George Washington National Forest
Public Workshop Worksheet

Name: Marie Heinz Date: 6/22/2011

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

Keep prohibition on horizontal fracking

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

Newly identified roadless areas should get 2001 Roadless Area Rule management.

Additions to wilderness should be way over the proposed 20,300 acres.

3. What are the possible effects of this change on other resources or other users of the Forest?

Less human impact on forest means better water and more game and more biodiversity.

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

Good.

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet
Name: Marsha SHRUNTZ Date: 6/22/11

1. What in the Draft Forest Plan would you most like to see NOT change, and why? Timber Harvest

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible. Horizontal Hydrofracking needs to be better explained what degrees or slants, angles to be acceptable?

3. What are the possible effects of this change on other resources or other users of the Forest? Drinking Water
What are Fracking fluids & cemicals?

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?
Be prepared for Law suits against drilling companies that do not comply with their Contract & specifications
Drilling Company disclosure on their Websites

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Katie Date: 6/22/11

1. **What in the Draft Forest Plan would you most like to see NOT change, and why?**

→ Please do not back down on your proposed ban on horizontal drilling. There are too many risks to water and other resources.

2. **What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.**

- Limit vertical well drilling opportunity.
- 10 yrs ago, no one would have predicted the scale of horizontal drilling. Technology for vertical wells to ~~access~~ extract shale gas may develop and be economically viable. 1,000,000 acres of GWNF open for hydrofracking via vertical wells seems a big gamble.

3. **What are the possible effects of this change on other resources or other users of the Forest?**

- This change would improve protection of all resources and would ~~to~~ prevent potential negative impacts on all users.

4. **Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?**

Shale natural gas has been there millions of years - it's not going anywhere while we develop the technology and BMP's to extract it safely. We're not there yet.

Please use the reverse side if needed.

THANK YOU for your work to manage our public lands!

George Washington National Forest
Public Workshop Worksheet

Name: Jane Thomas-Dove Date: 7/12/2011

1. What in the Draft Forest Plan would you most like to see NOT change, and why? NO "fracking" because of all the pollution caused by such. Clean water is our MOST valuable resource both now and the future generations. It must be protected.

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.
I do not want to see motor traffic in wilderness land – except access for service vehicles.

3. What are the possible effects of this change on other resources or other users of the Forest? I see it as more government control and in many ways the private landowner is overrun ~~with~~ entirely as in many other ways.

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations? I'm afraid as in so many things, the government and large companies will eventually do as they please.

Please use the reverse side if needed.

Thank you.

George Washington National Forest
Public Workshop Worksheet

Name: Everett A May Date: July 12 2011

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

Horizontal Drilling Prohibited
Mountain H. quality water supply

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

ATV usage be very limited to specific areas if at all.

3. What are the possible effects of this change on other resources or other users of the Forest?

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

This will protect our future generation with good Hi quality Water

Please use the reverse side if needed.

We need <u>not</u> have additional environmental impacts applied where road, trees and excavation of soil for access to energy companies

George Washington National Forest
Public Workshop Worksheet

Name: Ana Mendez **Date:** 7/12/11

1. **What in the Draft Forest Plan would you most like to see NOT change, and why?** The BAN on hydraulic Fracturing. There is not enough information of this process. You need to wait for The EPA Study and proper REGULATION of the GAS/OIL Industry.

2. **What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.** Change the complacency and keep Strict compliance of Best Management Practice, for you to totally uphold the Mission of The National Forest in preservation of the WEEKS ACT of 1911. for the protections of our water supply in the watershed and the conservation of our forest.

3. **What are the possible effects of this change on other resources or other users of the Forest?** The Millions of TAXPAYERS who rely on the watershed for Drinking water would be affected through the effects of contamination for a short BOOM of Natural Gas. Not worth it. A short SPURT of an economic BOOM will NOT make up hundreds of years of water contamination.

4. **Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?** A short lived economic Boom (when we should consider getting away from fossil fuels) would hinder the HEALTH of the forest for generations to come. First and foremost the watershed, the health of our forest the critters and the ECO SYSTEM should have priority on any short lived economic BOOM of a couple of years of cheap Gas That could Be sold in the world market. The impact is NOT worth hundred of years of unhealthy forest to serve a trillion dollar industry who could care less about our water shed and the environment and ecosystem.

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Mary Terry Date: 7/12/11

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

DO NOT PERMIT HORIZONTAL HYDROFRACKING
KEEP THE WILDERNESS PLAN FOR THE BERGTON VA AREA.

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

DO NOT ALLOW WIND FARMS AT ALL
TEST WATER REGULARLY IN DRILLING AREAS NOW FUNCTIONING, and also later ON, after The DRILLING ENDS.

3. What are the possible effects of this change on other resources or other users of the Forest?

IMPACT ON WATER QUALITY.

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

WATER CONTAMINATION.

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: BRUCE RITCHIE Date: 7/12/11

1. **What in the Draft Forest Plan would you most like to see NOT change, and why?** – Prohibition on Horizontal drilling for gas/oil
– related priority on water protections/stewardship for forest health & human needs.

2. **What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.**
– More Tight Regulation of mineral/oil/gas extractions w/in forest, avoid any compromise of soil/water/air during or because of these extractions.
– Consider combining prescribed burns w/ ~~Biochar~~ Biochar generation for soil carbon.

3. **What are the possible effects of this change on other resources or other users of the Forest?**
– Tighter extraction regulations would eliminate most related damages.
– Biochar would improve Soil Carbon, take away Carbon Impact on air

4. **Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?**
– Biochar/soil Carbon and tighter extraction regulations would enhance the resilience and biological health of the forest, into the future.

Please use the reverse side if needed.

comments by Sept 1

George Washington National Forest
Public Workshop Worksheet

Name:_____ Date:_____

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

The use of horizontal drilling would be devastating to water quality in streams and underground aquifers. I personally would ban all hydrofracturing in the National Forests.

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

3. What are the possible effects of this change on other resources or other users of the Forest?

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name:_____ Date:_____

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

No WIND FARMS - THEY Break down, most are Not Working a lot of the time - Are Costly (Gov't "gives" grants to company) so WE END up PAYING

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

NEED FRACKING to get GAS - Drilling Won't produce

3. What are the possible effects of this change on other resources or other users of the Forest?

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

Burning more → carbon released

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name:_____ Date:_____

1. What in the Draft Forest Plan would you most like to see NOT change, and why?
Horizontal Drilling Ban

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.
Buy the mineral rights where they are owned By Private owners to protect the forrest. Base line testing of water

3. What are the possible effects of this change on other resources or other users of the Forest?
intervene and promote the health of the forest, watershed & habitat.

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?
Guarantee for generations to come the health of the forest, animal habitat & eco system.

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Constance Birch Date: cwbirch319@juno.com

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

~~Oppose all drilling~~

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

Oppose all drilling

Oppose all leases for drilling for oil or gas

3. What are the possible effects of this change on other resources or other users of the Forest?

Contamination of water supply

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

I oppose any drilling, vertical or horizontal or whatever. I oppose any leases for oil or gas on public land.

Please use the reverse side if needed.

Thanks for the meeting. Tom Bailey was especially knowledgeable and helpful.

George Washington National Forest
Public Workshop Worksheet

Name: PHILLIP R. COBB **Date:** 7-18-11

1. **What in the Draft Forest Plan would you most like to see NOT change, and why?**
Be diligent in not opening land for loud, non-compatible uses of the forest such as: ATVs - gas drilling. USFS should be especially diligent about allowing wind energy. Wind power is a wolf in sheep's clothing.

2. **What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.**
There should be more timbering where appropriate. There are so many species of birds and animals that need the various stages of forest timbering. Grouse and black bear are especially needful of stages of timbering. Grouse & bear are the "canaries in the mines" in relation to maintaining reasonably wild lands in the GW. However, timbering that includes "biomass harvesting" should not be allowed cause it is too hard on the land & soils.

3. **What are the possible effects of this change on other resources or other users of the Forest?**
Of cause any kind of timbering brings out the "crazed hippie" in a lot of people, as they see no need for any forest timbering. Therefore any additional timbering will rankle such people. However, study after study indicates that successional vegetation (clearcuts) is mandatory for neotropical birds, grouse, deer, bear, and small game species.

4. **Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?**
Increased timbering will bring the GW in compliance with a proper balance/ratio of old growth, regular oak dominant forests, and increased timbered lands. From a future potential, there will be more land that is vitally critical for grouse, song birds and all other species that need successional forests.

Please use the reverse side if needed.
I appreciate the fine-line that USFS has to walk with the multi-use concepts. I think you guys (generic term for girls too) do a superb job in dealing with all the multi-use - including my biased viewpoint for grouse, birds, etc.

George Washington National Forest
Public Workshop Worksheet

Name: Grant Collier Date: 7/28/11

1. What in the Draft Forest Plan would you most like to see NOT change, and why? The most important aspect to not change is the prohibition of Horizontal Hydraulic Fracturing in the GWNF. This is the most effective strategy to prevent our drinking water from being polluted. Please do not change this under any circumstance!
2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.
The draft plan must include the recommendations made by friends of Shenandoah Mountain to create wilderness and scenic areas around the mountain and nearby areas. This would provide increased protection of key areas including headwaters for the James + Potomac Rivers and ensure recreation + tourism opportunities
3. What are the possible effects of this change on other resources or other users of the Forest?
It would prohibit degradation through extraction of lumber + natural gas.

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?
It would definitely benefit futures generations by providing intact and likely healthier ecosystems + forests to play in and explore. Additionally clean water will be ensured much more effectively.

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Ben Craig Date: 7/18/11

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

I commend the National Forest Service for keeping the ban on horizontal fracturing ("fracking") and for continuing to protect water quality for millions of households despite pressures to drop the ban.

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

N/A

3. What are the possible effects of this change on other resources or other users of the Forest?

N/A

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

N/A

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Mark Daugherty Date: 7/18/2011

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

Keep wilderness areas unchanged.

Do not add another 20,000 acres of wilderness

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

Open horizontal drilling. This will create jobs & economic development.

Plus, will contribute to American energy independence.

Hydro-fracking is safe, contrary to propaganda & misinformation.

3. What are the possible effects of this change on other resources or other users of the Forest?

Very little impact, since a small number of drill sites will access a large gas-shale deposit.

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

Please use the reverse side if needed.

OVER

Timber Harvest vs. Controlled Burns

Instead of burning 12,000 acres, let timber companies harvest the timber.

Plus, not burning will reduce air pollution. And, if you do burn, the smoke & soot will settle to the ground & contaminate surface water.

One other suggestion:

After Sept. 1st, Can you give statistics on how many comments you received during the comment period & the main points expressed by those submitting comments.

Don't want to feel that submitted comments are going into a black hole - and never hearing any feedback.

George Washington National Forest
Public Workshop Worksheet

Name: Kathleen C. Flaherty Date: 9/18/11

1. What in the Draft Forest Plan would you most like to see NOT change, and why? The increase in Wilderness Areas.

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible. a moratorium or decrease in any fracking or drilling for gas/oil.

3. What are the possible effects of this change on other resources or other users of the Forest? Protecting the environment + people

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations? Health + Well being

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Carolyn Ford Date: _____

1. **What in the Draft Forest Plan would you most like to see NOT change, and why?**

A million For lease - who are we getting in bed with?
Protection
Water & Soil have to be paramount

2. **What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.**

No drilling at all because you can no longer trust that this will be done correctly

3. **What are the possible effects of this change on other resources or other users of the Forest?**

use your education & job positions

Hold tight! don't let $ steal from the next generation

→ DO WHAT IS RIGHT

4. **Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?**

A question that has to be understood before anything is put into motion

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Holly Frazier **Date:** 7/18/11

1. **What in the Draft Forest Plan would you most like to see NOT change, and why?** I do not want to see horizontal or directional hydrofracking in the Forest. I do not believe it is in best public interest to search for ~~fuel~~ energy (wind or gas) in our National forests. Exploration for future energy supply can be done on privately owned property.

2. **What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.**

I would like to see the plan changed so as not to accomidate drilling for gas or capturing wind energy. Both will destroy habitat and impede the public's enjoyment of escaping modern life by visiting the National Forest.

3. **What are the possible effects of this change on other resources or other users of the Forest?**

Our nation will have to locate gas on privately owned land. Same goes for wind energy. Perhaps experimental attempts to create energy from the tides will yeild possibilities At Fundy Bay in Maine the Kitty Hawk project seems to foreshadow this opportunity.

4. **Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?**

More and more pressure will be put upon our National Forests and Parks as our numbers grow. We must preserve the wilderness and habitats for both man and beast. We may find that the diversity in flora and fauna is our salvation.

Please use the reverse side if needed. Building the infrastructure for drilling for gas and capturing wind will further erode the integrity of the forest.

George Washington National Forest
Public Workshop Worksheet

Name: David Fuller Date: 7/18/11

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

Do not lift or ease the ban on hydrofracturing in the GWNF. It is far too risky an impact on the drinking water supply and on the environment

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

Nothing

3. What are the possible effects of this change on other resources or other users of the Forest?

N/A

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

N/A

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Sandy Greene Date: 7/14/11

1. What in the Draft Forest Plan would you most like to see NOT change, and why? let's stand firm on the ban on horizontal drilling + Hydrofracking on Marcellus Shale.

We are wise to keep the Special Biological Areas protected,
2. and to review old growth characteristics, but I do appreciate
3. the ecosystem function + resilience objectives too.

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

4. Keep the great responses to Climate Change. Thank you for planning in new wetlands, core reserves,

5. Very wise to recommend large enough wilderness areas to allow natural processes to dominate

3. What are the possible effects of this change on other resources or other users of the Forest?

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

The National Forest is our life insurance policy - not to be cashed in for short term comfort or frivolous luxuries — Alternative C is the best choice.

Please use the reverse side if needed.

Thanks for a balanced + thoughtful plan for the future!

George Washington National Forest
Public Workshop Worksheet

Name: Ruth Jost Date: 7/18/11

1. What in the Draft Forest Plan would you most like to see NOT change, and why?
   - keep existing wilderness
   - expanded buffers / areas of growth
   - decommission more roads
   - Please all, do not allow fracking for gas! → Please speak out against fracking near GWNF
2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

   decommission even more roads than 160 mi.

3. What are the possible effects of this change on other resources or other users of the Forest?

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Susan Kubany Date: 7/18/12

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

No windmills: ugly, break, kill birds, require areas for maintenance + produce little to no energy.

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

I'm cautiously interested/optimistic about horizontal drilling for gas.

3. What are the possible effects of this change on other resources or other users of the Forest?

Unsure. Mostly, concerns seem emotional + non-scientific. I am cautious!

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

Unsure.

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Leo LaPlume Date: 7/18/11

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible. Reconsider to Allow Horizontal drilling and hydrofracturing in GWNF.
   why? - This is a known proven system - used world wide - for over the last 20 years. The information presented at this meeting was false and misleading

3. What are the possible effects of this change on other resources or other users of the Forest?
   The horizontal drilling and hydrofracturing will NOT affect the water tables and/or water quality.

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?
   Huge benefits for future generations for clean fuel source.

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Tom Long Date: 7/12/11

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

DON'T ALLOW FRACKING
KEEP THE MAX WILDERNESS AREAS

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

3. What are the possible effects of this change on other resources or other users of the Forest?

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: AnaMaria Mendez Date: 7/18/11

1. What in the Draft Forest Plan would you most like to see NOT change, and why? Do not change the Ban on Drilling

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible. I would change the allowance of any kind of Gas Drilling and put a total Ban as not to hinder forest habitat in any way shape or form

3. What are the possible effects of this change on other resources or other users of the Forest? Clean safe water for all concerned, all the way up to DC Potomac Watershed

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations? You should honor the Weeks Act of 1911, Water and the health of the forest should Be first.

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: [redacted] Date: 7/16/11
540-942-9422

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

3. What are the possible effects of this change on other resources or other users of the Forest?

Under the plan you are increasing the acreage for logging. Why are you reducing the amount of timber from 6.2 million board ft to 5.5. We can use increased lumber both for domestic use and export.

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

Hydrofracking has proved to be safe. Horizontal drilling uses 95% water 3% sand and other, usually consumed for cracking the shale. It is also done a minimum of 2000 feet below the water table with solid rock between the gas and water. We NEED this resource to maintain our way of life. Why are we taking horizontal drilling off the table?

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Seigfried Schmaltz Date: July 18, 2011

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

Don't do it!

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

3. What are the possible effects of this change on other resources or other users of the Forest?

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Michael Seth Date: 7/18/11

1. **What in the Draft Forest Plan would you most like to see NOT change, and why?**

ban on horizontal drilling!
potential threat to water sources & the
threat to the forest

2. **What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.**

More protection to Shenandoah Mt —
why not support a National Scenic Area from
Rt 250 to Rt 33

3. **What are the possible effects of this change on other resources or other users of the Forest?**

No threat except to logging but as long as
logging interest are accomodated elsewhere
Also protection to South Massanutten - which is
remarkably free of invasives

4. **Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?**

Protect Shenandoah Mt - South Massanutten
for hunters, hikers, bikers, campers -
& protect rich native flora

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Bill Shirley Date: 7-18-2014

1. What in the Draft Forest Plan would you most like to see NOT change, and why? Allow hydroFracking to continue !

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.
Rather than procure more acres, sell parts to private citizens. Private ownership reduces need for Forest Service Management.

3. What are the possible effects of this change on other resources or other users of the Forest?
None

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Mary Beth Spinelli Date: 7/18/2011

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

Please do not change the ban on horizontal hydro-fracking in the park.

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

I appreciate the creative ideas of alternatives on increasing hiking trails, and would be willing to volunteer for trail maintenance crews, if you can publish dates for trailwork on the NSF > GW Forest website.

3. What are the possible effects of this change on other resources or other users of the Forest?

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Nora Stehman Date: 7/18/11

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

The ban on horizontal drilling / fracking —

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

Didn't see a change —

3. What are the possible effects of this change on other resources or other users of the Forest?

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

My main concern is w/ hydrofracking & the env. impact esp. water —

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Beverly Thompson Date: 7/18/11

1. What in the Draft Forest Plan would you most like to see NOT change, and why?
   No horizontal natural gas drilling.

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

3. What are the possible effects of this change on other resources or other users of the Forest?

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Tim Peck Date: 3/18/12

1. What in the Draft Forest Plan would you most like to see NOT change, and why? The ban on horizontal gas drilling highlighted as sensitive area

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.
ban all gas drilling - protection for watershed
increase wilderness area & protection of remote areas
- save forest for future generation

3. What are the possible effects of this change on other resources or other users of the Forest?

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?
beneficial

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Kate Wofford Date: July 18

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

PLEASE do not compromise on your sensible, middle-of-the-road proposal to ban horizontal gas drilling.

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

Consider limiting vertical gas drilling to areas that do not supply local public drinking water.

3. What are the possible effects of this change on other resources or other users of the Forest?

This would benefit other resources and users by reducing potentially incompatible impacts of gas development.

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

Once shale gas drilling impacts are better understood and the risks are better managed, the land managers could reconsider the limitations on gas drilling. The gas will still be there.

Please use the reverse side if needed.

Thank You for your work on behalf of our Forest.

George Washington National Forest
Public Workshop Worksheet

Name: Dana Woodall Date: 7-18-11

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

More Wilderness - no hydro-fracking
- Protect watersheds of Harrisonburg + Staunton (Skidmore Fork, & Shenandoah Mountain National Scenic area

3. What are the possible effects of this change on other resources or other users of the Forest?

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: H Zehr Date: 2-11-11

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

not approve horizontal hydrofracking

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

seem well balanced

3. What are the possible effects of this change on other resources or other users of the Forest?

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Eric Wilson Date: 7/20/11

1. What in the Draft Forest Plan would you most like to see NOT change, and why?
(1) Protecting Water Quality (2) Managing Inventoried Roadless Areas under the 2001 Roadless Conservation Rule.

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.
(1) 20K of the 370K possible Wilderness Areas is a very low, low number. Get bold and add much more.
(2) No to commercial wind power due to the high negative impact of creating the infrastructure (roads, footpads, transmission lines
(3) No to any oil & gas leasing

3. What are the possible effects of this change on other resources or other users of the Forest?
They would have to rely more on private lands that are already heavily impacted by human activity. It may hurt short term economics, but so what. For the long term beyond my life we have to do the right thing.

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?
Long term beyond 40 years our country & human society will be better off served by healthy ecosystems.

Please use the reverse side if needed.

George Washington National Forest
Public Workshop Worksheet

Name: Eleanor Labiosa Date: Aug 24, 2011

1. **What in the Draft Forest Plan would you most like to see NOT change, and why?** All efforts to protect the ecosystem intact. Every commercial intrusion under consideration in this proposal will assault Nature's harmony, resulting in permanent damage. Any harvest of resources will be of fleeting value.
Mudslides, from the Amazon Rain Forest to California, as well as our disasterous Dust Bowl of the 30's, dramatize the consequence of disturbing root systems. These systems are as interwined as our own vascular network. Every disruption is consequential.

2. **What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.**
I would urge adoption of The Friends of the Shenandoah Mountain proposal. Any form of hydrofracking or timber removal with heavy machinery and new roads is a massacre of the elements. All wilderness areas should remain off limits. Selective timber removal should be limited to areas already accessible by established roads. Horse teams can be used to drag logs to those roads to spare the forest floor and its delicate fungal system.
Any disruption of habitat and sync transforms the entire dynamic of the area involved and it takes nature much longer to recover than it takes a community to clean up after a massive storm. The mosaic approach is like cutting steaks off of a living cow.

3. **What are the possible effects of this change on other resources or other users of the Forest?**
Visitors to our forest, (hikers, hunters, campers, etc) are forbidden to litter or take samples of any kind from our protected forests, and yet commercial enterprise has license to harvest and lay waste to acres and acres of the same forest.
Anyone who witnesses such unnatural assaults feels justifiably betrayed by those entrusted to protect land that was put off limits to development as a protection for all future generations.
Such encroachment is as devastating as development would be with consequences just as disruptive. And ugly, too.

4. **Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?**
There is no gentle approach to rape. The consequences are always permanent and the damage reverberates throughout the neighborhood.
Our motto is "Keep Virginia Green". We advertise that "Virginia is for lovers". Assumably these slogans are aimed at the tourist trade, and tourists respond. They come, they savor, they spend, and ideally they return home to share memories and photographs with friends and family (all potential new tourists ~~—~~)
oops! photographs? Will our next slogan have to be "No Cameras Allowed"?

Nothing that can be harvested from these mountains will last to benefit future generations in any way; but the scars will remain indefinitely.

The impact these proposed removals will have is just another way to rob our own children of their rightful inheritance. Investors and enterprise will reap the benefits and our children will inherit the mess they leave. The risk definitely outweighs the benefit in this matter.

We need to keep on keeping Virginia green for lovers. "Virginia is for lovers" ensures future generations — who will come in droves to continue to support our economy if we don't blast our scenery off the map or kill all the roots that keep Virginia green.

Please do not sell us out by inviting an invasion of vandals to rape our Virgin scenery and poison our wells and our air in the process.

My question is, who sold our mineral rights and how did they acquire the privilege to do that?

Ours is a government of the people, by the people, for the people. So why are the people being over-ruled by commercial interests?

From:
To: comments-southern-georgewashington-jefferson@fs.fed.us
Subject: Ban fracking gas drilling in George Washington National Forest
Date: Tuesday, August 16, 2011 12:42:00 PM

Aug 16, 2011

U.S. Forest Service

Dear Forest Service,

Please BAN drilling & fracking, both vertical & horizontal for natural gas in the George Washington National Forest, as proposed in the U.S. Forest Service "preferred alternative" draft management plan.

Clearly the Precautionary Principle (below) MUST here:

The Precautionary Principle (Raffensperger, Montague, and others):

"When an activity raises threats of harm to human health or the environment, precautionary measures shall be take, even if some cause-and-effect relationships are not fully established scientifically". "The Precautionary Principle always inquires about alternatives. Is there a less dangerous option?" "The Precautionary Principle advocates zero degradation of the environment because of the uncertainty of risk assessment. Why? The web of ecological relationships are too complex for science totally to disentangle."

Such a ban is needed to protect drinking water resources for more than 260,000 Shenandoah Valley area residents, preserve fish and wildlife habitat, and retain the remote rural quality of the forest that hosts almost a million visitors each year.

The Forest Service should conduct a more thorough study of the impacts before making a decision and, consider making local drinking water supply watersheds, other priority watersheds, and sensitive natural, scenic and recreation areas unavailable for drilling.

Sincerely,

Mr. Ross Lockridge

From:
To: comments-southern-georgewashington-jefferson@fs.fed.us
Subject: reduced wildlife numbers in G.W. Forest
Date: Saturday, August 27, 2011 10:02:00 AM

I have been an avid hunter in the Augusta county (North River) section of the forest. I have noticed the whitetail deer numbers decreasing for the past several years. I believe there are several factors responsible for the decline. Among all these factors are increased Bear numbers, coyote numbers (we have harvested 2 in last 2 years) a really severe winter 2 years ago and the emergence of unpredictable food resources ie. mast output. In the early 80's the wildlife populations seemed to be increasing rapidly, the deer and turkey populations exploded. In the latter 90's the growth stopped, the 2000's ushered in decline. The 1970's through the early 1990's there was quite a lot of clear-cutting, at the time I thought that this practice hurt hunting success; it did, but wildlife populations flourished with the ample supply of soft mast, browse and forage food they provided. It is my humble opinion, after 40 years as a conservationist in the forest, that this practice (although not eliminated) be pursued on a more vigor is level. This will benefit everyone, more wildlife, more forest use, more revenue to help manage these often neglected areas. Although the older forest growth is pleasing to the eye, the canopy shades out and diminishes the growth of natural plants which are beneficial as both a food source and erosion control. In conclusion, I think the forest service should re evaluate all clear cutting policies to help stimulate wildlife habitat.

Thank you,
William

Ferguson

P.S.
As a sportsman, I know the Forest Service resources in both revenue and personnel have suffered due to non-support through budgetary cuts over the last 20+ years in our congress. So in closing, if there is any support I can offer as a volunteer (we do trash pickup already on Tillman Rd) such as plantings or any other projects you may need help with please contact me.

From:
To: comments-southern-georgewashington-jefferson@fs.fed.us
Date: Tuesday, August 23, 2011 3:54:00 PM

- The U.S. Forest Service should not close the door on the potential that shale gas has to strengthen America's energy security for generations, while creating jobs and growing our economy.
- Horizontal drilling is a recognized way to produce this gas safely, with minimal environmental impact, and without disturbing large surface areas.
- With proper government regulation and oversight and use of industry best practices, directed at protecting our water resources, we can safely produce the energy America needs.
- Do not support the proposed federal ban on horizontal drilling in the George Washington National Forest.

From:
To: comments-southern-georgewashington-jefferson@fs.fed.us
Subject: Land use
Date: Thursday, August 25, 2011 3:39:00 PM

I wish to make it known to the U.S.Forest Service That I favor NO changes in Forest Service access policy. These forest belong to the people and they must be allowed to access them and to use them for hiking, hunting, fishing,and other recreational activities. Please make no changes reagrding "wilderness areas".

Further, horizontal drilling should be allowed into the Marcellus shale formation. This is done thousands of feet below any aquifers and will not harm them. We desperately need the oil and natural gas that this process will make available.

Fred Hollen

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Hydrofracking
Date: Thursday, October 06, 2011 11:34:52 PM

I am totally against hydrofracking and horizontal and vertical drilling. Our earth is so beautiful and life sustaning and it is our responsibility to preserve and retain it for our children and future generations. Please don't allow the desecration of Virginia, of our water and of our forests, that would be caused by hydrofracking.

--
Twilla Lambert

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Comments on Forest Plan
Date: Saturday, October 08, 2011 8:55:17 PM

Please continue to ban fracking throughout the forest.

