

1509 Village Grove Road
Richmond, Va. 23238
May 24, 2007

George Washington Plan Review
George Washington & Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, Va. 24019-3050

Subj: National Forest Service - New 15 Year Plan

Ref: I am a property owner of the Fort Valley Hunt Club,
off Moreland Gap Road, Fort Valley, Va.

Gentlemen:

I would like to provide you input for consideration as you develop your new fifteen (15) year plan for the national forest area around where the Fort Valley Hunt Club property is located. This club, to the best of my knowledge, was established during the 1920's. This private property of approximately fourteen (14) acres shares a common boundary line with the national forest. The majority of hunting is in the national forest.

Over the past fifteen (15) years or so, I have seen more and more impact from the addition and expansion of All Terrain Vehicles (ATV) trails and horse trails. It is not uncommon, while hunting in the forest around Fort Valley Hunt Club, to see private organized horse riding parties coming through the woods or having noisy ATV riders coming through. All this commotion is not very conducive to the wildlife, serenity of the woods, and for hunting.

As you consider your next fifteen (15) year plan please consider the follow:

1. No more expansion of ATV trails or elimination/reducing the number of trails.
2. No more expansion of horse back riding trails or elimination/reducing the number of trails.
3. Do not implement any additional camping or picnic areas.
- 4.. I feel the woods should be undisturbed, except by hunters, during the early and late black powder deer season and during the general west of the Blue Ridge deer season (October through January).

Your careful and thoughtful consideration would be most appreciated.

Sincerely,


Jack L. Redfern



Natural Bridge Appalachian Trail Club, Inc.

P. O. Box 3012
Lynchburg, Virginia 24503

May 14, 2007

George Washington Plan Revision
George Washington & Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019

Dear Sirs:

As per a resolution of our Board of Directors I am writing to express our organization's concerns pertaining to the George Washington National Forest Plan Revision. As a maintaining club responsible for 90 miles of the Appalachian National Scenic Trail (A.T.) and representing a membership of approximately 500 interested and concerned individuals we feel it is of the utmost importance that the new George Washington National Forest Plan and its implementation adequately address the needs and concerns of this national treasure.

The need to continue to protect the A.T. remains strong. We feel that the new Plan under the new guidelines should integrate the existing standards for the A.T. as found under the now current Plan. In addition we feel that the strong standards as set forth in the Plan for the Jefferson National Forest should also be incorporated into the design and implementation of the George Washington National Forest Plan.

Thank you for the opportunity to address this very important issue. We look forward to participating in this ongoing process.

David A. Helms
President

c: Laura Belleville
Appalachian Trail Conservancy
PO BOX 174
Blacksburg, VA 24063



ALLEGHANY COUNTY FARM BUREAU

411 South Monroe Avenue • Covington, Virginia 24426 • (540) 962-3961

May 8, 2007

Mr. Dave Plunkett
Planning Team Leader
George Washington Plan Revision
5162 Valleypointe Parkway
Roanoke, VA 24019

Dear Mr. Plunkett:

As you revise the Forest Plan for the George Washington National Forest, please consider the following comments and suggestions as your planning team develops the preferred plan.

The Alleghany County Farm Bureau consists of 888 total members of which 252 are farming producer members in the Alleghany Highlands Region. We believe responsible forest stewardship includes providing for all the amenities available from the forest, including the forest products society needs and wants. A sound timber harvesting program goes hand-in-hand with management for other uses, including forest health, wildlife, and recreation. These efforts are complimentary, and the Forest Service needs to recognize this when developing long-range plans.

The United States Forest Service owns 142,053 acres or 56.6% of the land base within Alleghany County. The Forest Products Industry plays a very important part of the economy in our region. MeadWestvaco, our largest employer with 1,400 plus employees, consumes approximately two million tons of pulpwood per year at Covington. However, less than 1% of the pulpwood consumed By MeadWestvaco in 2006 came from the George Washington National Forest. At least three sawmills and thirty five logging businesses operate in our county. These businesses provide jobs for many people. For the sawmill owners and loggers in these areas, the USFS timber sale program is extremely important, and it will impact them. A reliable supply of raw material is crucial to the future of our county. Forest products will be generated somewhere to meet demand, and it is logical and environmentally wise that some of these products come from Forest Service lands. This trend of decreasing emphasis on timber harvesting needs to be reversed in the revised plan. This includes maintaining both a high suitable-acres base and significant allowable cut level.

A healthy forest and one that provides habitat for a variety of plant and animal species is one that is diverse. Actively harvesting timber establishes and maintains this diversity by creating a mosaic of timber types and ages across the landscape. This helps minimize the potential for catastrophic losses due to insect and disease outbreaks,

uncontrolled fires, or other natural events. Environmentally, the Forest Service should have a strong harvesting program to protect the environment and improve biodiversity.

Thank you for the opportunity to comment. Please let me know if you would like to discuss further our common interest in the sound and balanced management of these public lands.

Sincerely,

A handwritten signature in black ink, appearing to read "Roger Timbrook". The signature is written in a cursive style with a large, prominent initial "R".

Roger Timbrook.

Vice-President Alleghany County Farm Bureau



Southern
Environmental
Law Center

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*mta
handwritten*

May 2, 2007

Maureen T. Hyzer
Forest Supervisor
George Washington National Forest
5162 Valleypointe Parkway
Roanoke, Virginia 24019

Re: George Washington Forest Plan Revision

Dear Ms. Hyzer:

We would like to take this opportunity to share our views on recent developments in the National Forest Management Act (NFMA) regulations which affect the George Washington (GW) forest plan revision.

As you recognized in your April 3, 2007, letter postponing public meetings on the revision of the GW plan, on March 30, 2007, the Northern District of California held that the adoption of the 2005 NFMA regulations violated the Administrative Procedure Act (APA), the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA). Citizens for Better Forestry v. United States Dep't of Agric., 2007 U.S. Dist. LEXIS 27419, *121 (N.D. Cal. 2007). The court enjoined the USDA "from implementation and utilization of the 2005 Rule until it has fully complied with" those statutes. Id.

If the GW desires to proceed with its forest plan revision at this time, the GW should use the 1982 NFMA regulations. Although it did not decide the question, Citizens suggested that the rule "immediately preceding the 2005 Rule" would control. Id. at *120. Prior to the adoption of the invalid 2005 Rule, the transition provision of the 2000 NFMA regulations, 36 C.F.R. § 219.35 (2004), acted as a placeholder, extending the 1982 regulations until the agency adopted new regulations in 2005. Pursuant to the transition provision and as a practical matter, the 1982 regulations remained in effect for forest planning and the 2000 Rule never was used. Further, the 1982 rules ensure the diversity and viability of wildlife and fish and guide timber suitability determinations, among other important provisions, and planning staff are familiar with them.

This injunction against the use of the 2005 Rule now applies, and should continue to apply, nationwide, including to the GW. While the GW has responded to the injunction by placing the public aspects of the revision on hold, we understand that the GW is proceeding with some internal analysis, including ecological analysis begun under the 2005 Rule and analysis of comments and issues raised during the first round of public meetings on the revision.

To the extent that the ecological analysis is based upon the 2005 Rule, 36 C.F.R. § 219.10 (2005), and its implementing directives, such as its framework for ecosystem diversity and management of species of interest and concern, it would violate the injunction. Staff should take a fresh look at the ecological analysis to ensure that it is not constrained or directed by the 2005 Rule under which it was begun months ago. The GW may need to restart some aspects of the analysis to avoid these improper constraints and to orient planning around the 1982 regulations, such as the requirement to manage fish and wildlife habitat “to maintain viable populations of existing native and desired non-native vertebrate species” and to select management indicator species and monitor their populations trends, 36 C.F.R. § 219.19 (1982).

Likewise, at the March 29, 2007, plan revision IDT meeting, staff were asked to draft summaries of public comments, focusing on how comments and issues related to the draft Comprehensive Evaluation Report (CER). Now, gearing comment analysis towards the CER, a component of the 2005 Rule, would violate the injunction. To the extent that staff proceed with comment analysis, they should now assess public comments independently from their relationship to planning done under the 2005 Rule, such as the CER.

Regarding the Environmental Management System (EMS), the Citizens decision specifically found that the adoption of the EMS requirement violated the APA, so any work on the EMS also must cease.

Further, under NEPA, 42 U.S.C. § 4332(2)(C), and the 1982 NFMA regulations, 36 C.F.R. §§ 219.6, 219.10 (1982), and even under the 2000 regulations, 36 C.F.R. § 219.9(d) (2000), the GW must prepare an Environmental Impact Statement (EIS) which analyzes a broad range of reasonable management alternatives and their impacts. The GW should not attempt to use the categorical exclusion (CE) for forest plans since it explicitly is based upon the agency’s conclusion that the 2005 Rule so changed the planning process and forest plans, making plans merely aspirational strategies, that they could be categorically excluded from NEPA documentation. 71 Fed. Reg. 75481, 75484 (2006) (plan CE). It is noteworthy that, although the planning CE was not part of the Citizens case, the court assumed that EISs must be prepared for forest plans. Citizens, 2007 U.S. Dist. LEXIS 27419, *7-8 (“When the Secretary [of Agriculture] develops these [forest] plans, the NFMA requires him to comply with NEPA, which in turn encompasses a duty to prepare environmental impact statements (“EIS”). See 16 U.S.C. § 1604(g)(1).”).

Similarly, under Section 7 of the ESA, 16 U.S.C. § 1536(a)(2), the GW now must consult with the Fish and Wildlife Service (FWS) regarding the plan revision. The Washington Office’s July 3, 2006, letter instructing the regions not to consult with FWS also relied on the 2005 Rule’s changes to forest plans. Now that the 2005 Rule has been thrown out, consultation with FWS is required.¹

The GW may need to go back to the drawing board on many issues in order to avoid any use or influence of the 2005 Rule and to allow the NEPA process, the analysis in the EIS and FWS consultation to shape the revision, rather than using them to justify decisions already made internally. It is very important that the GW does not become entrenched in the preliminary draft revised forest plan developed under the 2005 Rule and released for discussion in February 2007.

¹ Please note that we disagreed with the Forest Service’s conclusions and believe that even plans adopted under the 2005 Rule require preparation of an EIS and consultation with the FWS.

Many aspects of this initial draft plan will need to change to meet the 1982 regulations and to reflect the EIS, consultation with FWS and public input.

We understand the GW also is proceeding with the roadless inventory. The inventory should be conducted in accordance with the 1982 regulation on the roadless inventory, 36 C.F.R. § 219.17, and should use the inventory directives in place prior to the adoption of the 2005 Rule, rather than those revised as part of the 2005 overhaul of forest planning. Further, as we explained in detail in our administrative appeals of the Jefferson National Forest plan and other forest plans revised in 2004, the last roadless inventory in the Southern Appalachians was illegal and inaccurate in numerous respects, including but by no means limited to:

- Exclusive focus on opportunities for “solitude” which ignored opportunities for “a primitive and unconfined type of recreation,” despite the fact that The Wilderness Act, 16 U.S.C. § 1131(c), places both on an equal footing.
- Equating opportunities for solitude with a 2,500 acre “semi-primitive core” and using that core as a screen.
- The Congressionally-discredited “sights and sounds” criteria.
- Failure to ground-truth inventory decisions.

We hope that the roadless inventory for the GW will not repeat these errors. Many of the areas included in the Mountain Treasures of the George Washington National Forest, which we provided in draft form to Ken Landgraf on February 7, 2007, meet the roadless criteria and should be added to the inventory and managed consistent with all other roadless areas.

Finally, we have many concerns with the draft CER and initial draft revised plan released in February. We provide a few key, initial recommendations to guide forest planning when it resumes and look forward to submitting more comprehensive comments on these and other issues when it becomes clear when and how the revision will proceed.

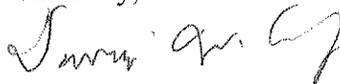
- Manage all inventoried roadless areas, and all areas meeting roadless criteria, under the reasonable protections of the 2001 Roadless Area Conservation Rule, 66 Fed. Reg. 3244 (2001).
- Make ample recommendations for new Wilderness Areas, to meet the growing demand for backcountry-type recreation such as hiking, camping, hunting and fishing, to secure large tracts of intact wildlife habitat, to protect water quality, and to provide many other important biological, scenic and cultural values. Nationally, an average of 18% of National Forest lands are designated Wilderness. This provides a good frame of reference for considering new designations on the GW, where currently only 4% is designated Wilderness.
- Protect all other Virginia Mountain Treasure areas for backcountry recreation and similar values.
- Survey the GW for existing old growth (similar surveys were performed on the Jefferson National Forest for its plan revision), protect all existing old growth, and establish an old

growth network which, at a minimum, meets Region 8's Guidance for Conserving and Restoring Old-Growth Forest Communities on National Forests in the Southern Region (June 1997).

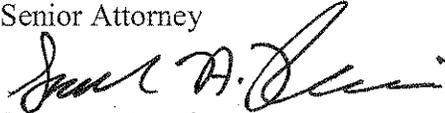
- Designate as Special Biological Areas all areas recommended for such designation by the Virginia Division of Natural Heritage.
- Identify watersheds which provide drinking water, support at-risk aquatic species and brook trout, or need restoration, and adopt standards to protect and restore them.
- Consider adopting measures for scientifically supported restoration which is ecologically appropriate for the GW. Such restoration should seek to reestablish natural, resilient, self-sustaining conditions in areas otherwise degraded or unbalanced, in accordance with the article "A Citizens' Call for Ecological Restoration: Forest Restoration Principles and Criteria," Ecological Restoration, Vol. 21, No. 1 (2003). The agency's land acquisition records, which document the natural conditions and processes in the Southern Appalachian forests and which were brought to light during the revision of the Jefferson and other plans by a Cherokee National Forest employee, will be highly relevant to identifying reference conditions prior to European settlement and the massive alteration of the Southern Appalachians that followed, and to developing restoration goals.
- The draft CER and initial draft plan suggest broad-scale logging and burning to restore and maintain "open woodlands," without providing scientific support for their natural occurrence on the GW. The GW should re-evaluate the basis for this proposal and fully consider its impacts.

Thank you for your consideration. We look forward to working with you and your staff as you proceed down the plan revision path. Please feel free to contact us if you have any questions.

