

## APPENDIX C POTENTIAL WILDERNESS AREA EVALUATIONS

### CHAPTER 1: POTENTIAL WILDERNESS AREA INVENTORY

The following inventory identifies areas meeting certain criteria for potential wilderness areas. Only the Congress can make the decision to designate wilderness. The responsible official is to consider all NFS lands possessing wilderness characteristics for recommendation as potential wilderness areas during plan revision.

Identification of potential wilderness areas and wilderness recommendations has always been an integral part of the NFS planning process. The first step in the evaluation of potential wilderness is to identify an inventory of all areas within National Forest System lands that satisfy the definition of wilderness. This study identifies those NFS lands possessing wilderness characteristics.

The Forest Service directives (FSH 1909.12, chapter 70) provide the detailed criteria for the identification of potential wilderness areas. Interpretation of these criteria is contained in the Forest's Guidance paper.

Table 1. George Washington NF Potential Wilderness Inventory

Potential Wilderness Name	Total GWJEFF Acres	Jeff NF Acres	Road Mileage Per 1,000 Acres	Total Miles of Road	Subsurface Federal Mineral Percentage	Subsurface Private Mineral Right Acres
Adams Peak	8,226	0	0.45	3.7	100	0
Archer Knob	7,110	0	0.32	2.3	100	0
Beards Mountain	10,152	0	0.26	2.6	100	0
Beech Lick Knob	14,087	0	0.46	6.5	92	1,158
Big Schloss	28,347	0	0.50	14.1	75	7,118
Crawford Knob	14,851	0	0.21	3.1	100	0
Dolly Ann	9,524	0	0.48	4.6	100	0
Duncan Knob	5,973	0	0.46	2.8	100	0
Elliott Knob	11,070	0	0.39	4.3	100	0
Galford Gap	6,689	0	0.30	3.3	100	0
Gum Run	14,547	0	0.37	5.4	83	2,529
High Knob	18,447	0	0.46	8.6	100	0
Jerkentight	27,314	0	0.46	12.5	90	2,617
Kelley Mountain	12,892	0	0.15	2.0	84	2,126

Potential Wilderness Name	Total GWJEFF Acres	Jeff NF Acres	Road Mileage Per 1,000 Acres	Total Miles of Road	Subsurface Federal Mineral Percentage	Subsurface Private Mineral Right Acres
Laurel Fork	10,236	0	0.21	2.1	100	0
Little Alleghany	15,395	0	0.18	2.8	98	374
Little Mare Mountain	11,918	0	0.50	6.0	100	0
Little River	30,227	0	0.40	12.1	90	3,128
Massanutten North	16,530	0	0.49	8.1	91	1,465
Oak Knob - Hone Quarry Ridge	16,343	0	0.44	7.3	96	617
Oliver Mountain	13,049	0	0.19	2.4	100	0
Paddy Knob	5,987	0	0.28	1.7	100	0
Potts Mountain	7,863	844	0.33	2.6	99	91
Ramseys Draft Addition	19,072	0	0.29	5.6	70	5,784
Rich Hole Addition	12,165	0	0.38	4.6	100	0
Rich Patch	5,625	4,754	0.04	0.2	100	0
Rough Mountain Addition	2,063	0	0.30	0.6	100	0
Saint Mary's North	3,006	0	0.00	0.0	79	630
Saint Mary's South	1,651	0	0.00	0.0	80	333
Saint Mary's West	278	0	0.00	0.0	100	0
Shaws Ridge	7,268	0	0.39	2.8	100	4
Shawvers Run Addition	84	0	0.00	0.0	100	0
Three Ridges Addition North	83	0	0.00	0.0	100	0
Three Ridges Addition South	187	0	0.00	0.0	100	0
Three Ridges Addition Southwest	9	0	0.00	0.0	100	0
Three Ridges Addition West	90	0	0.00	0.0	100	0
Three Sisters	9,871	0	0.44	4.4	95	491
<b>TOTAL GWJEFF ACRES</b>	<b>378,229</b>	<b>5,598</b>				
<b>TOTAL GW ACRES ONLY</b>	<b>372,631</b>					

Table 2. Potential Wilderness Area Inventory with Recreation Opportunity Spectrum Settings

Potential Wilderness Name	Total GWJEFF Acres	Jeff NF Acres	Roaded Natural Acres	Semi Primitive Motorized Acres	Semi Primitive Non Motorized Acres	Semi Primitive Core Total Acres
Adams Peak	8,226	0	3,801	407	4,018	4,425
Archer Knob	7,110	0	2,669	4,441	0	4,441
Beards Mountain	10,152	0	3,173	1,851	5,128	6,978
Beech Lick Knob	14,087	0	4,585	3,775	5,726	9,502
Big Schloss	28,347	0	8,632	9,974	9,741	19,715
Crawford Knob	14,851	0	3,023	2,522	9,306	11,828
Dolly Ann	9,524	0	3,491	1,361	4,672	6,033
Duncan Knob	5,973	0	2,741	3,232	0	3,232
Elliott Knob	11,070	0	3,978	3,402	3,691	7,093
Galford Gap	6,689	0	1,770	1,132	3,787	4,919
Gum Run	14,547	0	3,750	6,631	4,166	10,797
High Knob	18,447	0	6,686	8,032	3,729	11,761
Jerkemtight	27,314	0	11,473	8,574	7,268	15,841
Kelley Mountain	12,892	0	5,103	2,792	4,997	7,789
Laurel Fork	10,236	0	3,240	631	6,365	6,996
Little Alleghany	15,395	0	6,613	1,501	7,280	8,782
Little Mare Mountain	11,918	0	6,934	3,043	1,941	4,984
Little River	30,227	0	9,727	4,385	16,116	20,500
Massanutten North	16,530	0	5,382	4,563	6,585	11,148
Oak Knob - Hone Quarry Ridge	16,343	0	7,539	4,273	4,531	8,804
Oliver Mountain	13,049	0	3,852	20	9,176	9,197
Paddy Knob	5,987	0	2,703	1,259	2,026	3,284
Potts Mountain	7,863	844	3,372	4,491	0	4,491
Ramseys Draft Addition	19,072	0	8,075	1,717	9,280	10,997
Rich Hole Addition	12,165	0	5,072	480	6,613	7,093
Rich Patch	5,625	4,754	1,617	0	4,008	4,008
Rough Mountain Addition	2,063	0	1,311	498	254	752
Saint Mary's North	3,006	0	1,020	1,983	3	1,986
Saint Mary's South	1,651	0	762	0	889	889
Saint Mary's West	278	0	278	0	0	0
Shaws Ridge	7,268	0	3,315	1,878	2,076	3,954

Potential Wilderness Name	Total GWJEFF Acres	Jeff NF Acres	Roaded Natural Acres	Semi Primitive Motorized Acres	Semi Primitive Non Motorized Acres	Semi Primitive Core Total Acres
Shawvers Run Addition	84	0	84	0	0	0
Three Ridges Addition North	83	0	79	3	0	3
Three Ridges Addition South	187	0	131	0	56	56
Three Ridges Addition Southwest	9	0	9	0	0	0
Three Ridges Addition West	90	0	90	0	0	0
Three Sisters	9,871	0	3,647	1,249	4,975	6,224
TOTAL GWJEFF ACRES	378,229	5,598				
TOTAL GW ACRES ONLY	372,631					

**AREAS EXCLUDED FROM THE PWA INVENTORY**

Fourteen areas were reviewed and subsequently excluded from the inventory for not having attainable NFS subsurface ownership patterns that could ensure perpetuation of identified Wilderness characteristics. Each of these areas has less than 70% federal ownership of mineral rights. These areas are Long Mountain, Great North Mountain, Church Mountain, and Massanutten South (Lee RD), Cow Knob, Dunkle Knob, Radar Mountain, Kretchie Mountain, Hog Pen, Feedstone Mountain, and Hankey Mountain (North River RD), The Priest Addition (Pedlar RD), Back Creek Mountain East (Warm Springs RD) and Panther Ridge (James River RD).