Please protect all areas identified as Virginia Mountain Treasures, protect all roadless areas as much as possible, designate more wilderness areas, and protect all existing old growth forests.

Sincerely
Tom Hoffman

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Protect the George Washington & Jefferson National Forests!
Date: Tuesday, October 04, 2011 6:20:41 PM

TO: George Washington National Forest
Forest Plan Revision
5162 Valleypointe Parkway
Roanoke, VA 24019

FROM: Suzanne Smith Sundburg

DATE: October 4, 2011

RE: Comments submitted for the Draft Forest Plan and Draft Environmental Impact Statement

To whom it may concern:

Please review and consider these comments regarding the Draft Forest Plan and Draft Environmental Impact Statement for the George Washington and Jefferson National Forests.

Our national forests are a treasure—an important legacy left to us by our grandparents (and great-grandparents) who had the foresight to protect these lands so that these natural wonders would continue to exist not only for our benefit, but also for the benefit of all those generations who follow us. With our ever-expanding population, there will always be valid arguments to support the use (and often abuse) of our national forests to help quench our never-ending thirst for natural resources.

But as with any legacy, we have a fiduciary responsibility to ensure that our national forests remain healthy and flourishing for future generations to enjoy. If I (or anyone else) were to suggest that we level the Washington Monument so that its stones could be salvaged and reused to build something else, you would probably conclude that I had lost my mind. But the recommendations to allow hydraulic fracturing (drilling to access natural gas reserves from the Marcellus shale beds) or to permit the clear-cutting of forestland really amounts to the same thing. If you think hydraulic fracturing ("fracking") isn't deadly to forest life, read the excerpt below:

> "The new study by Mary Beth Adams, a U.S. Forest Service researcher, appears in the July-August issue of the peer-reviewed *Journal of Environmental Quality*. She looked at the effects of land application of fracking fluids on a quarter-acre section of the Fernow Experimental Forest within the Monongahela National Forest. More than 75,000 gallons of fracking fluids, which are injected deep underground to free shale gas and then return to the surface, were applied to the assigned plot over a two day period during June 2008. The following effects were reported in the study:
>
> • Within two days all ground plants were dead;
> • Within 10 days, leaves of trees began to turn brown;

> • Within two years more than half of the approximately 150 trees were dead; and
> • 'Surface soil concentrations of sodium and chloride increased 50-fold as a result of the land application of hydrofracturing fluids….' These elevated levels eventually declined as chemical leached off-site. The exact chemical composition of these fluids is not known because the chemical formula is classified as confidential proprietary information."
>
> "'The explosion of shale gas drilling in the East has the potential to turn large stretches of public lands into lifeless moonscapes,' stated PEER Executive Director Jeff Ruch, noting that land disposal of fracking fluids is common and in the case of the Fernow was done pursuant to a state permit. "'This study suggests that these fluids should be treated as toxic waste.'" —Public Employees for Environmental Responsibility (PEER) news release, July 6, 2011, http://www.peer.org/news/news_id.php?row_id=1498

Moreover, a recent report from Pennsylvania Governor Tom Corbett's Marcellus Shale Advisory Commission (created to review the impacts of fracking in the state's Marcellus shale region) was equally damning. The 137-page report (http://www.cbf.org/marcellusreport), released on July 22, 2011, included almost 100 policy recommendations. Clearly, the rules currently in place and previous enforcement efforts have not been adequate to protect the environment and human health.

Whereas, I think we all like the idea of clean and responsible natural gas extraction, the reality on the ground is something else entirely. Such an environmentally devastating process has no place in our national forests.

I recognize that the National Forest Service must balance the needs of the forest with the needs of people. But at the end of the day, if the Forest Service fails to protect our national forests, then it has failed in its primary mission and has abdicated its fiduciary responsibilities. That is why I am asking the U.S. Forest Service to meet the following guidelines in drafting the final forest management plan for the George Washington and Jefferson National Forests:

1.) Prepare for climate change by protecting core wilderness areas, reducing forest fragmentation and decreasing and eliminating non-climate stresses such as logging, road building and oil and gas leasing. Climate-related change is becoming an increasing threat to native species, which will need our help if they are to survive.

2.) Protect all areas identified in the Virginia's Mountain Treasures publication to the degree possible by designating them as unsuitable for timber harvest, new road building, and surface-occupying oil and gas drilling.

3.) Protect all roadless areas, whether previously inventoried or recently identified, consistent with the provisions of the 2001 Roadless Rule.

4.) Protect all existing old-growth forest.

In this regard, I ask that you **SELECT ALTERNATIVE C** from among existing alternatives. Alternative C is the most conservation-oriented alternative, and it should be modified so that it is consistent with the Friends of Shenandoah Mountain proposal. Alternative C addresses the four priorities above in a way that is far superior to the other existing alternatives.

And I ask that you **REJECT ALTERNATIVE G**, which is the alternative favored in

the current draft. Alternative G should be rejected for the following reasons: 1) It limits new wilderness recommendations to a mere 5% of potential acreage (20,400 acres out of 372,000 acres in the Forest Service's list of eligible areas). 2) It allows road development and logging in parts of many roadless areas. 3) It allows logging of old-growth trees in two of the major forest types. 4) It fails to protect all of the Virginia Natural Heritage program sites recommended for protection in 1991, 2000, and subsequent biological diversity reports.

I urge the National Forest Service to resist the pressure coming from unprincipled politicians and greedy, short-sighted business and industry executives/lobbyists who want to plunder and degrade our national forests for their own personal gain. **Please stand up for what is right and protect our national forests by selecting Alternative C.**

Sincerely,

Suzanne Smith Sundburg

From:
To: FS-comments-southern-georgewashington-jefferson
Date: Friday, October 07, 2011 10:56:04 AM

October 7, 2011

Forest Service Officials
re: protection of George Washington National Forest

It is extremely important that an extensive and thorough inventory (as required by Forest Service guidance) of all the old growth stands of trees in the George Washington National Forest be completed prior to public opportunity to address the issue of protecting same (as required by law). Please authorize this inventory and protect the future of George Washington National Forest. Thank you for your concern.

Sincerely,

Donna M. Loney

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Against hydrofracking, especially in the National Forest
Date: Thursday, October 06, 2011 2:08:46 PM

I am a resident and registered voter of Rockingham County, Virginia. I am opposed at this time to hydrofracking in general, because I think it uses too much water. Whether we recognize it or not, potable water is a scarce resource and will become more scarce in the future. I have read many articles predicting future regional and global conflicts over water. I can live without the next gallon or cubic foot of natural gas, but I cannot live without the next gallon of water to drink.

I am also opposed to any kind of hydrofracking in the George Washington National Forest, as the truck traffic, road grading and contamination caused by drilling seems incompatable with the purpose of a National Forest.

Technology advances. In the future, the methods used today to extract natural gas from shale rock may change to be less dependent on potable water and less intrusive on unspoiled land. Until then, I am e-mailing you to tell you my opinion. Thank you.

Karen E. Warner

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: George Washington Forest Plan Revision
Date: Thursday, October 06, 2011 9:03:37 PM

Gentlemen, For years I have hunted grouse in the GW National Forest, primarily in Augusta County, Highland County and Bath County. Over the years I have observed a marked decline in the number of birds, which I attribute to the lack of habitat. In order to promote the continuation of this species, there must be a significant increase in the amount of logging in the Forest to create successional habitat. Prescribed burning, if that is being considered, does not do the job. I have hunted in Quebec, Ontario, Minnesota, Michigan, Maine and New Hampshire, and have noted the manner in which those states manage their timber. They do so in a manner which utilizes the timber as a product and creates habitat for grouse and other species. My son in law, who is an ornithologist with a specialty in song birds and migration patterns, agrees with my assessment about logging. Many of the species he studies also require successional habitat, which logging produces. Thank you for considering my comments. I am a long time member of the Ruffed Grouse Society, which also supports the views I have set forth. Ralph Main.

Ralph E. Main, Jr.
Attorney at Law

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: NO FRACKING KEEP VIRGINIA CLEAN FOR OUR FUTURE GENERATIONS
Date: Saturday, October 08, 2011 9:46:25 AM

Dear employee of the people of America,

I would like to summit my comment please.

Water is our most vital and import natural resource and Fracking is a guaranteed way to destroy the heritage of this great and beautiful area for our future generations.

Once the ground water is polluted there is no going back. there are countless examples of this throughout the country, regardless of what the huge gas industry says.

Please view the movie GASLANDs for a small insight of what the future will bring if the greed of the gas industry is allowed to run rampant.

Please consider my comments.

Cliff Layman

From: S
To: FS-comments-southern-georgewashington-jefferson
Subject: Plans for GW Nat Forrest
Date: Wednesday, October 05, 2011 9:47:50 PM

I am an Virginia resident interested in maintaining as much forrested land, without roads or logging, as possible and therefore urge you to adapt Plan C for the management of this important and large park area (George Washington Nat. Forrest). Maintaining as much virgin forrest as we can becomes more and more important as the threat of global warming gets closer and closer. Please allow us, despite losses in so many other areas of the environment in these tough financial times, to maintain what we have.

Thank you for considering my voice.

Suzanne MIchels
Charlottesville, VA

From:
To: comments-southern-georgewashington-jefferson@fs.fed.us
Subject: Please increase timber harvesting
Date: Monday, September 12, 2011 6:40:00 AM

Since environmentalists have gotten their way and dried up timber harvests on the national forests, the forests have become seriously unbalanced and un-natural. An almost total lack of early successional area is endangering many species such as the ruffed grouse and the golden winged warbler. The original enabling legislation requires that national forests provide a sustainable supply of timber. This has been usurped by "multiple use" management which is , in fact, not multiple use at all. If multiple use means aging forests with little diversity, dying trees, and completely wasted resources, then I would have to say it has been a complete success. If, as it should, it means managing so as to enable the maximum possible users, then it is a dismal failure. Hunters, the people who fund most wildlife management, have been woefully shortchanged. Loggers are a dying breed. Even aesthetic users are being shortchanged by the near-complete monotone of 70+ year old forest acreage. Neither the timber supply nor the multiple use mandates are being met by current forest service policy. It is high time for that to change. Current management plans evidence not only poor management, but are actually illegal. National forest lands were purchased for clean water AND timber supply. There is a serious need for timber harvests that are at least 10 times the current levels.

Please tally my vote for complete forest management including significant timber harvesting using all available methods (especially including seed tree and clear cut harvests). I am a regular recreational user (backpacking and camping) on the George Washington, but I don't bother to hunt because the management styles currently in use are increasingly making that a study in wasted effort because the previously diverse landscape is disappearing.

Terry E. Seehorn
PhD- Forest Resources
Environmental Educator (25 years)

From:
To: FS-comments-southern-georgewashington-jefferson
Date: Monday, October 10, 2011 1:37:41 PM

Dear Forest Service,
I am writing in relation to the proposed hydrofracking to take place in the George Washington National Forest. I am a resident of Harrisonburg, VA and would like to make it known that I am NOT in support of hydrofracking in the George Washington National Forest. Please protect our natural watersheds and local habitats. Below are some major points I would like to make:
- I support the proposed horizontal drilling ban.
- I urge the Forest Service to conduct a more thorough study on the environmental impacts of vertical drilling before approving the draft plan.
- The agency should prohibit gas leasing and drilling in watersheds, special biodiverse areas identified by the Forest Service, and other places supplying local drinking water and valued for their natural, scenic, and recreational treasures.
- I support fellow community members and their concerns for water quality, recreation, and wildlife habitat.
Thank you for this opportunity for public comment, and please take into account how this proposal would negatively affect the environment that I, and those living in this area, are a part of.

Sincerely,
Rhett Adams

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Forest Service to adopt a plan that includes timbering AT LEAST 4400 acres
Date: Tuesday, October 11, 2011 11:46:01 AM

Good morning:

Being an active bird hunter and not being from the state of Virginia, I am very disappointed in the limited areas for hunting upland game. I saw this e-mail about the Forest Service and timbering and I thought this a great opportunity to voice my opinion on increasing habitat for upland game and wildlife in general. There seems to be an increase of urbanization and bulldozing all the trees down to create homes. If you have not seen the recent housing market then you are blind. We don't need any more housing areas to be developed. We need to maintain what we have and try to increase the habitat for wildlife. Very soon there will be no more Nat. Parks or Wildlife Management Areas because the developer will find the loop holes to start building. Yesterday I drove through a very expensive sub-division and saw a Sanctuary in the middle of this development. Homes all round this peaceful field. I thought "how thoughtful." Is this what we have become? Let's save 3 acres for the wildlife to live and they'll be happy.

We need to stop this and be more active in creating more acres for wildlife. This plan for timbering sounds like a good program and it will permit new growth for wildlife to live. I support this issue and we need your support for this pass through. Please support the Forest Service to adopt a plan that includes timbering AT LEAST 4400 acres.

Thank you

TSgt Brien Kocsis

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Need to identify old growth forest in George Washington National Forest
Date: Sunday, October 09, 2011 5:35:10 PM

I recently became aware that some old growth forest still exists in remote parts of the George Washington National Forest. What a gold mine of potentially useful plants, bacteria fungi etc. It's like finding gold under our feet. PLEASE identify and protect these vestiges of our past. With the potential of fracking in the forest it's important to not lose this potentially world changing resource for future generations. With respect
Samuel D. Caughron, MD

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Comments for the Lee ranger district
Date: Monday, October 10, 2011 5:15:18 PM

I like the preferred option G plan and have only one reservation. I'm generally opposed to any natrural gas fracking whether it involves horizontal or vertical drilling because of the adverse impacts on water supply. I live in Basye and we obtrain our water from wells on the National Forest. I would not want to see our water supply adversely impacted. Everything that I have read about fracking indicates that there are a lot of adverse environmental impacts from this practice.

I would appreciate your favorable consideration of this concern.

Ronald N. Landis

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Old Growth Forest Inventory
Date: Monday, October 10, 2011 11:34:12 AM

I am writing to support the undertaking of a survery and inventory of old-growth forest in the George Washington National Forest before any logging activity is undertaken. I urge the protection of these areas, once identified, from logging and other activities that would lead to the destruction or the deterioration of these areas.

To me these areas are a precious resource whose gifts are not yet totally known to us.

Please enable us to have the time to discover these gifts.

Thank you!

Joanne Wolf

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Public Comment
Date: Monday, October 10, 2011 1:22:11 PM

I am a resident of Harrisonburg, VA and I grew up in Winchester, VA. My family has always love to experience the outdoors through activities like hiking, camping and so forth and nature has had a huge impact on bringing us closer together. Spending my whole life near the George Washington National Forest I know the beauties and diversity that it holds. I am fully opposed to allow hydrofracking in the National Forest or any place where it is a possible threat to watersheds, biodiversity, or human and environmental health.

Thank you for hearing my comment,

John Picklap

From:
To: FS-mmrrepts-soy them-georaewasbjpgtop-jefferso p
Date: Monday, October 10,20118:26:34 PM

Submitted by: ellen and mark mancuso
At: eman497344@aol.com
Remark: re:forest service plan:i support the ban on horizontal drilling. if it was such a good thing for the environment why is it exemp from the clean water act? in the past it was beleived that ddt was good as was pbc\'s.

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Please
Date: Sunday, October 09, 2011 9:11:05 PM

Dear People with Power over whether we preserve Old Growth or not.:

Please do whatever is necessary to locate and mark the old growth forest stands.
There is invaluable information to be gained and enormous value in preserving them.
IDENTIFYING THE OLD GROWTH THAT HAS NOT BEEN PREVIOUSLY CUT IS IN YOUR PLAN. Please do what is necessary to implement the requirement
to do so before allowing any harvesting of the GWJF cutting. We need to preserve
these old growth forests which cannot be done without carefully identifying them.

I am sure you are aware of the enormous biological, ecological, cultural, botanical
value of these stands and I beg of you to protect them.

Most gratefully,

Asha Greer
Citizen of the Appalachian Region

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Horizontal Drilling in the GWNF
Date: Sunday, October 09, 2011 2:58:15 PM

Thank you for your decision to ban horizontal drilling for natural gas in our National Forests. I feel this practice is possibly the worst environmentally-damaging-for-profit idea since mountain-top strip mining.
I'm sure the people residing in the Shenandoah Valley appreciate your foresight in this matter. We all want clean drinking water for ourselves, our children and generations to come. I feel if ANY politician favors this detestable practice, they've been bought and paid-for by the gas companies.

Keep up the good work !!

RM Montgomery

Southern Shenandoah Valley Chapter
Potomac Appalachian Trail Club

October 9, 2011

Planning Team
George Washington National Forest
Roanoke, VA

Dear Planning Team:

We appreciate the opportunity to comment on the draft GWNF Forest Plan.

The Southern Shenandoah Valley Chapter of Potomac Appalachian Trail Club is based in the Staunton-Harrisonburg-Waynesboro area. We have been involved in the development of the Friends of Shenandoah Mountain Proposal and strongly endorse permanent protection of the Shenandoah Mountain area from Rt. 250 to Rt. 33. Shenandoah Mountain, with its network of 150 miles of trail, is where our local chapter hikes the most. Chapter members maintain several trails in the area, including North River Trail, Shenandoah Mountain Trail from 250 to the intersection with Ramseys Draft Trail, and Grooms Ridge Trail. We have also worked on Bald Ridge Trail. We are currently helping to write a guidebook to trails in the Shenandoah Mountain area.

The Shenandoah Mountain area has been important to PATC historically dating back to the late 1920s when the club scheduled hikes in the Reddish Knob – Ramseys Draft area. Based in Washington, D.C., club members would make the long journey over bad roads in a bus to visit this beautiful area. Myron Avery, who was President of the PATC from 1927-1941, said the Shenandoah Mountain Trail was one of his favorite trails anywhere. It still remains a favorite of many.

SSVC endorses the final George Washington National Forest Stakeholders Consensus Agreement (CA). We believe the boundary adjustments that the CA makes to the proposed Shenandoah Mountain National Scenic Area are reasonable and still leave the most important core areas in the proposal while allowing management for wildlife around the periphery in areas where management has historically been done. We strongly support Wilderness designation for Bald Ridge Addition, Lynn Hollow, Little River, and Skidmore Fork. We support the increase in timber and management activities that the agreement recommends.

We were sorry that the stakeholders could not agree to permanent protection of Laurel Fork and Kelley Mountain-Big Levels, both areas that are important to our chapter, but we realize that compromise involves giving up some of what you want.

Our Chapter also supports the agreement on Beech Lick Knob. We are helping to build the Carr Mountain Trail, which will eventually be a segment of the Great Eastern Trail. We are doing this in cooperation with mountain bikers and horseback riders. We

think the compromise of having some Wilderness on Beech Lick Knob and allowing management in certain areas is very reasonable. Since much of the Great Eastern Trail in Virginia is shared use, it is good that the Carr Mountain Trail is outside the Wilderness boundary.

In addition to supporting the CA, SSVC would like to make the following comments:

- We strongly support the ban on horizontal drilling in the GWNF.
- The draft plan would allow one million acres of the GWNF to be available for gas leasing. If the horizontal drilling ban should be dropped or overturned later by an amendment, our critical watersheds, wildlife habitat, and popular hiking areas would be vulnerable to the destructive effects of hydrofracking, which are well documented in other states as close as West Virginia. Please consider making the areas in the Shenandoah Mountain Proposal, sensitive habitat areas, critical watersheds, and popular hiking areas unavailable for leasing, as you have done with Laurel Fork.
- We would prefer to see the entire GWNF made off limits for wind development, but we ask especially the ridges that have the Great Eastern Trail and other trails be off limits. Wind development is not compatible with trails. It would ruin the hiking experience, endanger hikers, especially in winter when turbines can hurl ice, and in some cases obliterate trails. The GWNF is too important a recreational resource to sacrifice to energy development.

We appreciate the way you have involved the public in the planning process, and we look forward to seeing the final plan.

Sincerely,

Karen Waterman
President
Southern Shenandoah Valley Chapter of PATC

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: GWF Management Plan
Date: Tuesday, October 11, 2011 5:48:27 PM

I strongly support the ban on Hydrofracturing. I also urge that local water areas be identified and given priority and that management standards address drinking water issues more specifically.

Howard Zehr

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: support on ban
Date: Wednesday, October 12, 2011 8:59:48 AM
Attachments: image001.png

I support all the proposed bans to maintain water safety and forest integrity in the George Washington Nation Forest and all our National Forests. I object to hydrofracking in any way, shape or form and I support limited wind enegy development.

These forests were designed to remain a natural untouched area and should always remain so. Thank you

Martha A. Marchand | Manager of Nutrition Services
120 Bellview Avenue | Winchester, VA 22601
Tel: 540-542-0200 ext 6435
www.grafton.org

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Comments-Draft Forest Plan & Environmental Impact
Date: Tuesday, October 11, 2011 4:18:35 PM

Please accept our comments to the Draft Forest Plan and Environmental Impact that ends October 17th:

Please prohibit horizontal drilling anywhere on the forest, which will help protect drinking water resources.

Please conduct a more thorough study of the impacts of vertical gas drilling, which would be allowed on nearly all of the forest and **place additional restrictions** on vertical gas drilling, including a ban on drilling in local drinking water supply areas, priority watersheds, and sensitive natural, scenic and recreation areas.

Identify and protect drinking water supply areas by expanding protective buffers on streams and reservoirs._

Please identify all local drinking water supply areas as priority watersheds and use more defined management "standards" to protect priority watersheds, particularly limits on road construction which degrades water quality.

Thank you so much,
Alton & Charlotte Hughes

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Plan Revision
Date: Tuesday, October 11, 2011 9:57:12 PM

Charles Bartley
5014 Midland Trail
Covington Va. 24426

I am 61 years old and I've used the GW for 55 years when my father started taking me on trips. I have noticed over the years where the best game and healthy forest were found. There used to be game managers who built ponds, clearings, and food plots. I know that financial restraints have all but stopped these activities. Also I know when there was logging there was more game in and around these areas. In short the new plan needs more logging and timbering when possible. Also please don't close any forest service roads. These roads are access for me and thousands of visitors to gain avenues to our lands. For years I've removed fallen trees that have blocked the roads and on several occassions I have filled in ruts from water damage. Ever road out there is someones road to there favorite place. The public will help you keep these remote roads open. Also in closing I have purchased NF stamps ,rented camp spots, and payed parking fees for use of the GW . I'm sure all other users would be glad to buy stamps for access as some of us already do. In review
1 Cut more when possible
2 Keep all the roads open
Thanks Charles Bartley

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: drinking water, etc.
Date: Tuesday, October 11, 2011 5:24:06 PM

In this era of climate change and sprawl development, drinking water is our most precious resource.

I support permanent prohibition against horizontal drilling anywhere on the forestlands - and anywhere else for that matter.

I support a more thorough study of the impacts of vertical gas drilling, which would be allowed on nearly all of the forest and permanent elimination of vertical gas drilling, including a ban on drilling in local drinking water supply areas, priority watersheds, and sensitive natural, scenic and recreation areas.

I also recommend that all local drinking water supply areas to be identified as priority watersheds and that we put in place more defined management “standards” to protect priority watersheds, particularly limits on road construction, parking lots, hardscape, and other construction, which degrades water quality. I also think we need to expand riparian buffer zones, get the livestock out of our streams, and prevent needless destruction of trees cover.

Sonja Carlborg, Writer

From:
To: FS-comments-southern-georgewashington-jefferson
Date: Tuesday, October 11, 2011 5:30:00 PM

Submitted by: peter edmonds
At: cpledmonds@comcast.net
Remark: Dear Planning team, I do not like plan G. Plan C is better in every way. There is low demand for wood with few houses being build and newspapers and mail slowly going away. We should save this small part that is left of what use to be a massive forest from Maine to Texas. thank you, Peter Edmonds B.S. Forestry from Virginia Tech.

George Washington National Forest
Supervisors Office
5162 Valleypointe Parkway
Roanoke, VA 24019

Dear Planning Committee:

The West Virginia Wildlife Federation (WVWF) and its 41 affiliate sportsmen's clubs and 20,000 + members offers the following comments on the Land and Resource Management Plan for the George Washington NF.

First we offer our congratulations on the comprehensive planning document that the planning staff has produced for future management considerations. Rather than dwell on the many positive aspects of the plan, the WVWF offers what we consider as areas of concern for future management considerations on the Forest particularly for hunters, fishermen and wildlife enthusiasts. We note that hunter participations has declined greatly between 2001 and 2006. Could this be due to declining wildlife populations because of habitat degradation?

We note that 372,631 acres of potential wilderness areas in 37 sites have been identified on the Forest. The plan also identifies 44 thousand acres of this as wilderness designation and an additional 19% of the Forest as Remote Backcountry. The WVWF believes that wilderness designation is an anathema to wildlife management in eastern public lands. Please see the enclosure attached to this document. Early Successional Habitat (ESH) has been identified as a key component lacking in the habitat requirements of many wildlife species and suites of species as well as plant and ecosystem diversity throughout the eastern United States. This is well recognized by wildlife biologists in the east and active plans are in effect to address this problem. However, private lands cannot be a substitute for good forest and wildlife management on our public lands.

The WVWF believes that the designation of 507 thousand acres as "Mosaic of Habitats" can be a good treatment option, but it lacks clear standards and guidelines to identify proposed treatments. There is a myriad of standards and guidelines for wildlife management practices that can be tailored to various habitat treatments. We urge the

planning committee to consider referencing these to the plan to give clear direction to the term “Mosaics of Habitat.”

The WVWF urges the George Washington NF planning staff to 1) drastically reduce the amount of wilderness and Remote Backcountry prescriptions in the plan, 2) increase the acreage under active forest management prescription, 3) greatly increase the annual harvest of timber on the forest keying on the enhancement and regeneration of mast producing hardwoods as well as providing appropriate silvicultural treatments to increase ESH and 4) identify treatment options in the proposed “Mosaics of Habitat”.

The WVWF thanks the George Washington NF planning team for the opportunity to comment on the proposed plan and looks forward to a comprehensive planning document to guide the future of forest and wildlife management on the Forest.

Thank You, Jerod
Harman President,
WVWF

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Position of the West Virginia Wildlife Federation

Supporting the need for additional active forest and wildlife management on the National Forest and opposing additional wilderness areas

September 2011

Introduction

The West Virginia Wildlife Federation opposes Congressional legislation that would add more Wilderness Areas to National Forests in the state. The Federation supports the existing Wilderness Areas and believes that a portion of public lands should be set aside for Wilderness Areas; however, we recognize the limitations that additional wilderness designation impose for wildlife management and the consequences of wilderness legislation on lands set aside for the use of our citizens.

There are no Definitive Wilderness Areas in the East

Wilderness legislation is popular in the western states where it has protected lands and streams that have not been exploited by man in their original state. Western streams are particular sensitive to erosion. In the east where the original forest has been harvested years ago there are no definitive wilderness areas. Many headwater streams are too acidic in the East to support fisheries and must be treated with limestone; an operation prohibited in Wilderness Areas or restricted to high cost aerial operations. The coniferous forest of the west can be maintained for generations to come as Wilderness Areas, not so the hardwood forest of the east that must be managed due to past exploitation and threats from disease and insect.

The Appalachian Hardwood Forest is a unique Forest

The Appalachian temperate hardwood forest is a unique forest in the world today providing an abundance of biodiversity in its plant and wildlife communities. The National Forest land in the Allegheny highlands is the crown jewel in the Appalachian hardwood forest - a resource that we must protect for our future generations. But it is important to realize that the forest of today is not the forest of colonial days nor can it ever be again. The original Appalachian forest was dominated by virgin spruce on its mountaintops and white pine and northern hardwood forest below the conifers. While the coniferous forest was largely devoid of good wildlife populations, the northern hardwoods and the oak-chestnut forest provided the habitat which supported the abundant wildlife populations which made West Virginia the sacred hunting grounds.