Sincerely,



David W. Carr, Jr.
Public Lands Project Leader
Senior Attorney



Sarah A. Francisco
Staff Attorney

Hugh Irwin
Conservation Planner
Southern Appalachian Forest Coalition

Mary C. Krueger
Forest Policy Analyst
The Wilderness Society

cc: Kenneth Landgraf, GWNF

*MNA
Land Use
Planning Team*

April 27, 2007

Maureen Hyzer – Forest Supervisor
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019-0019

Dear Maureen,

The Nature Conservancy is a science-based organization dedicated to protecting the diversity of our natural world. We have protected more than 117 million acres worldwide, and more than 250,000 acres in Virginia. The Conservancy has completed a science-based assessment of the *Central Appalachian Forest Ecoregion*, a planning unit comprised of the Blue Ridge and Ridge and Valley provinces of Virginia, West Virginia, Maryland, and Pennsylvania, which includes the entire **George Washington National Forest (GWNF)**. This assessment, developed in consultation with numerous scientific experts and partner organizations including ecologists from the United States Forest Service, identifies the lands and waters that constitute a set of *priority conservation areas* essential for the maintenance of native biodiversity in the Central Appalachians.

Operating under the existing Master Memorandum of Understanding (02-SMU-132000-03) between the United States Forest Service and The Nature Conservancy, the Conservancy has completed a preliminary analysis that identifies and summarizes optimal management strategies for *priority conservation areas* found on the GWNF. This science-based analysis has been guided by our existing **Central Appalachian Forest Ecoregional Plan** and data, and has been conducted to support the Forest Service and its mission to sustain ecological systems and species diversity.

Enclosed, please find written and digital copies of two documents that summarize key results of our preliminary analysis of optimal ecological management strategies on the GWNF. The first document summarizes our general recommendations for protecting and managing significant species, natural communities, caves, and aquatic systems identified in our **Central Appalachian Forest Ecoregional Plan**. The second document summarizes our general recommendations for protecting and managing five large contiguous areas of forest habitat that the Conservancy refers to as “Matrix Forests”. These five Matrix Forests are a high priority for conservation action as they represent exceptional opportunities for sustaining functional forest ecosystems at a meaningful landscape scale in western Virginia and eastern West Virginia. Their protection also plays a critical role in sustaining the overall diversity of forest ecosystems in the Central Appalachians.

As you know, we have provided digital copies of our **Central Appalachian Forest Ecoregional Plan** and the data supporting our analyses directly to your science staff in Roanoke. It is our hope that this science-based information will be useful to a wide range of Forest Service staff including planners, scientists, and land managers. *Please do not re-distribute any of our ecoregional data sets without written permission from the Conservancy.*

Also enclosed are the Conservancy's written comments and reactions to the Forest Service's, "Draft Conservation Evaluation Report" for the George Washington National Forest Plan Revision. We are encouraged by many of the report's recommendations, particularly those pertaining to the expanded protection of Special Biological Areas, Caves and Karst Features, Rare Species, and Riparian Zones. We would also like to see the Forest Service increase its protection and management of Conservancy identified Matrix Forests. Special designation of five diverse Matrix Forests will allow the George Washington National Forest to make a lasting contribution to the protection of native biodiversity in the Central Appalachians.

Across the United States, The Nature Conservancy and the United States Forest Service are developing an exciting array of joint planning efforts, land management partnerships, and unique initiatives. It is my hope that The Nature Conservancy and the George Washington and Jefferson National Forests can work closely together in the years ahead to conserve and sustain the incredible biological diversity found in western Virginia and eastern West Virginia.

If you have any questions about our analyses and conclusions as they may relate to specific management strategies on the GWNF or the current draft CER, please do not hesitate in contacting me. The Conservancy looks forward to continuing our strong partnership and expanding our collaboration and success. We will remain an active participant throughout the George Washington National Forest plan revision process.

Sincerely,



Brad Kreps-Director
The Nature Conservancy
Allegheny Highlands Program
Warm Springs, VA

Cc: Dave Plunkett, Land Management Planning Specialist
Ken Landgraf, Land Management Planning Specialist

7/11/06

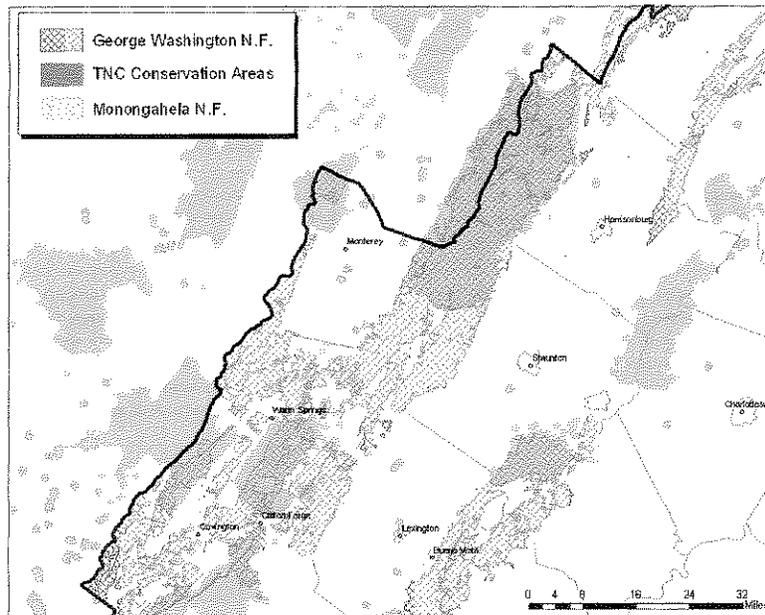
**Optimal USFS Management
of Nature Conservancy Standard Conservation Sites,
Priority Caves, and Significant Aquatic Systems**

The Nature Conservancy (the Conservancy) is a science-based organization dedicated to protecting the diversity of our natural world. To accomplish this ambitious mission, the Conservancy works with a variety of partners and prioritizes its work through a multi-scale, science-driven planning process known as *Conservation by Design*. As part of this approach, The Conservancy has completed an assessment of the **Central Appalachian Forest Ecoregion**, a planning unit comprised of the Blue Ridge and Ridge and Valley provinces of Virginia, West Virginia, Maryland, and Pennsylvania, which includes the entire George Washington National Forest (GWNF).

This assessment, developed in consultation with numerous experts and partner organizations including ecologists from the GWNF, identifies the lands and waters that constitute a set of *priority conservation areas* essential for the maintenance of this region's native biodiversity. A complete description of how the Conservancy defines, identifies, prioritizes, and sets goals for these conservation areas can be found in our **Central Appalachian Forest Ecoregional Plan** (The Nature Conservancy, 2001)¹. The Conservancy works in a collaborative fashion with numerous partners including public agencies, private landowners, businesses, and local communities to develop and implement a wide range of strategies aimed at protecting all *priority conservation areas* identified in our planning process.

In the Central Appalachians, the GWNF is clearly one of our most important, expansive, and ecologically diverse managed areas. Within the GWNF, Nature Conservancy scientists and planners have identified a number of highly significant *priority conservation areas* (Figure 1).

¹ The first iteration Central Appalachian Forest Ecoregional Plan, completed in 2001, did not examine and prioritize aquatic systems. The Conservancy has more recently completed an initial roll-up of these sites (2006). For more information on the methodology and results of our aquatic systems assessment, please contact Gwynn Crichton (gcrichton@tnc.org) at The Nature Conservancy in Virginia.



**Figure 1: Conservancy Priority Conservation Areas (in Pink)
And George Washington National Forest Lands (in Dark Green Hatch)**

The 1.1 million acre GWNF provides habitat for an impressive diversity of native forest ecosystems; healthy aquatic systems; unique cave features; and rare plants, animals, and exemplary natural communities. Like the Conservancy, the United States Forest Service’s (USFS) mission includes a goal of sustaining ecological systems and species diversity. The Conservancy has analyzed current (1993 Plan and Revisions) GWNF management prescriptions to assess the status and describe the optimal management of Conservancy-identified conservation areas found on the National Forest.

The following set of tables and accompanying text *generally* describe and compare current versus optimal management scenarios on USFS lands that contain ecoregionally significant terrestrial species, natural communities, caves, and aquatic systems. Based on our analysis, a set of targeted management changes within these priority areas would significantly enhance the GWNF’s overall contribution to the conservation of biodiversity in the Central Appalachians².

²In addition to the effective management of these species and natural community targets, the Conservancy has identified five priority Matrix Forests (generally >50,000 acres) on the GWNF. These larger forest areas contain a wide array of characteristic forest types and both rare and representative species. Optimal ecological management in these larger forest blocks is also critical to the maintenance of regional biodiversity. The Conservancy has conducted a separate analysis of these forest blocks and we have summarized our findings in a separate document.

Priority Terrestrial Species and Natural Communities

The GWNF contains a substantial portion of the terrestrial species and natural community conservation targets prioritized by the Conservancy in the Central Appalachian Forest Ecoregion (Table 1). **More than one-quarter of all priority species and community targets identified in the Central Appalachians are found on the GWNF.** With optimal management, the GWNF has an incredible opportunity to make a lasting contribution to the diversity of life found in this Ecoregion.

Table 1. Comparison of the Diversity and Abundance of TNC Identified Species and Natural Community Conservation Targets Among National Forests in the Central Appalachian Ecoregion.

Management Area	Target Species and Natural Communities (Diversity)	Percent of Total Targets in Ecoregion	Occurrences of Target Species and Natural Communities (Abundance)	Percent of Total Target Occurrences in Ecoregion
George Washington NF	58	26.7%	252	18.5%
Monongahela NF	33	15.2%	167	12.3%
Jefferson NF	37	17.1%	131	9.6%
Other Managed Lands	87	40.1%	243	17.8%
Private Lands	153	70.5%	570	41.8%

Target species and natural communities identified by the Conservancy include a wide array of both plants and animals existing at different spatial scales. A specific description and location for each priority species and natural community target can be found in the **Central Appalachian Forest Ecoregional Plan** (TNC, 2001). It is very difficult to summarize optimal management conditions for such a diverse set of conservation targets. As a general rule, in the specific places that provide supporting habitat for these target species and communities, optimal USFS management would include: (a) protection from all incompatible human uses which would likely include intensive timbering, mineral extraction, energy development, and road building, (b) maintenance of native species composition, (c) maintenance of appropriate supporting ecological processes, (d) habitat connectivity, and (e) effective species recruitment and population viability.

Many of these target species and natural communities are globally uncommon to rare, and thus their specific location and spatial extent is highly sensitive information. By consulting directly with The Nature Conservancy, the Virginia Department of Game and Inland Fisheries (VDGIF), and the Virginia Department of Conservation and Recreation-Division of Natural Heritage (VADCR-DNH), the USFS can maintain a current understanding of the location, distribution, and needs of these special conservation targets. Presently, the Conservancy estimates that only 47% of the target species and natural communities identified in our **Central Appalachian Forest Ecoregional Plan** are being optimally managed as “Special Interest Areas- Biological” (USFS Management Area 4). **We suggest that the USFS should manage 100% of these target species, natural communities, and supporting habitats under a biologically driven management prescription such as “Special Interest Areas-Biological”.**

Priority Caves and Karst Systems

According to our analysis of currently available data, the GWNF contains more than 13,000 acres of land that support the viability of ecoregionally important caves and karst systems (Table 2). In some cases, the GWNF contains cave openings and in other instances the USFS owns and manages portions of biologically and hydrologically significant karst watersheds.

Table 2. Ecoregionally Significant Karst Areas on the GWNF.

Karst Area	Acres	USFS Acres	Embedded Cave Species and Community Targets on USFS
Highland County Karst System	+/- 11,645	1,110	Virginia Big Eared Bats
Hupmans Saltpetre Karst System	300	16	Bats
Bursville Karst System	9,200	9.4	Cave Invertebrates
Starr Chapel Karst System	1,503	1,322	Cave Invertebrates
Windy Cove Karst System	23,000	10,061	Bats/Cave Invertebrates
Alleghany County Karst System	+/- 1,156	605	Cave Invertebrates
Chimney Rocks/Dry Run Karst System	810	483	N/A
Totals	+/- 47,614	13,606.4	113

Individual karst areas may exhibit unique conditions, rare species, and sensitivities that warrant very specific management approaches and attention. Generally speaking, optimal USFS management would include: (a) restricted access at biologically significant cave entrances, (b) protection of all known hibernacula sites with 1-2 mile forested buffers, (c) maintenance of nutrient/organic input flows into karst systems, (d) maintenance of stable temperature, humidity, and airflow in all caves, and (d) protection of water quality within all significant karst watersheds by maintaining appropriate forested buffers around all streams and sinkholes.

Many of these priority karst areas contain sensitive and biologically important cave species and thus their specific location and spatial extent is highly sensitive information. By consulting directly with the Virginia Department of Game and Inland Fisheries and the Virginia and West Virginia Divisions of Natural Heritage, the USFS can maintain a current understanding of the location, distribution, and needs of these important cave and karst areas. **The Conservancy strongly recommends that the USFS consult directly with cave biologists from these state agencies to develop optimal management approaches in significant cave and karst areas found on the GWNF.**

Priority Aquatic Systems

In early 2006, the Conservancy completed a science-driven prioritization of aquatic systems in the Central Appalachians³. Through this process, we were able to identify a set of high quality, ecoregionally significant river/stream reaches and associated 2nd and 3rd order watersheds. Importantly, the GWNF contains more than 480,000 acres of land that support the viability of these important freshwater systems (Table 3, Figure 4). The management role of the GWNF is particularly important in highly significant smaller to mid-sized freshwater systems such as Laurel Fork, Passage Creek, and the Cowpasture River.

Table 3. Priority Aquatic Systems on the GWNF.

Target Reach	Total Watershed Acres	GWNF Watershed Acres (% Total)
Laurel Fork	24,063	10,274 (43%)
Jackson River	101,165	25,410 (25%)
Cowpasture River	296,931	132,391(44%)
Middle James River	3,431,973	77,258 (2%)
Tye River	126,935	28,655 (23%)
Shoemaker River/NFk Shenandoah	117,165	64,036 (55%)
Passage Creek	55,929	31,614 (57%)
Dry Run/Muddy Crk.	76,658	43,635 (57%)
S Fork Shenandoah River	555,073	34,078 (6%)
Big Levels Tributaries	13,326	10,436 (78%)
Pedlar River	68,340	24,865 (36%)
Totals	4,867,558	482,652 (10%)

³ For more information on the methodology and results of our aquatic systems assessment, please contact Gwynn Crichton (gcrichton@tnc.org) at The Nature Conservancy in Virginia.