Six areas were identified that exceed 5,000 acres in size and meet the road density requirement, but were not included in the inventory due to a lack of outstanding opportunities for solitude or a primitive and unconfined type of recreation. In addition, the location of these areas is not conducive to the perpetuation of Wilderness values. These areas are Dyers Knob, Sidling Hill (North River RD), Warm Springs Mountain, Back Creek Mountain West (Warm Springs RD), Middle Mountain (Warm Springs and James River RDs), and Jerry’s Run (James River RD).

- Dyers Knob (WVA) is 5,057 acres in size and is surrounded by Forest Service Roads. It is long and narrow. For about one-third of its length, the width between the boundary roads is less than 1 mile and is only 2 miles wide at its widest. It is located along the side of Shenandoah Mountain and so does not encompass an entire watershed or mountain. Due to its configuration it is entirely in a Roaded Natural ROS class. Thus the sights, sounds and other impacts of the adjacent roads would not provide solitude or a primitive and unconfined recreation experience.
- Sidling Hill is 5,204 acres in size but it is long and extremely narrow, only 1.5 miles wide at its widest section. In addition, over half its boundary is shared with private lands. The area has some core solitude (2,310 acres) but its long and narrow shape is the limiting factor and does not provide for a Wilderness experience.
- Warm Springs Mountain is 6,194 acres in size with 2,220 acres of core solitude. While this area currently has some relatively good opportunities for solitude, private development is encroaching

along the southwest border of this area adjacent to the area of core solitude and additional future development is (expected) for this area by Bath County. As this development increases, the opportunities for solitude in this area will be further diminished.

- Back Creek Mountain West is 5,906 acres in size but is almost completely bisected by undeveloped private land which divides this area into two parcels connected only by a very narrow strip (700 feet) of National Forest land. The already limited opportunities for solitude are also divided and further limited by this configuration.
- Middle Mountain is a 5,959 acre area situated to the west of Douthat State Park. It is long and very narrow which severely limits opportunities for solitude. The northern portion is less than ½ mile wide at its narrowest and never exceeds 1 mile in width with no opportunities for solitude. The southern portion provides some semi-primitive recreation experience, but it is only a small (1,169 acres) portion of the area.
- Jerry's Run is 5,450 acres in size but is entirely within the Roded Natural ROS class with no opportunities for solitude. The northern portion is long and very narrow, rarely exceeding ½ mile in width and is bordered by seasonally open roads and Interstate 64. The southern portion also borders I-64 and has a long, undulating border with private land which isolates it from the central portion of the area and further limits opportunities for unconfined recreation.

Nine areas between 4,000 and 5,000 acres in size were reviewed to determine if they can be preserved due to physical terrain and natural conditions or are self-contained ecosystems that can be effectively managed as separate units of the National Wilderness Preservation System. Three of these areas have cores larger than 2,500 acres in size that provide a semi-primitive recreation experience. These areas are Green Mountain (Lee RD), Elliott Knob South (North River RD) and Mud Run Mountain (James River RD). Green Mountain and Mud Run were not included in the inventory since their ownership pattern cannot ensure perpetuation of identified Wilderness characteristics. At Elliott Knob South there are no terrain features that can make up for the lack of acreage in managing for Wilderness. In addition, the lower portion of the area is where the roads are concentrated and it has been actively managed.

- Green Mountain is a 4,506 acre area. It is long and narrow and more than half of its boundary is an undulating border with private lands in the Fort Valley area that are quickly developing. The western portion is adjacent to Peters Mill ATV/OHV area. These factors severely limit opportunities for solitude and therefore eliminating this area from further consideration.
- Elliott Knob South is a 4,718 acre area bounded largely by administrative use roads. Hog Back road and the Elliott Knob fire tower access road (and fire tower) separate this area from the adjacent Elliott Knob North area to the north. The upper elevations of this area provide some solitude however the southern portion of this area is heavily roaded and has been actively managed in recent years.
- Mud Run is a 4,295 acres area which is entirely surrounded by private lands. With a 2,929 acre semi-primitive core, there are good opportunities for solitude and unconfined recreation. However, the access into this parcel is very limited, accessible only from short section of State Route 619 across Hays Creek into steep terrain. There are no rights-of-way across private lands. This presents a situation where managing the area as Wilderness would be nearly impossible. We could not enforce rules regarding unauthorized access to the area.

Four of these areas (between 4,000 and 5,000 acres in size) contain smaller cores (less than 2,500 acres in size) providing a semi-primitive recreation experience: Signal Knob (Lee RD), Dameron

Mountain (James River RD), Short Mountain (Warm Springs RD), and North Mountain (James River RD). None of these areas have terrain features or natural conditions that lead to preserving Wilderness characteristics or effectively managing them as separate Wilderness units. Their size, shape, and location in relation to roads, railroads and private lands are not conducive to perpetuating Wilderness values, particularly the value of providing outstanding opportunities for solitude or unconfined recreation.

- Signal Knob is a 4,908 acre area with a core of 2,340 acres of semi-primitive recreation experience. The southern portion, south of Little Passage Creek, is rather narrow (not exceeding 1 mile in width) and is separated from the northern portion by a 30 foot Shenandoah Valley Electric Cooperative transmission line authorized by special use permit.
- Dameron Mountain is a 4,092 acre area with a core of 2,378 acres of semi-primitive recreation experience. The majority of the area is surrounded by private lands and illegal ATV use has been an ongoing problem. The upper elevations of this area provide some areas of core solitude but the long and somewhat narrow shape of the area restricts the capacity of this area to provide enough unconfined recreation opportunities to be suitable for Wilderness recommendation.
- North Mountain is 4,764 acre area which is long and narrow having a width that rarely exceeds 1 mile. Most of the eastern boundary of this area is adjacent to private land and the southern portion of the area has been actively managed in recent years. With only 1,751 acres of semi-primitive core, opportunities for solitude are limited.

The last three areas between 4,000 and 5,000 acres in size are Snake Run Ridge (James River RD), Short Mountain (Warm Springs), and Whites Run (Pedlar RD) and they contain no semi-primitive core areas. These areas are small, narrow, bounded by roads, and as such lack any measurable core solitude.

## CHAPTER 2: EVALUATION OF POTENTIAL WILDERNESS AREAS

### INTRODUCTION

The 37 Potential Wilderness Areas (PWAs) evaluated meet the inventory criteria set forth in Chapter 70 of Forest Service Handbook (FSH) 1909.12 (WO Amendment 1909.12-2007-1, effective January 31, 2007). Section 71 of FSH 1909.12 Chapter 70 provides direction on the inventory process. It is summarized in Table 3.