The original forest was logged near the turn of the 20th century, but it is not the logger, which has kept us from restoring the original forest. Forest insects and diseases, such as the chestnut blight which decimated our magnificent stands of chestnut and the gypsy moth which is reducing the abundance of oak, our best remaining mast producer in the forest, were introduced from foreign countries. These threats and more cannot be managed in a wilderness setting; indeed they need intensive forest and wildlife management.

Early Succesional Habitat (ESH) is rapidly Declining

National forest lands in the east have a sparsity of its forest coverage in this early stage known as Early Successional Habitat (ESH) forest in the 0-19 year old age class and only 7% of the forest is less than 40 years old. ESH is a rare habitat type and age class on the in the Eastern United States, generally. It is important to note that there is a suite of wildlife species numbering about sixty, which includes forty-three species of neo-tropical songbirds that rely on the youngest stages of forest regeneration for at least a part of their life history. Wildlife species, which depend on ESH such as the white-tailed deer and ruffed grouse, are much less abundant on the MNF than they were 10 or 15 years ago. Even species such as the wild turkey that rely on older age forest for mast production must have ESH for nesting cover. If we are to preserve the wildlife diversity on the east and particularly on our public lands we must greatly increase the ESH on the forest. To do this we must manage the timber. (See Appendix A, B, and C for supporting information.

Mast Production is Declining

The eastern hardwood forest is much more productive and supports more diversity and greater numbers of wildlife than the western coniferous forest. This is because of the mast (acorns, nuts, berries and seeds) production of a well-managed forest. A well-managed forest has more food. Also, depending upon which species, trees lose their ability to produce mast at various ages as the trees become over-mature or become overstocked (too many trees per acre). This is a problem in much of our national forest lands in the east today. The oaks are the dominant mast producing species in the Appalachian hardwood forest. Substantial acorn production generally begins at about 40 years of age and peaks when the trees mature when they are about 20-22 inches in diameter. Neither young trees nor old trees produce large acorn crops. See Appendix E for more information.

In addition, many of our hardwood forest trees (including the best mast producers such as oaks and cherries) need sunlight to regenerate the new forest. This means the crop trees must be cut to allow enough sunlight to the forest floor to grow the new seedlings. The role of early-native Americans in burning for hunting according to many researchers has been greatly under estimated. This burning created and maintained many of the glades and balds reported by early explorers and undoubtedly was a major reason for the presence of many mast producing species in the forest of colonial times. We cannot over emphasize the fact that wilderness will preclude the regeneration of our best mast producing trees in the MNF. Good mast producing trees, such as hickory, oak, and black cherry are shade intolerant species; they need light to both grow and to regenerate as new seedlings when the mature trees drop out of the forest stand. These species cannot be regenerated without good forest management. If we are to maintain these important mast-producing trees on our best public lands they must be managed, and not allowed to degenerate to poorly productive forests devoid of the abundant wildlife we have come to expect.

Wilderness will also preclude the planting of promising blight resistant American chestnuts in the future as well as other forest and wildlife management practices that will benefit the people of West Virginia. The decision rests with our lawmakers. Will we allow scientific forest and wildlife management to perpetuate our National Forests or will they become sterile deserts for wildlife habitat?

The Need for Wildlife Management on our National Forests

In West Virginia most of the wildlife management on the three national forests is accomplished by the states Division of Natural Resources personnel through a cooperative agreement with the National Forest. These wildlife management practices are paid for by the states hunters and fishermen through funds derived from the sale of hunting and fishing licenses and dedicated funds from the sale of guns and ammunition. As such the hunters and fishermen of West Virginia have a vested interest in these wildlife management practices. Wilderness Areas preclude the continuation of wildlife management on the national forest; therefore, not only does habitat quality and wildlife populations suffer, but also monies spent on management practices are wasted because management cannot continue on these areas.

Poor Timber Management on our National Forests

Much of our national forest lands in the east is not available to active forest management, due to designations such as wilderness, backcountry recreation, endangered species, and other non-management prescriptions. This forest management ban means the national forests cannot meet their primary objective set up by Congress in the 1897 Organic Act to furnish a continued supply of timber to the nation. Furthermore, the lack of management on the majority of the Forest insures that critical wildlife habitat (ESH and mast production) will continue to decline.

The reduction of wildlife habitat management activity on the national forests is reflected in the Allowable Sale Quantity (ASQ) of timber, the goal is shown in the forest plans, versus the actual timber harvest. The national forests in the east have not harvested the ASQ of timber each year and that has further exacerbated the scarcity of ESH on the Forest. Both the ASQ and the creation of ESH have been in steep decline since the early 1990's.

Environmental activists with the goal to make the entire National Forest a Wilderness Area have stopped planned timber harvests. Due to frivolous lawsuits from misinformed wilderness groups, our aging forests have gone for decades with very little active management making them more susceptible to invasive insects, invasive plants, and disease outbreaks as well as many natural disasters.

Declining Wildlife Populations

Wildlife populations are declining on our National Forests in West Virginia. Good wildlife populations require food, water and cover. The decline in ESH and mast abundance has been a direct result of poor forest and wildlife management on the Forests. Poor food and

cover have resulted in documented declines in game harvests over the last several years . The decline in habitat diversity has also resulted in a big decline in wildlife diversity on the forest; wildlife species such as ruffed grouse, blue-winged warbler, golden-winged warbler, chestnut-sided warbler, and a host of other species, which require ESH, have exhibited marked declines (see breeding bird survey reports).

Advocates of wilderness have attempted to appeal to hunters claiming a **Wilderness, A Great Place to Hunt.** For several years they have financed newspaper ads with pictures showing hunters utilizing wilderness for their sport. Science, provided by our wildlife professionals, shows completely different findings. Studies show that Wilderness areas have rapidly decreasing populations of game animals due to the fact active wildlife management is rare to non-existent. Traditional game species such as white-tailed deer and wild turkey have declined due to poorer habitat conditions on the Forest.

More Wilderness means less People have Access to our National Forests

Our National Forests are public lands designated for the use of all the public, but current trends are putting our National Forests off limits to the traditional user (the hunters and fishermen) and making them the exclusive property of a small group of elitist hikers that prefer the solitude of roadless areas. To the hunters and fishermen this might as well say no trespassing, because without access the hunter cannot harvest a large animal such as a white-tailed deer. Nor can a fisherman conveniently access a trout stream, if there were any trout. West Virginia has an aging population of citizens and more and more wilderness areas are being established. These areas cannot be accessed by the older-aged citizens, but are being catered to a small group of mainly non-resident wilderness advocates. The sad part of this is that by the time the hunting season comes in the majority of the hiking season is over; therefore, the hiker doesn't need to have a Wilderness Area to have the solitude and wilderness experience that they desire.

Native Brook Trout Streams Need Management

The vast majority of our native brook trout populations in West Virginia are in the National Forests and most of them have greatly reduced trout abundance. A decline in trout abundance is an early warning that the health of the aquatic ecosystem is at risk. In West Virginia, many trout streams have been impacted by acid mine drainage and acid rain, and these steams do not have the buffering capacity to maintain a healthy aquatic ecosystem. Liming and other practices can neutralize the acid deposition and restore these native brook trout fisheries. Past land use practices and natural disasters mean that many trout streams need management to return the stream to a productive trout fishery. Wilderness status means that none of these streams can be restored using conventional practices. Wilderness advocates contend that streams can be limed using helicopters, but this is not a cost effective method.

How Much Wilderness is Enough?

In 1986, during the first planning phase of the MNF, a small portion of the forest (78 thousand acres) was designated as Wilderness by Congress and another 124,500 acres were designated as Backcountry Recreation, which allows administrative access only. Currently, two-thirds of the MNF is not available to forest or wildlife management. Now the wilderness advocates are pushing hard for an additional 143 thousand acres as Wilderness Areas, all with no access, no wildlife management, no timber management, and no you. The George Washington NF has proposed 44 thousand acres as wilderness and 19% of the Forest as Backcountry Habitat. Additionally 372 thousand acres have been identified as potential wilderness. It is no secret that wilderness advocates are pushing for a Potomac Highlands National Park. Can you see the no hunting signs yet?

Appendix A

References a Wildlife Society Bulletin 2001 29(2): 407-494, ***Conservation of woody, early successional habitats and wildlife in the eastern United States*****,** editors Frank R. Thompson, Richard M. DeGraaf and Margaret K. Trani. **Sustaining biological diversity in early successional communities: the challenge of managing unpopular habitats**, by Robert A. Askins; **Patterns and trends of early successional forests in the eastern United States** by Margaret K. Trani, Robert T. Brooks, Thomas L. Schmidt, Victor A. Rudis and Christine M. Gabbard; **Historical and ecological roles of disturbance in eastern North American forests: 9,000 years of change** by Craig G. Lorimer; **Conservation of disturbance-dependent birds in eastern North America** by William C. Hunter, David A. Buehler, Ronald A. Canterbury, John L. Confer and Paul B. Hamel; **Importance of early successional habitat to ruffed grouse and American woodcock** by Daniel R. Dessecker and Daniel G. McAuley; **Importance of early successional habitats to mammals in eastern forests** by John A. Litvaitis; **Human dimension of early successional landscapes in the eastern United States** by Paul H. Gobster and **Conservation approaches for woody, early successional communities in the eastern United States** by Frank R. Thompson, III, and Richard M. DeGraaf.

Appendix B

References an article in ***BIRD CONSERVATION*** Summer 2006 titled **Early Successional Habitats In Eastern Deciduous Forests** discussing the threatened nature of early successional habitats and focuses on several priority bird species, Golden-winged, Kentucky and Prairie Warblers as well as Henslow's Sparrow and Northern Bobwhite Quail, that are affected by these habitat shortages in the East.

Appendix C

Mast Production Characteristics of Major Trees in West Virginia

Species	Range of optimum mast production / minimum age (yrs)	Interval of good mast production (yrs)	Shade Tolerance	DBH of mature trees (inches)	Maximum age of trees (yrs)
White Oak	50-200+ / (20)	4-10	Intermediate	36	600
Chestnut Oak	40-100 / (25)	4-5	Intermediate	20	200+
Red Oak	50-150 / (25)	2-5	Intermediate	24	200+
Black Oak	40-75 / (20)	2-3	Intermediate	24	150+
Scarlet Oak	50-125/ (20)	3-5	Very Intolerant	24	100+
Shagbark Hickory	60-200 / (40)	1-3	Intermediate	12-24	200+
Mockernut Hick.	40-125 / (25)	2-3	Intolerant	18-24	200+
Pignut Hickory	75-200 / 30)	1-2	Intolerant	36	200+
Bitternut Hickory	50-125 / (30)	3-5	Intolerant	24	200+
American Beech	60-(200) / 40	2-8	Very tolerant	36	300+
Black Cherry	30-100 / (10)	1-5	Intolerant	24	150+
Walnut	30-150/ (20)	2-5	Intolerant	24	250+
Yellow Poplar	15-220 / (20)	1-2	Intolerant	24	300+

REFERENCES:

1. USDA Forest Service. 1990. Silvics of North America Volume 2, Hardwoods. Agriculture Handbook 654.
2. USDA Forest Service. 2001. Crop Tree Field Guide: Selecting and Managing Crop Trees in the Central Appalachians. Northeastern Area State & Private Forestry. Report NA-TP-10-01.
3. Young, James A. and Cheryl G. 1992. Seeds of Woody Plants in N.A. Dioscorides Press. Portland. OR

From:	.
To:	FS-comments-southern-georgewashington-jefferson
Subject:	Vote for prohibition against hydrofracking and expansion of protective buffers on streams and reservoirs in GW Forest
Date:	Tuesday, October 11, 2011 4:39:12 PM

As attorneys that own property in Shenandoah County that borders the George Washington Forest, my husband and I fully support the position taken by the Friends of the North Fork of the Shenandoah River, and affirmatively request that the the studies, restrictions and standards requested by the FNFSR be implemented (see below).

We certainly hope that no hydrofracking will be allowed in the GW Forest and that stream and reservoir buffers will be expanded. Please do not hesitate to call or email me if you have any questions. Thank you. Tanya

Tanya A. Harvey, Esq.
Bryan Cave LLP

Ban on Horizontal Drilling (Hydrofracturing) for Natural Gas:

Friends supports: the prohibition against horizontal drilling anywhere on the forest, which will help protect drinking water resources.

Ask for: (1) a more thorough study of the impacts of vertical gas drilling, which would be allowed on nearly all of the forest and (2) additional restrictions on vertical gas drilling, including a ban on drilling in local drinking water supply areas, priority watersheds, and sensitive natural, scenic and recreation areas.

Public Drinking Water Protection

Friends supports: the identification and protection of drinking water supply areas by expanding protective buffers on streams and reservoirs.

Ask for: (1) all local drinking water supply areas to be identified as priority watersheds and 2) more defined management "standards" to protect priority watersheds, particularly limits on road construction which degrades water quality.

VIRGINIA OIL & GAS ASSOCIATION
PO Box 2285
Abingdon, VA 24212

October 11, 2011

George Washington National Forest Plan Revision
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, Virginia 24019

Re: George Washington National Forest Plan Revision

Ladies and Gentlemen:

I am writing to voice strong opposition to your proposed ban on horizontal drilling and hydraulic fracturing in the GW National Forest. I believe that in the best interests of the Forest and the people of the United States that decisions should be based on facts, science and sound engineering principals instead of fear and hype.

If this decision is implemented it will be in direct opposition to your own mission and vision. Which is……
The USDA Forest Service Strategic Plan (FY 2008-2012) defines the mission of the Forest Service to sustain the health, diversity, and productivity of the Nation's forest and grasslands to meet the needs of present and future generations.

In the 1990s I was involved in a project my company had with Columbia Gas Transmission to drill a horizontal gas storage well in the Monongahela National Forest in West Virginia. The purpose of this well was to **replace the need for several vertical wells and the pipelines that they required and to MINIMIZE the disturbance of forest land.** The well was successful. If you went to the Monongahela National Forest today unless you were told which well it was you wouldn't know because on the surface it looks like every other well site. Except that this well site minimized the disturbance of forest land. Why shouldn't we expect the same logic to prevail in the George Washington National Forest?

New technology has allowed the natural gas industry to drill even longer horizontal laterals. What this means is that one horizontal well can now replace 10 or more vertical wells. This means even less disturbance of plants and animals in the forest. Isn't this a good thing? Our country gets the energy it needs, the United States government gets the royalty income from an even more efficient well and the forest suffers minimal disturbance. Sounds like a triple win to me. But your proposed land use plan prohibits this creating a loss for our country and its taxpayers. This also will have a negative impact on Virginia. Prohibiting this efficient development of natural gas can cost Virginia jobs, tax revenues and energy.

I understand that there are concerns about hydraulic fracturing. Again these are based more on fear than fact. Our industry has been fracturing wells for over 60 years. The process is NOT NEW. The reservoirs that our industry fractures are typically thousands of feet deep. The fresh water is a few hundred feet deep. Due to rock stresses it is impossible to frac through thousands of feet of rock to reach fresh water. Hydraulic fractures travel horizontally (parallel to the ground surface) when wells above about 1500 feet are fractured. We know this from the coalbed methane wells we fracture for mine degasification in southwest Virginia. In those wells people have actually observed the hydraulic fractures created underground so this isn't theory it is fact. The fresh water is also protected by multiple strings of casing that are cemented. Virginia has strict regulations on drilling and completions. The Virginia Division of Oil and Gas strictly enforces these regulations.

Horizontal wells are drilled and fractured on a routine basis in southwest Virginia. Most of these wells are currently fractured using nitrogen gas and little if any water.

On behalf of the Virginia Oil and Gas Association and its members I urge you to reject fear in favor of fact, science and sound engineering and to do what is right for Virginia and our Nation by permitting horizontal drilling and fracturing in the George Washington National Forest. We need the jobs, energy and tax revenues. This can be done with minimal impact to the environment and recreational uses of the forest. I will be happy to answer any questions you may have and even do an educational seminar on drilling and hydraulic fracturing if that would be helpful. Thank you.

I can be contacted at; Gregory.Kozera@nabors.com or gkozera@aol.com or at
304- 545-7259.

Sincerely,

Gregory Kozera PE
President, Virginia Oil and Gas Association

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Hydro-fracking
Date: Tuesday, October 11, 2011 12:34:51 PM

My wife and I fully support the proposed ban on hydro-fracking in George Washington National Forest. We own a home adjacent to the National Forest and directly on Briery Branch, which is a beautiful clean mountain stream. My whole family loves to swim in a beautiful swimming hole on this stream in the Summer. We would be devastated if something happened to impair the quality of the water.

We don't believe it is worth the risk to local water supplies of the nearby Harrisonburg metro area, which comes from this National Forest. Also, the huge trucks could destroy the rural character of our area.

Currently, the chemicals used in hydro-fracking are not even required to be disclosed to local Hazmat teams if there was a problem, which to us seems ridiculous. Clean water is a God-given right that should not be tampered with.

Sincerely,
Steve and Debbie Althaver and sons

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Washington Forest revision comment
Date: Wednesday, October 12, 2011 2:43:58 PM

To Whom it May Concern,

I urge the individuals in this organization to omit all detrimental action concerning our Washington National Forest. Please consider short term gains in the name of progress, with the extended advantages of leaving old growth and the land we have reserved for centuries unharmed. It is in the interest of the people in present day, and for numerous generations in our fore-thought to seek continuing preservation of the finite natural refuge, that is the Washington National Forest.

Sincerely,
Kaydee of the Roanoke Valley

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Comment on George Washington Plan Revision
Date: Wednesday, October 12, 2011 10:33:41 PM

Dear Sir/Maam,

I'm writing to provide comment on the draft Forest Management Plan for George Washington National Forest (GWNF).

There are two specific issues I'd like to address.

The first is regarding the draft plan's prohibition of hydrofracking/horizontal drilling in the GWNF. I support this prohibition.

The second relates to Management Area 12 D "Remote Back Country". The draft plan states these areas are "available for federal oil and gas leasing with a no surface occupancy stipulation. Other Federal minerals may be available on a case-by-case basis after full consideration of effects on semi-primitive recreation opportunities and values. The Laurel Fork area is not available for federal oil and gas leasing."

I would like to go on record opposing the federal oil and gas leases in Management Area 12 D. I live near this area and believe use of the area for federal oil and gas leases is incompatible with the other uses of Area 12 D. I believe there is too high a risk of damage to the environment in Area 12 D to permit federal oil and gas leases.

Thanks for the chance to provide comment.

Jeff Bolander

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: forests
Date: Wednesday, October 12, 2011 10:24:28 AM

De
r Staff of George Washington Forest Plan Revision: I encourage you to do a completeinventory of all old-growth forest areas, to protect and improve the whole restoration of our forest. W e need this now, in time for public participation, and as a scientific basis for the decisions to be made. Thank you for your work concerning this urgent matter.

HOWARD COUNTY BIRD CLUB
10970 Millbank Row
Columbia, MD 21044

October 11, 2011

George Washington Plan Revision
George Washington & Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019
comments-southern-georgewashington-jefferson@fs.fed.us

To the Forest Service:

The Howard County Bird Club offers the following comments on the draft forest plan revision. Members of the Howard County Bird Club have visited the George Washington National Forest, as it contains important habitat for birds and other forms of wildlife, and it is two to three hours' drive from our homes.

The Howard County Bird Club is an organization with 220 members in Howard County, Maryland. We are a chapter of the Maryland Ornithological Society, a nonprofit, statewide organization of people who are interested in birds and nature. Our purposes include promoting the study and enjoyment of birds, promoting knowledge about our natural resources, and fostering their appreciation and conservation. We offer field trips, bird counts, and conservation projects. The club has raised and donated $66,000 for wildlife habitat preservation during the past 30 years.

There is a great scarcity of roadless, wild lands in Maryland and its neighboring states. The GWNF is a vital part of our regional picture because of its roadless areas. We hope to see the new forest plan provide secure protection for such areas.

In itself, a forest plan may not be enough to keep the land from being impaired by new roads, energy development, or unforeseen development projects. Over the past four years, energy companies have been looking into the Marcellus Shale formation in western Maryland, with an idea of using hydro-fracturing techniques to exploit natural gas. The same industry may have its eye on the GWNF. If so, the Forest Service will be under serious pressure to open roadless areas to energy operations. Only clear statutory protection will give Forest Service managers the power to reject such overtures.

For that reason, we support the proposed 115,000-acre Shenandoah Mountain National Scenic Area, encompassing a series of roadless areas on Shenandoah Mountain between US 33 and US 250, lying west of the Shenandoah Valley. In a commendable effort over several years, the group Friends of Shenandoah Mountain has negotiated with different user groups and local businesses to find common ground. Birding and wildlife groups have joined with many other visitor groups to support the NSA proposal. We urge the Forest Service to seek Congressional action to establish this NSA and prohibit incompatible development within it.

Birding is one of the activities that attract visitors to Shenandoah Mountain. Some 250 species of birds are known to use this area, in a variety of habitats reflecting a range in

elevation from 1,600 to over 4,000 feet. The Virginia Birding and Wildlife Trail Guide, "Discover Our Wild Side," recommends eight sites for wildlife-watching on Shenandoah Mountain: North River loop, Switzer Lake area, Hone Quarry area, Briery Branch Dam and Lake, Flagpole Knob, Reddish Knob, Hearthstone Lake, and Todd Lake.

A key ingredient in the NSA proposal is the designation of four wilderness areas. The wilderness boundaries have been debated and revised through negotiations. Two of the units would be adjacent to the existing Ramseys Draft Wilderness, established in 1984: Bald Ridge and Lynn Hollow. The other two would be separate: Skidmore Fork and Little River. We urge the Forest Service to recommend the four areas for wilderness status in the final plan.

We also support wilderness designation for Laurel Fork, Big Schloss, Beech Lick Knob, Three Sisters, Three High Heads and Little Allegheny Mountain, and wilderness additions for Rich Hole, Rough Mountain, Three Ridges and Saint Marys West.

We hope to see the above proposals included in the Forest Service's final plan. We believe they are needed to protect the great public values of the GWNF for the next generation of visitors who will be coming from Maryland and other states in the Mid-Atlantic region.

Thank you for considering our comments on this project.

Sincerely,

Ward L. Ebert
President, Howard County Bird Club

FAIRFAX COUNTY WATER AUTHORITY
8570 Executive Pari\ Avenue
Fairfax, Virginia 22031-2218
www.fairfaxwater.org

CHARUS M. MURRAY
GENERAL MANAGER
TELEPHONE (703) 289-6011

STEVEN T. EDGEMON DEPUTY
GENERAL MANAGER
TELEPHONE (703) 289-6012

FAX (703) 698-1759

October 11, 2011

Mr. Kenneth Landgraf
Acting Forest Supervisor
U.S. Department of Agriculture, Forest Service
George Washington & Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019

Re: Draft Environmental Impact Statement
for the George Washington National Forest

Dear]'vlr. Landgraf:

The Fairfax County Water Authority ('Fairfax Water") appreciates the opportunity to comment on the Draft Environmental Impact Statement ("EIS") for the Revised Land and Resource Management Plan in the George Washington National Forest ("the Forest").

Fairfax Water is a public, non-profit authority that provides drinking water to nearly 1.7 million people in Virginia, or about one in five Virginia residents. Fairfax Water seeks to operate our water supply system to provide water of the highest quality possible. Lands within the Forest comprise about 8o/o of the entire drainage area upstream of Fairfax Water's drinking water supply intake on the Potomac River. Consequently, we have a great interest in the management of the Forest and its impact on the Potomac River. Including Fairfax Water customers, more than 4.5 million people in the Washington, DC metropolitan area rely on the Potomac River as their primary source of drinking water

It is well documented that forested watersheds provide an important function in protecting downstream water quality. Accordingly, we strongly concur with the statement in the EIS that"*Water continues to be one of the most important resources produced on the Forest."* (Page 1-9). For that reason we are concerned about the potential impact of oil and gas leasing activities in the Forest within the watershed upstream of our water supply intake.

It is imperative that decisions regarding oil and gas leasing be based on sound science and that the highest-level of protection be afforded sources of drinking water supply. The Forest Service proposal to prohibit the use of horizontal hydraulic fracturing techniques ("Hydro-Fracking") on oil and gas leases within the Forest is a sound, prudent decision given the uncertainty of water resource impacts of natural gas drilling through Marcellus shale formations. Natural gas development activities have the potential to impact the quantity and quality of Fairfax Water's source water through consumptive use of water, generation of wastewater with high levels of Total Dissolved Solids (TDS) and often unknown chemical "fracking-fluid" additives, land-disturbing activities associated with the well pad and related features, and the disruption of natural groundwater flow pathways. As you may be aware, the U.S. Environmental Protection Agency (EPA) has·initiated a study of hydraulic fracturing practices to better understand any potential impacts of hydraulic fracturing on drinking water and groundwater, with initial research results expected by the end of 2012 and a goal of completing a report by the end of 2014. The State of Maryland is also in the process of evaluating the impact of Hydro-Fracking activities on all natural resources. These studies (and others) will provide information on some of the key questions that must be addressed, including a complete evaluation of the life cycle of water used in Hydro- Fracking, from acquisition of the water to its ultimate treatment and disposal, and on the management measures that are required to protect sources of drinking water supply.

As you consider finalizing the EIS, we urge you to remember the familiar saying: *"An ounce of prevention is worth a pound of cure."* In the absence of sound science unique to the meteorological and hydrologic characteristics of the Forest region, we applaud your decision to employ caution on this important issue, and recognize that the Forest has a distinct role in protecting the headwaters of the primary Washington, D.C. metropolitan area water supply. Downstream water users and consumers will bear the economic burden if drinking \Vater sources are contaminated or the quality of our source water supply is degraded.

We hope that our comments will be seriously considered as you finalize the EIS.

Thank you for your attention to this important matter.

Sincerely,

J. Murray
General Manager

cc: Congressman Gerald Connolly
Jerry Johnson, Washington Suburban Sanitary Commission
Joe Hoffman, Interstate Commission on the Potomac River Basin
Stuart Freudberg, Metropolitan Washington Council of Governments

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Hydrofracking
Date: Wednesday, October 12, 2011 2:20:47 PM

I am against horizontal drilling of any kind in the George Washington Forest. Further studies need to be conducted and drilling regulations passes that will protect our water supply.

This is critical for our children's future. Once the forest has been damaged and gas wells established it will be too late. It's short sighted to make decisions that will have lasting damage for generations to come.

Chipley & David Harris

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Please support Alternative G for the GW Forest Plan Revision
Date: Wednesday, October 12, 2011 6:59:51 PM

The GW National Forest is a precious environmental asset, all the more important because of it's location within the very densely populated mid-Atlantic region. More than ever, it demands intelligent management, nurturing and protection.

Thank you for the many meetings and opportunities you've given the public to comment on the next GW Forest Plan Revision. In Preferred Alternative Plan G, the Forest Service has managed the difficult task of balancing many often conflicting goals and uses of the Forest advocated by a wide array of interests.

The forest provides drinking water for the Shenandoah Valley and is a major source of drinking water for millions in the greater Washington Metro area. It's a gigantic carbon sequestration resource, a critical asset in a time of climate change. A working forest, it provides renewable lumber - and jobs and income for the local and VA economy. And it's an astonishing recreational resource for the entire mid-Atlantic region, providing opportunities for remote back country hiking, biking, hunting, camping, winter sports and ATV recreation. Finally, it is an irreplaceable wildlife resource and sanctuary. Any diminution of forested areas must be carefully considered.

Preferred Plan G best balances all of these uses. The remote backcountry areas are an irreplaceable resource for both people and wildlife , and Plan G protects remote backcountry areas for people and animals alike. The mountain ridge tops on Great North Mountain are crucial to numerous migrating birds and maintaining continuous, uninterrupted and undisturbed ridge top habitat is critical to migrating birds, to bats and to forest bear populations. With the pressure of nearby growing and already dense population areas these ridge tops are a final, essential migration corridor, unsuitable for industrial scale wind projects.