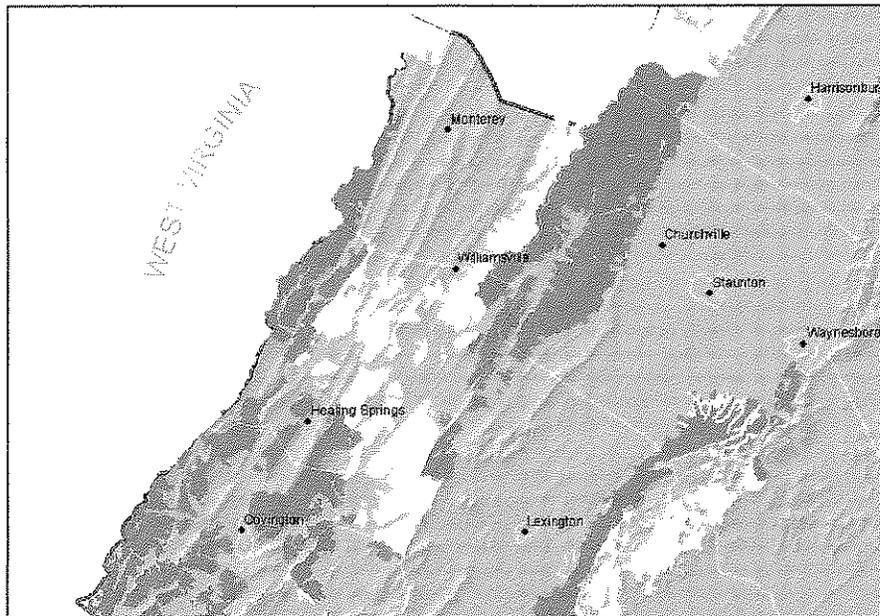


Figure 4. Spatial Extent of Priority 2nd and 3rd Order Watersheds (Yellow)
On the George Washington National Forest (Dark Green).

In addition to possessing outstanding water quality, these priority aquatic systems contain a wide array of embedded species targets that include but are not limited to globally rare fish and freshwater mussels. Thus, individual reaches and watersheds may exhibit unique conditions and sensitivities that warrant very specific management approaches and attention. Generally speaking, within these watersheds optimal USFS management would include: (a) maintenance of in-stream flows within range of natural variation, (b) habitat connectivity throughout system with no impoundments or impediments to flow, (c) forested riparian buffers 300-1,000 feet in width depending on species targets and topography, (d) physical habitat stability and diversity, (e) minimum impervious cover, (f) sedimentation rates in equilibrium with target stream system, (g) maintenance of the acid neutralizing capacity of cold water streams, (h) dissolved oxygen levels > 7 ppm, and (i) effective recruitment of target fish and mussel species.

Conclusion

The extensive ownership and management capacity of the United States Forest Service within the Central Appalachians makes the organization a central figure in a collective effort to conserve regional biodiversity. Through the appropriate protection and management of both rare and representative species, natural communities, and ecological systems, the George Washington National Forest can make a tremendous contribution to biodiversity protection and management. In this report, the Nature Conservancy has generally summarized optimal management conditions for priority terrestrial species, natural communities, karst areas, and aquatic systems identified through a rigorous, science-based assessment of the Central Appalachian Forest Ecoregion. A careful comparison of our optimal management scenarios with the GWNF's existing management prescriptions and strategies in specific target areas (as delineated in the

Central Appalachian Forest Ecoregional Plan) should reveal a set of targeted management changes that can more effectively conserve regional biodiversity.

Works Cited

The Nature Conservancy. Central Appalachian Forest Ecoregional Plan (1st Iteration). 2001.

The Nature Conservancy. Freshwater Ecoregional Assessment (Forthcoming, 2006).

Optimal United States Forest Service Management In Priority Matrix Forests

The Nature Conservancy (TNC) is a science-based organization dedicated to protecting the diversity of our natural world. To accomplish this ambitious mission, the Conservancy works with a variety of partners and prioritizes its work through a multi-scale, science-driven planning process known as *Conservation by Design*. As part of this approach, The Conservancy has completed an assessment of the **Central Appalachian Forest Ecoregion**, a planning unit comprised of the Blue Ridge and Ridge and Valley provinces of Virginia, West Virginia, Maryland, and Pennsylvania, which includes the entire George Washington National Forest (GWNF). This assessment, developed in consultation with numerous experts and partner organizations including biologists from the GWNF, identifies the lands and waters that constitute a set of *priority conservation areas* essential for the maintenance of this region's native biodiversity.

One important group of *priority conservation areas* identified by the Conservancy is known as "Matrix Forests". Matrix Forests are large (typically greater than 50,000 acres and as large as 300,000 acres), contiguous blocks of native forest that include an array of characteristic forest communities occurring across a range of geologic strata, soils, moisture regimes, topographic positions, and landforms. Matrix Forests are important as "coarse filters" for the conservation of most common species, wide-ranging fauna such as large herbivores, predators, and forest interior birds. The size and natural condition of these forested ecosystems allow for the maintenance of dynamic ecological processes, natural disturbance regimes, and meets the breeding requirements of species associated with a diversity of forest habitats. *The Conservancy has identified a set of priority Matrix Forests that if effectively conserved, will help to sustain the range of representative forest types found in the Central Appalachians.* A more complete description of how the Conservancy defines, identifies, prioritizes, and sets goals for Matrix Forests can be found in our **Central Appalachian Forest Ecoregional Plan** (The Nature Conservancy, 2001).

The Conservancy works in a collaborative fashion with numerous partners including public agencies, private landowners, businesses, and local communities to develop and implement a wide range of strategies aimed at conserving Matrix Forests. *Ideally, the full spatial extent of all priority Matrix Forests should be managed primarily for biodiversity protection, long-term ecological monitoring, and low-impact human use with the overall goals of maintaining forest cover, habitat diversity, rare species, significant natural communities, and water quality.* Practically, within each Matrix Forest, single or multiple "core biological areas" can be managed primarily for biodiversity and the maintenance of natural processes while surrounding "multiple use buffer areas" can be managed for a wider variety of biological, social, and economic values.

The GWNF contains large portions of five priority Matrix Forests that have been identified by Conservancy scientists and partners (Figure 1). In support of the 2007 GWNF plan revision, the Conservancy has analyzed current USFS management prescriptions within these five Matrix Forests. Through our analysis, we have identified a specific set of Management Area changes that will lead to more optimal conditions, from a landscape-scale ecological perspective.

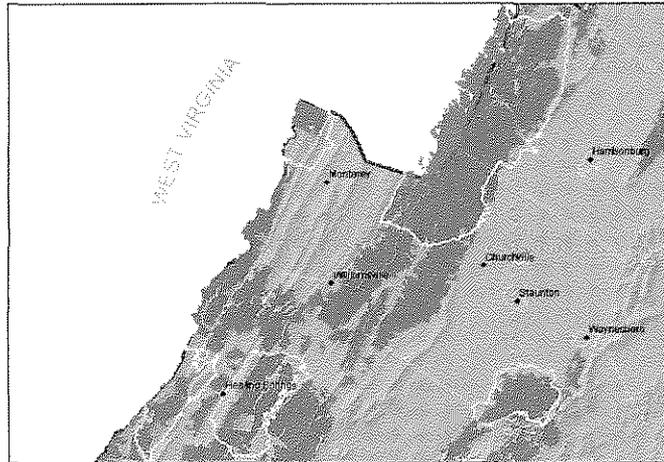


Figure 1 Conservancy Identified Matrix Forest Blocks (Outlined in Yellow) on The George Washington National Forest (Dark Green)

At a minimum, each Matrix Forest should contain one or multiple “core biological areas” of at least 20,000 contiguous acres. *Larger “core biological areas” are desirable wherever possible.* These cores should be designed to capture the full array of underlying landscape heterogeneity (i.e. geology, elevation, landforms, topographic positions, etc.) found within each Matrix Forest. For the purposes of our analysis, landscape heterogeneity is approximated through the development of an integrated “Ecological Land Unit” (ELU) GIS data layer (Figure 2). For a detailed description of how Conservancy scientists construct and interpret Ecological Land Units, please refer to our **Central Appalachian Ecoregional Plan** (The Nature Conservancy, 2001).

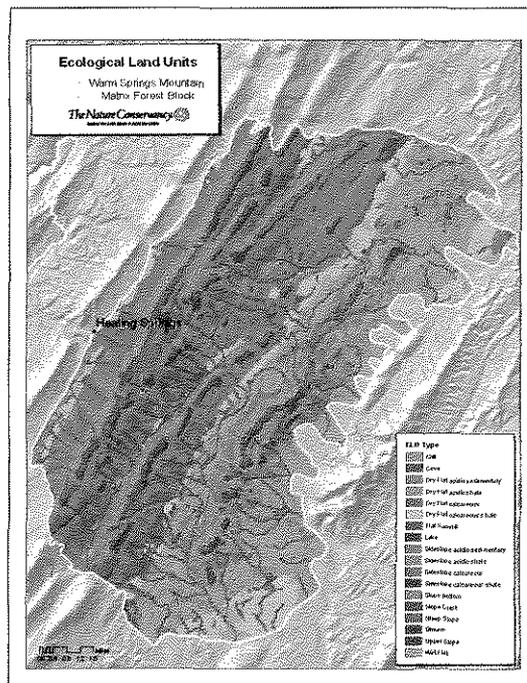


Figure 2 Warm Springs Mountain Matrix Forest ELU's

The following set of maps and accompanying text identify and *generally* describe ecologically optimal management scenarios on USFS lands within priority Matrix Forests. Based on our analyses, a set of targeted changes to current management prescriptions (followed by science-driven, ecological land management appropriate to site conditions including the use of prescribed fire, control of invasive species, small-scale restoration forestry, etc.) within these Matrix Forests would significantly enhance the GWNF’s overall contribution to the conservation of biodiversity characteristic of forest ecosystems in the Central Appalachians¹. ***Again, the fundamental strategy guiding our recommendations for optimal management within these Matrix Forests is predicated on the establishment of multiple “core biological areas” which capture the full array of underlying landforms and potential ecological conditions found within each Matrix Forest.***

After developing the ELU layer for each Matrix Forest, to conduct our analysis, the Conservancy generally classed existing GWNF Management Area prescriptions into three groups: (1) biological management prescriptions (i.e. core biological), (2) multiple-use management prescriptions (i.e. forest buffer areas), and (3) management prescriptions that are generally incompatible with the conservation of biodiversity within the context of Matrix Forest systems (Table 1). To classify USFS Management Areas (MAs), we examined the existing GWNF plan to gauge how each current MA generally addresses: (a) general protection and management of native forest habitat, (b) prescribed fire and wildfire management, (c) pest management, (d) natural resource extraction, (e) recreational use, (f) new road construction, (g) stream restoration, and (g) wildlife/habitat improvement.

As the Conservancy develops a more specific understanding of the allowable range and intensity of certain land uses within USFS MA types, we will adjust our “Biological”, “Multiple-Use”, and “Incompatible” classes accordingly. We must emphasize that this document summarizes our *initial* analysis. We hope to receive feedback from USFS staff and to make additional refinements and improvements to our suggestions as the GWNF plan revision continues.

¹ It is important to note that other significant and more discrete components of native biodiversity found on the National Forest (i.e. rare species, unique natural communities, caves and karst, and freshwater systems) require additional management strategies and protective measures which we address in a separate document.

Table 1. TNC Initial Classification of GWNF Management Areas

Management Area Type	General TNC Management Class
MA 4 Special Interest Areas	Biological
MA 4 Research Natural Areas	Biological
MA 5 Sensitive Viewsheds	Multiple Use/Buffer
MA 6 Appalachian Trail	Multiple Use/Buffer
MA7 Scenic Corridors/Highland Scenic Tour	Multiple Use/Buffer
MA8 Wilderness/Wilderness Study	Biological
MA9 Remote Highlands	Biological
MA10 Scenic/Recreational Rivers	Biological
MA11 ATV/ORV Routes	Incompatible
MA12 Developed Recreation Areas	Incompatible
MA13 Dispersed Recreation Areas	Multiple Use/Buffer
MA14 Remote Habitat for Wildlife	Multiple Use/Buffer
MA15 Mosaics of Wildlife Habitat	Multiple Use/Buffer
MA16 Early Successional Forest for Wildlife	Multiple Use/Buffer
MA17 Timber Emphasis	Incompatible
MA18 Riparian Areas w/Ecological Widths	Biological
MA20 Admin Sites, Utility Corridors and Communication Sites	Incompatible
MA21 Special Management Areas	Biological
MA22 Small Game and Watchable Wildlife	Multiple Use/Buffer

Shenandoah Mountain and Laurel Fork Matrix Forests:

Shenandoah Mountain: The Conservancy estimates that currently 42.8% (103,559 acres) of all USFS lands in this Matrix Forest are managed primarily for biodiversity values in a large and contiguous core area (Figure 3). This is a very good management configuration.

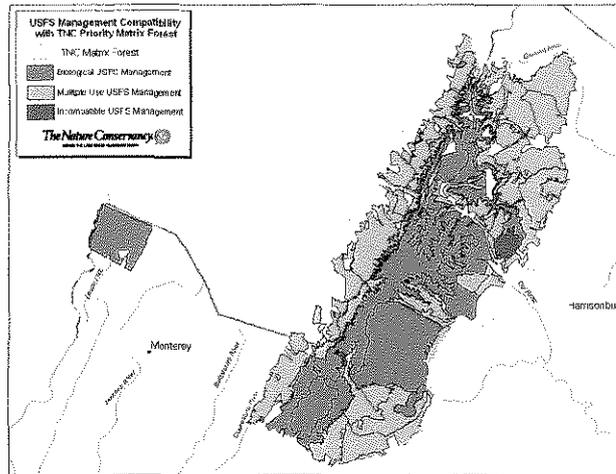


Figure 3: Biological (Dark Green), Multiple Use (Light Green), and Incompatible (Red) USFS Management Units within Shenandoah Mountain and Laurel Fork Matrix Forests

Our analyses of Ecological Land Unit types and the underlying diversity of topographic settings within this Matrix Forest reveals that certain landscape settings and potential ecological conditions are currently under-represented in the suite of lands managed primarily for biological values (e.g. Mid to Low Elevation Dry Flat Acidic Shales). A set of targeted changes can improve the overall protection of biodiversity (Figure 4).