**Table 3: Summary of Inventory Criteria as Provided in FSH 1909.12, Chapter 70, Section 71:**

<b>FSH 1909.12 Chapter 70</b>	<b>Potential Wilderness Criteria</b>
71.1 Par. (1)	1) Areas contain <u>5,000 acres or more</u> , OR
71.1 Par. (2)	2) Areas contain <u>less than 5,000 acres</u> , but can meet one or more of the following criteria: a. Areas can be preserved due to physical terrain and natural conditions; b. Areas are self-contained ecosystems, such as an island, that can be effectively managed as a separate unit of the National Wilderness Preservation System; c. Areas are contiguous to existing Wilderness, primitive areas, Administration-endorsed Wilderness, or potential Wilderness in other Federal ownership, regardless of their size.
71.1 Par. (3)	3) Areas do not contain forest roads (36 CFR 212.1) or other permanently authorized roads, except as permitted in areas east of the 100th meridian (sec. 71.12), (Less than 1/2 mile of system road per 1000 acres).
71.12 Par. (4) (1995 R8 Guidance)	4) Areas have semi-primitive (SP) core solitude greater than 2500 acres on NFS lands or otherwise provide solitude (e.g. topography). Eliminates smaller and/or narrower areas with small SP cores (limited solitude). Smaller or narrower SP core areas often indicate private land influenced core.
71.11 Par. (6)	5) Areas are not excessively fragmented by interior private land. (Greater than 70% NFS land).
71.11 Par. (6)	6) Areas are not excessively fragmented by interior private mineral rights. (Greater than 70% NFS mineral rights and not currently leased).
71.12 Par. (3,4)	7) Area boundaries are less than 60% private.

The PWAs evaluated include 26 stand alone potential Wildernesses and 11 potential additions to existing Wildernesses for a total of 37 areas containing 378,229 acres. Table 4 lists the Potential Wilderness Areas (PWAs) identified in 2008, using the criteria provided in FSH 1909.12. Of these,

23 “inventoried roadless areas” (IRAs) totaling 239,784 acres are included that were identified at the time of implementation of the 1993 George Washington National Forest Plan (GW Plan). Two of the IRAs are now designated Wilderness (The Priest and Three Ridges) and one IRA is now designated National Scenic Area (Mount Pleasant) and therefore were not evaluated as Potential Wilderness Areas (PWAs). One other IRA, The Friars, at only 2,035 acres does not meet the requirements provided in FSH 1909.12, Section 71.1 paragraph (2) for areas less than 5,000 acres in size. Therefore, it was not given further evaluation as potential Wilderness.

The inventory criteria for PWAs are less restrictive than the inventory criteria for identifying IRAs that was used during the 1993 revision of the GWNF Forest Plan. PWAs were identified for areas that did not qualify as IRAs. Where IRAs do overlap the PWAs, the PWAs are typically larger. Table 4 lists all of the PWAs that were inventoried in 2008 as well as the 1993 IRAs that overlap them.

**Table 4: Inventoried Potential Wilderness Areas (PWAs) with Crosswalk of 1993 Inventoried Roadless Areas (IRAs):**

<b>Potential Wilderness Area</b>	<b>2008 PWA Acres</b>	<b>1993 IRA Acres</b>
Adams Peak	8,226	7,133
Archer Knob	7,110	
Beards Mountain	10,152	7,501
Beech Lick Knob	14,087	
Big Schloss	28,347	20,755
Crawford Knob	14,851	9,889
Dolly Ann	9,524	7,850
Duncan Knob (Massanutten South IRA)	5,973	11,966
Elliott Knob	11,070	9,377
Galford Gap	6,689	
Gum Run	14,547	12,617
High Knob (Dry River and Skidmore IRAs)	18,447	12,971
Jerkentight	27,314	16,680
Kelley Mountain	12,892	7,589
Laurel Fork	10,236	9,961
Little Alleghany	15,395	10,208
Little Mare Mountain	11,918	
Little River	30,227	27,285
Massanutten North	16,530	9,448
Oak Knob - Hone Quarry Ridge	16,343	10,880
Oliver Mountain	13,049	13,081
Paddy Knob	5,987	
Potts Mountain	7,863	
Ramseys Draft Addition	19,072	12,777
Rich Hole Addition (Mill	12,165	10,834

<b>Potential Wilderness Area</b>	<b>2008 PWA Acres</b>	<b>1993 IRA Acres</b>
Mountain IRA)		
Rich Patch	5,625	
Rough Mountain Addition	2,063	1,385
Saint Mary’s North	3,006	
Saint Mary’s South	1,651	1,451
Saint Mary’s West	278	
Shaws Ridge	7,268	
Shawvers Run Addition	84	
Three Ridges Addition North	83	
Three Ridges Addition South	187	
Three Ridges Addition SW	9	
Three Ridges Addition West	90	
Three Sisters	9,871	8,146

Site specific maps for each Potential Wilderness Area are found at the GW Plan Revision internet site (<http://www.fs.fed.us/r8/gwj/forestplan/revision/plan-home.shtml>).

## **EXISTING SITUATION**

Existing Wildernesses on the George Washington National Forest (GWNF) amount to 42,674 acres in 6 units, comprising about 4 percent of the total National Forest System land of 1,065,389 acres. All designated Wildernesses on the GWNF are within the Commonwealth of Virginia. No designated Wilderness on the GWNF is in West Virginia.

The Jefferson National Forest (JNF) in Virginia, with portions in West Virginia and Kentucky, offers 96,787 acres of designated Wilderness. That is about 13.4% of its total area of 723,300 acres. The combined acres for the George Washington & Jefferson National Forests (GW&J) are 139,461, about 7.8% of the total area of these two national forests. In addition, Shenandoah National Park and the Monongahela National Forest administer 195,358 acres of designated Wilderness in Virginia and West Virginia. Tables 5 and 6 provide summary and details, respectively, of the designated Wildernesses administered by Federal land managing agencies in Virginia and West Virginia. Neither the George Washington National Forest nor the Jefferson National Forest administers any Wilderness in Kentucky.

**Table 5: Summary of Units and Acres of Existing Designated Wilderness in Virginia and West Virginia Administered by Federal Land Managing Agencies:**

<b>AGENCY</b>	<b>Acres of Wilderness in Virginia</b>	<b>Number of Wilderness Units in VA</b>	<b>Acres of Wilderness in West Virginia</b>	<b>Number of Wilderness Units in WV</b>	<b>Total Acres (VA and WV)</b>
George Washington NF	42,674	6	0	0	42,674
Jefferson NF	94,066	17	2,721	1	96,787
Monongahela NF	0	0	115,779	8	115,779
Shenandoah NP	79,579	1	0	0	79,579
<b>Grand Total</b>	<b>216,319</b>	<b>24</b>	<b>118,500</b>	<b>9</b>	<b>334,819</b>

**Table 6: Existing Designated Wilderness Administered by Federal Agencies in Virginia and West Virginia (by Agency):**

<b>WILDERNESS NAME</b>	<b>George Washington National Forest</b>	<b>Jefferson National Forest</b>	<b>Monongahela National Forest</b>	<b>Shenandoah National Park</b>	<b>Total Acres by Agency</b>
Barbours Creek Wilderness		5,382			5,382
Beartown Wilderness		5,609			5,609
Big Draft Wilderness			5,144		5,144
Brush Mountain East Wilderness		3,743			3,743
Brush Mountain Wilderness		4,794			4,794
Cranberry Wilderness			47,815		47,815
Dolly Sods Wilderness			17,371		17,371
Garden Mountain Wilderness		3,291			3,291
Hunting Camp Creek Wilderness		8,470			8,470
James River Face Wilderness		8,886			8,886
Kimberling Creek Wilderness		5,805			5,805
Laurel Fork North Wilderness			6,055		6,055
Laurel Fork South Wilderness			5,874		5,874
Lewis Fork Wilderness		5,926			5,926
Little Dry Run Wilderness		2,858			2,858