Thanks to the Forest Service for all of your hard efforts to balance so many needs. Plan G is the best of all proposed alternatives.

Sincerely, GS

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Ban on Horizontal Natural Gas Drilling - "Fracking" in the Shenandoah Valley
Date: Wednesday, October 12, 2011 11:13:29 AM

I am writing to add my voice to those in opposition to the proposed horizontal natural gas drilling in George Washington National Forest.

The comments and petitions made by the Land, Air, Water Stewardship Action Group speak well to the dangers of this process. For years we have been witness to the end results of various measures by greedy corporations in the name of energy efficiency or fuel independence. Promises continue to be made that they will be responsible users of the land, that they will ensure jobs, and that they will ***cause no harm****. However, individuals and groups continue to petition courts in this country for compensation for the harm done to human health and well being and to the land, air, water, wildlife and eco-systems of the place they once called home.*

*We, here in the Shenandoah Valley of Virginia have a unique opportunity to learn from the past and make firm and lasting decisions to protect what is known as one of the most beautiful places in this country. We have the opportunity to "****JUST SAY NO!"*** *We have the opportunity to show by example that we are good stewards of this beautiful land with historic geologic significance and human historic significance.*

I ask that you disregard the flimsy promises of the greedy corporate world and place a higher value on being vigilant protectors of nature in all of its treasured form. Give your voice to the silent plea of land, air, water and wildlife.

Thank you,
Diane Osworth
New Market, VA

From:
To: FS-comments-southern-georgewashington-jefferson
Cc: comments-southern-georgewashingtonjefferson@fs.fed.us
Subject: Please save the George Washington National Forest
Date: Wednesday, October 12, 2011 10:05:45 AM

Thank you for preserving the forest which was put in trust for future generations as a refuge for wildlife and people. We feel it is vital to the health of our air, as well, already compromised in the valley of Virginia; we also love grandfather trees, who bespeak of things timeless, universal. They deserve our care and respect, along with the animals who live there. The ground also needs protection from fracking and disruption so that our water supply is kept as pristine as it can be in an already compromised state. There are already fewer fish who swim in the water.

We cannot take away what has been bought and paid for by our citizens as a guarantee for the future generations.

I dread thinking of a world where there are no longer healthy environments for people and wildlife, places where stately trees live and provide homes and health.

Thank you, Wistie Jobe,

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TEL. 540 289-9466 FAX 540 289-9406
mail@mpoa.org web: www.massanuttenvillage.com

October 12, 2011

TO: George Washington National Forest
FROM: Massanutten Property Owners Association
RE: Comments on proposed plan

At the September 17, 2011 meeting of the Massanutten Property Owners Association, we passed the following resolution regarding our comments for the proposed plan for the forest:

"Since the US Forestry Service has posted a draft management plan for the George Washington National Forest on the web, and since portions of the George Washington National Forest categorized as Management Area 120 "Remote Back Country" are adjacent to properties of the Massanutten Property Owners Association,

And since paragraph 120-015 of the draft management plan states these areas are "available for federal oil and gas leasing with a no surface occupancy stipulation. Other Federal minerals may be available on a case-by-case basis after full consideration of effects on semi-primitive recreation opportunities and values. The Laurel Fork area is not available for federal oil and gas leasing,"

And since federal oil or gas leasing (or other Federal minerals) on US Forest Service Land adjacent to MPOA property would be contrary and harmful to our community's interests,

Be it resolved that the MPOA submit comments to the US Forestry Service opposing federal oil and gas leases (an other Federal minerals) in the South Massanutten portion of Management Area 120 and,

Be it further resolved MPOA encourages property owners to submit their own comments to the US Forestry Service opposing federal oil and gas leases (and other Federal minerals) in the South Massanutten portion of Management Area 120 and,

Be it further resolved that MPOA encourages Great Eastern Resort Management Corporation to also submit comments to the US Forestry Service opposing federal oil and gas leases (and other Federal minerals) in the South Massanutten portion of Management Area 120."

Please accept this letter as the official comments of the Massanutten Property Owners Association in response to your request for public comment on the proposed plan.

Thank you for the opportunity to submit these comments for your consideration.

Sincerely,

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Betty L. Newell, President
Board of Directors

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Forest plan
Date: Thursday, October 13, 2011 8:27:59 AM

Please do NOT allow horizontal fracking in the national forest. There are not enough scientific studies done by neutral parties and many questions remain regarding the impact on our drinking water. Water is a finite resource we take for granted but someday we will all heartily wish we had paid more attention to water and keeping it clean and available. The ndustrialization of the landscape, the impact on wildlife will adversely affect the quality of life for all Virginians if fracking is allowed. It would be a good idea to do a review of vertical gas drilling too, looking at impacts on water, wildlife, recreational areas. Once we give up these things they are hard to reclaim. Man has had a history of leaping before fully understanding the impacts of his actions, taking a short term solution over long term planning and maintenance of quality of life over profit taking from those who can mess up the local environment and then leave. Thank you for taking my views into account.

Kathleen de los Reyes
Fishersville, VA 22939

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Natural Gas Leasing
Date: Thursday, October 13, 2011 12:13:25 PM

I respectfully submit to you my view that hydrofracking in the GWNF is insanity. The forest, our water, our nature must be protected from this incredibly dangerous technology. Please say no to hydrofracking in the GWNF and the state of Virginia!
Sincerely,
Shari D. Scofield

--
"One can't believe impossible things."

"I daresay you haven't had much practice," said the Queen. "When I was your age, I always did it for half-an-hour a day. Why, sometimes I've believed as many as six impossible things before breakfast."

-Alice in Wonderland

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Comment on Draft GWNF Plan
Date: Thursday, October 13, 2011 10:03:03 AM

Thank you for the opportunity to comment on behalf of Shenandoah Forum on the draft management plan for the George Washington National Forest.

Shenandoah Forum supports the ban on horizontal drilling (hydrofracking) for natural gas anywhere on the forest. This would be a great step in protecting our drinking water resources and preventing the industrialization of public forest lands. We would like to see a more thorough study of the impacts of vertical gas drilling, which is allowed on nearly all of the forest, with additional restrictions on vertical gas drilling, including a ban on drilling in local drinking water supply areas, priority watersheds and sensitive natural, scenic and recreation areas.

Shenandoah Forum supports the identification of drinking water supply areas and the expansion of protective buffers on streams and reservoirs. We would like to see all drinking water supply areas identified as priority watersheds and more defined management standards to protect priority watersheds, particularly limits on road construction.

Shenandoah Forum supports the ban on industrial wind projects on our sensitive ridgelines in the forest. We would like to see the ban expanded to include drinking water supply areas and key natural heritage areas, where industrial-scale windturbine facilities and road construction can degrade water quality, wildlife habitat and recreational uses.

Thank you again for the opportunity to participate in the revisions of the plan for the George Washington National Forest.

Sincerely,

Kim Woodwell, Executive Director
Shenandoah Forum
P.O. Box 654
Woodstock, VA 22664
540.984.7003

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: George Wash National Forest
Date: Wednesday, October 12, 2011 11:02:16 PM

Dear Sirs/Madams,

I would like to submit the following comment to be considered in the plan for the George Washington National Forest.

I would like for water quality protection be of the highest importance in the draft and final plans.

Specifically, there should be no horizontal gas drilling allowed anywhere. Vertical gas drilling needs more thorough study and should not be carried out anywhere where drinking water supplies are present. or in priority watersheds, and sensitive natural, scenic and recreational areas.

In addition, our drinking water supplies should be protected by 1) expanding protective buffers around streams and reservoirs. 2) All local drinking water supply areas should be identified and protected as priority watersheds, and 3) very specific management standards should define activities, particularly road construction that are allowed and prohibited in the priority watersheds.

Thank you,

Katharine Layton

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: HYDROFRACKING BAN
Date: Thursday, October 13, 2011 11:10:19 AM

I would highly recommend the ban on hydrofracking because of the ground water contamination that it could cause
And the environmental impact it would have on our wildlife, streams and scenic area. (We don't take chances on our environment.)

Very concerned citizen of rockingham cty.,
Jerry f. black &

Board member for 30 years of
Massanutten chapter of trout unlimited 30 years

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: opposition to hydrofracking
Date: Thursday, October 13, 2011 12:31:06 PM
Attachments: Hydrofracking - October.doc

Though the attached document summarizes my opposition to hydrofracking on private land, everything that I say is equally applicable to the GWNF. The Administration of the GWNF does not have the monetary resources to battle multinational corporations once irreparable damage has been done to the Forest. My personal opinion is that it would be criminally negligent to allow any hydrofracking in the GWNF prior to the publication of the U.S. EPA report on hydrofracking that will not be available till sometime next year.

Sincerely,

James J. Leary

October 13, 2011

To Whom It May Concern:

I am strongly opposed to hydrofracking as it is currently done. My opinion is based upon my background as a PhD, analytical chemist with a 37 year career in academia during which I was very concerned about the environment and did a small amount of consulting for a major petrochemical company.

My opposition to hydrofracking is based upon the "Precautionary Principle." Because considerable misinformation has been disseminated about this term, allow me to define it. "The Precautionary Principle: When a new technology carries suspected harm, scientific uncertainty about the scope of the harm should not necessarily prevent precautionary action." In order to avoid nit-picking over the definition of the word "new," and in the interest of expedience I will contend that the Precautionary Principle is equally valid with or without the inclusion of this word.

There should be zero doubt about the potential for harm to the environment associated with hydrofracking. No one except an individual who lives far from the area where hydrofracking has been performed or who will benefit monetarily from this process could possibly ignore the countless reports of environmental disasters caused by the coal and petrochemical industries in recent years. I have some familiarity with the problems that hydrofracking and mountain top mining have caused in West Virginia, and in virtually all cases the local residents whose environments and, in some cases, lives have been destroyed will be asked to PROVE to a multibillion dollar corporation that it was that particular corporation that was responsible for their problems. The thought that an individual or even a group of individuals, can compete with the legal resources associated with a large corporation is ludicrous. When money and greed are involved; Government regulation is the only way to ensure that the environment and the citizens are protected.

Everyone now agrees that BP should not have been allowed to threaten the environment with the Deep Water Horizon project. Similarly, hydrofracking even on a test well basis should be outlawed until the companies that wish to utilize this technology have put money in escrow accounts that would be adequate to cover all claims associated with potential environmental damage AND the Federal Government should be responsible for overseeing the establishment of baseline levels of water pollutants (including methane) prior to and subsequent to any hydrofracking operations.

Sincerely,

James J. Leary
Professor Emeritus

From:	
To:	FS-comments-southern-georgewashington-jefferson
Cc:	
Subject:	Letter Concerning Horizontal Drilling & Hydraulic Fracturing in the GW National Forest
Date:	Thursday, October 13, 2011 1:26:19 PM
Attachments:	image87de9a.jpg@7e510b4a.30c94f6b George_Washington_National_Forest.doc

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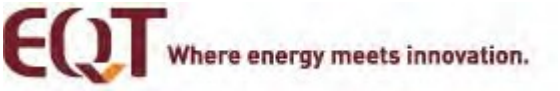
Please see the attached letter.

Thanks,

Junior Shupe



www.eqt.com

Junior Shupe – VOGA Member

October 13, 2011

George Washington National Forest Plan Revision
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, Virginia 24019

I am writing in opposition to the proposed ban on horizontal drilling found in the Draft Forest Plan for the George Washington National Forest. The proposed ban is not supported by the kind of scientific data or analysis that would be necessary to declare off-limits a potentially valuable resource that could meet our nation's and the Commonwealth of Virginia's future energy needs. Comments like "may impact water quality" are not strong enough reasons to ban techniques that have been incorporated safely and effectively in many other areas of the country for years, including Virginia, without incident.

Hydraulic fracturing is a technique that has been used over one million times since the the1940's without a documented instance of contamination, a fact confirmed by the EPA's own Lisa Jackson when she testified before congress saying that hydraulic fracturing doesn't affect water. Therefore there is not one shed of vetted scientific data that would support the proposed plan's assertion that drilling in the Forest would potentially affect water resources.

Furthermore, the proposed plan specifically bans horizontal drilling, a technique that has been utilized for 20 years in North America with amazing results. Drilling horizontally is the most effective and environmentally friendly way to harvest the resource. Horizontal wells expose more of the formation, which allows for production of a greater percentage of the natural gas. Also multi-well-single-pad drilling, the current dominant technique made possible through horizontal drilling, minimizes surface disturbance by concentrating wells in one location. This concentration of wells also limits the amount of pipelines, which further minimizes surface disturbance.

Lastly, the 900,000 acres that comprise the Forest is very close in size to Virginia's current natural gas producing area in the southwest corner of the State. Over the past 20 years, Virginia's natural gas industry has invested over $2 billion in the Commonwealth, paid over $600 million in royalties, paid over $150 million in severance taxes plus millions of additional dollars in real estate taxes and mineral taxes, while currently providing 3,000 good paying jobs. During that same 20-year period over 5,000 wells were drilled, under a very rigorous state-supported regulatory regime, without one water

contamination issue. How can the Forest Service consider a ban that would forego all of the above benefits without the science to back it up?

In closing, I urge that you reject the ban on horizontal drilling in the Draft Forest Plan for the George Washington National Forest. Instead, consider the nation's energy needs that can be met by safely drilling in the Forest and producing clean-burning natural gas.

Sincerely,

Junior Shupe

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Use of National Forest
Date: Thursday, October 13, 2011 6:08:47 PM

To Whom it May Concern;

Please ban Horizontal Drilling (Hydrofracking) for Natural Gas
I fully support the **prohibition** of this type of drilling **anywhere** in the forest.
Cracking the earth's crust to obtain more fossil fuel is dangerous, energetically inefficient, and destructive of ecosystems and drinking water sources. The potential of this kind of damage is practically irremediable. Please do your best to ban all drilling. If drilling is allowed, please see that it is banned in drinking water supply areas, in any area where aquifers supply water to the surface of the forest, in priority watersheds, and in sensitive natural, scenic and recreation areas.

Public Drinking Water Protection
Protective buffers on streams and reservoirs should be greater than 100 feet. Please do your best to make sure that drinking water is protected.
Please identify and designate all local drinking water supply areas as priority watersheds and put more energy into resource management that would protect priority watersheds and limit road construction in the National Forest.

Establishment of Wind Farms
Of the options available to create energy, I favor the establishment of wind farms in areas that are not sensitive, and where the building of roads will not threaten watersheds and sensitive ecosystems. I would like to see West Virginia benefit from the creation of energy from wind (which is relatively clean, low maintenance, and has a short energy payback time) instead of from coal and hydrofracking, which are dirty, dangerous and damaging.

Thank you for your consideration of these important matters,

Carollyn S. Oglesby
Scholar in Residence
Integrated Science and Technology
James Madison University
Harrisonburg, VA, USA

October 14, 2011

Dear Ladies and Gentlemen,

I am writing to oppose the part of your plan that would ban hydraulic fracing and horizontal drilling in the George Washington National Forest. The George Washington National Forest in Virginia is approximately the same size area as the current natural gas producing area in the Southwest portion of the Commonwealth. While the producing potential in GWNF has not been determined, any restrictions on natural gas production would likely cause the Commonwealth to miss out on the economic impact already seen in Southwest Virginia.

Over the past 20 years the Virginia gas industry has invested over two billion dollars in capital expenditures; paid over six hundred million dollars in royalties; paid over one hundred fifty million dollars in severance taxes in the producing counties; paid real estate and mineral taxes, payroll taxes, and sales taxes that all contribute to a robust trickle-down economic effect on the economy, and created more than three thousand good paying jobs for Virginia workers.

The proposed ban is without basis and would prevent Virginia from enjoying a similar benefit should development of the resource become available. The proposal is without basis because there have been no documented cases in the active gas producing areas of the Commonwealth where water has been damaged. The proposal is without basis because the forest service hasn't completed an environmental impact statement that could document damage. Even the Environmental Protection Agency Director has testified before Congress that there is no documented evidence of water damage from hydraulic fracturing.

Baring such activity on public lands in the Commonwealth is a meritless taking of a resource that could have significant economic value to Virginians and our Country. The Department of Energy has recently found that the drilling practices utilized today are appropriate and safe.

Therefore, the preferred option in the Forest Service plan should be rejected and an option selected that would allow development should be selected instead. The Forest Service could stipulate reasonable safeguards that would enable development while protecting the natural resources.

We urge you to seriously consider our Nations energy needs and reject the preferred option. To do otherwise is to turn a blind eye to our country's future energy needs and the national security implications of this short sited proposal.

Sincerely,

Bryon Helton

COMMONWEALTH OF VIRGINIA

Department of Mines, Minerals and Energy Wasbinlon
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Rtchmoud. Virgania B219-363& (804)
692-3200 I'AX (804) 692-3237
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October 13, 20I I

Maureen Hyzer
Forest Supervisor
US. Forest Service
5162 Valleypointe Parkway
Roanoke, VA 24019-3050

Re: George Washington National Forest Draft Revised Land and Resource Management Plan

Dear Ms. Hyzer:

The Virginia Department of Mines, Minerals and Energy (D➢ has reviewed the subject plan and offers the following comments:

Geologic resources. The objective of protecting geologic resources that have scientific, scenic, paleontologic, ecological or recreational value is appropriate. The identification of two areas, Devil's Garden and Rainbow Rocks, for special management and protection is noteworthy. However, based on the varied geology of the region, it is likely that a greater number of geologic resources worthy of protection exist \within the Forest. Among these arc known occurrences of lee Age features, fossils, and landforms. We recommend a more proactive approach in the form of a complete inventory and prioritization of geologic resources on GWNF lands.

Geologic hazards. The Draft Revised Plan identifies general categories of geologic hazards such as landslides, sinkholes, and areas of potential ground collapse. The Plan recognizes that such hazards must be mitigated in managing Forest lands, but does not identify specific areas of geologic hazards, even where such areas have been identified by detailed geologic mapping. We recommend, therefore, a more proactive approach in the form of a complete inventory of geologic hazards on GWNF lands. Such an approach is necessary both to protect visitors and to reduce the offsite impact of hazards originating on Forest lands.

Mineral resources. The Draft Revised Plan recognizes that mineral resources present in the forest should continue to be made available for development. DMME archives indicate that a wide variety of mineral resources, including crushed stone, sand and gravel, coal, chemical limestone, iron, manganese, brick shale, mineral pigments, and glass sand, may be present in the Forest. Energy-critical minerals such as

certain Rare Earth Elements (REEs) may also be present. The Plan contains adequate allowances for the development of mineral resources. Appropriately, the protection of private mineral rights remains a priority. Standards for reclaiming disturbed sites (36 CPR 228) pursuant to an approved reclamation plan are adequate. DMME considers the reclamation of abandoned mine sites for protection of public safety to be a priority. The Plan as presented would enable the continuation of these activities.

Mineral materials. We agree that the use of mineral material sources on Forest lands for Forest Service projects is an appropriate means to reduce costs and reduce the overall impact of projects when compared to the alternative of using off-Forest sources.

Oil and gas resources. Although no producing oil or gas wells currently exist in the Forest, the Plan recognizes that the potential exists for future drilling and production. The acreage technically available is generous and appropriate. The No Horizontal Drilling stipulation, however, is overly restrictive. It is likely that much of the natural gas resources present in the G'.Vl>.Tf are not found in large, confined conventional subsurface reservoirs but are trapped in shale, coal, or other "tight" rock formations. To access these gas resources, the rock formation must be stimulated, usually by hydraulic fracturing and usually along the path of a horizontal well. The wells are drilled horizontally to maximize the amount of reservoir rock exposed in the wellbore, thereby greatly increasing the efficiency with which the gas can be extracted.

Hydrau lic fracturing, which dates back to the 1940s, invol ves using pressurized fluids to stimulate or fracture rock or shale formations to release the natu ral gas. The type, composition and volume of fluids used depend largely on regional geologic structure and the specific geologic formation and target for a well. Virginia's geology is different than that of other states where, for example, the Marcellus shale exists and problems have been reported related to hydraulic fracturing. The United States Geological Survey bas indicated a :'viarcellus play for Virginia is on the outer periphery of the major structural body of the shale. As a result, concerns that have been raised regarding conditions in other states are less likely to be valid in the Commonwealth.

Hydraulic fracturing has been utilized in approximately I,800 shale and sandstone wells, both vertical and horizontal, drilled in Southwest Virginia. Tbe fluids used in this process are either nitrogen or water-based. Most often, pressurized nitrogen-based foam has been used to fracture gas deposits in Virginia. Nitrogen composes roughly 75% of the solution, with water and sand added to total approximately 99.5% of the fluid's ingredients. Some wells do require water-based fluids. In these instances, water and sand alone typically compose *99.5%* of these types of fluids.

We anticipate water-based hydraulic fracturing fluids would be used in the Virginia Marcellus formation, but at less volume than reported by neighboring states due to formation characteristics. In either case, the trace ingredients in the fluids, which are mostly neutralized in the subsurface, are typically used as friction reducers, gelling agents and antibacterial agents. The primary constiruents of concern in fluids returned to the surface are chlorides and other salts. Additives remain a highly diluted constituent in the returned waters.

DMME gas and oil regulations would apply to any wells drilled within GWNF. These regulations require submission and approval of a stimulation plan. This plan must address the specifics of how the well will be stimulated, including fluids to be used, additives, and other factors. DMME gas and oil permitting requires the operator complete site-specific assessments of the surface and underground

conditions to be affected by drilling, to ensure that operation will not cause off-site disturbances or pollution to surface or groundwater.

To date, there have been no known instances of surface water or groundwater degradation from hydraulic fracturing in Virginia. This is largely due to casing and fluid management requirements that must be met when drilling and stimulating a well. There are multiple layers of steel pipe and concrete extend ing through groundwater zones that provide protection and prevent the intrusion of water into a gas flow stream. Cement casing is required at least 300 feet below the surface or 50 feet beneath the deepest known groundwater horizon, whichever is deeper. Typically, hydraulic fracturing is conducted in fom1ations that are at least 500 feet, and often thousands of feet (for shale) below fresh water zones. These requirements ensure protection of groundwater from well stimulation fluids.

DMME regulations also protect water quality once the fluids return to the surface. Typically, and contrary to some reports, only about 15-30% of injected fluids return to the surface. Once returned to the surface, regulations require produced fluids to be stored in lined pits until ready for permanent disposal. All permitted gas sites are "closed loop" systems. No off-site disturbances or discharges are allowed. Fluids are normally disposed of in an off-site permitted facility such as a Class II EPA injection well. Well operators are also increasingly reusing or recycling stimulation fluids in order to minimize disposal.

DMME gas and oil regulations also govern on-site road and gathering pipeline construction and operation. Construction must meet all erosion and sediment control, storm water, and reclamation requirements, and are covered under performance bonds.

As mentioned above, Virginia's geology differs from that in neighboring states. Because Virginia's portion of the shale formation is not as thick as that in Pennsylvania, West Virginia, and New York, less water is necessary to fracture the rock. Additionally, the lateral portion of a horizontal well in other states may reach distances of 7000 to 8000 feet. The shale structure in Virginia is projected to allow laterals of only 3500 to 5000 feet A typical water-based well stimulation in the north requires anywhere from to 3 to 6 million gallons of water. Hydraulic fracturing in the Commonwealth can typically require from 50,000 to 300,000 gallons for a vertical well. Horizontal wells using nitrogen-based fluids require even fewer gallons of water. It is not uncommon for these wells to be stimulated with Jess than 35,000 gallons of water. Note that the No Horizontal Drilling stipulation would not prohibit the practice of hydraulic fractu.ring. Hydraulic fracturing could still be carried out in vertical wells.

DMME would closely monitor stimulation methods and volumes of water utilized should the Marcellus play prove viable in the GWNF. DMME will work with DEQ to ensure that water withdrawals and disposal of produced fluids do not harm surface or ground waters. DMME will be able to provide the DEQ with data on volume of water used for well stimulation, so that the DEQ can assess if groundwater and surface water withdrawals require regulatory control.

Horizontal drilling is a proven technology for increasing the reach of a single well in a producing horizon. for increasing production from that horizon, and for minimizing surface disturbance. Horizontal drilling has been used successfully for hundreds of wells in Virginia with no adverse environmental or public health impacts. Two potential undesirable outcomes may result from the No Horizontal Drilling stipulation. The first is that existing oil and gas resources in the Forest will be rendered uneconomic and will therefore remain unavailable to the citizens of the U.S. The second possible outcome is that high future prices will cause the Forest's natural gas resources to become extremely valuable, to the point that

companies desiring to develop lhese resources will be forced to driU a large number of vertical wells to gain access to !he gas, ra!her !han a much smaller number of horizontal wells. The resull would be a much greater dis!Urbance of surface acreage in !he Forest, and hydraulic fracturing would almost certainly be used to stimulate these wells. We recommend, lherefore, the removal of the No Horizontal Drilling stipulation.

Wind energy. The plan states that "generation of power from wind and solar energy may be national forest special uses of the future" and that "wind energy applications are considered a request for a special use penni!." The Plan states that areas have been identified where wind development would not be compatible with management of oilier resources, and that there are opportunities to evaluate potential wind development on some suitable ridges of the GWNF. The Forest Service intends to evaluate wind development on a project-specific basis after a specific request is submitted to the Forest Service. The following Management Prescription Areas have been recommended by the Forest Service as not suitable for consideration of wind energy development: Wilderness (LA); Recommended Wilderness Study Areas {1B); Special Biological Areas (4D); Research Natural Areas {4B}; Special Geologic Areas {4CI); Shenandoah Mountain Crest – Cow Knob Salamander Area (8£7); Indiana Bat Protection Areas (8E4a, 8E4b}; Appalachian Trail Corridor {4A); Blue Ridge Parkway Scenic Corridor (7F); Remote Backcountry Areas (12D); Mount Pleasant National Scenic Area (4F).

Forest Service staff has communicated that, while the Forest Service recognizes the importance and value of the wind resources at locations throughout the Forest, the Service itself lacks the expertise and resources to conduct a detailed technical analysis or the potential for wind development. Thus, the recommended Plan does not provide an analytical approach in its consideration of wind energy. Rather, the strategy employed was to simply identify land areas where wind development would be absolutely prohibited, even areas that might present opportunities \vilhout conflict, but within which sensitivities overshadowed the ability of the Forest Service to adequately assess the suitability of wind energy development.

Forest Service staff has stated !hat !he combined area in which wind energy could be considered totals approximately 450,000 acres. This value does nor consider any of !he technical constraints that would limit quite significantly !he total area available for wind energy development. The Virginia Center for Wind Energy at James Madison University has applied preliminary GIS analyses to determine where, wilhin the Prescription Areas that have NOT been recommended for prohibition of wind energy development, the wind resource as quantified on wind maps developed by AWS Truepower and the National Renewable Energy Laboratory would be suitable for utility-scale wind energy development, and also within a prescribed maximum distance to available transmission lines. The application of these two constraims reduces the total area that is realistically available for wind energy development to approximately 46,000 acres. If Roadless Areas are removed from consideration within these acres, this figure is reduced by art additional 30%. A more detailed analysis that also takes into account !he slope of terrain, !he actual available capacity of transmission, the accessibility of sites, and olher factors would reduce lhese estimates even further.

A ralher conservative estimate is that 100 acres is required per each large wind turbine to ensure adequate spacing. The preliminary analysis presented here suggests !hat a total of approximately 320 wind turbines might be permissible in !he GWNF under the current Draft Revised Plan, but this number would likely be reduced significantly once a more rigorous analysis is conducted, possibly by as much as 90%. Thus, a total installation capacity of 32 large wind turbines is all that might be available for wind

development in the GWNF according to the Plan that is currently recommended by the Forest Service. This equates to an estimated total installed capacity of 64 to 80 MW, which represents an extremely small fraction of the total wind energy available within the GWNF.