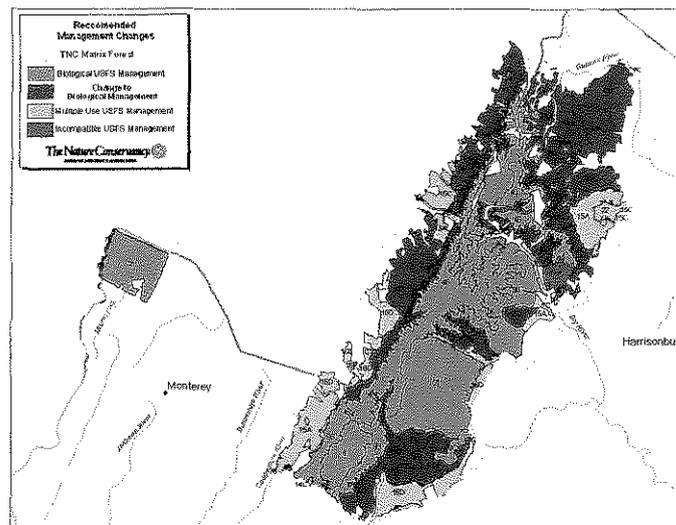


Figure 4: Recommended Management Area changes (Purple) to achieve a more optimal management condition.

To protect the full representation of potential ecological diversity (as estimated by Ecological Land Units), *particularly at lower elevations* within the Shenandoah Mountain Matrix Forest, we suggest that the USFS change its management approach on approximately 95,450 acres of land currently designated as MAs 13, 14, and 15. We recommend that these areas be designated as MA 9, or another appropriate designation which places a primary emphasis on biological values. This would result in a total of 199,009 acres (76.7%) of USFS land within the Shenandoah Mountain Matrix Forest being managed as a “core biological area” and could set the stage for one of the most ambitious and noteworthy ecological management efforts on the entire George Washington National Forest (Figure 5).

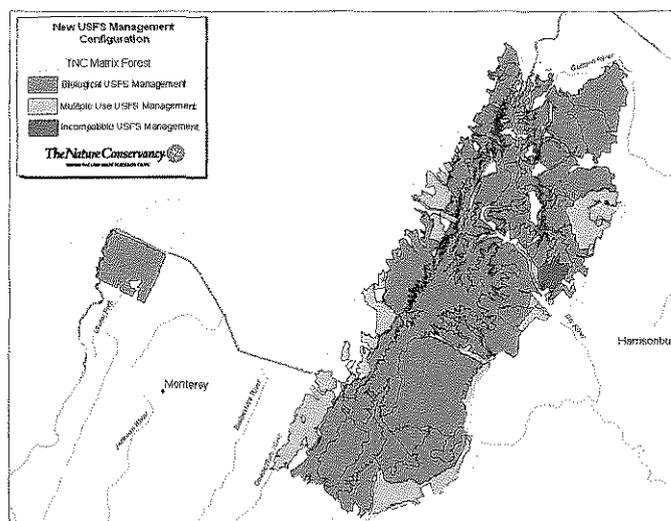


Figure 5: More optimal management configuration following adoption of TNC recommended changes.

Laurel Fork: We estimate that 97.6% (10,275 acres) of all USFS lands are currently managed primarily for biodiversity values in a contiguous area (Figure 3). Assuming this optimal management configuration is maintained, one possible means of enhancing biodiversity protection would be for the GWNF to communicate closely with the adjacent Monongahela National Forest (MNF) to identify compatible management scenarios across state and National Forest boundaries. For example, the Monongahela National Forest is working with a range of partners to restore native red spruce communities in high elevation areas near Laurel Fork. It would be helpful if the GWNF pursued a similar initiative in Virginia. Through cooperation with the MNF, it may be possible to expand a core biological area on public lands into West Virginia. Additionally, the Conservancy is actively forming voluntary partnerships with other private landowners in the Laurel Fork Matrix Forest to increase the total area conserved in this remarkable place.

To increase its protection of the full suite of landscape settings and potential biodiversity within Big Levels, a set of management changes should be adopted (Figure 8). Specifically, we recommend new biologically oriented Management Area designations (MA 4 is likely the most appropriate in this case) in several calcareous flats and in a larger upland area currently designated as MA 13.

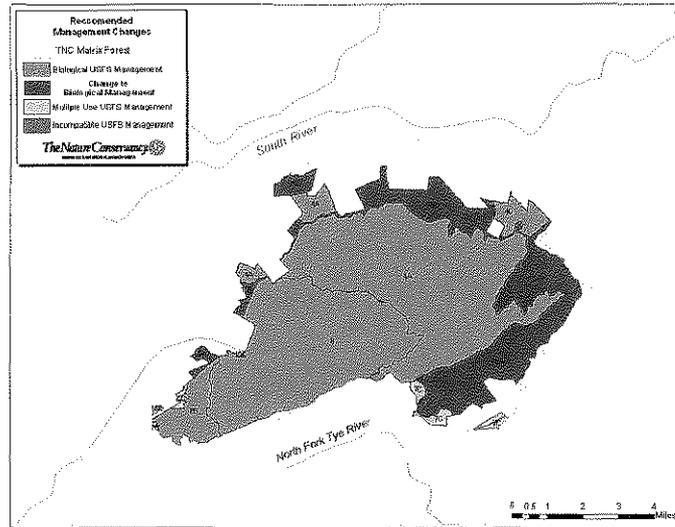


Figure 8: Recommended Management Area changes (Purple) to achieve a more optimal management condition.

Adoption of these recommended changes would result in a total of 32,678 acres (98%) of USFS land within the Big Levels Matrix Forest being managed as a contiguous “core biological area”. This represents a more optimal management configuration from an ecological perspective (Figure 9).

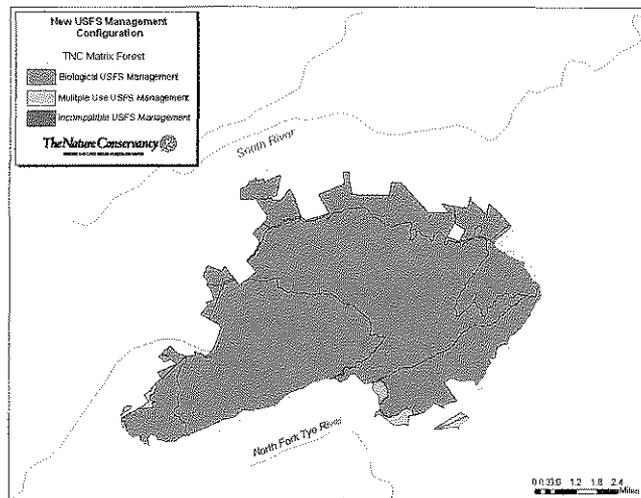


Figure 9: More optimal management configuration following adoption of TNC recommended changes.

Meadow Creek Mountain and Warm Springs Mountain Matrix Forest Blocks:

Evaluation of the current management status of these two Matrix Forests is improved by considering and classifying additional land that is owned and managed by The Nature Conservancy, the Virginia Department of Game and Inland Fisheries (VDGIF), and the Virginia Department of Conservation and Recreation (VDCR-Douthat State Park) (Figures 10 and 11).

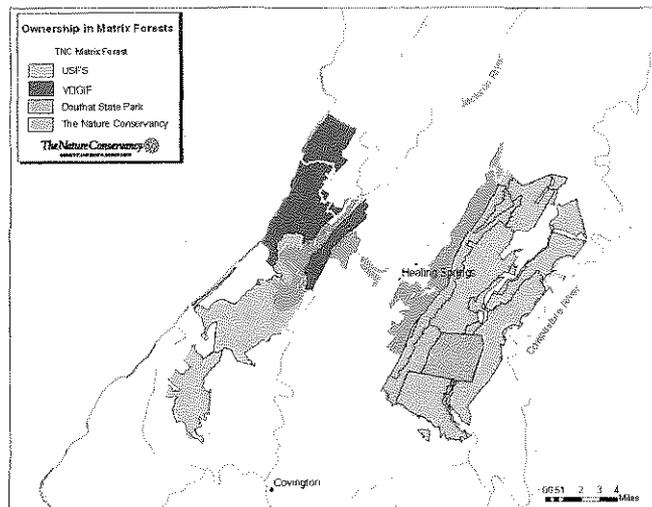


Figure 10: USFS, VDGIF, VDCR, and Conservancy Lands within Meadow Creek Mountain and Warm Springs Mountain Matrix Forest Blocks

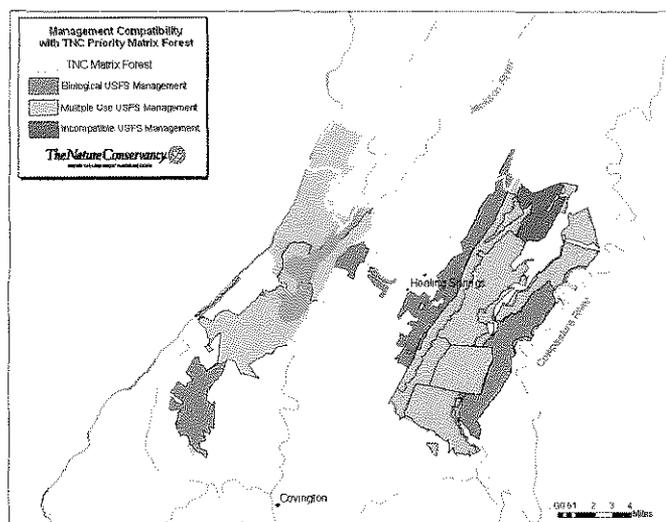


Figure 11: Classification of VDGIF, VDCR, Conservancy, and USFS lands As Biological, Multiple Use, and Incompatible

Warm Springs Mountain: We estimate that 17.8% (6,946 acres) of all USFS lands are currently managed primarily for biodiversity values. Our analyses of Ecological Land Units and the underlying diversity of topographic settings within this Matrix Forest reveal that certain landscape settings and potential ecological conditions are currently under-represented in the suite of lands managed primarily for biological values. Under-represented landscape settings include lower elevation forest in general, and more specifically Dry Flat Acidic Shale Areas and Dry Flat Calcareous Zones (Figure 2). Additionally, we note that the current configuration of USFS Management Area designations misses an important opportunity to establish a management linkage with a large neighboring landowner (the Conservancy). The Conservancy and the USFS have an exceptional opportunity to jointly establish a “core biological area” on the crest of Warm Springs Mountain and in the headwaters of both Wilson Creek and Mare Run. To achieve a more optimal management configuration in the Warm Springs Mountain Matrix Forest, we suggest several changes which are displayed in Figure 12.

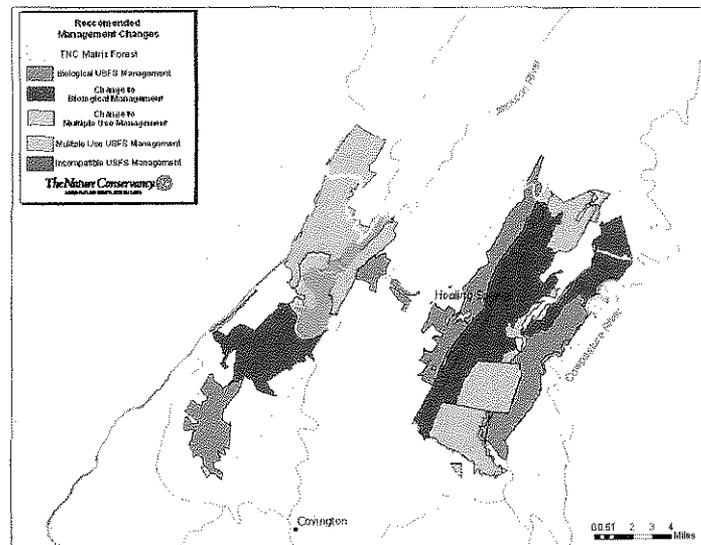


Figure 12: Recommended Management Area changes (Purple and Light Blue) to achieve a more optimal management condition.

First, we suggest a change in Management Area designations on approximately 14,569 acres directly adjacent to and down-slope of the Conservancy’s 7,000+ acre **Warm Springs Mountain Preserve**. These lands are currently classed as MAs 14 and 15, but they would be more appropriately classed as MA 9. This shift will support joint biodiversity management efforts already underway by the Conservancy and USFS-Warm Springs Ranger District in this area. Second, to expand a “core biological area” on Beards Mountain, it would be beneficial to reclassify approximately 4,800 acres currently classed as MA 15 to a designation such as MA 9. Lastly, we suggest shifting management in an approximately 3,000 acre area currently classed as MA17 towards a less intensive multiple-use management prescription such as MA 15.

Adoption of these recommended changes would result in a total of 45,203 acres (83.2%) of the Warm Springs Mountain Matrix Forest being managed as a “core biological area”. This represents a more optimal management configuration from an ecological perspective (Figure 13).

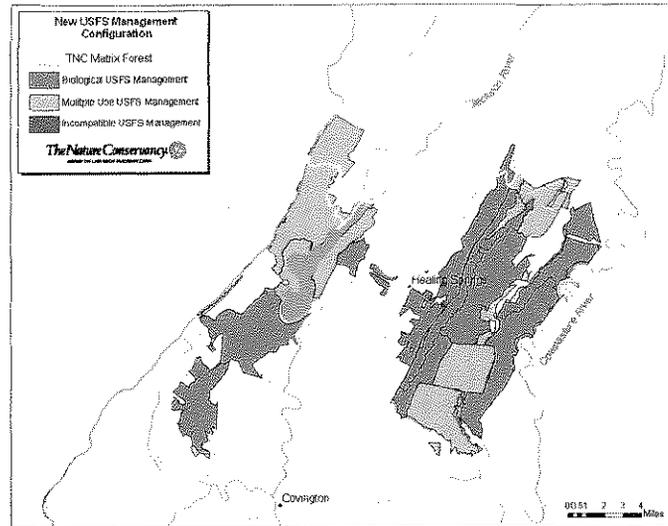


Figure 13: Improved management configuration following adoption of TNC recommended changes.

Meadow Creek Mountain: We estimate that 26.3% (5,059 acres) of all USFS lands are currently managed primarily for biodiversity values (Figure 11). To achieve a more optimal management configuration, the George Washington National Forest should change a portion of the large area southwest of Lake Moomaw from MA 13 to a more biologically oriented management prescription such as MA 9 (Figure 12). This would create a larger contiguous “core biological area” of more than 13,000 acres (Figure 13). This still does not meet the Conservancy’s recommended threshold of having at least one 20,000+ acre “core biological area” within the Matrix Forest. The Conservancy will seek partnerships with private landowners to explore options for protecting additional core forest. Additionally, similar to the situation in Laurel Fork, we recommend close communication between the GWNF and the adjacent Monongahela National Forest. There may be opportunities to establish joint biological management objectives across state and National Forest boundaries.

