless, many common practices on forests can contaminate drinking water sources if proper mitigating measures are not applied.

The Safe Drinking Water Act Amendments of 1996 require every State to perform source water assessments of all public drinking water sources and make the results public by 2003. In Virginia, Source Water Protection areas are delineated 5 miles upstream from the intake for water systems, which serve at least 25 people for 60 days or more per year.

Management of source water protection areas is designed to protect both surface and ground water drinking water sources. The Jefferson National Forest serves as the source of several public drinking water supplies in Virginia and is expected to participate with the State in preparing assessments and to work with the public to assure safe drinking water. On the Jefferson National Forest these are: North Fork of the Pound Reservoir, John W. Flanagan Reservoir, Big Cherry Reservoir, Town of Duffield, Town of Bland, Gatewood Reservoir, Catawba Sanitorium, and Bedford Lake. The source water protection areas for the North Fork of Pound Reservoir and Bedford Lake are allocated to management prescriptions 4K6 and 8E2, respectively. The desired condition and standards for these management prescriptions are consistent with the protection of these source water areas.

9A2 Reference Watersheds

There are approximately 10,800 acres of reference watersheds across the Jefferson

National Forest. Reference watersheds generally lay beneath other management prescriptions whose desired conditions and standards are consistent with the protection of these reference watersheds. These watersheds are maintained in a relatively undisturbed condition, with a low level of human intervention or impact so that existing water quality conditions are considered to be the "best attainable" for the ecological sub-section.

9A3 Watershed Restoration Areas

This management prescription is allocated to approximately 1,700 acres. These watershed restoration prescription areas cover a broad spectrum of past land uses (such as historic mining) have degraded water quality or soil productivity. Consequently, a broad spectrum of restoration activities is needed and different management activities are appropriate. Watershed planning and analysis guides these activities.

Many of these areas are recent land acquisitions. New land acquisitions in the future will often be allocated to this management prescription.

Management emphasis is on improving conditions where past land uses have degraded water quality or soil productivity. The long-term goal of these watersheds is to showcase restored and resilient watersheds where proper multiple use management practices are applied. When this goal is achieved, these watersheds are allocated to a different management prescription.

9A4 Aquatic Habitat Watersheds

This management prescription is allocated to approximately 6,500 acres. These watersheds include: Wolf Creek, Lynn Camp Creek, Craig Creek, and Stony Creek (all on the New River Valley District) and Potts Creek on the New River Valley and New Castle Districts.

Aquatic habitat watersheds are managed to protect the habitats of specific threatened, endangered, sensitive, or locally rare aquatic species known to exist on national forest lands.

9F Rare Communities

This management prescription is allocated to approximately 7,400 acres. Rare communities are assemblages of plants and animals that occupy a small portion of the landscape, but contribute significantly to plant and animal diversity. Rare communities, wherever they occur on the forest, are managed under this prescription to ensure their contribution to meeting goals for community diversity, endangered and threatened species recovery and providing habitat for sensitive and locally rare species. All known rare community sites, and lands surrounding them appropriate for protection of the rare community, are allocated to this prescription. As new rare community sites are found, they will be added to this prescription without plan amendment, unless such additions would result in large shifts in land allocation or expected benefits and outputs.

These lands serve as core areas for conservation of the most significant elements of biological diversity identified to date on the Forest. The emphasis of designation and management of these areas are: (1) to perpetuate forest communities that are unique at the scale of their ecological Section or Subsection unit; and (2) to perpetuate or increase existing individual plant or animal species that are of national, regional, or state significance as identified on threatened, endangered, sensitive, and locally rare species lists.

MANAGEMENT PRESCRIPTIONS

9G1 Maintenance And Restoration Of Bottomland Hardwoods

This management prescription is allocated to approximately 100 acres. These forests occur mostly in the floodplains of major rivers and their tributaries within the broad coastal plain. Consequently, these community types rarely occur on the Jefferson National Forest. We have identified them due to their importance for several neotropical migrant bird species, whose declining populations make them of particular concern.

Emphasis is primarily on maintenance of bottomland hardwood forest communities with limited opportunities for restoration. Restoration activities are focused on reforestation of non-forest areas.

9H Management, Maintenance And Restoration Of Forest Communities

This management prescription is allocated to approximately 24,700 acres. Forest community types in the Jefferson National Forest are influenced by bedrock geology, soils, slope position, aspect, and disturbance history. Consequently, many various community types are represented within a single watershed or landtype association. Allocation of these prescription areas focused on areas where southern yellow pine communities and the drier oak and oak-pine mixed communities predominate.

The emphasis of this management prescription is to restore and maintain the potential natural vegetation predicted as most likely to occur in each landtype and landtype phase based on ecological potential.