Therefore, we recommend that:

- The Draft Revised Land and Resource Management Plan for the George Washington National Forest be modified to allow for applications for wind energy projects along ridges in the following Prescription Areas: Blue Ridge Parkway Scenic Corridor (7F); Remote Backcountry Areas (12D); Mount Pleasant National Scenic Area (4F), with recognition that these areas require special consideration with respect to viewshed and sound impacts.
- The Draft Revised Land and Resource Management Plan for the George Washington National Forest incorporate language that recognizes that the evaluation of applications for wind energy development requires special expertise and analytical resources and forms an evaluation committee with representation among the key stakeholders who can bring this special expertise to bear during evaluation of applications.
- The Draft Revised Land and Resource Management Plan for the George Washington National Forest recognizes that the Commonwealth of Virginia has developed GIS-based analytical tools that have been peer-reviewed and are designed and suitable for wind energy assessments and will task the committee described in the previous bullet to review and adapt said tools to provide scientifically-grounded techniques for determining the suitability of wind energy projects proposed within the George Washington National Forest.

Thank you for this opportunity to provide input into your planning process.

Sincerely,

Conrad T. Spangler, IIJ
Director

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: suppport protection of Geo. Washington and Jefferson National Forests
Date: Friday, October 14, 2011 7:16:58 AM

Dear Sirs,

I support the proposed ban on horizontal natural gas drilling in GWNF. We need to keep this area free of commercial exploitation and protect our air quality while limiting truck traffic.

We need to protect our drinking water supply at all costs. Accidental contamination due to gas drilling, clear cutting roads through the forest is unacceptable. These natural resources were protected for a reason. They belong to we, the people NOT commercial interests.

Please continue all your efforts to protect the fish and wildlife habitat here in Virginia by keeping it rural and remote.

Again, vertical gas drilling puts our air water and land at risk. I ask you to increase scrutiny!

Thank you,

Kathleen Pantaleo

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: please stop hurting our world.
Date: Thursday, October 13, 2011 4:15:45 PM

Although the ban on horizontal fracking outlined in the Draft Forest Land and Resource Management Plan is a welcome step in the right direction, all fracking should be banned in the George Washington National Forest.

Even more conventional forms of natural gas drilling (non-horizontal fracking) can deplete and contaminate local water, damage the environment and threaten public health. Fracking is exempt from key federal water protections and overwhelmed state regulators largely oversee the practice.

Fracking poses an unacceptable risk to our pristine national forests, tourism and agriculture industries, and public drinking water. All fracking should be banned from George Washington National Forest.

lisa kingsley

George Washington National Forest - Public Workshop Worksheet

October 12, 2011
Jack Wilson

1. What in the Draft Forest Plan would you most like to see NOT change, and why?

Retain strict prohibition of horizontal hydrofracking and expand prohibitions to include all forms of hydrofracking.

Hydrofracking has the same potential for catastrophe common to other methods of energy production, despite using the most sophisticated, up-to-date technology. Recent examples include Appalachian mountaintop removal, the Fukushima nuclear disaster, and BP's gulf oil spill.
While hydrofracking is newer and less understood than other extraction technologies, production methods are considered trade secrets and cannot be appropriately evaluated by either the government or the public.
Hydrofracking poses a direct threat to the water-table and soil biota.
This could have a particularly disastrous effect on the fungal community.

2. What in the Draft Forest Plan would you most like to see change, and why? Be as specific as possible.

Recognize the central role of Fungi in the forest and plan appropriately.

Anticipate the vast progress in our understanding of fungus that will occur over the 10-15 year life of the plan.

Plan for stewardship of the whole forest with:
1) At least one member of the Fungal Kingdom as a Management Indicator Species (MIS) – I suggest Armillaria genus.
2) At least one *Special Biological Area – Fungal* (the only current areas are botanical or zoological)
3) An expanded lichen monitoring program based on the existing *Forest Inventory and Analysis Program*, but one that includes local communities, schools and recreational users.
4) A Forest Service Research/Education Station dedicated to Fungi of the Eastern Forests located near Elkhorn Lake in the GWNF (North Ranger District).
5) At least one staff specialist (mycologist) for the GWNF.

3. What are the possible effects of this change on other resources or other users of the Forest?

The health of all animals and plants are dependent on fungus.

Fungus is also central to watershed health, pollution mitigation and monitoring, timber health and scenic/recreational use. (See *Effects of Fungus* on the following page.)

4. Considering future potential biological, social and economic conditions, what are the impacts of this change for future generations?

More than 10% of the biomass of the GWNF is FUNGUS.*

Fungus is neglected (virtually ignored) in the Draft Forest Plan, the Draft EIS and in current management. Therefore, fungus can be expected to provide at least 20% of the opportunity for resources and mitigation during the 10-15 year planning period.
12 of the 13 "Significant Issues" of the Draft EIS require an appropriate level of attention to this Missing Kingdom.

Future generations will inherit a Forest of Fungus, plan for it.

Ignoring this Kingdom will have a significant negative impact.
Incorporating the critical role of Fungi in the Draft Plan and Draft EIS will have a significant positive impact.

Effects of Fungus – A Partial List

Reasons to include "good" fungus in Draft EIS and Draft Plan:

1) Healthy fungal communities filter silt from open areas, such as road beds, improving watersheds.
2) Healthy fungal communities retain moisture reducing risk of fire and impact of drought.
3) Healthy fungal communities digest hydrocarbon pollutants improving watersheds.
4) Healthy fungal communities digest pathogenic microorganisms protecting human health.
5) Healthy fungal communities mitigate the effects of acid rain.
6) Healthy fungal communities cool ground water protecting native trout populations.
7) Entomophaga maimaiga is a natural mycopesticide pathogenic to Gypsy Moths.
8) Healthy fungal communities provide low-impact recreational opportunities.
9) Healthy fungal communities can provide significant sources of income to local economies (see #15).
10) Fungus is the critical "first responder" after natural disaster.
11) Lichens are sensitive indicators of climate change and air pollution.
12) Every species of oak requires a symbiotic fungus.
13) Repopulation of American Chestnut will require specific fungal symbiants.
14) Old Growth Climax Fungi are an important potential resource for the pharmaceutical industry, pesticide industry, for chemical industry and for natural health practitioners.
15) Common in GWNF, Turkey Tail, *Trametes versicolor*, fungus generates over $200M/year in Asia.
(Compare with $208M landowner timber sales in Virginia in 2009.)

Reasons to include "bad" fungus in Draft EIS and Draft Plan:

1) White nose disease is a fungus decimating endangered bat colonies in GWNF.
2) Chestnut blight is a fungus that has virtually wiped out the American chestnut.
3) Amillaria Root Rot is pervasive in North America and a major cause of oak decline.
4) Canker-rot fungi cause serious damage to hardwoods, especially the red oaks.
5) Annosus Root Rot is a rot of conifers that occurs over much of the Eastern U.S.

***Accurate measurements of total fungal biomass in the GWNF are not available and estimates vary. I believe 10% is a conservative estimate. Estimates in the Pacific Northwest run as high as 30%.**

Certainly, if 10% of the GWNF is unaccounted for in the Draft Plan and MIS, it is reasonable to estimate that 20% of the forest's potential over the next 10-15 years is being ignored.

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Do Not Allow Fracking in George Washington National Forest
Date: Friday, October 14, 2011 7:54:30 AM

All fracking should be banned in the George Washington National Forest. Even more conventional forms of natural gas drilling (non-horizontal fracking) can deplete and contaminate local water, damage the environment and threaten public health. Fracking is exempt from key federal water protections and overwhelmed state regulators that largely oversee the practice.

Fracking poses an unacceptable risk to our national forests, tourism and agriculture industries, and public drinking water. All fracking should be banned from George Washington National Forest.

Thank you.

Margaret Wood

AAPL
AMERICA'S LANDMEN

4100 Fossil Creek Blvd
Fort Worth, TX 76137-2791
817-847-7700

October 13, 2011

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

Subject: Comments on EIS No. 20110174, Draft EIS, USFS

Gentlemen,

Attached are the American Association of Professional Landmen's Comments on EIS No. 20110174, Draft EIS, USFS due October 17, 2011. Please review and acknowledge receipt. Thank you.

Respectfully Submitted,

American Association of Professional Landmen

Jack C. Richards, CPL, President

Attachment

AAPL

AMERIC:A" s lANDMEN

SUBMITTAL OF COMMENTS BY THE AMERICAN
ASSOCIATION OF PROFESSIONAL LANDMEN

TO THE UNITED STATES FOREST SERVICE
RE: DRAFT LAND AND RESOURCE MANAGEMENT PLAN
GEORGE WASHINGTON NATIONAL FOREST
ALLl GHANY, AMHERST, AUGUSTA, BATH, BOTETOURT, FREDERICK,
IDGHLAND, NELSON, PAGE, ROCKBRIDGE, ROCKINGHAM, SHENANDOAH,
AND WAJRREN COUNTIES, VIRGINIA AND HAMPSIDRE, HARDY, MONROE AND
PENDLETON COUNTIES, WEST VIRGINIA

The Ameri,can Association of Professional Landmen (AAPL) appreciates the opportunity to comment on the Draft Land and Resource Management Plan (Draft Plan) currently under consideration for the George Washington National Forest (GWNF) in Virginia. The oil and gas industry employs hundreds of thousands of this country's citizens, and the AAPL represents approximatly 13,500 members actively involved in the industry. AAPL's mission is to promote the highest standards of performance for all land professionals, to advance their stature and to encourage sound stewardship of energy and mineral resources. Through their daily activities, AAPL members are engaged with the mineral and surface owners of the United States, including the United States itself when dealing with public lands such as the GWNF.

AAPL is greatly concerned with the Draft Plan's prohibition of horizontal drilling to develop oil and/or natUJral gas within the GWNF. This proposed prohibition lacks any basis in science and lacks the appearance of any attempt by the Forest Service in this particular instance to understand *the* nation's oil and gas industry. The Draft Plan and accompanying Draft Environmental Impact Statement (DEIS) appear mostly to address the horizontal drilling of naturaJ gas wells and ignore lhe fact that the DEIS supporting documents demonstrate that there are no indications that hydraulic fracturing has caused any environmental harm. The naturaJ gas industry in the United States is an American success story. The recently released report from the ShaJe Gas Subcommittee of the Secretary of Energy Advisory Board (Report) states that "Natural Gas is a cornerstone of the U. S. economy, providing a quarter of the country's *total* energy."[1] The Report continues that the growth in natural gas production has brought lower prices, domestic jobs and the prospect of enhanced national security. The Report further states that in excess of200,000 jobs, both direct and indirect, have been added to the nation's economy over the last few years as a result of shale gas development.

Additionally, the Draft Plan and DEIS prohibition of horizontal drilling would preclude the use of multiple-well drilling pads. The use of such pads would result in a recognizable and desirable

effect, being a smaller footprint and less surface impact within the Forest. In addition to less surface impact of the pad, less truck traffic, pipelines and other related development infrastructure would be required. The aforementioned report recognizes horizontal drilling as a technological breakthrough and recommends the optimal use of such multi-well pads for the reasons mentioned.

The DEIS and the Frequently Asked Questions (FAQ) found on the GWNF website state that horizontal drilling and the accompanying "hydrofracturing" threaten to impact the water quality of the GWNF. Again, these claims lack a credible basis and are not presented in the context of actual total water use by residential, commercial and industrial users Alternative A to the DEIS, that provides for horizontal drilling, projects slightly less than one billion gallons of water would be used over a period of fifteen years. Although this is a significant amount of the water, the U. S. Geological Survey reports that the 2005 statewide use of fresh water in Virginia was in excess of seven billion gallons per day.[2] The Draft Plan and DEIS also do not recognize the advancements in recycling water operations used in the drilling and completion of horizontal wells as referenced in the Shale Gas Subcommittee report and reported by various industry sources and the FracFocus website (fracfocus.org).

The Forest Service appears to justify the horizontal prohibition in the answer to FAQ No. 16 by stating that the folding and faulting of the geologic formations in the area are not conducive to horizontal drilling as is the Marcellus Shale formation. This statement seems extremely short sighted. Most of the areas producing natural gas and oil today by horizontal wells were not considered productive just a few years ago. Horizontal drilling is used in situations other than "Marcellus" type drilling, such as "tight sand" formations in the Mid-Continent region of the United States. In these tight sands and similar situations, horizontal wells are able to utilize and connect the natural fractures found within the productive formations. Many of these situations are found in folded and fractured formations such as those described above. The prohibition under the Draft Plan and the Forest Service's stance seem to indicate that no further geologic evaluation by the industry is even necessary, much less desired.

This nation's oil and gas industry has been very resourceful in developing the energy needed for the country. It is a much regulated industry at both the state and Federal levels. On Federal lands, such as those within the GWNF, not only are operators required to follow state regulations but also regulations of the Bureau of Land Management and of the Surface Management Agency, such as the Forest Service. These regulations require the use of industry best practices (Best Practices) for well integrity and surface impact. In addition to the Best Practices, certain unique situations require additional efforts to lessen the impact of oil and gas development. Quite often, these unique situations require the use of either directional or horizontal drilling.

AAPL members are most often tbe first representatives of the industry to engage landowners and the public illl any oil and gas project. The members are charged with acquiring the oil and gas leases and acquiring the necessary surface access to develop our nation's oil and natural gas, and in doing so treating all stakeholders fairly. In the case of the GWNF, AAPL members would be engaged wilth both the Bureau of Land Management and the Forest Service in acquiring leases and access. The proposed prohibition under the Draft Plan would effectively eliminate the lands of the GWNF from being able to contribute to the nation's energy needs. Many Federal lands across the country today are unfortunately off limits to development by the industry. The prohibition 10f horizontal drilling as found in the Draft Plan would in effect place the lands of the GWNF off limits to the industry as well.

AAPL recommends thai the Final Land and Resource Management Plan incorporate the multiple-use goals of the Forest Service as found elsewhere in the country. The multiple-use goals would most certainly include mineral development using Best Practices methodologies, including horizontal drilling. Elsewhere in the nation, the National Forests ofter the combined benefits of 1recreation, timber harvesting and mineral development where they co-exist without detriment to the environment. AAPL feels most strongly that the potential for mineral development in a regulated environment should be the same within the GWNF. The ability to evaluate and develop using horizontal drilling under the highly regulated regime would be in the best interest of the industry, the nation, and the local communities.

Respectfully Submitted,

American Association of Professional Landmen

Jack C. Richards, CPL, President

[1] "Ninety-Day Report-August 11, 2011, The Shale Gas Production Subcommittee of the Secretary of Energy Advisory Board

[2] Estimated Use of Water in the United States in 2005, Circular 1344U.S. Department of Interior. U. S. Geological Survey

I am writing in opposition to the proposed ban on horizontal drilling found in the Draft Forest Plan for the George Washington National Forest. The proposed ban is not supported by the kind of scientific data or analysis that would be necessary to declare off-limits a potentially valuable resource that could meet our nation's and the Commonwealth of Virginia's future energy needs. Comments like "may impact water quality" are not strong enough reasons to ban techniques that have been incorporated safely and effectively in many other areas of the country for years, including Virginia, without incident.

Hydraulic fracturing is a technique that has been used over one million times since the the1940's without a documented instance of contamination, a fact confirmed by the EPA's own Lisa Jackson when she testified before congress saying that hydraulic fracturing doesn't affect water. Therefore there is not one shed of vetted scientific data that would support the proposed plan's assertion that drilling in the Forest would potentially affect water resources.

Furthermore, the proposed plan specifically bans horizontal drilling, a technique that has been utilized for 20 years inNorth America with amazing results. Drilling horizontally is the most effective and environmentally friendly way to harvest the resource. Horizontal wells expose more of the formation, which allows for production of a greater percentage of the natural gas. Also multi-well-single-pad drilling, the current dominant technique made possible through horizontal drilling, minimizes surface disturbance by concentrating wells in one location. This concentration of wells also limits the amount of pipelines, which further minimizes surface disturbance.

Lastly, the 900,000 acres that comprise the Forest is very close in size to Virginia's current natural gas producing area in the southwest corner of the State. Over the past 20 years, Virginia's natural gas industry has invested over $2 billion in the Commonwealth, paid over $600 million in royalties, paid over $150 million in severance taxes plus millions of additional dollars in real estate taxes and mineral taxes, while currently providing 3,000 good paying jobs. During that same 20-year period over 5,000 wells were drilled, under a very rigorous state-supported regulatory regime, without one water contamination issue. How can the Forest Service consider a ban that would forego all of the above benefits without the science to back it up?

In closing, I urge that you reject the ban on horizontal drilling in the Draft Forest Plan for the George Washington National Forest. Instead, consider the nation's energy needs that can be met by safely drilling in the Forest and producing clean-burning natural gas.

From:
To: FS-comments-southern-georgewashington-jefferson
Cc: twarner@rangeresources.com
Subject: George Washington National Forest Plan Revision
Date: Thursday, October 13, 2011 3:46:55 PM

Ladies and Gentlemen:

I am writing to voice strong opposition to your proposed ban on horizontal drilling and hydraulic fracturing in the George Washington National Forest. I believe the basis behind this proposal is founded in myth and hype instead of sound scientific data. Over the years, we have drilled several wells in Jefferson National Forest in a very responsible manner and without incident for EQT. The ban would also negatively impact future job creation and investment in Virginia.

Horizontal wells are able to expose more gas producing formation from a single well bore than a conventional vertical well, thus reducing surface disturbance and environmental impact. Banning horizontal drilling would require multiple vertical well pads and more surface disturbance to access the same amount of gas/oil.

My field of expertise is not in hydraulic fracturing, so I will leave that for others to discuss and comment on. However, I have never seen nor been aware of any negative impacts from the procedure.

On behalf of Gasco Drilling and its employees I strongly urge you to act in a responsible manner concerning the future of job growth and investment for all Virginians and reject this proposal.

Regards,

Chris Ratliff
Gasco Drilling
Mobile: 276-701-7175
Office: 276-964-4117(9)

Letter# 401

VIRGINIA NATIVE PLANT SOCIETY

Conserving Wild Flowers & Wild Places

Comments of the Virginia Native Plant Society on
The Draft Revised Land and Resource Management Plan and EIS for the
George Washington National Forest

October 15, 2011

The VirginiaNative Plant Society (VNPS) is a statewide organization whose purpose is to further appreciation and conservation of Virginia's native plants and habitats. Our members are nearly 2,000 strong across the Commonwealth of Virginia. Our highest priority is to conserve our native flora. The following are our comments on the April 2011 Forest Plan Revision and EIS.

Two thirds of the more than 3,000 native vascular plants in Virginia can be foUI1d in the George Washington National Forest's vast and mountainous terrain. This extraordinary biodiversity is arrayed in numerous ecological communities to form over a million acres of habitat for wild creatures from mammals to birds to insects. As the global climate crisis changes their habitats, those creatures need the corridors and watersheds of the Appalachian chain just to survive as they migrate northward along with the changing plant life.

We are pleased with the Forest Service's plan to maintain or increase populations and occurrences of northeastern bulrush, swamp pink, Virginia sneezeweed, shale barren rockcress, and smooth coneflower through protection and maintenance of existing sites.

We are also pleased that the Forest Service intends to continue to cooperate with the Virginia Natural Heritage agency to make appropriate adjustments to "Management Prescription Area 4D-Special Biological Areas" through the Forest Plan amendment process as new rare community location and management information becomes available, as well as to maintain records of rare cornmllility locations and conditions across the forest. Project areas are to be surveyed for rare communities prior to implementing projects that have the potential to negatively affect them.

We are pleased with the designation of Key Natural Heritage Community Areas including Frozen Knob and Peters Mountain.

We applaud the Forest Service for its ban on horizontal hydrofracturing.

The Virginia Native Plant Society endorses the September Consensus Agreement (CA) of the stakeholders group. We commend the spirit of cooperation of that group. We are extremely pleased that many of the areas that we had concerns about would be protected if theCA recommendations are accepted by the U.S. Forest Service.

(over)

We are particularly supportive of the recommendations of the stakeholders for congressional or administrative designations for the network of core areas including protections for the Shenandoah Mountain Area and the Kelley Mountain SBA designation

We strongly support the CA recommendations for increased wilderness protections and the recommendation that "all Inventoried Roadless Areas not allocated to a congressional designation be designated as Remote Backcountry and managed consistent with the 2001 Roadless Area Conservation Rule."

However, we do have some remaining concerns which are outlined below:

- Our highest priority is the protection of all of the Special Biological. Areas proposed by Virginia Division ofNatural Heritage.

- We continue to believe that the U.S. Forest Service should protect all areas identified in the Virginia's Momltain Treasmes publication by designating them as unsuitable for timber harvest, new road building and surface-occupying oil and gas drilling.

- We are concerned that the revised plan does not adequately protect the entire Peters Mountain North area identified as old growth by Virginia Division ofNatural Heritage.

- We strongly support wilderness designation for Lame! Fork and Three Sisters.

- We do have concerns about those Potential Wilderness Areas that would be allocated to "Mosaics of Habitat" While we support habitat management for declining species, disturbances in those areas would make them vulnerable to invasion by exotic species. We strongly support the proposed National Forest System Invasive Species Management Policy and look forward to its final publication and implementation.

Thank you for the opport:Lmity to comment.

Sincerely,

Sally Anderson, President
Virginia Native Plant Society

From:
To: FS-comments-southern-georgewashington -jefferson
Subject: Comments on Draft LRMP and EIS for GWNF
Date: Friday, October 14, 2011 4:16:44 PM
Attachments: MOSGeorgeWashingtonOct2011.doc
9ACE4FD8-F468-422D -85EC-33E573F2B998.png

MARYLAND ORNITHOLOGICAL SOCIETY, INC.

George Washington Plan Revision
George Washington & Jefferson National Forests
5612 Valleypointe Parkway
Roanoke, VA 24019
comments-southern-georgewashington-jefferson@fs.fed.us

October 14, 2011

To the Forest Service:

The Maryland Ornithological Society appreciates the opportunity to submit these comments on the draft Land and Resource Management Plan and environmental impact statement (EIS) for the George Washington National Forest. The GWNF is important to Marylanders because there is no national forest in Maryland. Our members visit those in neighboring states, most often the GWNF and the Monongahela. These forests provide a resource of roadless areas with intact, uninterrupted wildlife habitat that supports a diverse population of birds and other forms of wildlife.

The importance of the GWNF to Marylanders is demonstrated by data in the EIS (page 3-197) indicating that of the 9.2 million people within 75 miles of the GWNF, 2.7 million are in Maryland.

MOS is a statewide nonprofit organization established in 1945 and devoted to the study and conservation of birds. Currently we have 15 chapters and approximately 1,500 members. Some are scientists and naturalists, but our membership includes people of all ages and all walks of life, from physicists to firefighters, legislators to landscapers. Birding is one of the fastest growing types of outdoor recreation. MOS members travel to national forests and other federal lands on birding and nature-watching vacations throughout the United States. We spend money on food, lodging, guide services, books, and souvenirs to support the local economy wherever we go.

Wild Lands Are Vulnerable

The increasing pressures for development of publicly owned lands in the Mid-Atlantic region leave the national forests vulnerable. Forest plans in themselves do not give Forest Service managers an adequate defense against these pressures. Already our members have seen wildlife habitat in the Allegheny National Forest damaged by roads built for oil and gas drilling. The same is happening in western Maryland, and it will also be a threat to the GWNF.

Logging in roadless areas of the GWNF or in old growthstands would mean new roads that that would fragment wildlife habitat. Commercial wind development along ridgelines could interfere with important bird migration routes and spoil the scenic vistas now enjoyed by visitors to the Shenandoah Valley. The best defense is to seek statutory protection for the finest roadless areas and wildlife areas of the GWNF, and channel development into areas that have already been disturbed.

National Scenic and Recreation Areas

We favor the recommendation for a Shenandoah Mountain National Scenic Area (NSA) of 115,000 acres, as proposed by Friends of Shenandoah Mountain and many endorsing organizations. The NSA would give statutory protection to the wild lands in the segment of Shenandoah Mountain between US 33 and US 250, west of Harrisonburg and Staunton. The NSA would bar oil and gas leasing, logging, new roads, or commercial wind developments. Shenandoah Mountain is known as an excellent birding area. The Virginia Department of Game and Inland Fisheries in its guidebook "Discover Our Wild Side" recommends several areas for birding here.

We compliment the citizens' groups and stakeholders in Virginia for their long and careful consideration of different management options for these extraordinary wild lands. Many conflicts have been resolved through negotiations. The Shenandoah Mountain proposal is supported by groups representing diverse types of outdoor recreation and by many local businesses.

We favor National Recreation Area status for the northern part of Massanutten Mountain, a wild tract that is the closest part of GWNF to residents of Maryland and Washington DC. We support the proposed Big Schloss National Scenic Area, to protect the outstanding wild lands of this tract, with wilderness designation for ThreeHigh Heads within the NSA. We also support the proposed Kelley Mountain – Big Levels National Scenic Area, encompassing 12,895 acres south of Waynesboro. It has been recommended by Friends of Shenandoah Mountain and many other Virginia citizens' groups.

Wilderness

At present six areas are protected as wilderness on the GWNF, totaling 42,674 acres and representing about 4 percent of the total acreage of the forest. Those wilderness designations were made by Acts of Congress between 1984 and 2000. The last forest plan was adopted in 1993. Since then, the need for wild places has become much stronger. We have seen at first hand the huge growth in bird and nature-watching. The GWNF, situated within a two-hour drive of 10 million people, now has more visitors each year than many national parks. We believe more of the forest must be protected as wilderness, to assure that future visitors will find its wild places intact. Wilderness is a very scarce resource in the Mid-Atlantic region, and qualified areas should be protected.

Virginia citizens' groups have devoted years to studying roadless areas of the GWNF, testing them against the criteria for designation as wilderness, and negotiating with diverse stakeholders to resolve potential conflicts entailed in wilderness designation. We urge the Forest Service to support this good work by adopting wilderness recommendations that will strengthen the hand of future forest managers in resisting pressures for development.

The Forest Service has listed 37 "potential wilderness areas" totaling 372,631 acres (EIS, Table C4.1 on page 3-223). But the proposed plan (Alternative G) proposes only a pitiful four units totaling 20,300 acres (Little River and additions to Rich Hole, Ramseys Draft and Saint Mary's

West). We urge substantial improvement to this proposal. Under the Forest Service proposal much of the rejected land would be managed for nonwilderness purposes as described in Table C4.3 (EIS, page 3-228) – some for "remote character," some under prescriptions "not designed to maintain the remote character of the area" (EIS, page 3-227). Much of the wilderness character of these lands would be lost during the years this plan will be in effect. That should not be allowed to happen.

Within the Shenandoah Mountain NSA we recommend the designation as wilderness of four units that have retained their wild character, namely Little River, Ramseys Draft Addition, Skidmore Fork, and Lynn Hollow. Detailed recommendations with negotiated boundaries have been submitted to the Forest Service by the Virginia Wilderness Committee.

We also recommend wilderness designation for Beech Lick Knob, Laurel Fork, Three Sisters and Little Allegheny Mountain, and wilderness additions for Rich Hole, Rough Mountain, Three Ridges and Saint Mary's West, as proposed by the Virginia Wilderness Committee.

Roadless Areas
The inventoried roadless areas of the GWNF are a vitalresource for wildlife, watershed values, and recreation. Parts of the IRAs should be recommended for wilderness, as mentioned above. The rest should be managed strictly under the Roadless Area Conservation Rule to bar new roads. Obsolete travel routes should be decommissioned and restored to nature.

Energy Development
We support the Forest Service proposal to prohibit directional drilling. This will prevent the impacts associated with hydraulic fracturing ("fracking"), which is being used elsewhere in the development of the Marcellus Shale.

We also urge that the GWNF be closed to industrial wind energy development. Here in Maryland, Governor Martin O'Malley wisely has barred wind development from all state-owned lands, including prominent mountains within state forests in western Maryland which are comparable to the mountains of the GWNF.