Additional Recommendations for Matrix Forest Management:

Along with specific shifts to the MA status of the areas mentioned above, the Conservancy also maintains that a variety of “on-the-ground” management approaches within “core biological areas” are necessary to ensure their viability. These management strategies may include but not be limited to prescribed fire, invasive plant eradication, exotic pest and pathogen control, and small-scale, ecologically-driven timber management. In all “core biological areas” resource management to achieve biodiversity goals would be most effective if geared towards producing a set of *desired future conditions* that would include:

- (1) Forest structural diversity, with at least three age classes present, including a late successional forest age class (>150 years), specifically composed of a diversity older species as appropriate to site conditions.
- (2) A fire regime with severity, intensity, and frequency being a function of historical occurrence of fire in the Central Appalachians as well as site specific conditions and topographic position. On mid-slopes the fire return interval may be between two and nine years; however, this may be highly variable across matrix blocks.
- (3) A cycle of other natural disturbances such as ice and wind storms at recurring intervals within the historical natural range of variability.
- (4) Vigorous regeneration and recruitment of key canopy species including: oaks, pitch pine, and table mountain pines. Lower recruitment and selection for thin-barked species such as white pine, red maple, and other shade tolerant species.
- (5) Favorable conditions for the regeneration of American chestnut.
- (6) Reduction in ericaceous shrubs such as *Rhododendron* spp. and *Kalmia latifolia* replaced by more frequent occurrence and distribution of native grasses, forbs, and sedges in the forest understory.
- (7) A herbaceous understory composed of characteristic native species with less than 5% cover consisting of invasive, non-native species; and no new non-native, invasive plant or animals introduced into the system.
- (8) Standing dead snags and coarse woody debris (>50 cm dbh) in a density of 5-10 logs per acre with roughly 8-10% cover of woody debris in all size classes per 400 meter-squared plot.
- (9) Soil organic matter and pit and mound topography well developed; soils remaining productive in high elevation acidic areas.
- (10) High elevation communities (esp. Red spruce) protected from wet deposition of sulfur dioxide.

Conclusion

The Conservancy posits that the maintenance of single or multiple “core biological areas” within each Matrix Forest is one important strategy for sustaining and enhancing the long-term viability of forest-dependent species and natural communities found on the George Washington National Forest². Establishment of these biological cores through the strategic clustering of contiguous USFS Management Areas is a first and important step towards achieving the set of *desired future conditions* outlined in this general assessment. Once the clusters of biologically oriented Management Areas have been created, the Conservancy suggests that the USFS take additional action to designate each “core biological area” as a *Special Area* in the revised GWNF Plan. These areas should be protected from incompatible human use as much as possible since they represent some of the best interior forest habitat on the entire George Washington National Forest. An even more ambitious approach would be to designate the full extent of all five Matrix Forests as *Special Areas* with clear guidelines for minimizing negative impacts associated with a variety of human activities.

Due to their strategic selection as priorities for ecoregional-scale conservation in the Central Appalachians, Matrix Forests and the designation of “core biological areas” within these Matrix Forests should be a top priority in the GWNF plan revision. That said, it should be noted that there are opportunities to establish additional “core biological areas” outside of the five Matrix Forests identified by the Conservancy. Across the GWNF, by spatially aggregating contiguous clusters of Wilderness, Wilderness Study, Remote Highlands, Special Biological, and Inventoried Roadless Areas, the USFS can define and designate other “core biological areas”. Additionally, there is an opportunity to examine the spatial distribution of the ten “old-growth types” mentioned in the existing GWNF plan and to incorporate patches of these aging, late successional forest communities into “core biological areas” as well.

To remain viable, “core biological areas” will require varying levels of active ecological management (though certainly there will be areas within these biological cores that are essentially “un-managed”) to achieve the suggested desired future conditions. It is also critical to emphasize that these “core biological areas” can support a variety of low impact recreation. We conclude that it would be beneficial for the USFS to conduct site-specific conservation planning for each Matrix Forest to characterize current conditions, develop specific management objectives and strategies (prescribed fire, invasive species control, recreation planning, etc.), and establish monitoring protocols aimed at restoring lasting function and natural diversity in these special areas. The adjacency of the Conservancy’s **Warm Springs Mountain Preserve** to USFS lands in the Warm Springs Mountain Matrix Forest makes that area an excellent place to pilot a USFS/Conservancy planning and management partnership that could serve as a model for other areas on the GWNF. Together, and with a range of other partners, we can demonstrate the value of science-based forest management and restoration.

² Again, it must be stressed that other significant and more spatially discrete components of native biodiversity found on the National Forest (i.e. rare species, unique natural communities, caves and karst, and freshwater systems) will require additional management strategies and protective measures. Some of these elements of biodiversity will be found as “embedded targets” within *Matrix Forest* blocks, while many others will exist in separate areas of the National Forest. The Conservancy has summarized optimal management scenarios for these other biodiversity elements in a separate document.

Works Cited

The Nature Conservancy. Central Appalachian Forest Ecoregional Plan (1st Iteration). 2001.

7/1/07

Initial Reactions to Proposed Management Changes on the George Washington National Forest as Summarized in the Draft Comprehensive Evaluation Report (2/15/07)

The Nature Conservancy (the Conservancy) is a science-based organization dedicated to protecting the diversity of our natural world. We have protected more than 117 million acres worldwide; including more than 250,000 acres in Virginia. The Conservancy has a long standing and very positive working relationship with the United States Forest Service. We appreciate the opportunity to submit our *initial* reactions to proposed management changes on the George Washington National Forest (GWNF) as summarized in the draft Conservation Evaluation Report (CER), published by the United States Forest Service on February 15, 2007.

The 1.1 million acre GWNF provides habitat for an impressive diversity of native forest ecosystems; healthy aquatic systems; unique cave features; and rare plants, animals, and exemplary natural communities. Like the Conservancy, the United States Forest Service's (USFS) mission includes a goal of sustaining ecological systems and species diversity. Many of the management changes proposed in the draft CER will advance the protection of significant species, natural communities, and supporting ecological processes. *In this document, we will specifically recognize and offer our support for these changes.*

Additionally, the Conservancy recommends a set of strategic management changes that are currently not reflected in the draft CER. We will summarize these recommendations, and explain the ways in which they support the USFS's overall goal of ecological sustainability on the George Washington National Forest.

For the sake of clarity, our reactions, comments, and suggestions are organized into the specific Chapters and Sections used in the draft CER. We look forward to discussing our recommendations in more detail as the George Washington National Forest plan revision continues.

CHAPTER 3: EVALUATION OF EXISTING ISSUES

Issue 1 – Biodiversity

A. Fragmentation

We agree with the USFS assertion that forest fragmentation is, “a function of patch size, isolation of patches, total reserve area, and linkages among patches.” The Conservancy applauds the USFS’s sustained commitment to the protection of large, un-fragmented blocks of forested land, mostly in later successional stages. In the eastern United States, the best remaining opportunities for protecting and sustaining expansive blocks of mature forest interior habitat mostly occur on public lands. The Conservancy also acknowledges that early successional habitat and open woodlands are important elements in a landscape mosaic of habitat conditions. We recognize that in some places on the George Washington National Forest prescribed fire and timber management is needed to restore open woodlands (e.g. Upland Oak Forests and Pine-Oak-Heath Woodlands).

The Conservancy supports, *where ecologically appropriate*, the USFS proposed action for change that would add an objective for open woodland restoration.

In the effort to restore open woodlands, it is critical to recognize the importance of identifying and protecting the best opportunities for conserving high quality interior forest habitat on the George Washington National Forest. The Conservancy has conducted and submitted to the USFS a science-based analysis which has identified five large “Matrix Forests” which contain some of the most outstanding and diverse interior forest on the GWNF. *These Matrix Forests are well described in an accompanying document that is included with this report.* In Matrix Forests, large (>1,500 acre burn units) prescribed fires utilizing existing and natural fire breaks wherever possible should be the preferred tool for creating a mosaic of open woodland conditions. Especially in Matrix Forests, habitat management to achieve more open woodland conditions *should not* be conducted in such a manner that leads to the establishment of new roads, extensive new human created fire breaks, or other vectors for invasive species.

B. Old Growth

We strongly agree that old growth and late successional forests are an important component of biodiversity on the George Washington National Forest and that the full suite of old growth forest-types need special recognition, protection, and management. Like the USFS, the Conservancy recognizes that fire is an important natural disturbance shaping the structure and composition of many old growth types. Additionally, wind, ice, native insects, disease, and landslide events are important natural processes that create a mosaic of disturbance patterns and ultimately produce forest diversity.

It is important to recognize that a minimum age requirement should not be the only criteria used for classifying mature and/or “old growth” stands and tracking late successional conditions on the George Washington National Forest. Within the ten old

growth types listed in the Draft CER and found in specific patches across the landscape, USFS management should strive for a set of *desired future conditions* that include but are not limited to:

- (1) Forest structural diversity, with multiple age classes present, including a dominant late successional forest age class (>150 years), specifically composed of a diversity older species as appropriate to site conditions.
- (2) A fire regime with severity, intensity, and frequency being a function of historical occurrence of fire in the Central Appalachians as well as site specific conditions and topographic position.
- (3) A cycle of other natural disturbances such as ice and wind storms at recurring intervals within the historical natural range of variability.
- (4) Vigorous regeneration and recruitment of key canopy species.
- (5) Favorable conditions for the regeneration of American chestnut.
- (6) A herbaceous understory composed of characteristic native species with less than 5% cover consisting of invasive, non-native species; and no new non-native, invasive plant or animals introduced into the system.
- (7) Standing dead snags and coarse woody debris (>50 cm dbh) in a density of 5-10 logs per acre with roughly 8-10% cover of woody debris in all size classes per 400 meter-squared plot.
- (8) Soil organic matter and pit and mound topography well developed; soils remaining productive in high elevation acidic areas.

In terms of specific proposed USFS management changes to existing Old Growth forest types, the Conservancy prefers option C-1 (rather than the proposed C-3).

We agree that timber harvesting should be restricted in old growth types 1, 2a, 2b, 2c, 5, 10, 22, 24, 25, 28, and 37. We also agree that, given the wide distribution and abundance of the Dry Mesic Oak Type (type 21), it is reasonable to conduct a modest level of timber harvesting within this type. However, prior to harvesting timber from suitable acreage in type 21, a stand level inventory for old-growth characteristic should be conducted. Since there have been no official old growth inventories done on the GWNF, it is important to conduct pre-harvest field based assessments to ensure that no unique values or areas exhibiting exceptional conditions are unnecessarily impacted.

There is a great opportunity to conduct further spatial analyses of old growth patches found on the George Washington National Forest to determine if and how these patches are distributed across existing USFS Management Area (MA) designations. When old growth patches occur within MAs that do not emphasize late successional forest management, we suggest that changes should be made and MA boundaries should be re-drawn. *When spatially aggregated with biologically driven MAs such as MAs 4, 9, 10, 18, and 21; as well as inventoried roadless areas, wilderness areas, and wilderness study areas; these old growth patches can help to form spatially contiguous “core biological areas” across the George Washington National Forest.*

As we have discussed in an accompanying document that deals specifically with our recommendations for the management of five Matrix Forests, for the purpose of sustaining functional forest ecosystems across a variety of landscape settings, the USFS should designate and manage numerous “core biological areas” of at least 20,000 acres (many should be much larger). Conservancy scientists and planners would welcome the opportunity to collaborate with the USFS on conducting a GIS-driven analysis to identify these potential “core biological areas”. It would represent the foundation of a strong conservation plan for the GWNF that would ensure the sustainability of diverse and mature forest interior habitat, in multiple large patches, at a meaningful scale.

D. Riparian Areas

Maintaining healthy forested riparian zones is fundamental to sustaining ecological health on the George Washington National Forest. Riparian areas contain an impressive diversity of terrestrial and aquatic species and are essential to the maintenance of water quality. We are pleased that springs, seeps, ponds, and wetlands are included as part of the USFS guidelines for riparian area management and are protected from disturbance.

The Conservancy supports USFS ongoing efforts to meet its *Desired Future Conditions* for aquatic habitats through practices such as: (1) the addition of large woody debris to streams, (2) the installation of rock veins and other structures made of natural materials to improve stream structure and habitat complexity, (3) the removal of rock gabions and restoration of past hydrological modifications that did not incorporate natural stream design elements, and (4) the planting of trees to establish riparian forest buffers where none currently exist, (5) the removal/movement of roads to avoid streamside and floodplain areas, and (6) the prevention of dispersed vehicle access and camping along streams.

We agree it is a problem that under the current GWNF plan, riparian zones are designed only with the protection of water quality and in-stream resources in mind. Scientists are increasingly noting the importance of forest riparian zones for a host of terrestrial species such as birds and amphibians. These riparian dependent species need to be recognized and managed for as well. It is also unfortunate that the current GWNF plan gives no protection to intermittent streams with scoured widths less than 3 feet or to channeled ephemeral streams. Intermittent and ephemeral channels are extremely important

components of any hydrologic system and their integrity should be maintained with protective buffers.

We are very pleased that the USFS recognizes the critical importance of maintaining aquatic organism passage. Clearly, culverts at certain road crossings represent an important barrier. We support the installation of bottomless culverts wherever possible and economically feasible.

In terms of proposed USFS management changes to Riparian Zones, the Conservancy supports option C-1, which will expand riparian management zone widths and more effectively protect intermittent and channeled ephemeral streams. We also offer the following suggestions:

We recommend that the portion of the USFS riparian management buffer that is extended based on slope not only be considered a “vehicle exclusion zone”, but that timber harvesting also be restricted in these areas. We recognize that some level of vegetation management in these riparian zones may be desirable from time to time, especially in situations where invasive species control is a priority, but that management should have a clear ecological restoration purpose that is well defined and scientifically defensible.

Due to the well recognized importance of riparian areas, we also recommend that the USFS further extend the width of its riparian management zones on the GWNF. For perennial streams, we suggest riparian buffer widths of at least 300 feet¹. This is especially important in the case of ten stream reaches and associated 2nd and 3rd order watersheds occurring on the GWNF which have been prioritized in the Conservancy’s **Central Appalachian Aquatic Assessment (2006)**. These high quality aquatic systems were identified by a team of experts (including qualified staff from the Virginia Department of Conservation and Recreation-Division of Natural Heritage, the Virginia Department of Game and Inland Fisheries, the United States Forest Service, Virginia Tech, and The Nature Conservancy) as being essential to the maintenance of overall aquatic health and diversity in the Central Appalachians².

¹ For more information on the scientific research supporting the Conservancy’s suggestion of 300 foot perennial stream buffers, please contact Gwynn Crichton, Director of Stewardship, at the Conservancy’s Virginia Field Office: 434-951-0571.