<b>WILDERNESS NAME</b>	<b>George Washington National Forest</b>	<b>Jefferson National Forest</b>	<b>Monongahela National Forest</b>	<b>Shenandoah National Park</b>	<b>Total Acres by Agency</b>
Little Wilson Creek Wilderness		5,458			5,458
Mountain Lake Wilderness		16,511			16,511
Otter Creek Wilderness			20,698		20,698
Peters Mountain Wilderness		4,531			4,531
Priest Wilderness	5,963				5,963
Raccoon Branch Wilderness		4,223			4,223
Ramseys Draft Wilderness	6,518				6,518
Rich Hole Wilderness	6,450				6,450
Roaring Plains West Wilderness			6,792		6,792
Rough Mountain Wilderness	9,300				9,300
Saint Mary's Wilderness	9,835				9,835
Shawvers Run Wilderness		5,686			5,686
Shenandoah Wilderness				79,579	79,579
Spice Run Wilderness			6,030		6,030
Stone Mountain Wilderness		3,270			3,270
Three Ridges Wilderness	4,608				4,608
Thunder Ridge Wilderness		2,344			2,344
<b>Total Acres by Agency</b>	<b>42,674</b>	<b>96,787</b>	<b>115,779</b>	<b>79,579</b>	<b>334,819</b>

**PROCESS FOR EVALUATION AND PRELIMINARY ADMINISTRATIVE RECOMMENDATION**

Section 72 of Chapter 70 of FSH 1909.12 provides direction for evaluation of potential Wilderness. This report evaluates Wilderness potential in three main categories: **capability, availability, and need.**

**Capability** is defined as the degree to which the area contains the basic natural characteristics that make it suitable for Wilderness designation without regard to its availability for or need as Wilderness. There are six basic characteristics to evaluate the capability of an area east of the 100<sup>th</sup> meridian. These six characteristics are:

- Natural - ecological systems are substantially free of modern civilization and are affected primarily by forces of nature;
- Undeveloped – degree to which the area is without permanent improvements or human habitation;
- Primitive – ability of the area to provide outstanding opportunities for solitude or primitive and unconfined recreation;
- Special features or values - ability to provide ecologic, geologic, scientific, educational, scenic, historical, or cultural features or values of significance.
- Manageability – the ability of the area to be managed as an enduring resource of Wilderness and be protected for its natural character;
- Nonconforming uses (for areas in the East) – ability for nonconforming uses, structures and/or improvements to be effectively mitigated or terminated.

**Availability** for potential Wilderness is an assessment of the value of and need for the area as a Wilderness resource compared to the value of and need of the area for other resources. To be available for Wilderness, the tangible and intangible values of the Wilderness resource should offset the value of resources that formal Wilderness designation would forego. In essence, other resources could be satisfied in the area that may conflict with Wilderness designation.

Constraints, encumbrances and nonconforming uses as well as structures and improvements on lands are considerations in assessing the availability of lands for Wilderness designation. Generally, PWAs that contain subsurface or outstanding mineral rights are deemed a risk for Wilderness designation, as those legal rights could result in the construction of non-comforming facilities such as roads and structures. The need to actively manage for Threatened or Endangered Species in compliance with the Endangered Species Act and its associated regulations often conflicts with some of the restrictions that result from Wilderness designation. Another consideration is the effect of management on adjacent lands outside the area (FSM 1923.03, WO Amendment 1900-2006-2, effective 01/31/2006).

The other resources included in the availability evaluation were chosen due to one or more of the following reasons: (1) they have been discussed historically on this National Forest, internally and with the public, regarding which should take priority – the other resource or the Wilderness resource; (2) comments were received from the public on the need to change the GWNF Forest Plan; and (3) comments were received during or resulting from the Forest Plan public meetings conducted from 2007 to 2009.

**Need** is the degree to which an area contributes to the local or regional distribution of Wilderness and to the overall national Wilderness preservation system. The factors considered include: demand based on visitor pressure in existing Wilderness areas; proximity to other designated Wilderness; ability of a PWA to provide solitude, physical and mental challenge, inspiration and research opportunities; improving the quality and characteristics of an existing Wilderness; and expanding the representations of various ecosystems within the region and within the national Wilderness preservation system.

This analysis includes information and data from several sources. One of which is the public involvement done throughout the revision effort. Others include reports of Forest Service social science researchers in collaboration with the University of Tennessee and University of Georgia based on data collected during the last two National Surveys on Recreation and the Environment (NSRE). Also considered is data from gathered during the last two National Visitor Use Monitoring surveys (NVUM). Data for the existing distribution of Wildernesses, their acreages, and relative rankings between states as pertains to Wilderness designation came from [www.Wilderness.net](http://www.Wilderness.net). Overall state land area rankings were obtained from the U.S. Census website at [www.census.gov](http://www.census.gov). Data on existing level of Wilderness use was obtained from the Southern Appalachian Assessment. The distribution of existing and potential wilderness areas and ecosystems is accomplished using geographic information systems (GIS) data.

**Preliminary Administrative Recommendations** from the Responsible Official will be documented in the agency's decision that approves the Revised Forest Plan. An area must meet the tests of capability, availability, and need (FSH 1909.12, Chapter 72). In addition to the inherent Wilderness quality a potential wilderness area might possess, the area must also provide opportunities and experiences that are dependent upon and enhanced by a Wilderness environment. Furthermore, the area and boundaries must allow the area to be managed as Wilderness.

An area meeting the criteria stated above may be included in a preliminary administrative recommendation that may or may not receive further review and possible modification by the Chief of the Forest Service, Secretary of Agriculture, and the President of the United States. The Congress has reserved the authority to make final decisions on Wilderness designation.

It is important to note that any areas being recommended for wilderness study designation may have their initial Potential Wilderness Area inventory boundaries adjusted as a result of this evaluation process (FSH 1909.12, Chapter 72.5).

## **RESULTS**

### **A. Capability and Availability Results**

Evaluation of each of the 37 PWAs was performed by Forest Supervisor's Office and District resource specialists with consideration of personal knowledge of the areas and resources, data contained in the forest's geographic information system (GIS), comments provided by the public (both individuals and groups through public workshops and letters), and information provided in the Virginia Mountain Treasures report.

While all six of the basic characteristics for capability were evaluated for each PWA, only the characteristics that most contributed to each PWA's meeting, or to not meeting, the capability for Wilderness are given in this report. This includes providing information helpful in making relative comparisons between PWAs, such as the size of the semi-primitive core. Data for all of the characteristics are included in Table C – 1 at the end of this Appendix

In the Availability evaluation, there may be additional other competing uses documented, although not all are included in this summary report. Those that caused the most concern to the Forest Service and/or to members of the public are included here.

For the purpose of summarizing the evaluations, Capability and Availability are grouped together for each PWA. Each was evaluated individually. The areas are listed alphabetically. The evaluation of Need follows separately as it was evaluated on a Forestwide, regional and national level.

#### **ADAMS PEAK (8,226 acres)**

Capability: This area meets the minimum requirements for size and opportunities for remoteness. It has a relatively small core of 4,000 acres of semi-primitive area.

Availability: There are two TESLR species that would benefit from management activities. There is heavy mountain bike use on Whetstone Ridge Trail. More than half of the boundary interfaces with private land.

#### **ARCHER KNOB (7,110 acres)**

Capability: This area meets minimum requirements for size. Its core of semi-primitive is relatively small at 4,440 acres. There are opportunities within this area for primitive recreation and solitude.

Availability: Two TESLR species could benefit from management activities. The North Mountain Trail is popular with mountain bikers. About 1,322 acres are suitable for timber production and the area contains 1,734 acres of pine species that benefit from prescribed burning.

#### **BEARDS MOUNTAIN (10,152 acres)**

Capability: While this is a moderately large area, the shape and location are poor for providing Wilderness qualities. The area is narrow and located along a mountainside with views to exterior private lands, many with developments such as cabins, camps, houses and farms. Close proximity to Douthat State Park with a connector trail into Wilderness may result in unacceptably high levels of user interaction that diminish the mental challenge and need to rely on one's own primitive recreation skills and abilities.