Conclusion
The George Washington National Forest is a national treasure. Its greatest value toresidents of our entire region is as a reserve of natural wild land. Nothing should be allowed in the new forest plan that would allow logging in roadless areas or add new roads or developments incompatible with protection of wildland values. Just the opposite: more protection for those values should be added through wilderness recommendations and designation of national scenicareas. In the final plan, we urge the Forest Service to include the protection measures recommended above.

Sincerely,

Kurt Schwarz
MOS Conservation Chair

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: hydrofracking in GWNF
Date: Friday, October 14, 2011 11:34:15 AM

We support the prohibition of hydrofracking anywhere in the GWNF to protect our drinking water and watershed area and prevent industrialization of our public lands.

We request a thorough study of the impacts of vertical gas drilling and restrictions of vertical gas drilling, including a ban on drilling in local drinking water supply areas, priority watersheds, and sensitive natural, scenic and recreation areas.

We support the identification of drinking water supply areas and the expansion of protective buffers on streams and reservoirs.

We request that all local drinking water supply areas be identified as priority watershed and for there to be more defined management standards to protect priority watersheds, particularly limits on road construction which degrades water quality.

We support the ban on industrial wind projects in sensitive ridgelines in the forest, including the Shenandoah Mountain Crest and remote backcountry areas.

Sara Godshall

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Forest Plan comments
Date: Friday, October 14, 2011 3:25:04 PM

From: Ron Falyar
Friends of the North Fork of the Shenandoah River
PO Box 746
Woodstock VA 22664

October 14, 2011

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

To whom it may concern:

These comments on the Draft Forest Plan for the George Washington National Forest(GWNF) are being filed on behalf of the Friends of the North Fork of the Shenandoah River, which is a community-based volunteer organization representing 400 members dedicated to protecting and enhancing the North Fork of the Shenandoah River.

The GWNF drains 1.1 million acres, including 24 per cent of Rockingham and Shenandoah Counties, which the North Fork of the Shenandoah River and its tributary streams flow through. The fate of both the quality and quantity of water in the North Fork of the Shenandoah are inextricably linked to management of the GWNF. The forest also provides drinking water for almost 40,000 residents of the North Fork watershed. We believe the proposed draft plan represents an improvement over the existing plan and commend the Forest Service staff for their efforts in developing the proposed plan.

We strongly support the prohibition against horizontal drilling for natural gas on the national forest. Additionally, we suggest all gas drilling on federally-owned mineral rights be banned in drinking water supply areas, priority watersheds, eligible scenic river segments, research natural areas and special biological areas. These areas are particularly vulnerable to impacts from activities associated with gas development, especially road building and other construction activities.

We also support the identification of drinking water supply areas and the expansion of riparian corridors along steams and reservoirs as proposed in Alternative G. We would like to have all drinking water supplies be further protected by identification and management as

priority watersheds, including limits on road construction in priority watersheds.

Due to the necessary road development and other land disturbing activities required for industrial-scale wind energy development and the high potential for water quality and stream habitat degradation to occur, we request a ban on these facilities in identified drinking water watersheds.

We appreciate that the existing draft has taken significant steps to ensure management of the forest in a manner that protects sensitive aquatic features. We believe the above suggested changes will help protect additional aquatic resources in and near the George Washington National Forest.

Sincerely,

<!--[if !vml]--> <!--[endif]-->
Ron Falyar,
President, Friends of the North Fork of the Shenandoah River

Dedicated to the study, enjoyment and conservation of Virginia's birds.

October 15, 2011

Maureen Hyzer, Forest Supervisor
George Washington National Forest
5162 Valleypointe Parkway
Roanoke, VA 24019-3050

Dear Supervisor Hyzer:

Thank you very much for the opportunity to provide comments on the draft Land and Resource Management Plan (draft plan) for the George Washington National Forest (GWNF).

The Virginia Society of Ornithology (VSO) has long promoted the study and conservation of the birds of Virginia, as well as increased public awareness and interest in them. We are also an advocate for the conservation of all wildlife and natural resources in the Commonwealth.

As you know, publicly owned lands are critical for the long term conservation of wildlife and natural resources in the United States. The recent study and report in which the U.S. Forest Service participated, *The State of the Birds 2011*, documents the role public lands must play in the long term protection and conservation of native bird populations. As the report indicates, national forests in particular are key for birds in the eastern United States.

As the largest national forest in the East, at more than 1 million acres in size, the GWNF plays a vital role in safeguarding and conserving our bird populations. Because of the forest's conservation importance, we would like to discuss two issues that we believe are not adequately addressed in the draft plan.

The draft plan recommends four areas and 20,300 acres for Wilderness Area consideration. It does not recommend any areas for National Scenic Area or other congressional designations. We believe these recommendations are sadly inadequate in scope. The VSO endorsed the Shenandoah Mountain Proposal several years ago and continue to believe it provides a strong framework for permanent protection of critical areas in the GWNF. We encourage you to use the Shenandoah Mountain Proposal as the

basis for Wilderness and National Scenic Area recommendations in the final Land and Resource Management Plan.

We are also very concerned about the potential for industrial scale wind energy projects that the draft plan allows. We recognize the need to shift to renewable energy sources for producing electricity in the United States. However, we have grave concerns about siting large wind turbines on the ridgelines of the eastern mountains in general, and believe they are inappropriate in the GWNF.

The draft plan identifies 11 management prescription areas, totaling approximately 456,000 acres, as unsuitable for utility scale wind energy development. This leaves roughly 610,000 acres of the GWNF available for consideration of wind energy projects. Of this, 39,236 acres of ridge crest, is judged "suitable for consideration of wind energy development" in the draft plan (based on areas classified in wind power classes 3 through 7). Due to the inevitable impact on forest wildlife and habitat, we believe that all areas of the GWNF are inappropriate for large scale wind energy projects. While the benefits of this type of development in GWNF have not been demonstrated, the tradeoffs in terms of direct impacts to wildlife, habitat fragmentation, earth disturbance, water resource degradation, and industrial intrusion on forested mountain landscape are clear.

Any consideration of wind energy development on the GWNF should involve National Environmental Policy Act review, including objective assessment of both costs and benefits. The Forest Plan should include an explicit standard requiring that any permit application for any project related to wind energy development shall include reviewable data and analysis that quantifies any purported benefits associated with the particular proposed project.

Although large-scale wind energy development has been promoted as part of the solution to some of our most pressing energy and environmental challenges, the limited available analysis indicates that wind energy is, at best, only a small part of the solution. Wind energy is highly diffuse and intermittent, and wind energy development requires a large footprint to generate relatively small amounts of electricity. A 2007 National Research Council report, Environmental Impacts of Wind Energy Projects, found that the most-ambitious level of onshore wind development could satisfy only 3.5 to 19% of the projected increase in U.S. electricity demand through 2020 and offset U.S. carbon emissions by only 1.2 to 4.5%. Given that 95% of the U.S. onshore wind resource is located in the western part of the country, the potential contribution of wind energy development on central Appalachian ridges is substantially less (National Research Council, 2007. Environmental Impacts of Wind Energy Projects. Washington, DC: National Academy Press, http://www.nap.edu/catalog/11935.html.)

In addition to other environmental damage associated with wind energy development, impact with wind turbines is a significant cause of bird mortality. In 2009, the U.S. Fish and Wildlife Service estimated that 440,000 birds are killed at wind farms each year (A. Manville, 2009, *Towers, Turbines, Power Lines and Buildings – Steps Being Taken by the US Fish & Wildlife Service to Avoid or Minimize Take of Migratory Birds at These*

Structures, Proceedings of the Fourth International Partners In Flight Conference). Sadly, the direct mortality of birds by wind turbines has not been adequately studied to this point in time. This lack of data is true of the ridgelines of the Appalachian and Alleghany Mountains, where migrating songbirds and raptors often occur in great numbers.

It is widely known that many raptors, and golden eagles (*Aquila chrysaetos*) in particular, are susceptible to collisions with turbine blades. Recent research has shown that the population of golden eagles in eastern North America is small, and that a large proportion of these birds both travel through and overwinter in the Appalachian Mountains. Although the golden eagle is rare in the eastern U.S., recent research has shown that wintering golden eagles often concentrate on forested ridges in the central Appalachian region. These are the same areas that show the most potential for wind energy development in the GWNF. Given the significant risk to these birds posed by wind development, areas of coincident golden eagle use and potential wind energy development should be carefully determined before any decisions are made to allow wind development in the GWNF. We also recommend adherence to the requirements of the Bald and Golden Eagle Protection Act a prerequisite for wind project consideration.

The potential impacts of wind turbines to bat populations are even less studied and known than potential impacts to birds. The federally endangered Indiana bat (*Myotis sodalis*) occurs in the GWNF. The federally endangered Virginia big-eared bat (*Corynorhinus townsendii virginianus*) occurs on private lands near the GWNF, though no known hibernacula or summer roosts have been documented in the GWNF. The bats likely fly over and forage in the GWNF though (Appendix F, draft Environmental Impact Statement for the draft plan).

Of tremendous concern is the white-nose syndrome (WNS) that is decimating bat populations in the northeastern U.S. and beyond. Since first observed in 2006 in New York, it has been blamed for the death of more than 1 million bats and has spread to many states, including Virginia and West Virginia. It is a threat to many species of bats, and is known to occur in Indiana bats. Scientists fear WNS is a threat to Virginia big-eared bats as well, as the fungus that causes the syndrome, *Geomyces destructans*, has been found in caves where the bat hibernates (Smithsonian Conservation Biology Institute website, 09 Oct. 2011, http://nationalzoo.si.edu/scbi/SpeciesSurvival/VirgianiaBigEaredBats/default.cfm). Given existing threats to bat species, particularly these two endangered species, the additional threat posed by industrial scale wind energy development should not be allowed in the GWNF.

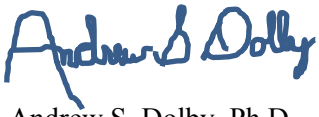
It is important to note that birds and bats are threatened not only by mortality from collisions with wind turbine blades, but from degradation, fragmentation, and loss of habitat as well. Development of industrial wind facilities (generally requiring 2-5 acres of cleared land for each industrial sized wind turbine), transmission-line corridors, and corresponding access roads will negatively impact populations of many wildlife species through habitat loss and damage.

One of the perceived benefits of wind energy production is a reduction in greenhouse gas emissions when generating electricity, thus reducing a primary cause of global warming. It is very ironic then, that some of the most critical natural areas required by flora and fauna in adapting to climate change – the ridgeline and high elevation areas of the eastern mountains – will be removed if wind energy facilities are developed. The need for animal and plant populations to move along both elevation and latitudinal gradients in response to changing climate conditions will be severely impacted by eliminating or degrading these very habitat areas.

We hope you will consider our views in developing the final Land and Resource Management Plan. For the reasons discussed, we believe that industrial scale wind energy should not be allowed in the GWNF. We also believe that much stronger Wilderness and National Scenic Area recommendations are needed.

Thank you again for the opportunity to provide input on the management plan for the GWNF.

Sincerely,



Andrew S. Dolby, Ph.D.

President, Virginia Society of Ornithology
1411 Franklin Street
Fredericksburg, VA 22401
540-654-1420

George Washington National Forest Land Use Plan
Public Comment on EIS Significant Issues

October 12, 2011
Jack Wilson

Copied below are excerpts from the GWNF Draft EIS, April 2011: Pages 1-8 to 1-13. (Black 10 pt.)
This section of the Draft EIS lists all Significant Issues identified during the planning process.

Unfortunately, neither the Draft EIS nor Draft Plan addresses fungi in any significant way.
"Fungi are one of the most important and widespread components of the biosphere, and are essential for the growth of over 90% of all vascular plants." Biomass recycling and the origin of phenotype in fungal mycelia - Ruth E Falconer, James L Bown, Nia A White, and John W Crawford

My submission documents the importance of fungi on 12 out of 13 Significant Issues. (Blue 12 pt.)
A short bibliography follows.

Summary of Significant Issues
Public involvement is a key part of the planning process. Providing for public comment helps identify what people want from the national forests in the form of goods, services, and environmental conditions. Issues submitted by the public, as well as from within the Forest Service and other federal and state agencies, guided the need to change current management strategies and formed the basis for developing alternatives in the DEIS.

Access
ISSUE STATEMENT: Forest management strategies may affect the balance between public and management needs for motorized access to Forest lands (for recreation, hunting, management activities, fire suppression) and protection of soil and water resources, wildlife populations and habitat, aesthetics, forest health, and desired vegetation conditions.

BACKGROUND: System roads are the primary means of motorized access to the national forest. However, they are also a source of concerns including the environmental effects of roads (on water quality, soil erosion, and habitat) and the social effects on remote settings. Some people would like to see the motorized access to the national forest increased, especially during hunting seasons for big game, for other recreational uses, or to meet forest management needs. Other people, however, feel that road construction should be limited and some existing roads decommissioned. Other comments were made that new roads should not be constructed for the purposes of logging or for off-highway vehicle use. The amount of motorized access should be balanced with wildlife habitat needs, the need to provide both motorized and non-motorized recreational opportunities, the need to protect soil and water resources, the need to have management access, and the financial capability of maintaining safe and environmentally secure roads.

Tahuya State Forest Reclamation Test Site (*Mycelium Running: How mushrooms can help save the world,* Stamets p.82) demonstrated the value of road reclamation with the common, native Oyster Mushrooms. Such projects have improved aesthetics, reduced sediment flow, retained moisture, removed hydrocarbon contaminants, reduced pathogenic bacteria and rebuilt soil. The technique uses native fungus to improve habitat, expand recreational opportunities while potentially providing a source of Non-Timber Forest Products. Run-off filtered through natural mycelial mats reduces water temperature improving native Brook Trout habitat. Not only does this alternative require no additional funds, cost of decommissioning is half that of conventional techniques.

Watersheds, Soil and Water Quality, Riparian Resources and Aquatic Diversity

ISSUE STATEMENTS: Management activities may affect soil quality, water quality (surface and groundwater) and riparian resources, including drinking water watersheds and those watersheds with streams impaired due to activities off the Forest. Management activities may affect the maintenance and restoration of aquatic biodiversity and may affect species with potential viability concerns.

BACKGROUND: Providing favorable flows of water was the main objective of the Organic Administration Act that created the forest reserves and of the Weeks Act that allowed the purchase of lands for national forests in the eastern U.S. Water continues to be one the most important resources produced on the Forest. A number of communities in Virginia and West Virginia obtain their drinking water from the National Forest, whether their Summary of Draft EIS and Draft Plan George Washington National Forest April 2011 S-5 water supply watershed is completely within the Forest boundary or their supply is a river that is downstream from the Forest. The Forest is also an important component of the Chesapeake Bay watershed. There are streams within and downstream of the Forest that have impaired water quality. Most of these impairments are due to acid deposition or to agriculture and none have been attributed to management activities on the Forest. Water quality and aquatic systems can be affected by acid deposition, roads, trails, past storm events, insects and disease, non-native invasive species and other disturbances. Streams on the Forest provide habitat for a number of species at risk, including brook trout and the James spinymussel. The projections for climate change in this area indicate an increase in temperature, which could affect aquatic species, especially trout populations. Climate change projections are more uncertain on whether precipitation will increase or decrease
in the southeast over the next 30-100 years but droughts or extreme weather events each would have impacts to future water quantity and quality conditions. Climate change could also increase acid deposition effects on soil productivity. Currently, the biggest concerns for aquatic habitats on the Forest are sedimentation, future sources of large woody debris for self-maintaining diverse habitat components, canopy cover to maintain water temperature regimes, impacts from roads, and acid rain.

In addition to the Tahuya State Forest Reclamation Test Site mention above, the Field Demonstrations of Mycoremediation for Removal of Fecal Coliform Bacteria and Nutrients in the Dungeness Watershed (*PNWD-4054-1, SA Thomas, et. al.)* proved the value of natural fungal systems in watershed health. This EPA sponsored study concluded:
The benefits of the mycoremediation treatment application to a bioretention cell or other type of site (e.g., stream bank, riparian buffer) include the following:

1) a technology based on natural systems
2) only native fungal species used; can locally source all materials (plants and fungi)
3) minimal handling and low maintenance
4) visible improvement to a site
5) non-toxic byproducts; no secondary waste streams produced
6) protects local water quality mobile and flexible; no structures, no minimum batch size
7) economical
8) effective at reducing fecal coliform and nutrients when properly designed
9) applicable to a variety of other contaminants (e.g. PAHs, PCBs, metals)

Terrestrial Biological Diversity

ISSUE STATEMENT: Forest Plan management strategies may affect the maintenance and restoration of the diverse mix of terrestrial plant and animal habitat conditions and may affect species with potential viability concerns.

BACKGROUND: Ecological communities provide the foundation for biological diversity. Ecosystems identified on the Forest include ecological communities that predominate on the landscape (e.g. Central Appalachian Dry Oak-Pine Forest); communities that are declining, rare, or unique (e.g. Caves and Karstlands); and communities that provide habitat for species with potential viability concerns (e.g. Special Biological Areas). For the GWNF, management of ecological communities primarily involves the use of timber harvest and fire to influence vegetation

composition and structural diversity of habitats. Some comments were concerned about the current age class distribution on the forest being too skewed toward the mid- to late-successional habitats and that management is needed to provide a mosaic of habitats, especially early successional habitat, which is needed by many species. They cited bird and animal species in decline that require early successional habitat at some point in their life cycle. Others thought the focus on the GWNF should be on providing habitat for species requiring late successional habitat or large home ranges since these conditions are rarer on private lands. They stated that private lands can provide for early successional habitat needs and natural disturbances can create openings on the Forest. Some comments identified the importance of the oak-hickory community in the Central and Southern Appalachians for species diversity and are concerned about oak regeneration and the continuity of future hard mast production.

Fungi are diverse and successional. Those species of fungi symbiotic with the American Chestnut should be studied and encouraged as this important species is reintroduced into the forest. Chestnut symbiants that did not become extinct during the Chestnut Blight will be critical to the chestnut's successful recovery.

"It is now known that the majority of vascular plants – including all oaks – form mycorrhizal partnerships with fungi. In some instances, the association is so essential to the plant that it cannot survive without its fungal partner. Macrofungi Associated with Oaks of Eastern North America, Binion et. al., p.x
The presence of viable fungal inoculum appears to be crucial to the survival of seedlings on stressed sites. (Abler in Fungi in Forest Ecosystems, Cripps, p.288).
At one well studied site, Cedar Camp, *"adding less than half a cup of soil from the root zone of a healthy conifer plantation to each planting hole doubled growth and increased survival of conifer seedlings by 50% in the first year following outplanting. By the end of the third year, only those seedlings receiving soil from the plantation were still living".* D. A. Perry in Restoration Forestry, Pilarski, p. 89.

Special Biologic Areas designated in the plan have associated rare and potentially valuable fungus. These endangered fungal species should be addressed in the Draft EIS and Draft Plan.

White-nose Syndrome in bats (*Geomyces destructans)* is mentioned in the Draft EIS and is a fungi that affects the endangered Indiana Bat.

For the reasons noted the GWNF needs at least one *Special Biological Area – Fungal. T*he only current areas are botanical or zoological.

Old Growth
ISSUE STATEMENT: Forest management strategies may affect the potential biological and social values associated with the abundance, distribution and management of existing and future old growth.

BACKGROUND: Nearly all the lands that became the George Washington National Forest had been cut over at least once before becoming National Forest System lands. However, in many areas of the Forest, stands of trees have reached ages and structural conditions that qualify as "old growth" under the current definitions used in the Southern Region of the Forest Service. Old growth provides both biological and social values. Old growth communities provide large den trees for wildlife species such as black bear, large snags for birds and cavity nesters, and large cover logs for other wildlife. Ecologically, old growth provides elements for biologic richness, gene conservation, and riparian area enhancement. Old growth areas provide for certain recreational experiences, research opportunities, and educational study. Other areas have associated historical, cultural, and spiritual values. Some may never visit an old growth site but will receive satisfaction from just knowing that it exists. On the other hand, old

growth areas can be a source of large-diameter, high-value hardwoods, which are limited in supply and in high demand for such products as furniture and finish construction work. Others say that insect and disease risk can be relatively high in old growth stands and could (for some community types) threaten the retention of those stands as old growth. There is concern that fire exclusion could favor a buildup of fire-intolerant, but shade-tolerant, species that could eventually replace the original old growth type.
Another view is that active management, including timber harvest and prescribed fire, could be used to accelerate the development of old growth attributes.

Fungal decomposition is accomplished by many successional species. We can assume that many "climax fungi" with niches dependent on old growth have been lost with cutting of the old growth forests. Inventory of late composters in the remaining old growth areas could identify endangered fungi and provide clues for supporting forest regeneration. **Old Growth Climax Fungi are an important potential resource for the pharmaceutical industry, pesticide industry, for chemical industry and for natural health practitioners.**

Impact of even-age timber stands on successional fungi should be considered.

Fungi and animals are both subject to bacterial attack. Penicillin is an example of a naturally occurring, native fungus that has revolutionized medicine. Preservation of unexplored fungal resources in old growth forests should be addressed in the Draft EIS and Draft Plan.

Forest Health
ISSUE STATEMENT: Forest Plan management strategies may affect the spread and control of non-native invasive species, forest pests, and pathogens, all of which have the potential to affect long-term sustainability, resiliency, and composition of forest ecosystems.

BACKGROUND: While the term "Forest Health" can have several meanings, it is used here to identify the effects of forest pest problems and non-native invasive species. It is a dynamic concept that considers the conditions of our forested ecosystems when subjected to insect and disease organisms and/or invasive species that may otherwise contribute to poor development. While not all non-native species are known to disrupt native ecosystems, of particular concern are those that are successful at invading and rapidly spreading through natural habitats. These include a wide variety of organisms such as the chestnut blight fungus, gypsy moth, hemlock woolly adelgid, didymo algae, and ailanthus. In addition to these non-native pests, it includes the native pine bark beetles. Invasive plants create a host of harmful environmental effects to native ecosystems including: displacement of native plants; degradation or elimination of habitat and forage for wildlife; extirpating rare species; impacting recreation; affecting fire frequency; altering soil properties; and decreasing native biodiversity. Invasive plants can spread across landscapes, unimpeded by ownership boundaries. Control of existing populations, prevention of the spread of known pests, mitigation of existing problems, and prevention of the introduction of new pests are all components of this issue.

Fungus is central to forest health. Saprophytic mushrooms are the primary decomposers of the forest and the planet. While fungi continue to function without mention in the Draft EIS or Draft Plan, attention paid to this 10-20% of the forest biomass has great potential for return.

All forest pests and non-native invasive species are impacted by fungus. *Entomophaga maimaiga* is a natural mycopesticide pathogenic to Gypsy Moths, but forest managers have not been able to optimize its effects. Other pests and non-native invasive species have their own fungal pathogens that may be missing or impaired in the GWNF. The use of natural mycopesticides should be addressed in the Draft EIS and Draft Plan.

Wind Energy
ISSUES STATEMENT: Responding to opportunities to develop wind energy generation may result in effects on a wide variety of resources (including birds, bats, scenery, trail use, soils on ridgetops, water, noise, remote habitat, local communities/economies, and social values).

BACKGROUND: Wind energy is renewable, can reduce the use of fuels generating carbon gases and can positively affect climate change effects. The USDA Forest Service and National Renewable Energy Laboratory (2005) identified 35,810 acres (primarily ridgetops) of the GWNF with a high potential for wind area development. The GWNF is in close proximity to growing population centers that would benefit from additional and clean energy production. However, there are concerns about the effects to water, birds, bats, views, visuals, aesthetics (height of towers), noise, carbon sequestration, and fragmentation of habitat. These concerns relate to both construction and operation of the wind turbines and the associated infrastructure development to support the turbines (roads, powerlines). Some people believe that this need for wind energy development can and should be met on private lands, or that the power would not be used to solve local needs. Other people believe that the National Forests should contribute to the development of renewable resources and green energy.

There do not appear to be any significant issues related to wind energy and fungus.

Oil and Gas Leasing
ISSUE STATEMENT: Use of National Forest System lands to support energy needs through federal oil and gas leasing may affect forest resources and impact adjacent private lands.
BACKGROUND: Energy production has long been a component of National Forest System management and gas development provides energy to meet national needs. There are no active gas wells currently in production on the Forest and only about 12,000 acres are currently under lease for gas and oil. A particular type of gas well operation is the development of gas deposits within the Marcellus shale formations, through horizontal drilling and use of hydrofracturing at numerous locations throughout the horizontal bore holes. Concerns about hydrofracturing include the quantity of water needed in the process, negative effects on water quality (ground and surface), wildlife, air quality, viewsheds, forest fragmentation, and ecotourism. Some public comments identified that developing Marcellus shale gas is acceptable when it is properly regulated and that National Forest System land should be available for leasing Marcellus shale so that people can maintain their standard of living and meet energy needs. Other comments stated that there must be an effects analysis for hydrofracturing or that there should be a moratorium on development until federal/state regulations are in place and an on-going EPA study is complete. Other comments are opposed to this development or want limitations on where it could be used.

While the practice of hydrofracking is new, there seems to be the same potential for catastrophic surprises common to other methods of energy production. I speak from personal experience as a coal miner in the Appalachian Mountains. My logic is as follows:

1) Deep mines in Appalachia commonly leak bright orange fluid that can be seen from the ridges as it makes its way down the waterways. This leakage seeps through rock layers without the explosive power used in hydrofracking. It keeps coming years after mines are closed and “sealed”. Coal is less porous than Marcelus shale.
2) The GWNF is mountainous, with most of the population at the lower elevations. My home in Augusta county boarders the forest, but is nearly 2000 feet lower that nearby peaks. My water well is 600 feet lower still. Springs at high elevations in GWNF clearly show that liquids move from great depths to the surface, naturally.
3) If I can see the orange effluent in the streams and rivers of Appalachia where I once worked as a coal miner, should I not be concerned about my drinking water 2600 feet below a proposed gas well?

Fire
ISSUE STATEMENT: The management of fire to achieve goals related to protection of property, wildlife habitat, ecosystem diversity and fuels management may affect air quality, non-native invasive species, recreation, water quality, wildlife, and silviculture.
BACKGROUND: Fire is acknowledged as an important part of some ecosystems on the Forest. Aggressive control of wildfire (unplanned ignitions) throughout much of the twentieth century resulted in changes to these ecosystems. Management of prescribed fire and some wildfires can serve to restore and maintain these ecosystems, while also protecting National Forest and adjacent lands from the negative effects of fire. Some people support the continued use, and advocate an increase in the use, of prescribed fire to restore ecosystems, create habitat, encourage oak regeneration and reduce fuels. Some comments support the proposed increase in use of prescribed fire, but caution that fire does not replace timber harvest as a management tool; rather it should be considered an additional option for timber management. Some comments identified concerns with the burning program including impacts on adjoining private land, carbon emissions, impacts on native vegetation, opening up habitat for non-native invasive plants, stream sedimentation, and air pollution. Some comments indicated support for using lightning ignited fires to achieve ecosystem restoration goals.

Rotting logs don't burn, they make mushrooms. Mushrooms create soil, not smoke. When I asked the Forest Service how to reduce the chance of forest fire at my home next to the GWNF, I was instructed to remove dry, dead debris. By just putting deadfall in contact with the ground, potential fuel grows fungus and retains water. The risk of fire is greatly reduced.

A very large portion of the Forest Services' limited budget is directed toward controlled burns. The burns, in addition to their high cost, are a significant source of pollution and regulated by Clean Air standards when they affect populated areas. Controlled burns also carry hot greenhouse gasses into the atmosphere and remove needed carbon from the forest. Controlled burns pose a significant risk to Forest Service personnel, as well as property.

Fungal decomposition releases cool carbon dioxide a ground level, that can be immediately used by plants in a continuous carbon cycle. Fungal decomposition also retains moisture in the forest, thereby greatly reducing the effects of drought.