² For more information on the Central Appalachian Aquatic Assessment, please contact Gwynn Crichton, Director of Stewardship, at the Conservancy’s Virginia Field Office: 434-951-0571.

Table 1. Nature Conservancy Priority Aquatic Systems on the GWNF.

Target Reach	Total Watershed Acres	GWNF Watershed Acres (% Total)
Laurel Fork	24,063	10,274 (43%)
Jackson River	101,165	25,410 (25%)
Cowpasture River	296,931	132,391(44%)
Tye River	126,935	28,655 (23%)
Shoemaker River/NFk Shenandoah	117,165	64,036 (55%)
Passage Creek	55,929	31,614 (57%)
Dry Run/Muddy Crk.	76,658	43,635 (57%)
S Fork Shenandoah River	555,073	34,078 (6%)
Big Levels Tributaries	13,326	10,436 (78%)
Pedlar River	68,340	24,865 (36%)

In addition to establishing larger riparian management zones within these ten exceptional watersheds, the Conservancy recommends that the USFS designate these drainage areas with a *Special Areas* designation. A *Special Areas* designation could further protect these high quality aquatic systems if that designation: (1) prohibits impoundments, (2) prohibits water withdrawals, and (3) makes these watersheds a priority for ecological stream restoration and scientific monitoring.

E. Management of Indicator Species

The Conservancy generally agrees that in most cases management of the George Washington National Forest has sustained and improved conditions for many Indicator Species. We share the USFS concern for the general decline of fire-dependent “yellow pine” natural communities.

The Conservancy strongly supports the specific USFS recommendations to: (1) create a new Special Biological Area(s) to protect newly found occurrences of eastern Tiger Salamander and (2) to increase the Prescribed Fire objective on the GWNF to continue restoration of the Yellow Pine Community.

Again, we must emphasize our preference for burn units which, to the greatest extent possible, utilize existing and natural fire breaks. Especially in the five Matrix Forests on the GWNF which we have identified through a rigorous ecoregional planning process, use of prescribed fire *should not* be conducted in such a manner that leads to the establishment of new roads, extensive new human created fire breaks, or the invasion of exotic species.

F. Threatened, Endangered, and Sensitive Species

The Conservancy strongly agrees that a newly revised GWNF plan should incorporate the most current scientific information on these unique species.

The Conservancy strongly supports the creation of new Special Biological Areas to protect additional examples of the shale barren rockcress and the Northeastern bulrush. We also support the proposed administrative change which would delineate primary and secondary cave protection areas and correspondingly adopt the Jefferson Plan's direction for these special areas.

Protecting unique caves, cave dependent species, and larger karst networks is a critical component of an overall management strategy that is geared towards ecological sustainability. Individual caves and karst areas may exhibit unique conditions, rare species, and sensitivities that warrant very specific management approaches and attention. Generally speaking, optimal USFS cave management would include: (a) restricted access at biologically significant cave entrances, (b) protection of all known hibernacula sites with 1-2 mile forested buffers, (c) maintenance of nutrient/organic input flows into karst systems, (d) maintenance of stable temperature, humidity, and airflow in all caves, and (d) protection of water quality within all significant karst watersheds by maintaining appropriate forested buffers around all streams and sinkholes.

*There is a great need to identify significant karst watersheds supporting groundwater quality and rare invertebrates both on and off the George Washington National Forests, and to establish (within these karst basins) a set of management restrictions ensuring consistent forested buffers around cave entrances, sinks, seeps, streams, and springs. We suggest that the USFS work closely with karst experts from the Virginia and West Virginia Departments of Conservation and Recreation-Division of Natural Heritage to maintain an accurate database of hydrologically significant karst basins. As they are identified, these karst basins should be given a *Special Areas* designation and afforded special protection.*

G. Unique Natural Communities (Special Biological Areas)

From the standpoint of ecosystem sustainability and biodiversity management, the special designation of rare and unique species, natural communities, and supporting habitat is absolutely critical. The Conservancy is pleased that the USFS continues to obtain and incorporate the latest information on these species and communities into its management prescriptions on the George Washington National Forest. In addition to information provided by state natural heritage departments, the Conservancy also recommends that the USFS review the Conservancy's **Central Appalachian Ecoregional Plan** which provides science-based viability and representation goals for many of these same species and communities.

The Conservancy strongly supports the proposed expansion of 13 existing Special Biological Areas and the designation of 83 new Special Biological Areas (SBAs). Without viewing a map of these new areas, it isn't possible to determine if critical natural habitat in the West Virginia portion of the GWNF has also been designated for special protection. *If the USFS hasn't already done so, the Conservancy recommends consultation with the West Virginia Division of Natural Heritage to identify unique West Virginia species and habitat in need of special recognition and designation on the GWNF.*

Although many of these Special Biological Areas are embedded in larger protected areas such as Wilderness, the identification and special designation of these unique places raises public awareness about the importance of conserving unique biological elements. Identification and special designation also promotes sustained monitoring which may be critical in SBAs that are threatened by invasive species or incompatible recreation.

The existing and proposed SBAs rightly elevate the protected status of important species, and unique "small to large patch" natural communities. The Conservancy also strongly recommends that the United States Forest Service create a *Special Areas* designation for five "Matrix Forests" which intersect the GWNF and have been identified and selected as priorities by Conservancy scientists and partners (including USFS scientists) in the **Central Appalachian Forest Ecoregional Plan** (Figure 1). These five Matrix Forests, which are described in more detail in an accompanying document, play a critical role in the maintenance of forest diversity on the George Washington National forest and the Central Appalachians. We suggest that they should be recognized as *Special Areas* and buffered from incompatible uses such as utility corridors, road building, and natural resource extraction. *At a minimum*, multiple 20,000+ acre "core biological areas" within each Matrix Forest should be designated as *Special Areas* and afforded a high level of protection from incompatible human use³.

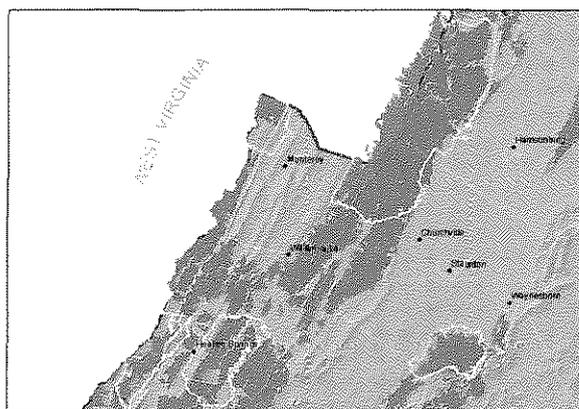


Figure 1 Conservancy Matrix Forest Blocks (Outlined in Yellow) on The George Washington National Forest (Dark Green)

³ For more specific Conservancy suggestions regarding the designation of "core biological areas" within each Matrix Forest please refer to an accompanying document entitled, "Optimal United States Forest Management In Priority Matrix Forests".

Issue 2- Timber Management

C. Suitability

It is critical to look at the spatial arrangement and context of lands classed as “suitable for timber management” across the GWNF. Some areas of the GWNF will lend themselves to timber management better than others. In general the Conservancy prefers that remote areas are buffered from active timber management. We suggest that the USFS manage for timber in areas that are already accessible by an established road system.

Unless timber management is pursuant to a scientifically justified ecological objective, the Conservancy recommends that Special Biological Areas, Riparian Areas, Inventoried Roadless Areas, and “core biological areas” within Conservancy identified Matrix Forests be classified as “generally unsuitable” for timber management. These areas possess unique and outstanding natural features which need to be buffered from intensive timber management as much as possible. This can be achieved without curtailing the stated USFS goal of managing 350,000-370,000 acres for timber production.

E. Salvage

The Conservancy agrees that dying, dead, and damaged trees are an important component of a functional forest ecosystem. As the forest continues to age, we can expect increasing mortality. It is reasonable to set a goal of achieving a balance between the ecological need to allow for natural forest decay with the socio-economic need to salvage high quality timber products in the event of a disease outbreak or some other sudden forest disturbance.

The Conservancy generally supports salvage timbering where it can be accomplished without the creation of new roads, or other vectors for invasive species and habitat fragmentation. However, we strongly recommend that salvage harvesting be restricted in Special Biological Areas, Riparian Areas, Inventoried Roadless Areas, and “core biological areas” within Conservancy identified Matrix Forests. In these areas, salvage harvesting should only occur when pursuant to a scientifically justified ecological restoration goal. Further, in these areas, we suggest that salvage logging should be accomplished only along open road systems or via helicopter *with no new road or landing construction.*

Issue 5- Roadless Area Management

A. Existing Inventoried Roadless Areas

The 261, 233 acres of inventoried roadless area on the George Washington National Forest are essential to the maintenance of forest interior habitat. These roadless areas, along with Special Biological Areas, Special Interest/Management Areas, Remote Highlands, Wilderness, and Wilderness study areas should continue to be managed

primarily for biological values. *Wherever possible, these management areas should be spatially aggregated and linked by designated corridors to protect multiple 20,000+ acre "core biological areas" across the GWNF.* Recognition and protection of these aggregated "core biological areas" is essential for ecological sustainability on the GWNF.

The Conservancy generally supports the USFS Proposal (C-3) to modify the existing GWNF plan by creating a special Remote Backcountry area that includes Laurel Fork, Big Schloss, Little River, all areas currently designated as MA 9, and all remaining portions of inventoried roadless areas not currently designated as MA 9. We suggest that management in these areas should follow the guidelines set forth in the 2001 Roadless Rule as they relate to road building and timbering. Further, we recommend that to the extent possible, these areas be deemed "unsuitable" for mineral development, utility corridors, and other activities that would likely fragment and impact these remote natural areas. *We strongly support the USFS intention to place the highest importance on biological values when a potential management conflict occurs within an inventoried roadless area.*

In addition to the areas proposed for inclusion in the new "Remote Backcountry Area", the Conservancy also recommends that additional Management Areas within five Conservancy identified Matrix Forests be given this new designation (if it is adopted). The details of our specific Management Area recommendations are provided in an accompanying document entitled, "Optimal United States Forest Service Management In Priority Matrix Forests".

Issue 6- Special Management Areas

The Conservancy supports the USFS recommendation to adopt Jefferson National Forest standard #FW-140 and enact a WFU policy on the George Washington National Forest. It will not likely be possible to restore an appropriate fire regime at an ecologically meaningful scale without this policy change.

Issue 8- Vegetation Manipulation

The Conservancy agrees with the USFS suggestion that an appropriate landscape scale forest management strategy should focus on the protection of large tracts of mature forest which contain within them a mosaic of different forest types and ages. As we have stated in other sections of this document and in an accompanying document, the Conservancy recommends that within larger tracts of forest, especially within five "Matrix Forests", multiple "core biological areas" of at least 20,000 acres should be managed primarily for late successional characteristics and natural disturbance regimes. These "core biological areas" can be imbedded in a much larger forest matrix that is managed for multiple use values such as recreation, timber management, wildlife habitat, and natural forest cover. **The Conservancy generally supports the USFS change recommendation (C-1) calling for the re-introduction of a blight-resistant American chestnut.** The loss of the American chestnut in the 1930's has had a tremendous impact on the ecology of the

GWNF's and its return as a dominant canopy species would bode well for a range of wildlife species.

Issue 9- Resource Sustainability

D. Water Quality

The Conservancy agrees that for monitoring purposes it is important to establish a series of "reference watersheds" across ecological subsections of the GWNF. **We support the USFS recommendation (C-2) to designate five reference watersheds across the ranger districts with the following suggestion:**

On the Warm Springs Ranger District, along with Lost Run (or instead of it) we strongly recommend that the USFS consider designating the Mare Run watershed as a reference watershed. The Mare Run headwaters begin on the Conservancy's **Warm Springs Mountain Preserve** and then flow into USFS lands lower in the watershed. The Conservancy has been exploring opportunities with University of Virginia researchers for establishing a permanent stream monitoring station on Mare Run. The designation of Mare Run as a reference watershed could lead to a variety of interesting and productive research partnerships between the Conservancy, the United States Forest Service, and other partners. Additionally, the Conservancy and the Warm Springs District are launching a major prescribed fire partnership on Warm Springs Mountain and will be developing a comprehensive monitoring plan in this area (to include Mare Run). The special designation of the Mare Run watershed would compliment monitoring activities that will need to be put in motion by the Conservancy and USFS pursuant to our joint ecological restoration efforts in the vicinity of Warm Springs Mountain.

G. Fire

The Conservancy strongly supports the USFS and its use of fire to restore a key ecological process essential to forest health and diversity. There are indeed many places on the GWNF where the current ecosystem condition has departed radically from historic reference conditions (in terms of fire return intervals, vegetation structure and composition).

Specifically, the Conservancy strongly supports the proposed USFS management changes (C-1) which will (a) establish WFU as a suitable use on the entire George Washington National Forest (acknowledging that the protection of life and property remain the highest priorities), (b) increase the annual prescribed fire objective to 15,000 acres, and (c) identify a forest-wide desired future condition of restoring fire adapted ecosystems to their historic range of variability in terms of fire frequency, intensity, and seasonality.

Issue 10- Minerals and Energy

A. Federal Minerals

The exploration and development of leasable minerals is an important opportunity provided by the GWNF. To protect critical elements of natural diversity and the best examples of un-fragmented forest interior habitat, the Conservancy suggests that mineral extraction be significantly restricted within all Wilderness, Wilderness Study Areas, Remote Highlands, Inventoried Roadless Areas, and Special Biological Areas. Further, we recommend that new mineral leases be avoided within five Conservancy identified "Matrix Forests". While the development of mineral resources (in some cases) can be conducted in an environmentally sensitive manner, the potential associated influx of invasive species and additional fragmentation of forest habitat by new roads and equipment will likely have a detrimental effect on the health of interior forest areas.

B. Groundwater and Karst

Protection of karst and groundwater features on the forest is of critical importance to the maintenance of water quality and both common and rare subterranean species occurring on and nearby the GWNF. The Conservancy strongly supports the protection of karst areas through the "Special Biological Area" designation. We have discussed specific recommendations for karst and cave protection in another section of this document (Biodiversity-Section F).

The Conservancy supports the USFS recommendation (C-1) which would establish a forestwide guideline to manage significant caves in accordance with the Cave Resources Protection Act of 1988.

C. Private Mineral Rights on Federal Lands

It is very important to analyze the potential issues related to the exercise of private mineral rights on federal land across various GWNF management prescriptions. Extraction of privately owned minerals will likely require the construction of new roads and oil/gas pads. In places where private minerals are owned within a GWNF management area prescription (such as Wilderness or Special Biological Area) that has highly restrictive surface management guidelines, there may be conflicts between public and private interests.