Availability: There are shale barren species, at least one of which is a TESLR, that benefit from management including prescribed burning. There are over 1,400 acres of pine species that also benefit from fire, and over 1,300 acres are suitable for timber production. The Beards Mountain Trail is used by mountain bikers coming out of Douthat State Park.

#### **BEECH LICK (14,087 acres)**

Availability: Beech Lick is a large area with shape, size and topography that provides outstanding opportunities for solitude and physical challenge as well as for natural processes to dominate within the area. There is a large unbroken core of nearly 9,500 acres of semi-primitive ROS class. There are no current recreational uses that are incompatible with Wilderness.

Availability: About 1,158 acres have private sub-surface mineral rights. This area is near the western boundary and could be excluded. Plans have been approved and NEPA analysis completed for construction of a trail in the western portion of this PWA. The trail is intended for use by mountain bikers, equestrians and hikers. Beech Lick is currently suitable for wildlife habitat and timber management with past investments made for both of these resources. Almost 5,600 acres of this PWA is suitable for timber production primarily in the eastern portion. There are almost 1,300 acres of pine species that benefit from prescribed fires. An estimated 75-80% of the boundary is adjacent to private land.

### **BIG SCHLOSS (28,347)**

Capability: This is a huge PWA with a semi-primitive core of almost 20,000 acres. There are outstanding opportunities in the interior for primitive recreation and physical challenge. However, the dense system of existing, popular trails results in a high number of encounters with other users, diminishing or eliminating the opportunity for remoteness and relying on one's own skills and abilities. The odd overall configuration of the PWA along with a high percentage of the boundary being adjacent to private lands are not conducive to the area's capability to provide outstanding scenic qualities.

Availability: There are 7,118 acres of privately owned sub-surface mineral rights. There is a private inholding near the east boundary. Almost 5,550 acres are suitable for timber production. There have been investments in wildlife habitat (openings and prescribed fire). The Wood turtle exists in the area and some habitat management might be needed. Due to acidification, Little Stony Creek is limed. West Virginia has the Cove Deer Management Area. Multiple trails exist throughout the area and some are popular with mountain bikers.

### **CRAWFORD KNOB (14,851 acres)**

Capability: This area has the substantial size and compact for natural processes to dominate the landscape. The semi-primitive core is about 11,830 acres in size. The area is essentially a mountain offering many external views to non-Wilderness Forest Service lands and to private lands, although drainages offer interior views and remoteness. Opportunities exist for primitive recreation and physical challenge.

Availability: There is a ridgetop private inholding in southeast portion of the area. It is not very near a boundary, so it would remove a large area to exclude it without cherry-stemming. There are multiple trails in southern portion of the area, some used by mountain bikers. There are views to

Staunton and a powerline on the north side. About 3,800 acres are suitable for timber and there has been active management such as timber harvesting and prescribed burning.

#### **DOLLY ANN (9,542)**

Capability: This is a moderately sized PWA with a core of 5,850 acres of semi-primitive land. There are opportunities for interior views and remoteness, but most of the area consists of mountaintop area with external views to private. The northern portion of the area is very narrow. The overall size and configuration are not ideal for ecological processes to dominate. There are sights and sounds of the interstate and U.S. highways located on three sides. The prevailing winds often carry a reminder that the paper mill in Covington is nearby.

Availability: This is the southernmost range for Variable sedge (TESLR) that requires fire, as well as one other TESLR species that may benefit from active management. It has been 15 years since timber and prescribed fire activities, and these activities are due again in the typical cycle. About 3,424 acres are suitable for timber production. Trails exist that are used by mountain bikers and horseback riders.

#### **DUNCAN KNOB (5,973)**

Capability: This area meets minimum requirements for size. Its core of semi-primitive is small at 3,232 acres. It is comprised of a steep mountaintop with knobs, primarily with views outside of the Wilderness. The entire east boundary is adjacent to private land. The area is not large or wide enough for natural processes to dominate.

Availability: One sensitive species exists in the area and it benefits from active management. Three trails exist within this area and all are used by mountain bikers, including technical trails. Maintenance is performed by volunteers.

#### **ELLIOTT KNOB (11,070 acres)**

Capability: This is a moderately large PWA with a semi-primitive area of about 7,100 acres. It is very rugged and offers great opportunities for remoteness and challenge. It is marginally large enough for ecological processes to dominate. There is very little boundary adjacent to private land.

Availability: There are three TESLR or FS sensitive species that benefit from active management. There is also the Smooth green snake that requires open grassy areas. There are multiple roads as well as some mountain biking trails within the area. There is a trout stocked stream popular with anglers. Active management has occurred around the west, north and northeast perimeter and 3,468 acres are suitable for timber management. There are multiple access opportunities on roads and trails used by visitors engaging in activities that are not allowed in Wilderness.

### **GALFORD GAP (6,689 acres)**

Capability: This meets the minimum size requirements for Wilderness and has a core of 4,920 acres of semi-primitive land. The area is oddly configured, long and narrow. It consists of mostly mountainside and mountaintop high elevation views to exterior private lands. Approximately 80% of the boundary is adjacent to private. Due to size and primarily due to shape and configuration, this area does not provide a great opportunity for ecological processes to dominate.

Availability: There was active timber and prescribed burning activities from 1993 to 2000 and it is nearing time to return to these areas. About 4,467 acres are suitable for timber management.

### **GUM RUN (14,547)**

Capability: Despite its relatively large size, the semi-primitive area consists of only about 6,700 acres. The shape of this area, small percentage of boundary adjacent to private, and rugged terrain with large interior drainages provide good opportunities for remoteness and primitive recreation. The area is arguably large enough for ecological processes to dominate.

Availability: There are 2,529 acres with private sub-surface mineral rights across the north portion of the PWA. There is one small private inholding with a cabin near the south boundary. There are acidified streams in the area that would benefit from liming; there are approximately 24 miles of native brook trout streams. There is a mountain bike trail on Chestnut Ridge. There are 2.2 miles of open road currently providing public access into the interior of the area.

### **HIGH KNOB (18,447 acres)**

Capability: This large PWA has a core area of 11,760 acres of semi-primitive lands. The area consists of mountainsides with views to external areas, although the deep, rugged drainages do offer opportunities for solitude and physical challenge. The area is large enough for ecological processes to dominate. This PWA has a sizeable cherry stem around the Skidmore Fork Road on the east. In the northwest portion of the area, Brandywine Lake Recreation Area and a block of private land jut into the PWA, creating an oddly shaped boundary.

Availability: There are two TESLR or FS sensitive species in the area that benefit from active management. There have been a lot of wildlife management activities (about 15 openings) as well as a large prescribed burn. About half of this area is in West Virginia, and the Department of Natural Resources has strong reservations about Wilderness designation. About 4,300 acres are suitable for timber management. Shenandoah Mountain Trail, used by mountain bikers, traverses the ridge of the mountain through the middle of this PWA.

### **JERKEMTIGHT (27,314 acres)**

Capability: This is the third largest PWA in the assessment. It has a huge core of 15,840 acres of semi-primitive land. It is rugged with multiple ridges and twisting drainages, offering excellent opportunities for remote recreation and physical challenge. The area is large enough for ecological processes to dominate. The shape is odd with multiple corners and curves along the boundary, many of them plunging deeply into the PWA. However, a very small percent of the boundary is adjacent to private land.

Availability: There are six TESLR or FS sensitive species within the area that benefit from human intervention. The 1,280 acre Special Biological Area on the south end requires prescribed burning. There are 2,617 acres of private subsurface mineral rights in three blocks from roughly the center of the PWA up to the northwest portion. To exclude these would require reducing the size of the PWA by nearly half. There are two National IMBA mountain bike trails within the area. There have been significant investments in timber and wildlife projects dating 1993 to 2000.