10B High Quality Forest Products

This prescription is applied to approximately 16,200 acres where lands are capable of producing high quality valuable sawtimber. Timber stand improvement and regeneration harvest methods are applied that best provide for the growth and harvest of high quality, valuable sawtimber that is most in demand in the marketplace. Other forest products such as pulpwood, fuelwood, and low value sawtimber are provided as result of timber stand improvement to cultivate high quality, valuable sawtimber. Opportunities are also provided for other high value forest products.

11 Riparian Corridors – Streams, Lakes, Wetlands, and Floodplains

This management prescription is allocated to approximately 73,600 acres.

Riparian Areas are functionally defined as areas with three-dimensional ecotones of interaction that include both terrestrial and aquatic ecosystems. They extend down into the groundwater, up above the canopy, outward across the floodplain, up the nearslopes that drain into the water, laterally into the terrestrial ecosystem, and along the watercourse at a variable width. A “riparian corridor” is a management prescription area designed to include much of the riparian area. This includes corridors along all defined perennial and intermittent stream channels that show signs of scour, and around natural ponds, lakeshores, wetlands, springs and seeps.

12A Remote Backcountry Recreation--Few Open Roads

This management prescription is allocated to approximately 9,700 acres.

These lands are managed to provide users with a degree of solitude and a semi-

primitive recreation experience in large remote areas. They also provide limited motorized public access on existing open roads and/or motorized trails. Areas are 2,500 acres or greater in size, unless the area is adjacent to a wilderness or other backcountry recreation area.

12B Remote Backcountry Recreation - Non-Motorized

This management prescription is allocated to approximately 91,300 acres.

Recreation opportunities are provided in large remote areas where users can obtain a degree of solitude and the environment can be maintained in a near-natural state. There is little evidence of humans or human activities other than recreation use and non-motorized trails. These areas are generally 2500 acres or greater in size, unless the area is adjacent to a wilderness or other backcountry recreation area. Existing roads are closed to all but occasional administrative use.

12C Natural Processes In Backcountry Remote Areas

This management prescription is allocated to approximately 9,800 acres.

Management of these areas emphasizes a wilderness-like remote recreation experience where mountain bikes are allowed and chainsaws may be used to maintain trails. Areas are 2,500 acres or greater in size, unless the area is adjacent to a wilderness or other backcountry recreation area. Existing roads are decommissioned.

DOCUMENTATION RELATED TO THE FOREST PLAN

The following are the titles of documents prepared in conjunction with the revision of the Jefferson National Forest's Land and Resource Management Plan. All documents are dated January 2004.

Revised Land and Resource Management Plan (Forest Plan), Management Bulletin R8-MB 115A (A Maps Packet is included in the Forest Plan)

Final Environmental Impact Statement (FEIS), Management Bulletin R8-MB 115B

Record of Decision (ROD), Management Bulletin R8-MB 115C

Summary of the Final Environmental Impact Statement and Forest Plan, Management Bulletin R8-MB 115D

Appendices for the FEIS and Forest Plan, Management Bulletin R8-MB 115E

APPEAL INFORMATION

This decision is subject to administrative review pursuant to 36 CFR 217. A written appeal of this decision must be filed in duplicate within 90 days of the date of the published legal notices. Appeals must be filed with:

USDA Forest Service
Attn: NFS-EMC Staff (Barbara Timberlake)
Stop Code 1104
1400 Independence Avenue, SW
Washington, D.C. 20250-1104

Any notice of appeal must be fully consistent with 36 CRF 217.9 and include at a minimum:

- A statement that the document is a Notice of Appeal filed pursuant to 36 CFR part 217;
- The name, address, and telephone number of the appellant;
- Identification of the decision to which the appeal is being made;
- Identification of the document in which the decision is contained, by title and subject, date of the decision, and name and title of the Deciding Officer
- Identification of the specific portion of the decision to which appeal is made
- The reasons for appeal, including issues of fact, law, regulation, or policy and, if applicable, specifically how the decision violates law, regulation, or policy
- Identification of the specific change(s) in the decision that the appellant seeks.

Requests to stay implementation of the Revised forest Plan will not be granted [36 CFR 217.10(a)]

Final decisions on proposed projects will be made on a site-specific basis using appropriate analysis and documentation and in compliance with NEPA. Project decisions may be subject to appeal at that time.

USDA Forest Service
Attention: Ecosystem Management Staff (Steve Segovia)
P.O. Box 96090
Washington, D.C. 20090-6090
(202) 205-1066)

For questions concerning the Jefferson Revised Forest Plan, contact:

William E. Damon, Jr.
Forest Supervisor
Jefferson National Forest
5162 Valleypointe Parkway
Roanoke, VA 24012
(540) 265-5100

Reviewers are encouraged to contact the Forest Supervisor before submitting appeals to determine if misunderstandings or concerns can be clarified or resolved.