The Conservancy supports the USFS recommendation (C-1) to encourage private mineral owners to implement all surface disturbing activities outside of riparian areas. We also suggest that it should be a standard practice for the USFS to work closely with private mineral owners to identify the least intrusive way to extract private minerals by using existing roads and other infrastructure as much as possible. Further, all relevant Best Management Practices should be implemented and mineral areas should be reclaimed to the highest standards established by federal and state laws.

E. Wind Energy Development

In recent years, several industrial wind energy facilities have been constructed on the high elevation ridgelines of West Virginia, Maryland, and Pennsylvania. Currently, the Central Appalachian region supports 7 active projects (approximately 120 turbines). Additionally, 9 new projects have been approved by local governments and the number of planned projects is estimated to be 44⁴ (approximately 500 and 2,100 turbines, respectively). Economists project that approximately 15,000 turbines will be needed to meet Renewable Portfolio Standards established by MD, PA, and NJ⁵, and in the near term it is likely that some proportion of these will be constructed in the Central Appalachians.

As noted in the draft CER, Highland County, Virginia approved a facility on private land near Laurel Fork, and the Virginia State Corporation Commission is currently reviewing an application to construct that facility (the first such application to come before the Commission). The development of industrial scale wind energy facilities in the region has been demonstrably contentious, and it is reasonable to assume that any proposals to construct wind energy facilities on the George Washington National Forest will elicit significant public attention. Consequently, the George Washington National Forest Management Plan needs to establish clear guidelines for how potential wind energy projects on public lands will be considered.

Nationally, The Nature Conservancy supports wind energy development when it is appropriately sited. In Virginia, the Conservancy has articulated specific concerns regarding the potential for conflict between development of wind energy, wildlife, and wildlife habitat – namely, forest fragmentation, displacement of forest dependent species, and direct mortality to bats, songbirds, and raptors. To avoid these impacts, the Conservancy generally recommends that wind energy facilities not be constructed in areas known to support extensive, intact forested habitats, rare threatened or endangered species likely to be adversely affected by habitat conversion or fragmentation, or in significant migratory corridors for birds or bats. The Conservancy acknowledges that there is a lack of scientific consensus regarding the location and significance of migratory corridors for birds and bats. However, we also note with particular concern that the limited studies currently available clearly indicate that various species of migratory, tree-roosting bats, including hoary, and eastern red bats, and Eastern pipistrelles, along with silver-haired, little brown, and big brown bats are most likely to be killed at wind energy facilities in the Central Appalachians⁶, and that inappropriately sited wind energy

⁴ Boone, 2006. "Wind Energy Application filed for Grid Interconnection Study within Mid-Atlantic Highland Region of PGM (PA, WV, MD, DC& VA)". Viewed April 26, 2007, at http://www.vawind.org/assets/Docs/PJM_windplant_quere_summary_073106.pdf

⁵ Riposo, David. "Re-evaluating Wind Energy Industrial Development in the Mid-Atlantic: Working Draft of the U.S. Society of Ecological Economics". Viewed April 26, 2007, at <http://www.useee.org/PDFs/WorkingPapers/RiposoReevaluatingwindenergyMid-Atlantic.pdf>

⁶ Kerns, Jessica, Erickson, W.P., Arnett, E.B. 2005. Chapter 2. "Bat And Bird Fatality At Wind Energy Facilities In Pennsylvania And West Virginia." pp 24-95 in E. B. Arnett, technical editor, Relationships between bats and wind turbines in Pennsylvania and West Virginia: an assessment of bat fatality search protocols, patterns of fatality, and behavioral

development may have the potential to cause reductions in populations of these species already depressed from historic levels.

Option C-1 is consistent with the Conservancy's recommendations that wind energy facilities not be constructed in extensive forested areas and areas known to support rare, threatened or endangered species. We note however that there are extensive areas of unfragmented forest habitat that are not identified in Option C-1, including inventoried and un-inventoried roadless areas, and Matrix Forests identified by The Conservancy in consultation with USFS ecologists and other scientific experts (described in detail in an accompanying document).

Given the ambiguity present in the currently available data regarding actual impacts of wind energy facilities, siting guidelines alone will not ensure that wildlife and wildlife habitat impacts are avoided. Rather, all wind energy facilities should maintain monitoring programs adequate to enable ongoing assessment of their impacts, and demonstrate compliance with legal requirements including the Federal Endangered Species Act, the Bald and Golden Eagle Protection Act, and Forest Plan Objectives.

The Nature Conservancy also suggests that USFS statements relating to the Rural Development *Desired Future Condition* be clarified. Analyses by the staff of the Virginia State Corporation Commission suggest that the primary economic benefit of wind energy facilities to localities is from the generation of property tax revenue on the installed turbines⁷. Given the controversy that generally has surrounded the development of wind energy resources, claims of economic benefit are likely to be contested by opponents and the potential economic benefit of wind energy facilities on public lands should be well understood and articulated by USFS officials.

Issue 11- Forest Pests and Invasive Species

The Nature Conservancy has identified non-native and invasive forest pests, pathogens, and plants as one of the top threats to biological diversity in the United States and around the world. Working at scale across a variety of landscape settings, our Invasive Species Initiative employs a five part strategy that includes prevention, early detection/rapid response, restoration, research, and outreach. Nationally, the Conservancy has supported the United States Forest Service and its efforts to control a range of pests and pathogens including Asian Longhorned Beetles, Emerald Ash Borers, and Sudden Oak Death. In Virginia, the Conservancy and other agency partners have formed the Virginia Invasive Species Council to identify overarching strategies to prevent the invasion of new invasive plants and pests in the Commonwealth. Locally, the Conservancy is actively controlling

interactions with wind turbines. A final report submitted to the Bats and Wind Energy Cooperative. Bat Conservation International. Austin, Texas, USA.

⁷ Commonwealth of Virginia State Corporation Commission. October 1, 2006. "Pre-filed Testimony of Mark K. Carsley, Public Version". p. 5. Available at: http://docket.scc.state.va.us:8080/CyberDocs/Libraries/Default_Library/Common/frameviewdsp.asp?doc=65310&lib=CASEWEBP%5FLIB&mimetype=application%2Fpdf&rendition=native

invasive plants on its Warm Springs Mountain Preserve, which shares a thirteen mile boundary with USFS lands in the GWNF-Warm Springs District.

We strongly support the USFS recommendation to establish broader overall guidance and goals in the GWNF plan for preventing the introduction of new invasive pests, pathogens, and plants. We support the continued focus on the gypsy moth, but there is a great need to expand monitoring and intervention treatments of other invasive species including but not limited to Hemlock Woolly Adelgid (*Adelges tsugae*), Tree of Heaven (*Ailanthus altissima*), Japanese Barberry (*Berberis thunbergii*), Garlic Mustard (*Alliaria petiolata*), Japanese Stiltgrass (*Microstegium vimineum*), and Oriental Bittersweet (*Celastrus orbiculatus*).

Due to cost and staff constraints, it will not be possible to control and eradicate these species across the entire forest, but a high priority should be placed on the protection of Special Biological Areas, Matrix Forests, Roadless Areas, and other unique and/or high quality habitats on the GWNF. As mentioned, the Conservancy has established its Warm Springs Mountain Preserve as a platform for controlling invasive species and we would welcome the opportunity to establish a joint ecological restoration project centered on Conservancy and USFS lands with the Warm Springs Mountain Matrix Forest.

Additionally, there are a myriad of other potential pests that may not currently be present but will certainly threaten the GWNF at some point in the future (e.g. Sudden Oak Death). We encourage the USFS to continue in its national, regional, and forest level efforts to monitor and prevent the introduction of Sudden Oak Death and other potentially devastating non-native species.

Issue 13- Mix of Goods and Services

C. Wildlife

The Conservancy acknowledges that early successional habitat and open woodlands are important elements in a landscape mosaic of habitat conditions. In particular, these forest conditions provide critical habitat for many species at some point in their yearly life cycle needs. Timber management, prescribed fire, natural disturbances, and continued maturation of the forest can all create patches of both early successional habitat and more open mature woodland conditions. It is clear that to meet its goals of providing a range of habitat components for a variety of forest-dependent species, the GWNF plan needs to recognize the importance of early successional and open woodland habitats and to establish clear management goals for maintaining these conditions at an appropriate scale.

We support increasing the prescribed burn objective in MAs oriented towards creating early successional habitat. We are also in favor of adding an objective for open woodland restoration, and an objective for blight resistant American chestnut restoration.

The Conservancy strongly recommends that within the five Matrix Forests we have identified and described in an accompanying document, prior to combining MAs 14, 15, 16, 17 and 22 into one area, the USFS reclassify a subset of these Management Areas to either MA 4, 9, or the newly suggested “Remote Backcountry” designation. Our specific suggestions related to these Management Areas that warrant reclassification are highlighted in the accompanying report entitled, “Optimal United States Forest Management in Priority Matrix Forests”.

D. Land Ownership

The Conservancy and the United States Forest Service have a long history of working together to identify and protect desirable forest interior tracts and rare species habitat. Although the goals for land exchanges and acquisitions have not been met since 1993, the general goals remain important. Additionally, though the Land and Water Conservation Fund (LWCF) has not been a funding source for land acquisition on the GWNF, it is still a viable source of funding and may be important to future acquisition efforts in critical areas adjacent to or within the GWNF.

The Conservancy supports a change in language that states that exchanges and acquisitions of land will be accomplished as funding is available. We do not suggest removing reference to the Land and Water Conservation Fund as it may be an important funding source in the future.

MTB
Land
Plan

April 25, 2007

Dear Forest Supervisor,

I am writing to give you my ideas and comments for the new forest plan. Please consider my opinion in your official decisions. This letter is for the CER and for the plan revision in general. I understand that the courts may throw out the CER process. I agree that the CER is not sufficient and that an EIS should be done for the plan revision. Whatever pans out, here are my comments, first in general and then specifically.

The spirit of management on the George Washington National Forest could use a change. We have a real gift in Virginia. Over a million acres of forested mountains, clean streams, an astounding diversity of wild plants and animals, not to mention recreational, educational, and spiritual renewing opportunities for millions of people. We no longer need our National Forest for timber. We need it to escape from our busy lives and as a relief from urban sprawl. The future of National Forest management should focus on ecological restoration and providing for non-motorized recreation.

Our GW forest is more important ecologically now than it has ever been. Due to the reality of private lands management (heavy logging for chip mills, fragmentation, sprawl, water pollution), our GW forest is vital for the survival of many wildlife species and the continuation of healthy ecosystems in our region.

Economically our National Forest is worth much standing than cut for timber. Forest Service studies have shown that recreation contributes much more to the local economy than logging (which often loses money), and logging threatens recreation.

The new forest plan can be much better than the last one. The future is in true ecological restoration and non-motorized recreation.

My specific comments for the new forest plan,

-Define ecological restoration as the removal of roads, dams, and non-native species, also include the reintroduction of extirpated species. Do not use logging and prescribed burns as primary tools for restoration. Make ecological restoration a budgetary priority.

-Permanently protect all roadless areas from the 2001 roadless rule regardless of national politics.

-Create a system to incorporate the " Virginia Mountain Treasures" into permanent roadless protection.

-Identify and permanently protect all old growth forest (all forest types). Work to create connectivity between old growth stands. No more Hoover Creek timber sales.

- Fully protect all rare, threatened, and endangered species listed by the US Fish and Wildlife Service and the Virginia Division of Natural Heritage.
- Change the road density standards by making them more strict not less strict than the previous forest plan. These standards should be enforced and implemented.
- Decrease the cut. Decrease the acreage and board feet from current timber sale levels by at least half.
- Cut back on prescribed burns. Allow lightning fires to burn in a controlled manner.
- Hemlock protection (from the wooly adelgid) and blight resistant Chestnut reintroduction are great plans. Please make this happen.
- Create special biological areas for the Wood Turtle and all other areas recommended by the Virginia Division of Natural Heritage.
- Recognize that non-native invasive species are a big threat to the forest. Recognize that logging has contributed to this problem more than it has helped. Identify all major invasive species and create specific plans for the removal of each one.
- Locate managed wildlife habitats near existing early successional land uses, such as adjacent private lands, and within previously cut areas to lessen the impacts of forest fragmentation within public lands.
- Keep ATV trails at the edge of the forest and keep them to a minimum. Keep ATV trails away from all rare and ecologically sensitive areas, and away from hiking trails.
- Don't build any more roads, permanent or temporary. Remove roads wherever possible.
- Study edge effect and the impact it has on a large part of our forest.
- Identify all lightly roaded or mostly intact mature forest areas, old growth, uncommon forest types, special biological areas, rare species locations, and intact watersheds, drinking sources, and trail sites, and strictly protect them from all logging, road construction, drilling, mining, grazing, and other development.

Thank you for considering my comments. I look forward to hearing from you.

Sincerely,



Michael Kruse

1420 Early St
Charlottesville VA 22902



Handwritten note: *Land for forest*

COMMONWEALTH of VIRGINIA

L. Preston Bryant, Jr.
Secretary of Natural Resources

Department of Game and Inland Fisheries

J. Carlton Courter, III
Director

April 17, 2007

Ms. Maureen Hyzer, Forest Supervisor
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019

Dear Maureen:

The Virginia Department of Game and Inland Fisheries (VDGIF) has been a long-term cooperater with both National Forests in Virginia, with a Cooperative Agreement dating back to June 1938. Because of this long history and our interest in the wildlife resources on the George Washington National Forest (GWNF), staff from our Wildlife, Fisheries, and Wildlife Diversity Divisions have compiled the following comments in order to assist the GWNF as you prepare to revise the existing Land and Resource Management Plan.

Attached is an Executive Summary document which was prepared for presentation to our Board of Directors at their March 23, 2007 meeting. This document identifies the main issues that we (VDGIF) feel need to be considered as the GWNF moves forward with revision of the 1993 Revised Land and Resource Management Plan. I understand that at the present time your planning process is on hold as the Forest Service determines under what regulations/rules you will proceed in revising the GWNF's management plan. However, we wanted to offer these comments for the record.

We look forward to working closely with your staff to develop a revised management plan in the future that meets the needs of the numerous wildlife resources found on the George Washington National Forest, as well as providing for the recreational needs of our constituents and citizens of Virginia who use the National Forests in Virginia.

Please feel free to contact me at P.O. Box 996, Verona, VA 24482 or by phone (540) 248-9360 if you have any questions or need further clarification of anything brought up in our comments.