### **KELLEY MOUNTAIN (12,892 acres)**

Capability: This moderately large area has a core of about 7,300 acres of semi-primitive land. In conjunction with the existing Saint Mary's Wilderness and Saint Mary's Wilderness Addition North, this could establish a large area of Wilderness. Within this area there are multiple ridges and valleys providing good opportunities for remoteness and physical challenge, with most views being to the interior of the area. This PWA, with its topography and natural features, can be dominated by ecological processes. There is a large, wide cherry stem on Turkey Pen Ridge, which is not a desirable quality in a Wilderness boundary.

Availability: There are three large blocks of private sub-surface mineral rights totaling 2,126 acres along the northern portion of the area. There are three TESLR or FS sensitive species that exist in the area that benefit from habitat management activities. There are several trails running parallel to each other spread across the area, one of which is accessed by a road that penetrates deeply into the interior. An OHV road separates Kelley Mountain from Saint Mary's Wilderness. There has been significant past investments in wildlife habitat improvements.

### **LAUREL FORK (10,236 acres)**

Capability: This moderately sized PWA has a core semi-primitive area of about 6,700 acres. The PWA is located in a fairly isolated area. The terrain within the PWA allow for opportunities for remoteness and physical challenge. The area is biologically unique on the GWNF and is the southernmost range for some northern species. There is a concern that climate change will result in these northern species migrating to the north and out of the area. There are large plantations of red pine and spruce. The area is marginally large enough for ecological processes to dominate.

Availability: The area has multiple trails, many used by mountain bikers. This area is the southernmost range for some of the northern animal species found in this area, and some may

benefit from management activities, particularly as more is learned about the effects on them of global warming. It is important to keep management options open to maintain these species in this area.

#### **LITTLE ALLEGHANY (15,395 acres)**

Capability: This PWA has about 8,780 acres of semi-primitive which is oddly shaped and protruding down each “leg” of this PWA. The area is rugged and does provide opportunities for remote, primitive recreation. The odd configuration impedes the area’s ability to have ecological processes dominate the landscape. Almost the entire boundary of this area is adjacent to private land.

Availability: There are two TESLR or FS sensitive species that are enhanced by active management. There are private sub-surface mineral rights on 374 acres. While this is not a large amount, due to its location, the entire southeast “leg” would need to be excluded. Approximately 5,621 acres are suitable for timber management.

#### **LITTLE MARE MOUNTAIN (11,918 acres)**

Capability: Less than half of this area, a total of about 5,000 acres, is in the semi-primitive ROS class and it is pushed toward the northern half. The narrow panhandle on the south portion has steep topography, but it is along a mountainside with external views to private. The larger block at the north end offers opportunities for remoteness, but the topography is not as rugged for offering physical challenges. The oddly shaped area is not conducive to allowing ecological processes to dominate the landscape. Close proximity to Douthat State Park with connector trails into the area may result in unacceptably high levels of user interaction for a quality Wilderness experience.

Availability: There is one TESLR or FS sensitive species that is enhanced by management activity. The Nature Conservancy opposes Wilderness as they work with the State in controlled burning projects outside of the western boundary. There are existing and planned mountain bike and equestrian trails in the area. More than half of the area is suitable for timber production and there have been active management activities within the area.

#### **LITTLE RIVER (30,227 acres)**

Capability: This is the largest area in the inventory and possibly the largest block of land to meet potential Wilderness criteria in the east. It has a huge core of about 20,500 acres of semi-primitive ROS class that offers significant opportunities for isolation, primitive recreation and physical challenge. This is the largest PWA; and with its proximity to existing Ramseys Draft Wilderness, offers a significant opportunity on the GWNF to provide adjacent Wildernesses that cumulatively are a substantial size.

**Availability:** Five TESLR species are found within the area that benefit from human intervention or disturbance. There are over 3,100 acres of private sub-surface mineral rights. There is a long, narrow inholding with a cabin near the north boundary; it can be excluded. A network of popular trails is found within the area that offers outstanding mountain biking opportunities. The area is very popular with bear hunters.

#### **MASSANUTTEN NORTH (16,530 acres)**

**Capability:** This area contains about 11,150 acres of semi-primitive land, but it is in a linear strip along a mountainside with views to the exterior private land. Almost the entire boundary of this PWA is adjacent to private lands, much of which has been developed with farms, residential areas, cabins, etc. The area is too narrow to provide outstanding opportunities for remote and physically challenging recreation. The area is too narrow to allow ecological processes to dominate the landscape.

**Availability:** There are reserved sub-surface mineral rights in five blocks totaling 1,465 acres. Two of these blocks stretch from boundary to boundary at the center of the area and at the north end of the area. To exclude them would mean reducing the area by half its size. The area contains premiere technical mountain biking trails maintained by volunteers. There is one TESLR or FS sensitive species that may benefit from active management.

#### **OAK KNOB-HONE QUARRY RIDGE (16,343 acres)**

**Capability:** This large PWA offers a core semi-primitive area of about 8,800 acres. There are excellent opportunities for remoteness and primitive recreation that is physically challenging. The area is of a size and shape that ecological processes can dominate the landscape. There is an undesirable cherry stem for the Hone Quarry recreation area. A roadbed through the area evidences past human activities.

**Availability:** There are reserved sub-surface mineral rights on 617 acres near the east boundary. It can be excluded; however it is on a ridgetop and any exploration or production activities may be visible from within the PWA. Some exploration occurred in the 1980's. There is one TESLR or FS sensitive species that would benefit from active management. Mountain bike trails exist throughout the area. There is a rock climbing area with permanent anchors. The area provides access for bear hunters. There are 5.7 miles of open or seasonally open roads in the area. There have been multiple prescribed fires between 1979 and 1999, encompassing about 35-40% of the area. About 882 acres are suitable for timber management.

#### **OLIVER MOUNTAIN (13,049 acres)**

Capability: This area has a semi-primitive core of about 9,200 acres, most of that situated to the west away from Lake Moomaw. While that is positive for escaping the sounds of motorized ski boats and personal watercraft, this portion of the PWA is surrounded by private land with many views to the exterior rather than to the interior. The topography is not rugged; it rates fairly low for providing physical and mental challenge. The area is marginally capable of allowing natural processes to dominate.

Availability: There are four TESLR or FS sensitive species within the area that would benefit from management activity, particular shale barren species. A road used by four-wheel-drive enthusiasts runs along Hughes Draft. There are multiple trails in the area used by mountain bikes, although some are not system trails and use of those is not authorized.

#### **PADDY KNOB (5,987 acres)**

Capability: This area has a small core of 3,300 acres of semi-primitive land; however the area is deeply incised and can offer physical challenge. The area is small for allowing ecological processes to dominate.

Availability: The area has been actively managed to provide outstanding habitat for the Mourning warbler that requires a fire cycle. The very hot prescribed fire of the late 1990's also released a large component of American chestnut. The area has been actively managed for timber, with 2,149 acres currently being suitable for timber production.

#### **POTTS MOUNTAIN (7,863 acres)**

Capability: This area has a core of about 4,500 acres of semi-primitive land. The PWA is situated on the side of a mountain with many exterior views. This mountainside is not deeply incised with steep, twisting drainages to offer physical and mental challenge. There are some moderate drainages along the lower slopes of the southwest portion. The northern part of the PWA is very oddly shaped around private lands that jut into the north boundary.

Availability: There are 91 acres of private subsurface mineral rights land jutting into the center of the area from the southern boundary. To exclude it would nearly divide the area in half. A very popular jeep road exists along the south boundary between Potts Mountain and existing Barbours Creek Wilderness. A large area of private land that juts into the north boundary contains several houses and a road. Over half of the area, 4,143 acres, is suitable for timber production although there have not been any activities in the area since prior to 1993. There are about 190 acres of pine species that would benefit from prescribed burning.