The Draft Plan and Draft EIS should address the simple alternative of putting woody debris in contact with the earth, as a safer and more economical alternative to controlled burns. Chipping timber waste, inoculating with beneficial fungus and creating moist nurse logs are all methods which should be mandated by the Draft Plan and MIS.

Recreation
ISSUE STATEMENT: Forest management strategies should determine an appropriate mix of sustainable recreational opportunities (including trail access) that responds to increasing and changing demands and also provides for public health and safety and ecosystem protection (such as soil and water resources, nesting animals, riparian resources and spread of non-native invasive species).
BACKGROUND: The Forest is within a day's drive for a large population of people in the eastern U.S. Local and regional visitors use the forest for a variety of recreational opportunities, from primitive hiking and camping to developed recreation sites and motorized travel. Developed recreation is not a significant issue. Demand for long-distance trails for special recreation events, such as long-distance mountain bicycling, equestrian endurance rides and runner marathons, has increased in recent years. There is more demand than supply for motorized trail opportunities as opportunities for such use is very limited on private land. Some comments stated that off-highway and all-terrain vehicle use is not appropriate at all on the Forest due to the noise, potential environmental damage, and the opportunity for the need to be met commercially on private lands.

Education as a central part of recreation should be clearly stated in the Plan. The Forest Inventory Program is in place and should be expanded to include local schools, environmental groups and recreational users of GWNF. In order to effectively provide

> *"In my opinion, the promotion of wildlife research sports is the most important job confronting the profession of wildlife management."* A Sand County Almanac *by Aldo Leopold, p.186*
>
> *"wildlife once fed us and shaped our culture. It still yields us pleasure for leisure hours, but we try to reap that pleasure by modern machinery and thus destroy part of its value. Reaping it by modern mentality would yield not only pleasure, but wisdom as well"* A Sand County Almanac *by Aldo Leopold, p.187*

There should be a Forest Service Research & Education Station dedicated to Fungi of the Eastern Forests in the GWNF North Ranger District with at least one staff mycologist.

The Forest Inventory and Analysis Strategic Plan includes the goal of a Family Forest Research Center that could share mission funding and staff with the **Fungi of the Eastern Forests Research Station.**

*"**Family Forest Research Center**. The goal of the Family Forest Research Center (FFRC) will be to promote sustainable forest stewardship through increased understanding of family forest owners. The FFRC will be a collaborative venture between FIA and researchers from academia, nonprofit organizations, corporations, and other USDA Forest Service research units. The FFRC will be the epicenter for implementing and analyzing FIA's NWOS. In addition to implementing the NWOS, the FFRC will have the capacity to implement other forest landowner research on a competitive basis (e.g., receiving grants or contracts from other groups). A collaborative approach will increase analytical capacity, reduce costs, and increase efficiency. "* Forest Inventory and Analysis Strategic Plan page 12

Wilderness/Roadless

ISSUE STATEMENT: Forest management strategies may affect the balance between the desires for permanent protection of remote areas and the desires for management flexibility and ability to respond to changes in ecological, social and economic conditions when identifying areas to be recommended for Wilderness and determining how potential wilderness areas and other remote areas should be managed.

BACKGROUND: Management of remote areas on the Forest continues to be one of the most prominent issues raised in comments. Remote areas include existing Wilderness, the Inventoried Roadless Areas identified in the 1993 GW Forest Plan Revision (and incorporated into the 2001 Roadless Area Conservation Rule), and the Potential Wilderness Areas (identified as areas meeting the definition of wilderness that need to be evaluated in the current revision process). Public rationale for additional wilderness includes: ecological values of remote, intact areas; recreational values; proximity of large masses of people to the Forest; protection of watersheds through permanent protection; carbon sequestration; ability for latitudinal range adjustments for species in response to climate change; future scientific reference; and a need to bring the amount of wilderness on the Forest more in line with amounts on other National Forests. Public rationale opposing wilderness includes: lack of balance of forest age classes (many species are at risk without early successional habitat); limitations on recreation use by those less physically fit; limitations on group size for recreation events; limitations on special use events; prohibitions for all motorized and mountain bike access; restrictions on treatment of invasive species; limitations on meeting energy resource demands; limitations on emergency access; firefighting restrictions; and limiting options as conditions or future demands change.

The GWNF has 23 Inventoried Roadless Areas (IRAs) with a total of 242,278 acres. As part of the revision process, the Forest has identified 37 areas as Potential Wilderness Areas (PWAs) with a total of 372,631 acres. The PWA inventory includes all of the IRAs, with the exception of Southern Massanutten and The Friars. For the remote areas in the PWA inventory that are not identified for Recommended Wilderness Study by Congress, some people would like to see them managed according to the direction in the 2001 Roadless Area Conservation Rule (RACR) and others would like to see them actively managed for wildlife habitat and timber production.

Tahuya State Forest Reclamation Test Site (Stamets p.82) demonstrated the value of road reclamation with fungus and was mentioned under "ACCESS" above.

Old Growth Climax Fungi are an important potential resource for the pharmaceutical industry, pesticide industry, for chemical industry and for natural health practitioners.

Unlike timber harvesting, mushroom harvesting can be accomplished in Roadless areas. Mushrooms, as a non-timber resource, provide a balance between wilderness and the local economy while providing restoration, recreation, natural migration corridors and education.

Timber Harvest

ISSUE STATEMENT: Forest Plan management strategies may affect: a) the amount and distribution of land suitable for the sustainable harvest of timber products; b) the amount of timber offered by the Forest; c) the role of timber harvest in benefitting local economies and other multiple use objectives; and d) the methods used to harvest the timber. If the Forest responds to needs for biomass for energy production, whole tree harvesting may affect nutrient cycling, wildlife habitat, and soil productivity and stability. Timber harvest may have effects on other resources.

BACKGROUND: Timber harvest is one of the tools used to manage vegetation on the Forest to create a diversity of habitat conditions. It also produces wood products that benefit local economies. The ecological, social, and economic effects of the timber management program on the GWNF, both positive and negative, are of great importance to many. Some people strongly state that the forest should reduce the acres suitable for harvest, reduce the Allowable Sale Quantity (ASQ), and decrease the commercial timber program due to adverse impacts to: water quality, competition with private lands, air quality, scenery, ecological habitats such as large areas of intact forest (fragmentation), and a variety of other ecological/environmental resources. Some indicate that commercial timber harvest on the Forest is not economically viable and competes with privately held timber, that demand for timber can be met on private land, or that the level of the timber sale program should be based on reasonable budget expectations. Other people strongly support an expanded timber program because of the positive impacts on: balancing age classes and reducing acres of an aging forest, maintaining species composition, wildlife habitat, responding to an increased demand for wood products (including biomass), reduction of hazardous fuels, and benefits to local economies.

The potential use of forest wood and fiber as biomass for energy production raises concerns on the effects on carbon sequestration and on the removal of too much organic material which could increase soil erosion and/or remove too many nutrients from the site, particularly in low site index areas or areas affected by acid deposition. Some people believe that the Forest should contribute to this green energy demand while meeting other resource needs (fuels reduction and wildlife habitat), that this will produce green jobs and wood products, and that it is better to burn the trees for fuel rather than burning them as part of prescribed burns. Other people don't believe that biomass fuels are a green source of energy, don't believe that energy should take precedence over forest health, or believe that biomass will compete with pulpwood and drive up prices.

I am not opposed to harvesting timber; any more than a beekeeper is opposed to harvesting honey. I am opposed to an extractive economy that destroys resources. If a beekeeper takes too much honey, his hive will collapse—in a single winter. The extractive treatment of our forests is a slower process, but the signs are obvious. Plots of 3-log trees become 2-log on the

second harvest, then single log. Even the timber companies acknowledge they will quickly destroy the productivity of their own lands. I also deeply object to the treatment of the local timber harvesters (see Local Economy).

The underappreciated diversity underfoot is being ignored at our mutual peril. Most estimates calculate that the Shenandoah Valley has lost between 3 and 8 feet of soil since introduction of modern horticulture and timber harvest methods. "Before" pictures of the Draft Plan and EIS show the loss of soil that required the establishment of the GWNF.

Fungus is the agent of decomposition that rebuilds soil. **Soil Building needs to be measured and should be the main determinate of the any timber harvest.**
"This precious resource of mineral, decaying biomass, gasses, water and critters is the only protective veil between humanity and starvation" Joel Salatin, Polyface Farm, Swoope, VA

Economics and Local Community
ISSUE STATEMENT: Management activities may affect the economic role of the Forest, particularly the role it plays in the economy of local communities, including the production of ecosystem services and commodity outputs. Increasing population and development near the Forest may influence access to the National Forest and management activities such as special use requests, fire management, and responses to additional recreation demands.

BACKGROUND: Some outputs from management activities can be readily valued in economic terms such as timber, firewood, and recreation fees. Ecosystem services are the suite of goods and services from the Forest that are vital to human health and livelihood but are often not easily valued in economic terms. These services include wildlife habitat and diversity, watershed services, carbon storage, and scenic landscapes, for example. These outputs and services can all be important to many of the rural communities in and around the National Forest. Several categories of activities identified as important to local communities include tourism (family based nature activities, recreation events, aggressive trail experiences like all-terrain vehicle trails, equestrian and mountain bike use, wilderness, new trails), habitat management that increases diversity for wildlife viewing and game populations for hunting, and timber production that supports the logging industry.

"Natural assets can be used wisely to improve the quality of life of the community without endangering the resource itself." Uncommon Wealth

"I think repopulating the countryside with loving stewards is a great aspiration." Joel Stalin

The GWNF requires a plan that teaches respect for the human inhabitants of the woodlands, as it does for the forest itself. This Plan and EIS should include detailed graphs of the wages of Virginia timber workers, with shame.

Non-timber resources must be included in the plan. This includes fungus.
The GWNF is a significant resource for the pharmaceutical industry, the pesticide industry, the chemical industry and natural health practitioners. One example would be the Turkey Tail mushroom, *Trametes versicolor.* This fungus generates over $200M/year in Asia, more than all of the $208M landowner timber sales in Virginia in 2009.

See Fungi of the Eastern Forests Research Station and Family Forest Research Center mentioned earlier as important plans for the local community and economy.

Climate Change
ISSUE STATEMENT: Changes in climate may require adaptation strategies that facilitate the ability of ecosystems and species to adapt to changes in conditions (such as stream temperature, community vegetation composition, and invasive species). Forest management activities may exacerbate the impacts of climate change or mitigate the impacts through adding to or sequestering carbon or enhancing opportunities for alternative energy sources (wind, biomass, solar).

BACKGROUND: In developing management strategies to deal with a changing climate, it has been recognized that forests can play an important role in both mitigating and adapting to climate change. Mitigation measures focus on strategies such as carbon sequestration by natural systems, ways to increase carbon stored in wood products, ways to provide renewable energy to reduce fossil fuel consumption, and ways to reduce environmental footprints. Adaptation measures address ways to maintain forest health, diversity, productivity, and resilience under uncertain future conditions so that forest resources can better adapt to change. Based on current projections, the primary regional-level and state-level predicted effects of climate change that would impact the GWNF include: (1) warmer temperatures; (2) extreme weather events; and (3) increased outbreaks of insects, disease, and non-native invasive species. Comments suggested that the Plan should address reducing current threats to forest conditions, such as from non-native invasive species, pests and pathogens, acid deposition, and human uses of forest resources. Some comments identify the need to provide migration corridors, which include altitudinal gradients, for plant and animal species, especially those most vulnerable to changing climate conditions. Other comments requested that we evaluate how management activities may exacerbate, mitigate or enhance effects of a changing climate. Others identified the importance of the forest's role in carbon sequestration.

ENVIRONMENTAL MONITORING WITH LICHEN – There are lichen monitoring programs similar to Macroinvertebrate Stream Monitoring. Of particular interest would be those appropriate for eastern forests (GWNF) and within the abilities of school groups, mushrooming clubs and other non-biologists. Of the 23 Management Indicator Species (MIS) in the GWNF, none are from the Fungal Kingdom. The unique combination of fungal and algae makes lichen sensitive indicators of air quality. Such a lichen based monitoring program would contribute to both public education and public recreation, while contributing to science. Ref: Lichens of North America, Brodo, Sharnoff and Sharnoff, *chapter 11: Environmental Monitoring with Lichen.*

Lichen monitoring as an indicator of pollution and climate change is an important part of the mission of the Forest Service's **Forest Inventory and Analysis (FIA) Program**. The program was established more than 75 years ago to provide the kind of information that is missing from the Draft Pan and MIS.

"Development of a regional lichen gradient model from community data is a powerful tool to derive lichen indexes of response to environmental factors for large-scale and long-term monitoring of forest ecosystems. The Forest Inventory and Analysis (FIA) Program of the U.S. Department of Agriculture Forest Service includes lichens in its national inventory of forests of the United States, to help monitor the status of forested ecosystems. Development of a model for a specific region to calculate lichen response indexes that are correlated with air quality and major climate factors, and are also independent of each other, is a critical step in achieving program goals." **Will-Wolf, Susan; Neitlich, Peter. 2010. Development of lichen response indexes using a regional gradient modeling approach for large-scale monitoring of forests. Gen. Tech. Rep. PNW-GTR-807. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station**

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United States Department of Agriculture - Forest Service - Pacific Northwest Research Station
General Technical Report PNW-GTR-807 - September 2010

Critical Information for Policy Development and Management of Non-Timber Forest Products in British Columbia: Baseline Studies on Economic Value and Compatible Management - Forest Science Program Proposal - Y061065

Rebecca McLain & Eric Jones: *Challenging 'Community' Definitions In Sustainable Natural Resource Management: The Case Of Wild Mushroom - Harvesting In The USA*

Trade Environment Database (TED) - US Wild Mushroom Exports and Impacts (MUSHROOM)
CASE NUMBER: 94 - http://www1.american.edu/ted/MUSHROOM.HTM
"The worldwide wild mushroom industry is estimated conservatively at $250 million."
"The North American Truffling Society estimates that an acre of conifer forest abundant with mushrooms can produce more than $240,000 worth of truffles every year."

Field Demonstrations of Mycoremediation for Removal of Fecal Coliform Bacteria and Nutrients in the Dungeness Watershed, Washington
PNWD-4054-1, SA Thomas, et. al.
Dungeness River Watershed Final Workplan for the EPA Targeted Watershed Grant Program (2004) under a Related Services Agreement with the U.S. Department of Energy
under Contract DE-AC05-76RL01830

A guide to AIR QUALITY MONITORING with LICHENS - William C. Denison, author
Sue Carpenter, Illustrator - Copyright 1973 by Lichen Technology, Inc.
http://ocid.nacse.org/classroom/lichens/denison/
"With the help of this GUIDE, an intelligent and patient person without previous training in biology should be able to identify the lichens which require clean air, and then use this information to evaluate air quality at one or more sites." From the preface

"Fungi are one of the most important components of the biosphere. They are essential for the growth of over 90% of all vascular plants (Allen 1993), and play an essential role in the ecosystem services associated with soil processes valued at $90 trillion per annum globally (Boumans 2002). "
Biomass recycling and the origin of phenotype in fungal mycelia
Ruth E Falconer, James L Bown, Nia A White, and John W Crawford

Fungal biomass in decayed wood
Heather L. Jones, James J. Worrall
College of Environmental Science and Forestry,
Syracuse,New York 13210

Oak Decline
Forest Insect & Disease Leaflet 165
U.S. Department of Agriculture Forest Service
Philip M. Wargo, David R. Houston and Leon A. LaMadeleine

Forest Inventory and Analysis Strategic Plan
United States Department of Agriculture Forest Service
FS-865 January 2007

"For mor than 75 years, the Forest Inventory and Analysis (FIA) program has played an integral role in managing the Nation's forest resources and conducting the orderly inventory of these resources, which is required for developing effective management scenarios." From Introduction

*"**Family Forest Research Center**. The goal of the Family Forest Research Center (FFRC) will be to promote sustainable forest stewardship through increased understanding of family forest owners. The FFRC will be a collaborative venture between FIA and researchers from academia, nonprofit organizations, corporations, and other USDA Forest Service research units. The FFRC will be the epicenter for implementing and analyzing FIA's NWOS. In addition to implementing the NWOS, the FFRC will have the capacity to implement other forest landowner research on a competitive basis (e.g., receiving grants or contracts from other groups). A collaborative approach will increase analytical capacity, reduce costs, and increase efficiency. "* p12

Community Alliance for Preservation

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PreserveRockingham
@gmail.com

October 14, 2011

Maureen Hyzer, Forest Supervisor
George Washington National Forest
5162 Valleypointe Parkway
Roanoke, VA 24019-3050

Sent via Email

Comments on George Washington National Forest Draft Management Plan

Dear Ms. Hyzer:

Thank you for the opportunity to comment on the George Washington National Forest draft management plan. CAP is a citizens' organization that works with the public, elected leaders and agencies to enhance Rockingham County's rural character, urban spaces and natural and cultural resources.

The GW represents 24 percent of all land in Rockingham County, and provides drinking water for over 50,000 residents of Rockingham County, Harrisonburg, so its careful management is of great interest to CAP.

As you know, Rockingham County, many of its towns, and the City of Harrisonburg endorsed resolutions in 2008 asking the Forest Service to identify and protect vital drinking watersheds. In 2010, Augusta, Staunton, Rockingham and Harrisonburg officials called on the Forest Service to ban or impose a moratorium on horizontal (hydrofracking) natural gas drilling, to further protect drinking water supplies. We support these efforts by our local governments.

Ban on Horizontal Drilling (Hydrofracking) for Natural Gas

To protect drinking water resources and prevent industrialization of public forest lands CAP supports the prohibition of horizontal drilling for natural gas drilling anywhere on the forest. We are also concerned about the large potential for impacts of vertical gas drilling, which would be allowed on nearly all of the forest and ask for additional restrictions on vertical gas drilling, including a ban on drilling in local drinking water supply areas, priority watersheds, and sensitive natural, scenic and recreation areas.

Public Drinking Water Protection

CAP supports the identification of drinking water supply areas and the expansion of protective buffers on streams and reservoirs, which will almost double in width. We would like to see all local drinking water supply areas identified as priority watersheds and more defined management "standards" to protect priority watersheds.

Limits on Wind Energy Development

We support the ban on industrial wind projects on sensitive ridgelines in the forest, including the Shenandoah Mountain Crest and remote backcountry areas. And, as with vertical drilling, we ask that the ban to be expanded to include drinking water supply areas and key natural heritage areas, where industrial-scale wind turbine facilities and road construction can degrade water quality, wildlife habitat, and recreational uses.

Thank you for considering our input on the GW draft management plan. Please contact me if additional information is needed.

Sincerely,

Kim Sandum

Executive Director

Community Alliance for Preservation

PreserveRockingham@gmail.com

540-209-2552

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Comments for GW forest plan
Date: Friday, October 14, 2011 11:43:23 AM

Hello,
I support the ban in horizontal natural gas drilling in the national forest. Our national forests should not be desecrated by highly industrial and environmentally destructive practices such as hydrofracking. Allowing this kind of extraction in the forest will ruin this resource for all other purposes.
Sincerely,
The Rev. Sarah Trone Garriott

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Comments on Forest Plan
Date: Friday, October 14, 2011 11:28:29 AM

Dear Forestry Management Officials,

Concerning the upcoming decision on the long term Forest Plan, I hope you will give highest priority to the long-term effects any of your allowances will have on the long-term health of the entire forest ecology, the supply and safety of the drinking water that the forest supplies, and the continued enjoyment of forest visitors in their visits and multiple uses.

I have great concerns about hydrofracking -
-Its initial development and continued industrial footprint on the forest floor,
-The amount of vehicle traffic required to supply the necessary water and chemicals for the process,
-The chemicals used in the process and the residue left behind - either above ground or pumped below to maintain interstitial pressure -
-And the possible long term effects on ground water movement, availability and quality.
Please do not allow this industry on forest lands.

In the same light, vertical drilling can cause a huge amount of topical destruction as well as water resource degradation, both on the surface and underground. Full studies and limits should be applied to prevent any threats to water resources and areas of natural significance that should be protected from all impacts.

I do believe that water is fast becoming our most precious and threatened resource - even in the east, so everything you can do to protect watersheds and water sources will pay big benefits in the long run - such as increasing buffers around water sources and limiting development and industry of any kind in fragile watersheds and along streams. This one is basically a "no-brainer."

The initiatives on wind energy are laudable, but again, we need to balance the benefit with the cost - the cost of industrial impact on forest lands and the purely negative impact on wildlife and recreational use (especially back country areas.) I have yet to hear of anyone who enjoys camping or hiking near these monster turbines.

Thank you for your consideration.

Kathleen Wissinger

McGaheysville, Va.

Request for new Management Indicator Species – Honey Mushroom

October 12, 2011
Jack Wilson

The Honey Mushroom, *Armillaria mellea (Vahl),* should be included as a Management Indicator Species (MIS) in the current George Washington National Forest (GWNF) Plan. There should also be a Forest Service Research & Education Station dedicated to **Fungi of the Eastern Forests** in the GWNF North Ranger District with at least one dedicated staff mycologist.

Fungi, herbaceous flora, and invertebrates, such as snails, slugs, millipedes, worms, and arthropods, that live in the forest floor litter or topsoil or are associated with the presence of large woody debris are a significant component of forest diversity (McMinn, J.W. and D.A. Crossley, Jr. 1996). These organisms are also important food for species such as Wood Turtles. Yet these species are significantly absent from the list of MIS.

From Alternative C: Section 20: page 48

Is this species sig ificant enough to warrant MIS status?

The Honey Mushroom is "by far the largest biological entity on the planet". Mushroom, Action and Sandler, P. 20

One close relative, *Armillaria bulbosa,* also known as Honey Mushroom covers 38 acres beneath an Iron County forest near the Wisconsin border. It is believed to be 1,500 to 10,000 years old and weigh about 100 tons - about the same as an adult blue whale. It is the species called *Armillaria bulbosa* and the mushrooms it produces are commonly called "honey mushroom." The mushroom is the only edible part of the fungus. *Armillaria bulbosa* is very common, occurring in hardwood forests in North America, Europe and Japan. See: CrystalFalls.org

More recently, *Armillaria solidipes*, is known to be one of the largest living organisms, where scientists have estimated a single specimen found in Malheur National Forest in Oregon to have been growing for some 2,400 years, covering 3.4 square miles. See: Wikipedia

Does this species directly affect the GWNF?

Armillaria Root Rot is pervasive in North America. It affects maples and is a major cause of oak decline. A characteristic of oak decline is that it may develop suddenly on many trees in the area affected by an initiating stress factor.

Would the Forest benefit from further study of this species?

"What was once considered to be a single species in North America having various forms and ecological roles is now known to be a complex of up to ten closely related species."
Mushrooms of West Virginia and the Central Appalachians; Roody, p.31

New species within the *Armillaria* complex have been discovered recently in West Virginia.

In summary, this is "by far the largest biological entity on the planet", causing significant decline of the forest's primary resources and directly affecting the local economy. Yet, it hasn't been clearly identified as to species.

Is the species a good indicator, relative to the significant issues identified in the Draft Environmental Impact Statement (DEIS)?

A) Timber – major forest pathogen in GWNF and on private timberlands in the region.

B) Recreation (and local economy) - The Honey Mushroom is a choice edible and one of the few occurring in commercial quantities in the GWNF.

C) Old Growth - Armillaria Root Rot has a complex impact on old growth oak.

D) Local Economy –

1) Pharmaceutical potential:

a) A new antibiotic armillaric acid, has been isolated from the cultured mycelia of Armillaria mella. See: Planta Med. 1990 Apr;56(2):198-201.

b) Armillaria mellea induces a set of defense genes in grapevine roots and one of them codifies a protein with antifungal activity. See: Mol Plant Microbe Interact. 2010 Apr;23(4):485-96.

c) In addition to newly documented uses above, Armillaria has been used in Chinese medicine for centuries for respiratory and digestive conditions.

2) Armillaria Root Rot also affects Virginia Wine industry.
Vines infected with Armillaria root rot become nonproductive and often die within 2 to 4 years. There are no known Armillaria-tolerant grape rootstocks.
(Oak root rot costs peach growers in South Carolina an estimated $4 million a year)

3) The Honey Mushroom is a choice edible and one of the few occurring in commercial quantities in the GWNF.

4) Honey mushrooms can attack fruit trees with devastating results. Field Guide to Mushrooms of Pennsylvania and the Mid-Atlantic, Russell, p.2

5) GWNF Educational Role: Honey mushrooms are the source of "Foxfire". The Foxfire book series comes with a wealth of the kind of folk wisdom and values of simple living that have made these volumes beloved bestsellers for the last three decades.

Honey Mushrooms and the Forest Service's Educational Mission

Reactions to this proposal have fallen into two groups.

1. "Can we eat it?"
2. "This seems like a bad fungus, maybe we should get rid of it."

Well…
It is a prime edible and is available in GWNF by the truckload in September,
It tasted like local, wild, shitake,
It's pretty easy to identify,
but…..
It is poisonous when raw,
It is not tolerated by a few folks even when cooked (just stomach upset),
and it can be mistaken for Deadly Galerina (Galerin autumnalis),
So….
it's a fascinating fungus, critical to the forest's health and ours, but not clearly identified even by the experts.

Therefore, Honey Mushroom should be an MIS. There should also be a Forest Service Research & Education Station dedicated to Fungi of the Eastern Forests in the GWNF North Ranger District with at least one staff mycologist.

From: D
To: FS-comments-southern-georgewashington-jefferson
Date: Friday, October 14, 2011 9:24:08 PM

As residents of Broadway Va., we are very concerned about the quality of our drinking water, the condition of the watershed, and the conservation of the parks as as attractive and natural places for all visitors to enjoy.

We would ask that all local drinking water supply areas be identified as priority watersheds and would like more defined management standards to protect priority wtersheds, particularly limits on road construction which degrades water quality.

We ask for a more thorough study of the impacts of vertical gas drilling and a ban on drilling in local drinking water supply areas, priority watersheds, and sensitive natural scenic & recreation areas.

We support a ban on hydrofracking in any and all areas of the parks.

We support the ban on industrial wind projects on sensitive ridgelines in the forest, including the Shenandoah Mountain Crest and remote backcountry areas. We would ask for the ban to be extended to include drinking water supply areas and key natural heritage areas, where industrial-scale wind turbine facilities and road construction can degrade water quality, wildlife habitat, and recreational uses.

Sincerely,

Frank and Dixie Hovermale

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: supporting the ban on horizontal drilling
Date: Friday, October 14, 2011 11:37:05 PM

I am writing to applaud the Forest Service for listening to public concern and proposing a ban on natural gas horizontal drilling within the George Washington National Forest.
I strongly urge you to write this ban into the new management plan thereby safeguarding our public land for the next 15 years. It is vital that horizontal drilling be banned from all the forest to safeguard our drinking water resources and stop the rape of the land.
I also urge you to make a more thorough study of the impacts of vertical drilling, and apply additional restrictions on vertical gas drilling, including a ban on drilling in local drinking water supply areas, priority watersheds, and sensitive natural scenic and recreation areas.
Drinking water supply areas need to be identified as priority watersheds, and protective buffers on streams and reservoirs widened. Management standards to protect priority watersheds need to be strengthened with limits on road construction.

Thank you for considering my concerns.
Gillian Preston
Waynesboro, VA

From:
To: FS-comments-southern-georgewashington-jefferson
Cc:
Subject: Comments on Draft Plan
Date: Friday, October 14, 2011 5:07:54 PM

My comments concerning the Draft Management Plan for the GWNF are as follows :

Please support the final version (as agreed to by the stakeholders collaborative group) of the Friends of Shenandoah Mountain Proposal. This well thought out combination of National Scenic Area and Wilderness designations is the best way to protect critical drinking supply watersheds from threats such as gas drilling and industrial wind development. We can't afford to not give this greatest level of protection for the water supplys of Harrisonburg, Staunton, Bridgewater and elsewhere. The Shenandoah Mountain area is prominent on The Nature Conservancy's map of biodiversity hotspots and harbors over 250 bird species and several rare salamanders. Several headwaters streams are outstanding trout waters. The greatest long term value of the Shenandoah Mountain area is for outstanding outdoor recreation and the potential to enhance local tourism and improve the quality of life for all residents.