Sincerely yours

Handwritten signature of Al Bourgeois in cursive script.

Al Bourgeois
District Wildlife Biologist

Virginia Department of Game and Inland Fisheries Comments

George Washington National Forest Land and Resource Management Plan March 27, 2007

Executive Summary:

The George Washington National Forest is the largest public land holding in the Commonwealth with 1 million acres. The Virginia Department of Game and Inland Fisheries (VDGIF) and the George Washington National Forest (GWNF) have cooperatively managed fish and wildlife resources since 1938. The GWNF is important in providing recreational opportunities for millions of citizens from across Virginia and forest habitat for many wildlife species.

Reduction in active habitat management, mainly due to the lack of implementation of the 1993 GWNF Plan, has resulted in a predominantly mature forest. This shift towards an older age class forest has resulted in a decline in early successional habitats and populations of wildlife species associated with these habitats.

We request that the George Washington National Forest consider the following recommendations during revision of their Land and Resource Management Plan:

- Implement a more balanced age class distribution of forest habitats. Habitats ranging from herbaceous openings to mature forests provide benefits for all wildlife species (e.g., both those species of greatest conservation need and those of recreational demand).
- Promote or maintain a forest species composition with high value to wildlife. A diverse forest species composition is just as important to wildlife as a balanced age class distribution, particularly those that provide diverse hard and soft mast. Control and eradication of invasive species should also be a priority.
- Implement active forest management practices (e.g., timber harvesting, prescribed fire, herbicides) across a larger percentage of forested habitats to provide more diverse habitats for all wildlife species.
- Protect and manage species and habitats of greatest conservation need, as recognized in the Virginia Wildlife Action Plan.
- Incorporate goals and objectives of state, regional and national wildlife plans and directives (e.g., Wildlife Action Plan, Virginia Bear Management Plan, Virginia Deer Management Plan, Partners in Flight Bird Conservation Plans).
- Protect and manage riparian habitats and water quality. Comply with Virginia Best Management Practices but retain flexibility to provide for a range of resource values.
- Manage roads to improve access for wildlife recreation and wildlife habitat management.

Introduction

The George Washington National Forest (GWNF) is the largest landowner in the Commonwealth and is a critical player in helping the state manage and protect its wildlife resources. Virginia is dependent upon the GWNF implementing programs that help manage and protect the diversity of wildlife in the state.

The 1993 GWNF Plan set the stage for how the Forest would be managed. A change in the mission of the NF is identified to include not only watershed protection, but also management of recreation, wildlife habitat, and timber production. The 1993 Plan further states a shift to ecosystem management where more elements are considered in decision making and that these elements are considered at a broader range and scale. The management of ecosystems serves the purpose of producing, restoring, or sustaining certain ecological conditions. To this effect, the 1993 Plan created Management Areas, with specific Desired Future Conditions (DFC), acreages, and locations to meet the broad ecosystem goals identified by Forest Service staff, with input from the general public. The result was 18 Management Areas that provided management direction for ecosystems from grassland to early succession (young forest) through mature/old growth forest.

The 1993 GWNF Plan set the stage for the management of these ecosystems to provide for a diversity of wildlife while protecting the most sensitive wildlife resources on the NF. While the intent of the 1993 Plan was to move the GWNF toward desired future conditions, implementation of the plan failed in several areas and yet excelled in others. The lack of active forest management resulted in an increase of mature forest habitats. This increase benefited wildlife species requiring older forests, but was detrimental to the many wildlife species that are dependent on young forests and herbaceous habitats.

Need for Change in the 1993 GWNF Revised Plan

Wildlife habitat management objectives should reflect wildlife importance. Habitat management on the GWNF should have two primary objectives. The first focus of habitat management should be geared toward species of greatest conservation need. There are several documents and reports that identify “priority species” in need of conservation and management. Of recent note is Virginia’s Wildlife Action Plan (VWAP). The purpose of the VWAP plan was to identify priority species, habitats, and management/conservation actions needed to maintain viable populations in Virginia. In addition, the plan was developed as a guidance document for all parties to use in their planning process as they develop wildlife conservation actions. To this end we believe the GWNF plan should incorporate, to its best ability, the priority species, habitats and conservation strategies identified in the plan. The second primary objective of habitat management should be to provide for wildlife species that benefit recreational opportunities including hunting, fishing, wildlife watching, and other outdoor recreational demands. While these “demand species” (deer, grouse, turkey, bear, etc.) may not be considered “priority species” from the perspective of low populations that need immediate management, they can be considered “priority species” from the contribution they provide to the general public. Habitat management for species of greatest conservation need is often compatible with habitat management for demand species. Typically demand species have been studied over a long time period and our knowledge of specific management conditions is well described.

Develop and maintain a more balanced forest age class distribution on the GWNF. Scientific studies have shown that a diversity of vegetative stages, dispersed across the landscape, is important for maintaining biological diversity and protecting forest health. The GWNF should strive to develop and maintain balanced forest age classes, where this is appropriate on the Forest. A more balanced forest age class distribution will improve habitat conditions for wildlife species on the GWNF, especially those needing herbaceous (grass/forbs) and early successional (young forest) habitat conditions. However, old growth forest stands are an important part of the Appalachian ecosystem and are needed to maintain forest/biological diversity and health. One goal for the Desired Future Condition on the GWNF would be to strive for the following habitat percentages across the GWNF at all times: 3 to 5% in herbaceous grass/forb habitat; 10% to 15% in early successional forest habitat (predominantly <10 years old); 15% to 20% in young forest habitat (predominantly 10 to 40 years old); 50 % to 60% in mast producing habitat (predominantly 40 to 120 year old); and, 10% to 15% in old growth/late successional (predominantly 120 plus years old) forest habitat. While we realize these are very broad goals that will take several decades to achieve, we feel the GWNF must have a long-range direction for the Desired Future Condition of the Forest.

Promote a forest tree species composition with high value to wildlife. A diverse forest species composition is just as important to wildlife as a balanced age class distribution. Priorities in the revised GWNF Plan should include maintenance, restoration and regeneration of plant species important to wildlife, particularly those that provide diverse hard and soft mast (e.g., American chestnuts, acorns, grapes, berries), and control and eradication of invasive species that provide little wildlife value and impede ecosystem management goals (e.g., ailanthus, privet). Intervention is necessary to reverse the ongoing conversion from shade-intolerant, fire-tolerant species (e.g., oak, hickory, yellow pine) to shade-tolerant, fire-intolerant species (e.g., white pine, maple, beech). Although the latter tree species certainly have wildlife value, their significant expansion at the expense of the former can be considered a net loss to many wildlife species."

Create more early successional (young forest) habitat for wildlife species requiring this habitat. Reduction in timber harvesting on the GWNF in recent years has resulted in the GWNF becoming a predominantly mature forest. Nearly 40 % of the GWNF is over 100 years old, with 88% of the Forest being over 70 years. This forest age class structure has significant implications for wildlife populations, especially those species that require younger habitat conditions. Less than 1% of the Forest is 10 years old or younger, while 3% is less than 20 years old. Many wildlife species, which require this type of forest habitat, are in serious decline (American woodcock, yellow-breasted chat, golden-winged warbler, prairie warbler, chestnut-sided warbler, etc.). In addition, many other species that, while not significantly declining, are found in low numbers (white-tailed deer, ruffed grouse, etc.) on the GWNF and would benefit from an increase in this habitat. The Desired Future Condition should be to have 10% to 15% of the GWNF in early successional habitat.

Allow timber harvesting on more acres of the GWNF. Commercial timber harvesting has long been recognized as a primary method by which wildlife habitat is created and maintained in a forested landscape like the GWNF. The 1993 Plan significantly reduced the land area available for commercial timber management (only 333,000 acres were available). In contrast, the 1986 plan designated 640,166 acres of the GWNF as available for timber

harvesting. Also, the level of timber harvesting on the GWNF in 1993 was approximately 3,000 acres a year. Currently this level has dropped to about 800 acres a year, for many reasons. The significant decrease in timber harvesting on the GWNF recent years has resulted in a substantial reduction in early successional (young forest) habitat and has shifted the age structure to a more mature forest. A level of timber harvesting in the new revised plan of between 4,000 to 5,000 acres per year will provide more young forest habitat. At 5,000 acres a year and a 100 year rotation this would equate to treating 500,000 acres or half the GWNF in 100 years. All the acreage within the old Management Areas 14, 15, 16, 17 and 22 on the GWNF should be available for timber harvesting, prescribed burning and other habitat manipulation techniques. This would result in 600,000 acres (57% of the GWNF) being available for wildlife habitat management.

Use prescribed fire as a tool to create habitat on the GWNF. In recent years prescribed burning has been recognized as a valuable technique for creating habitat in forested landscapes. Historically, fire played an important part in the ecosystem of the Appalachians. Prescribed burning should be promoted in the GWNF Plan revision as a technique for creating wildlife habitat. However, although fire can and does create disturbance and result in changes in habitat, prescribed burning does not create the same vegetative structure and habitat conditions that timber harvesting creates. Recent studies have shown that fire is an effective tool in oak regeneration, particularly when used along with certain timber harvesting regimes. Fire should be used in conjunction with an active timber harvesting program to achieve the Desired Future Condition for wildlife habitat on the GWNF. Age structure, stem density response, vegetative species composition and other factors need to be considered when choosing the appropriate vegetation manipulation technique. Guidelines for prescribed fire in the GWNF Plan revision need to allow for burning under aggressive (hot) conditions in order to achieve desired habitat results.

Protect unique habitats and Rare, Threatened & Endangered and Sensitive species habitats on the GWNF. The 1993 GWNF Plan successfully identified and protected unique habitats found on the Forest (e.g., Special Interest/Research Natural Areas, Special Management Areas). Continue to manage these areas to maintain their unique ecological values and incorporate management options as new scientific research dictates. The 1993 Plan also did a good job of managing for T & E, rare and sensitive or species of concern found on the GWNF (Indiana bat, cow knob salamander, tiger salamander, wood turtle, James River Spiny Mussel, etc.). Continue to manage habitat on the GWNF to maintain and enhance these species on the Forest.

Protect and manage riparian habitats and maintain water quality on the GWNF. The riparian guidelines in the 1993 plan have been effective in protecting and maintaining habitat and water quality. We recommend retaining these guidelines in the revision of the 1993 plan with modification to bring them into compliance with the Virginia BMP's. While protection of riparian corridors and habitats along perennial, intermittent and channeled ephemeral streams is critical for maintaining water quality there should be flexibility in the plan to allow for management of these habitats to provide for a range of resource values. Riparian management guidelines need to protect the riparian resource, while allowing for site-specific management to meet the needs of terrestrial riparian-dependent species.

Road management decisions should be guided by biological concerns and recreational access needs. Limited disturbance of wildlife species during the breeding, nesting and brood rearing season is widely recognized as being crucial to survival of many wildlife species. Survival of young birds and animals is higher when they are not disturbed and/or separated from adults during this period of growth and development. Look at road density issues with the goal of seasonal closures to protect wildlife during this critical time of the year. Decisions on when roads are opened and closed should be consistent across the GWNF. Recreational access to the GWNF for hunting, fishing, trapping, wildlife viewing, etc. is another important consideration when deciding to open and close roads. Sportsmen use the GWNF extensively throughout the fall and early winter for hunting, fishing and trapping. Review all roads on every Ranger District with the respective natural resource partners (VDGIF & WVA DNR) to determine when and which roads will be opened and closed (give consideration to late season hunting and fishing access). Development of temporary access roads for forest management activities is important to achieve a diversity of wildlife habitats across the GWNF. Construction of these roads should be kept to the minimum length necessary to meet management objectives. These roads should be seeded to wildlife-friendly herbaceous cover and closed to public vehicular use.

Incorporate new scientific research findings when developing management guidelines. Chapter 3 of the 1993 Final Revised Land and Resource Management Plan lists common standards and guidelines for the entire GWNF and for the various Management Areas identified in the plan. Current scientific research and studies (Cooperative Alleghany Bear Study, Appalachian Cooperative Grouse Research Project, Turkey Population Dynamics Study, Turkey Gobbler Study, and numerous songbird studies and surveys, etc.) on several wildlife species has revealed new information, which needs to be incorporated in the GWNF plan revision. Many of the standards and guidelines need to be modified or changed to include these new findings in order to better meet the habitat needs of wildlife species found on the GWNF.

Incorporate goals and objectives of state, regional, and national wildlife plans and directives into the revised GWNF Plan. Natural resources agencies in Virginia have collaborated to develop several plans that help guide and direct decisions for population and habitat goals for different species. Since the GWNF is the largest public landholding in the Commonwealth, its forested area (1 million acres) is critical in helping to achieve many of the goals identified in these plans. The GWNF should cooperate with the Virginia Department of Game and Inland Fisheries to meet habitat goals outlined in Virginia's 2006-2015 Draft Deer Management Plan; Virginia's 2001 Bear Management Plan; and, Virginia's Wildlife Action Plan. Two other national bird plans have identified habitat needs (mature forest and early successional forest habitat) for bird species in need of conservation. Incorporate habitat needs identified in the Partners in Flight Conservation Plan: the Mid-Atlantic Ridge and Valley (MARV) Plan and the Southern National Forest's Migratory and Resident Landbird Conservation Strategy into the GWNF Plan revision. Other pertinent management plans should be reviewed and applicable management strategies incorporated in the revised plan if they are consistent with the management direction of the Forest Service.



"Karen Pluth"
<kapluth@isp.com>
11/04/2007 12:36 PM

To: <Mailroom_R8_George_Washington_Jefferson@fs.fed.us>
cc:
Subject: PAO web page feedback

Supervisor's Office, Roanoke,

I understand that the George Washington National Forest is under a revision process and would like to add some input.

These projects are a priority:

- Remove roads - build no more roads
- Keep streams clean, clean up streams
- Plant native trees, remove invasive species
- Protect the roadless and Heritage areas
- NO LOGGING!!!!!!!!!!!!!! or mining or development

Thank you for your consideration,

Karen Pluth

2619 Mt. Zion Rd.

Pearisburg, VA 24134

(Bland County)

1270 Hill Hollow Rd.

Fiber, VA 22938

11-24-07

To Whom it Concerns:

I would like to comment on your plan revision for the national forest. I support the most restrictive human use of the forest. I believe it must be kept wild and more roadless areas should be protected as such.

Any old growth forests should be left alone. Below-cost logging should definitely be stopped.

I believe less management of the G.W. is the best. I don't agree with habitat manipulation to ensure animals for people to kill. I'd like to see less hunting, no ATV use.

Please consider my views. Thank you.

Sincerely,

Susan Wredman