#### **RAMSEYS DRAFT ADDITION (19,072 acres)**

**Capability:** This PWA offers the largest addition to an existing Wilderness, collectively offering a significant area with outstanding opportunities for primitive recreation, remoteness, physical and mental challenge, and for natural processes to dominate. It meets the GWNF goal of establishing a large block of Wilderness in the east that can enhance the NWPS.

**Availability:** The west side of this PWA is almost entirely underlain by privately owned minerals. The southern portion of the area contains popular mountain biking trails. The eastern portion of the PWA has 4,753 acres of land suitable for timber production. Timber and some wildlife habitat projects have occurred in the past. The North River Road is within the floodplain and should be relocated which would put it inside the northern boundary of this PWA.

Augusta County Board of Supervisors passed a resolution opposing any additional designation of Wilderness in Augusta County.

#### **RICH HOLE ADDITION (12,165 acres)**

**Capability:** In line with the GWNF's goal of expanding the size of existing Wildernesses to improve their Wilderness qualities and enhance the NWPS system, this area offers the opportunity to expand the acreage of a small Wilderness. Furthermore, it will almost connect the Rich Hole and Rough Mountain Wildernesses, generally increasing the area of designated Wilderness that is currently relatively small.

**Availability:** There are management concerns about the southern portion of the area that has an extensive boundary with private land and is irregularly shaped. The northern section along Forest Road 129 has been actively managed with timber production and prescribed burning. Forest Road 129 is also a popular forest access route for hunters and anglers.

#### **RICH PATCH (5,625 acres)**

**Capability:** This extremely narrow sliver of land, in and of itself, is not capable of providing for ecological or recreational Wilderness qualities. The majority of the PWA is on the Jefferson National Forest.

**Availability:** One TESLR or FS sensitive species exists in the area that might benefit from management activity. There are many trails, including a National Recreation Trail, used by mountain bikers.

#### **ROUGH MOUNTAIN ADDITION (2,063 acres)**

**Capability:** Same as Rich Hole above.

**Availability:** There are shale barrens on the north end that would benefit from prescribed fire. North end also has a boundary adjacent to private land.

### **SAINT MARY'S ADDITION NORTH (3,006 acres)**

Capability: This addition would increase the size of the existing Saint Mary's Wilderness. It has a semi-primitive core of almost 2,000 acres. The area consists primarily of a north facing mountainside with exterior views. However, here is rugged terrain and two very deep and winding drainages providing opportunities for physical challenge and remoteness.

Availability: About 630 acres, or 21%, of the area has private subsurface mineral rights. The area is bordered on the east side by a popular Forest Service road and on the west and north by VA 42. A Forest Service road runs along most of the southern border of the area currently providing motorized access.

### **SAINT MARY'S ADDITION, SOUTH (1,651 acres)**

Capability: This small addition contains rugged topography with multiple ridges and deeply incised drainages.

Availability: There are 333 acres of private subsurface mineral rights in two large blocks occupying much of the northern portion of the PWA.

### **SAINT MARY'S ADDITION, WEST (278 acres)**

This area was acquired by the Forest Service for the express purpose of providing an addition to the existing Wilderness.

### **SHAWS RIDGE (7,268 acres)**

Capability: This area has a core area of about 3,950 acres of semi-primitive land. The area is desirable for expanding the block of Wilderness with Ramseys Draft and its Addition. However, the area is comprised of a mountain with views east toward Ramseys Draft and about half of the area has views west toward private land. There is a substantial amount of private interface. The area is not deeply incised to offer outstanding opportunities for physical challenge.

Availability: There is one TESLR or FS sensitive species that is enhanced by prescribed fire (shale barren species). A private inholding exists near the center of the area on the west slope. There are 1.3 miles of road used for public access. There are 396 acres of pine species that benefit from fire.

### **SHAWVERS RUN ADDITION (84 acres)**

Capability: This area would not appreciably add to the Wilderness qualities of Shawvers Run. If designated, it would add a length of road to the boundary and it would add some additional boundary adjacent to private land.

Availability: There are no concerns for other resources or recreational uses.

### **THREE RIDGES ADDITIONS, ALL (369 acres)**

Capability: These areas would not appreciably add to the Wilderness qualities or improve ability to manage the Three Ridges Wilderness.

Availability: There are no significant concerns for other resources or incompatible recreation opportunities.

### **THREE SISTERS (9,871 acres)**

Capability: The area offers a semi-primitive core of about 5,500 acres. There is rugged terrain and multiple drainages to offer remote primitive recreation opportunities (if one goes off of trails) and physical challenge. The presence of the popular Appalachian National Scenic Trail may result in unacceptably high encounters with other users, by Wilderness standards. The area is arguably large enough to allow natural processes to dominate.

Availability: There are 491 acres of sub-surface mineral rights. This is in one block on the northwest boundary and could be excluded. The Appalachian Trail is maintained by volunteers who use chainsaws. The local maintaining trail club does not support designation. Furthermore, there is an overnight shelter for backpackers within the area. There are 1.3 miles of road that currently provides motorized public access. Wildlife management activities have occurred in the area in recent years, and 879 acres are suitable for timber production. Streams within the area are acidified, and there are 10 miles of native brook trout stream present. These streams may benefit from future liming. There has been a significant investment in mine reclamation just outside of the eastern boundary. Additional work may be needed there.

## **C. Evaluation of Need for Additional Wilderness on the GWNF**

The concept of Wilderness is multifaceted as envisioned by the authors and framers of the 1964 Wilderness Act. As such there are a number of factors to consider in assessing the need for additional Wilderness including evaluating use trends and current visitation pressures on existing wilderness; the location, size and type of other Wildernesses in the general vicinity; the need to provide a refuge for species that have demonstrated an inability to survive in less than primitive surroundings (included in Capability evaluation); and ecosystems that are not represented or are under-represented in the NWPS. Agency direction in assessing need is that it is most informative and meaningful when performed at a forest scale or regional scale.

The Eastern Wilderness Areas Act (1975) pointed out that “in the more populous eastern half of the United States there is an urgent need to identify, study, designate, and preserve areas for addition to the National Wilderness Preservation System”. That Act established 15 additional areas as Wilderness and states further that “Congress finds and declares that . . . these and similar areas in the eastern half of the United States be promptly designated Wilderness...” (emphasis added). The need for such designation, as provided in this Act, is to preserve such areas as an enduring resource of Wilderness, which shall be managed to promote and perpetuate the Wilderness character of the land and its specific values of:

- solitude,
- physical and mental challenge,
- scientific study,
- inspiration,
- primitive recreation

for the benefit of all the American people of present and future generations. The GWNF did not have any Wildernesses designated in that 1975 Eastern Wilderness Areas Act. The JNF had one area designated at that time, the James River Face Wilderness. Since then, 22 Wildernesses have been designated on the GWNF and JNF.

Before going further, it should be stated that certain assumptions and observations are made in this assessment of need:

1. No target or formula has been provided for determining the appropriate distribution of Wilderness that should be provided in our region. The 4% of the GWNF that is designated Wilderness is below the 6% of Wilderness designated on Forest Service lands in the Southern Region. The Southern and Eastern Regions combined have over 8% of NFS lands designated as Wilderness.
2. Some demand for primitive recreation opportunities can be met on non-Wilderness back-country lands. However, research data indicate that the public finds the permanence of Congressional Wilderness designation to be very important.
3. The ability to provide outstanding opportunities for solitude, inspiration and primitive recreation is to a great extent dependent on the size and shape of the Wilderness. A relatively large area of land with relatively little to no private interface is better suited to providing this type of experience than irregularly shaped, small areas that are adjacent to private land.
4. The demands for various uses of public lands are constantly increasing. Forest Service lands once referred to as “the lands nobody wanted” now seem to be the lands everybody wants. As this occurs, the lands meeting the criteria for PWAs may decrease.

For a look at the distribution of roadless areas and Wildernesses in the southeast United States, see the Southern Appalachian Assessment, Chapter 5 (SAMAB, 1996) at <http://sunsite.utk.edu/samab/saa/reports/social/chapter5.pdf>. This document discusses the location, size and type of other Wilderness and roadless areas, existing recreation use of Wilderness, occurrences of ecosystem subsections in Wilderness in the local and regional area. See also discussion of Wilderness at <http://www.Wilderness.net/>.

Table 7 provides information about the existing Wildernesses and their distribution by County in Virginia. None of the GWNF Wildernesses are in West Virginia.

**Table 7: Existing Congressionally-Designated Wildernesses on the GWNF**

<b>Wilderness (alphabetically)</b>	<b>Ranger District</b>	<b>Total Acres</b>	<b>County</b>	<b>Acres by County</b>	<b>Year Designated</b>
Priest	Glenwood Pedlar	5,963	Nelson	5,963	2000
Ramseys Draft	North River	6,518	Augusta	6,518	1984
Rich Hole	James River	6,450	Rockbridge	3,200	1988
			Alleghany	3,250	
Rough Mountain	Warm Springs	9,300	Bath	9,096	1988
			Alleghany	204	
Saint Mary's	Glenwood Pedlar	9,835	Augusta	9,835	1984
Three Ridges	Glenwood Pedlar	4,608	Nelson	4,590	2000
			Augusta	18	
<b>Totals</b>	4 Ranger Districts	42,674 acres	5 Counties		

The GWNF is not the only provider of Wilderness in the vicinity. The Shenandoah National Park is in closer proximity to the large urban population of Washington, D.C., and northern Virginia. It is also a short distance from populations west in the Shenandoah Valley. The Shenandoah National Park offers 79,579 acres of designated Wilderness, or approximately 40.4% of the 197,000 acres in its ownership.

Just to the west of the GWNF is the Monongahela National Forest (MNF) in West Virginia, the northern portion of which is within a few hours' drive or less of the Washington DC metropolitan area and the Shenandoah Valley. The southern end is within a few hours' drive or less of most of the George Washington National Forest and the population that resides within and adjacent to it. The MNF offers 115,779 acres of designated Wilderness. Just to the south of the GWNF is the Jefferson National Forest in Virginia, West Virginia and Kentucky. It offers 17 Wildernesses totaling 96,787 acres.

In an effort to determine if demand for Wilderness-based recreation is increasing, the results of the last two National Visitor Use Monitoring Results (NVUM) for George Washington-Jefferson National Forest are used (USDA Forest Service, Region 8, data collected fiscal years 2000 and 2006, published August 2001 and July 2007 respectively). In 2000, 34 days were sampled in Wilderness, and in 2006, 37 days were sampled.

Based on the statistical data, the Wilderness visits in 2000 were estimated to be 69,406, and the Wilderness visits in 2006 were estimated to be 61,200, a decrease of 10.38% over 6 years.

Both years' reports include a survey of perceived crowding in Wilderness. Table 8 shows the results of that portion of the surveys. Seemingly in contrast to the decreased visitation reported, visitors in

2006 perceived Wilderness to be more crowded than did the visitors to Wilderness in 2000, although not overwhelmingly.

**Table 8: Perceived Crowding in Wilderness from NVUM Reports:**

<b>Crowding Rating</b>	<b>2000 % of site visits</b>	<b>2006 % of site visits</b>
10 Overcrowded	0	0.0
9	3	6.2
8	0	0.3
7	13	12.1
6	10	19.5
5	15	24.8
4	12	6.5
3	6	0.3
2	26	30.0
1 Hardly anyone there	15	0.3

The NVUM provides a list of visitors’ home zip codes. In the 2000 survey, there were a total of 7 home zip codes provided by visitors; in 2006, there were a total of 89 and 1 foreign country, indicating that visitors are coming from a broader and more diverse area than previously.

Another source of information about demand for Wilderness recreation opportunities is the July 2002 report by Ken Cordell titled “A Survey of Residents of the Greater Southern Appalachian Region to Describe: Public Use and Preferred Objectives for Southern Appalachian National Forests, Public Survey Report, George Washington and Jefferson National Forests”, commonly referred to as the Public Survey Report (Web Series: SRS-4901-2002-5). This report provides the findings of a telephone survey of residents of counties located within 75 miles of each of the 13 southern Appalachian national forests. A minimum of 400 telephone interviews were conducted for each of these national forests. The report indicates that 41% of local residents 16 and older who responded that they had visited the GWNF in the prior 12 months had visited a Wilderness area. Over 64% of local respondents 16 years of age or older indicated that designating additional acres of Wilderness was important to them, and over 42% indicated that it was extremely important to them. Since the completion of the 2006 NVUM and the 2002 Public Survey Reports cited above, six new Wildernesses and six additions to existing Wildernesses were Congressionally designated on the Jefferson National Forest totaling 40,340 acres. Three new Wildernesses were added and three were expanded on the Monongahela National Forest as well.

With 24 Wildernesses, Virginia ranks 1<sup>st</sup> of the states east of the Mississippi with the most Wilderness units, and 10<sup>th</sup> nationally. While Virginia is ranked 35<sup>th</sup> nationally for total area (U.S. Census), it ranks 17<sup>th</sup> nationally for total acres of designated Wilderness. Virginia also ranks 17<sup>th</sup> for percent of the state’s total land area that is designated Wilderness ([www.Wilderness.net](http://www.Wilderness.net)).

Wilderness is valued for, among other reasons, preserving representative natural ecosystems. In terms of ecological classification, all of the PWAs are within the Central Appalachian Broadleaf-Coniferous Forest Meadow Province. Within this province, the GWNF contains portions of the Northern Blue Ridge, Ridge and Valley and the Appalachian Plateau physiographic regions. All of these physiographic regions are well represented with existing Wilderness. Wilderness in the Northern Blue Ridge include St. Mary's, The Priest, Three Ridges and Shenandoah Wilderness. Wilderness in the Ridge and Valley include Ramseys Draft, Rough Mountain and Rich Hole. And the Monongahela's Wildernesses are found in both the Appalachian Plateau as well as the Alleghany Highlands.

At the regional and the local scales, there are no known visitor use pressures on existing Wilderness on the GWNF that would potentially be alleviated by additional Wilderness designation near population centers. In fact, per the NVUM surveys data cited above, use of Wilderness appears to have decreased between 2001 and 2006. St. Mary's Wilderness receives the highest use on the George Washington NF, while Ramseys Draft receives moderate use. The other four Wildernesses receive low use (SAA Chapter 5 at page 193, 1996). St. Mary's has always been popular and receives repeat visitation by people familiar with this Wilderness. Sixteen years after St. Mary's designation, two Wildernesses, The Priest and Three Ridges, were designated near to and in the same physiographic region as St. Mary's, yet there was no apparent decline of visitation in St. Mary's. Other management actions will be required if the pressures of use in St. Mary's result in unacceptable numbers of encounters with other visitors or unacceptable impacts to resources. Designating new Wilderness will not solve those issues.

The primary benefit that could be achieved through additional designation of Wilderness on the GWNF would be to expand the size of one or more existing Wilderness to provide better opportunities for solitude, remoteness, challenge, and the ability of natural processes to dominate. This expansion could include designating adjacent areas as well. Though not as effective as contiguous blocks, adjacent Wilderness separated by a narrow road corridor could be effective in meeting this goal.