Shenandoah Mountain should also be protected because it will be a critical corridor for species migration as effects of climate change become more severe. This will improve resilience of the ecosystem.

ENERGY DEVELOPMENT

All drinking watersheds and biologically sensitive areas need to be excluded from availability for any oil and gas leasing.

Thank you for the brave move to ban horizontal drilling on the forest in the Draft Plan. Please don't give in to political pressure to rescind the ban. Please maintain the horizontal drilling ban in the final plan.

Please designate the entire forest as off limits to industrial wind farms. There is enough private land in this region for wind farms. The Allegheny and Blue Ridge ridgetops are much too biologically sensitive for such industrial scale development, with all the clearings, excavation, roads and powerlines that would be needed. Raptors and bats would be in serious jeopardy. The wind is not reliable in this area compared to offshore where development interest is increasing. A wind farm on a National Forest ridgeline would exclude people from many forms of recreation in the vicinity, such as hunting, hiking and bird watching.

Controlled Burning

While controlled burning has definite benefits when done in moderation in the right areas, the annual acreages proposed are too high. It should be limited to 10,000 to 12,000 acres per year. A buffer of 500 feet from perennial streams should be designated. Drinking watersheds should not have controlled burns except in instances of extreme fuel buildup from storms or severe pest infestations.

Timber Harvest

The forest can support greater levels of timber harvest than has been the case in recent years. Peripheral areas along existing roads and closed logging roads can be harvested while protecting the higher elevation core areas. A harvest level of 1500 to 2000+ acres per year would be OK.

Great Eastern Trail

The Great Eastern Trail corridor must be protected from development. Much work and coordination among hiking, mountain biking and horseback riding groups has already gone onto developing the Great Eastern Trail in portions of the GW, particularly in the Shenandoah Mountain area. Various aspects of the Plan in this area need to include in their development, consideration of the effects they may have on the Great Eastern Trail.

I'd like to see some existing recreation sites further developed, such as Hone Quarry, including upgrades to the campground.

Thank you for the opportunity to comment on the Forest Plan. Please keep up the good work.

Sincerely,

Malcolm Cameron

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Comments on the GW - Jefferson NF plan.
Date: Friday, October 14, 2011 9:31:21 PM

To whom it may concern,
I am writing to voice my support for a ban on horizontal drilling in the George Washington and Jefferson national forests. I feel this way for the protection of drinking water resources and to prevent national forests from being developed as industrial sites. I am also asking for a more thorough study of the impacts of vertical drilling and its impact on water supplies, watersheds and sensitive natural, scenic, and recreation areas.

In support of drinking water supplies and surface water quality, I am asking for an expansion of buffers of riparian zones to 100 feet, as well as identification of local watersheds as priority protection zones.

I feel that development of the Shenendoah Mountain Crest and other sensitive/remote areas needs to be prevented. This ban should be extended to drinking water supply areas and key natural heritage areas where industrial scale wind turbines and the supporting road structures can degrade wildlife habitat and water supplies.

I trust you will make choices that will protect our national forests for the next generation.

Sincerely Lee and Rosemary Good
Harrisonburg, VA
--
"You must be the change you want to see in the world" Mahatma Gandhi

I am writing in opposition to the proposed ban on horizontal drilling found in the Draft Forest Plan for the George Washington National Forest. The proposed ban is not supported by the kind of scientific data or analysis that would be necessary to declare off-limits a potentially valuable resource that could meet our nation's and the Commonwealth of Virginia's future energy needs. Comments like "may impact water quality" are not strong enough reasons to ban techniques that have been incorporated safely and effectively in many other areas of the country for years, including Virginia, without incident.

Hydraulic fracturing is a technique that has been used over one million times since the the1940's without a documented instance of contamination, a fact confirmed by the EPA's own Lisa Jackson when she testified before congress saying that hydraulic fracturing doesn't affect water. Therefore there is not one shed of vetted scientific data that would support the proposed plan's assertion that drilling in the Forest would potentially affect water resources.

Furthermore, the proposed plan specifically bans horizontal drilling, a technique that has been utilized for 20 years in North America with amazing results. Drilling horizontally is the most effective and environmentally friendly way to harvest the resource. Horizontal wells expose more of the formation, which allows for production of a greater percentage of the natural gas. Also multi-well-single-pad drilling, the current dominant technique made possible through horizontal drilling, minimizes surface disturbance by concentrating wells in one location. This concentration of wells also limits the amount of pipelines, which further minimizes surface disturbance.

Lastly, the 900,000 acres that comprise the Forest is very close in size to Virginia's current natural gas producing area in the southwest corner of the State. Over the past 20 years, Virginia's natural gas industry has invested over $2 billion in the Commonwealth, paid over $600 million in royalties, paid over $150 million in severance taxes plus millions of additional dollars in real estate taxes and mineral taxes, while currently providing 3,000 good paying jobs. During that same 20-year period over 5,000 wells were drilled, under a very rigorous state-supported regulatory regime, without one water contamination issue. How can the Forest Service consider a ban that would forego all of the above benefits without the science to back it up?

In closing, I urge that you reject the ban on horizontal drilling in the Draft Forest Plan for the George Washington National Forest. Instead, consider the nation's energy needs that can be met by safely drilling in the Forest and producing clean-burning natural gas.

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Re: Comments on George Washington revision plan
Date: Friday, October 14, 2011 8:17:26 PM

Drilling for oil and gas can be done safely but we cannot depend on profit driven companies to plan their activities with the public good a priority. When a gas or oil field is fully developed it will change the area forever. Our public officials who will ultimately make the planning decisions must immerse themselves in understanding the long term consequences of development to minimize the negative impacts and maximize the positive. The gas trapped in the Marcellus shale has been there for millions of years. It is not going anywhere. There is no need to rush into decisions that will impact us for years to come. Plan carefully and don't let the big money of energy companies influence your decisions.

Before any exploratory work begins energy companies should provide: (1) size and weight of trucks and number of loads to set up pad and drilling equipment, fuel, etc before drilling begins. (2) volumes and sources of water for drilling and fracking. (3) Sources and methods of transporting fracking chemicals before and after drilling. (4) the composition of fracking chemicals so that they can be monitored. (5) specify means of disposal of fracking chemicals and waste salt water from wells. (6) all groundwater wells and surface water that might be impacted should be tested before drilling begins and stored for comparison after drilling. (7)strict monitoring must accompany all phases of the drilling and fracking operations to see that safe procedures are followed. Penalties for not following strict procedures must be in place before any drilling proceeds. (8) A detailed list of impacts on local infrastructure and local economies must accompany all applications for permits.
John L. Kline,

SUPERIOR
WELL SERVICES
200 Willow St. Elkview, WV 25071 mobile: 304.545.7259

October 14, 2011

George Washington National Forest Plan Revision
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, Virginia 24019

Re: George Washington National Forest Plan Revision

Ladies and Gentlemen:

I am writing to voice strong opposition to your proposed ban on horizontal drilling and hydraulic fracturing in the GW National Forest. I believe that in the best interests of the Forest and the people of the United States that decisions should be based on facts, science and sound engineering principals instead of fear and hype.

If this decision is implemented it will be in direct opposition to your own mission and vision. Which is……
The USDA Forest Service Strategic Plan (FY 2008-2012) defines the mission of the Forest Service to sustain the health, diversity, and productivity of the Nation's forest and grasslands to meet the needs of present and future generations.

In the 1990s I was involved in a project my company, at the time, had with Columbia Gas Transmission to drill a horizontal gas storage well in the Monongahela National Forest in West Virginia. The purpose of this well was to **replace the need for several vertical wells and the pipelines that they required and to MINIMIZE the disturbance of forest land.** The well was successful. If you went to the Monongahela National Forest today unless you were told which well it was you wouldn't know because on the surface it looks like every other well site. Except that this well site minimized the disturbance of forest land. Why shouldn't we expect the same logic to prevail in the George Washington National Forest?

New technology has allowed the natural gas industry to drill even longer horizontal laterals. What this means is that one horizontal well can now replace 10 or more vertical wells. This means even less disturbance of plants and animals in the forest. Isn't this a good thing? Our country gets the energy it needs, the United States government gets the royalty income from an even more efficient well and the forest suffers minimal disturbance. Sounds like a triple win to me. But your proposed land use plan prohibits this creating a loss for our country and its taxpayers. This also will have a negative impact on Virginia. Prohibiting this efficient development of natural gas can cost Virginia jobs, tax revenues and energy.

I understand that there are concerns about hydraulic fracturing. Again these are based more on fear than fact. Our industry has been fracturing wells for over 60 years. The process is NOT NEW. The reservoirs that our industry fractures are typically thousands of feet deep. The fresh water is a few hundred feet deep. Due to rock stresses it is impossible to frac through thousands of feet of rock to reach fresh water. Hydraulic fractures travel horizontally (parallel to the ground surface) when wells above about 1500 feet are fractured. We know this from the coalbed methane wells we fracture for mine degasification in southwest Virginia. In those wells people have actually observed the hydraulic fractures created underground so this isn't theory it is fact. The fresh water is also protected by multiple strings of casing that are cemented. Virginia has strict regulations on drilling and completions. The Virginia Division of Oil and Gas strictly enforces these regulations.

Horizontal wells are drilled and fractured on a routine basis in southwest Virginia. Most of these wells are currently fractured using nitrogen gas and little if any water.

Our company is in the process of hiring 20-30 people at our Norton, VA facility. These types of regulations are what causes fear in our upper management and can impact hiring decisions. I urge you to reject fear in favor of fact, science and sound engineering and to do what is right for Virginia and our Nation by permitting horizontal drilling and fracturing in the George Washington National Forest. Virginia needs the jobs, energy and tax revenues. This can be done with minimal impact to the environment and recreational uses of the forest. I will be happy to answer any questions you may have and even do an educational seminar on drilling and hydraulic fracturing if that would be helpful. Thank you.

I can be contacted at; or at
304- 545-7259.

Sincerely,

Gregory Kozera PE
Regional Sales Manager
Superior Well Services

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Ban on Horizontal Drilling in the George Washington National Forest
Date: Friday, October 14, 2011 5:20:45 PM

I am commenting to voice my objection to the proposed ban of horizontal drilling in the George Washington National Forest. There has not been one documented case of water contamination caused by drilling and stimulating horizontal gas wells and this was even confirmed by the EPA. Not only does our country need domestic energy, we also need to create jobs, and this ban would be detrimental to both. Wells have been hydraulically fractured since the 1940' or 1950's. Please do not listen to the negative comments from those who know little about this subject and use common sense to make a rational decision not to enact this ban.

Thank you.

Phil Horn
Land Manager
Range Resources-Pine Mountain, Inc.

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: George Washington National Forest Horizontal Drilling
Date: Friday, October 14, 2011 4:59:51 PM

As an employee of a gas company that has been active in Virginia for many years AND an avid nature lover, I would like to comment on the proposed ban on horizontal drilling in the George Washington National Forest. It would seem to me that you would encourage horizontal drilling in Virginia rather than discourage it. While horizontal drilling pads are a little larger than vertical ones, they are also drilled on much large spaced units due to the horizontal length of the well underneath the ground. Multiple wells can be drilled close together in one top hole location with the horizontal lengths running underneath the ground in various directions, thereby drastically minimizing disturbance to the surface, our beautiful mountains, streams and the animals that live there. The horizontal well sites are seeded with vegetation once drilling is completed and are returned to a natural state similar to a meadow. Also, by encouraging drilling of these horizontal wells, we as individuals are helping our communities, state and our government. Gas companies offer good, high-paying jobs in our communities and with today's economy, that is certainly a step in the right direction. Gas companies also pay severance taxes to the counties in which they drill and, without that income, our county offices would be hard pressed to come up with funds for road improvements, increased technology and employment of safety individuals for our communities. Finally, by producing more of our own energy from our own resources, we will become less reliant on foreign oil thereby assisting our state and government as well. Natural gas is a very clean-burning product and is one of the most environmentally friendly energy sources that we have currently available to us, for our future and for our children's futures. For these reasons, I wholeheartedly support horizontal drilling in the George Washington National Forest.

Deborah T. Louthian
Property and Account Administration Manager
Range Resources - Pine Mountain, Inc.
406 West Main Street
PO Box 2136
Abingdon, VA 24212
Direct: (276) 619-2582
Fax: (276) 628-7246

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: GW Draft Forest Plan and Draft Environmental Impact Statement
Date: Friday, October 14, 2011 4:20:14 PM

Dear Ladies and Gentlemen,

On Behalf of Range Resources, I am writing to oppose the part of your plan that would ban hydraulic fracing and horizontal drilling in the George Washington National Forrest. The George Washington National Forest in Virginia is approximately the same size area as the current natural gas producing area in the Southwest portion of the Commonwealth. While the producing potential in GWNF has not been determined, any restrictions on natural gas production would likely cause the Commonwealth to miss out on the economic impact already seen in Southwest Virginia.

In the early 1990's, I was actively involved in the drilling and fracing of vertical gas wells in the Jefferson National Forest on the USA Tract 550-C in Southwest Virginia. All the appropriate environmental safeguards were implemented and followed and the result was a successful partnership between the USFS and the gas producer. The well site access roads enabled the USFS to gain access to previously remote areas, the well pads became open areas for the deer to graze, and the area hydrology remained unchanged.

Over the past 20 years the Virginia gas industry has invested over two billion dollars in capital expenditures; paid over six hundred million dollars in royalties; paid over one hundred fifty million dollars in severance taxes in the producing counties; paid real estate and mineral taxes, payroll taxes, and sales taxes that all contribute to a robust trickle-down economic effect on the economy, and created more than three thousand good paying jobs for Virginia workers.

The proposed ban is without basis and would prevent Virginia from enjoying a similar benefit should development of the resource become available. The proposal is without basis because there have been no documented cases in the active gas producing areas of the Commonwealth where water has been damaged. The proposal is without basis because the forest service hasn't completed an environmental impact statement that could document damage. Even the Environmental Protection Agency Director has testified before Congress that there is no documented evidence of water damage from hydraulic fracturing.

Baring such activity on public lands in the Commonwealth is a meritless taking of a resource that could have significant economic value to Virginians and our Country. The Department of Energy has recently found that the drilling practices utilized today are appropriate and safe.

Therefore, the preferred option in the Forest Service plan **should be rejected** and an option selected that would allow development should be selected instead. The Forest Service could stipulate reasonable safeguards that would enable development while protecting the natural resources.
We urge you to seriously consider our Nations energy needs and reject the preferred option. To do otherwise is to turn a blind eye to our country's future energy needs and the national security implications of this short sited proposal.

Thank you,

Al Mueller

Drilling Manager

Range Resources - Pine Mountain, Inc

Office: (276) 619 - 2588

Cell: (276) 608 - 2372

Fax: (276) 739 - 2700

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: GW forest
Date: Saturday, October 15, 2011 10:46:22 AM
Importance: High

Dear Sirs:

I am writing to voice my concern about the George Washington National Forest planning. I am concerned about several aspects of the preferred alternative, such as, logging of old growth forests and minimal permanent protection of wilderness and scenic areas, permanent road building and other development. Hydrofracking should not be allowed in the National Forests, nor should drilling for natural gas. Increased streamside protections are welcome. Instead of the preferred alternative, I urge you to consider Alternative C which would allow for more wilderness protection and protection of old growth forests and roadless areas. The Friends of Shenandoah Mountain proposal also deserves consideration. It is imperative that we continue to protect the George Washington National Forest so that it may provide opportunities for recreation, such as hiking and back country activities, and also a refuge for wildlife and a source of clean water for all.

Thank you for your consideration of my concerns,

Sally Tucker, MD

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Comment on George Washington Plan Revision
Date: Saturday, October 15, 2011 12:10:56 AM

Your plan isn't a plan at all. I attended one of your public meetings and the so-called GWNF Head Biologist couldn't provide wildlife population trend estimates for your current plan, let alone for any of your current proposals. You lied thru your teeth when you claimed that you are meeting 50% of your current proposed Timber Harvests, that's pure unadulterated BS and you own numbers show that it's closer to the 35% range.

Someone asked me what I would do to change the Management of the GWNF and here is my unedited response!!

1. Fire/abolish the entire "upper management" level and implement a state by state management system where the wants and needs of the individual states in which the lands located are the highest priority, rather than having the entire southeast (13 states total) run by some eco-weenie fruitcake from Commiefornia.

2. Since he couldn't tell me jack about the past wildlife population trends or how their various new draft proposals would impact wildlife populations, the current GWNF Head Biologist's ass would also be hitting the streets.

3. Since they have drastically under-achieved in the past, especially when it comes to meeting their timber harvest goals, I'd say somewhere around a 10% across the board paycut is in order. 10% bonuses would be available to bring them back to their current level (on a state by state basis), but only for each year that they actually met or exceeded an "adjusted increased timber harvest goal", which would attempt to recoup what they have failed to meet in the last 20 or so years.

4. Eliminate any currently proposed road closures and open up all the damn existing gates a hell of lot more. They would only be closed when safety might warrant due to heavy rains, really bad winter weather, and such.

5. Either abolish the fee that Virginia Sportsmen are required to pay or make it across the board for all user groups who have been getting a free-ride and bigger say for far too damn long.

6. Since prison labor is used on our State highways, I don't see why it can't also be used on our National Forest land maintenace.

W. Brown

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: comment on Geo Washington Plan Revision
Date: Saturday, October 15, 2011 7:32:11 AM

To the Protectors of our Forests,

I understand that many old growth patches of forest have been discovered in the George Washinton National Forest, in the past 30 years. A friend of mine showed me two maps of "Existing Potential Old Growth of the George Washington National Forest," which show many forest stands. Which of these are true old growth? I would like to be able to visit some of these newly rediscovered forest stands. And, especially, I would like to know that these old growth forest stands, both large and small, are included in a good, clear inventory of old growth so they can be protected from cutting.

Sincerely,
Pamela J Hoadley

Your task is not to seek for love, but merely to seek and find all the barriers within yourself that you have built against it.
Rumi

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Horizontal Drilling
Date: Saturday, October 15, 2011 10:53:34 AM

Dear sir or madam: I strongly urge you to permanently ban horizontal drilling (hydrofracking) from the George Washington & Jefferson National Forests. Allowing this drilling to take place will result in the permanent destruction of precious wild lands and immeasurable pollution of large areas of land and of a significant portion of the drinking water to residents of western Virginia. Just go out to Colorado and see what has occurred there as a result of this type of drilling.
Thank you very much for your attention.
Sincerely,
Octavio de los Reyes
Fishersville, VA

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Comments on the GWNF proposal
Date: Saturday, October 15, 2011 8:03:29 PM

I have several concerns that are not addressed in the plan, but should be. While not a Park Service concern directly, government subsidy of energy projects, whether concentrated industrial wind power or gas drilling, warps and alters the normal business plan and investment strategies for the organizations receiving the subsidies.

Government subsidy includes direct subsidy or payment, tax credits or suspension, and a variety of regulatory, accounting, and legal/judiciary waivers or benefits. This is seen most notably in concentrated industrial wind energy projects, which have been shown around the world to be unprofitable and unsuccessful in meeting production and delivery goals of electricity. Concentrated wind farms have not been shown to deliver a significant benefit in the Appalachian mountains, even with heavy government subsidy.

Beyond subsidy that warps the energy project arena calculations, internal forest system bureaucracy and habit warps and increases the cost of timbering selected and approved areas. The preference stated in the plan for burn management is truly a default into the path of least resistance and least cost (to USFS). Streamlining the timber identification by allowing commercial timber companies to propose timbering projects more efficiently should be pursued, and pollution-producing area burns be minimized. In addition, the Forest Service itself must prepare for a future of budget cuts, and this means fewer employees and a requirement for improved marketing of all aspects of forest management, recreational, biological, and marketable resources. A more market-based solution should produce win-win results, albeit control will need to be shared somewhat between private accountable timber companies and forest service managers.

I suggest three things:

1) Prior to determining the business viability of wind and gas facility construction within the forest, the approving Park officials should require the provision of an alternative proposal from each vendor that is reflects profit and loss projections WITHOUT state or federal business subsidies. This business plan would parallel the original proposal but be completely free from government grants, EPA and private lawsuit waivers, rebates, and incentive payments. It should then be made publicly available for comment for a reasonable period of time. Rationale: The federal government will face imminent and future budget cuts. It is of critical importance that the investors constructing industrial-style wind energy or gas drilling plants in the parkland are able to profit in such a reduced subsidy environment, and to project profit in the outyears, such that communities impacted are not left in the lurch in case government subsidies are no longer available, or are suddenly reduced.

2) Prior to any permissions or leases granted for wind or gas drilling, a complete listing of state and federal environmental and legal waivers that have been granted or are in existence should be published, and made available to communities impacted. The best way to keep the area and the water safe is to make mistakes and accidents extremely expensive, and to be able to put a price on the various qualities and functions of the national forest and its underground water system.

This is of particular importance, as many private landowners may have already signed contracts which indemnified the companies and operators from suit or damages.

3) Develop an improved process by which forest lands can be timbered such that time and money is not wasted, and burn areas are limited to only those areas where species promotion or restoration is desired, or timbering is not a geographically feasible option. The forest service itself is clearly not suited to conduct this process design, otherwise it would have already developed a more efficient and streamlines process than the one currently in use. The process should be improved through timber company, local citizen, university and free market oriented think tanks included. ref: http://www.newsleader.com/article/20111015/NEWS01/110150331/Forest-Service-seeks-more-cutting-burning

Karen Kwiatkowski
Mt Jackson, VA 22842

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: George Washington forest plan revision
Date: Saturday, October 15, 2011 4:38:01 PM

Dear Mr. Landgraf,

This is to record my support for the preferred alternative under the draft management plan and EIS and to ask that the Forest Service take all measure to protect water quality, especially those areas which supply drinking water to adjacent towns.

Sincerely,

Cecily Kihn
Philadelphia, PA

October 13, 2011

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

Dear Supervisor Hyzer,

Please accept my comments on the draft Land and Resource Management Plan and draft Environmental Impact Statement for the George Washington National Forest (GW) and thank you for this opportunity to comment . As landowners living adjacent to the GW our lives are made richer by its proximity and we are directly affected by what happens to the forest .

Energy:

Biomass Incineration – Using our standing forests as a fuel source for biomass incinerators and electricity generation is a terrible waste of the forest .Because of the huge volumes of fuel—trees—and water necessary and the large amount of air pollution—fine particulates and CO2—that accompany biomass incineration, the George Washington National Forest should not allow timber sales that fuel biomass incinerators.

Wind Energy – The mountain ridges of the George Washington National Forest are flyways for birds and bats and are home to many rare species and Special Biological Areas. The huge surface areas—clearings, platforms, roads, and transmission lines—necessarily cleared and developed for industrial scale wind generation would irreparably fragment and destroy sensitive habitats and our beautiful mountain vistas. Industrial wind energy should not be allowed in the George Washington National Forest.

Gas and Oil Extraction – I strongly support the prohibition on horizontal drilling in the draft plan and commend you for this responsible decision. This will reduce the risk of serious water quality degradation and other environmental concerns associated with hydraulic fracturing. Please keep this prohibition in place.

Making more oil and gas leases available in the George Washington National Forest would lead to dangerous impacts to water quality on the forest. Hydraulic fracturing is a common practice on vertical as well as horizontal wells. The draft plan allows standard oil and gas leasing, at least in some form, on roughly 994,000 acres, or 93% of the forest. The development accompanying wells, platforms and wellheads would compromise recreation, scenic and biological resources. The forest should not make any further leases available and existing leases should be removed from lease availability when they expire.

In dealing with the effects of climate change, standing forests and soils are more valuable as carbon sinks than in using forest resources as fuel or as a source of renewable energy. Please make necessary changes so that the Final Land and Resource Management Plan for The George

Washington National Forest does not allow for fuel for biomass incineration, industrial wind energy or further gas and oil leases on the forest.

Roadless, Wilderness, and Special Biological Areas:

The GW is one of the very few places in the eastern United States where large areas of relatively undisturbed, mature forest still exist. These forests and the remote settings they provide must be protected. In addition to the public benefits they provide (clean air & water, unique recreation opportunities, etc.), many wildlife species that need large geographic areas (e.g., black bears, bobcats, raptors) or habitat conditions found here (e.g., forest breeding birds, salamanders) depend upon these special habitat areas.

The draft plan identifies 372,000 acres of ―potential wilderness area‖, or PWA. Prohibiting timber sales and new roads in the 242,000 acres of the PWA (the inventoried roadless areas) is a very positive and important step. However, the draft plan does not give the same protection to 80,000 or more acres of PWA. The entirety of all the PWA should be protected from timber sales and road construction.

Creating wilderness study areas (WSA) is an excellent means for protecting these large, remote forests. I am disappointed in the meager recommendations for WSA in the draft plan. Each of the four areas recommended are important, but three need to be increased in size. The 9000 acre recommendation for Little River is a fraction of the 30,200 acres in its PWA. Similarly, the 5000 acre recommendation for Rich Hole Addition should be increased to protect the 12,165 acre PWA, and the 6000 acre recommendation for Ramsey's Draft Addition should be increased to protect the 19,072 acre PWA.

Just as importantly, many other areas of the GW are very worthy of WSA designation. No wilderness exists in the Lee RD, and part of the Big Schloss PWA should become WSA. Several other areas in the North River RD should become WSA, including Beech Lick Knob PWA and many PWA on Shenandoah Mountain. Laurel Fork in Warm Springs RD is a truly unique and special place deserving to be WSA.

I am also concerned about rare and uncommon species and natural communities in the GW. Special Biological Areas or similar designations should be assigned to all areas, in their entirety, that have been recommended for protection or special management by the Virginia Division of Natural Heritage.

Timber Harvest - Annual timber harvest levels in the GW have generally declined since the current plan was completed in 1993. This is a welcome trend. I believe the draft plan's objective for annual timber harvest should reflect the most recent harvest levels (approximately 610 acres in 2010), and be lowered considerably from the recommended range of 1800-3000 acres/year.

Water Resources:

I am glad to see the increased attention on public drinking watersheds and water resources in the draft plan when compared to the current plan. I believe more protective measures are needed

though. There should be specific management objectives for watersheds that provide drinking water to cities and communities near the forest. The desired conditions for these watersheds in the draft plan are too general to be useful.

Identifying priority watersheds seems to be a good concept, but the draft plan does not describe how or why the watersheds were selected. Less than a third of the acreage in local drinking watersheds are included in the priority watersheds. This seems to lessen the importance of protecting these drinking watersheds.

Riparian areas in the priority and drinking watersheds deserve special attention. Riparian zones in these areas should be wider than 100 feet along perennial streams and 50 feet along intermittent streams specified by the draft plan forest-wide (on level and gently sloping ground). These widths should be tripled to improve water quality and aquatic habitat and provide riparian habitat for many species (e.g., salamanders, turtles) that use these special areas.

On sloping lands, the draft plan requirements are less stringent than the Virginia Best Management Practices. State BMPs call for streamside management zones along Municipal Water Supplies (including both perennial and intermittent streams) to be 150 feet wide where the slope of the ground is 11-45%, and 200 feet wide where the slope exceeds 45%. At a minimum, the riparian area widths in priority and drinking watersheds of the GW should meet these state BMPs.

Sedimentation is a big threat to water quality everywhere, including the GW. Yet, sedimentation is not directly measured or monitored under the draft plan. Measuring sedimentation in strategic locations and waterways will complement the macroinvertebrate sampling in streams and should be part of forest management.

I am very glad to see that road decommissioning is included in the draft plan. Road closures will help decrease sedimentation while improving water quality, aquatic and terrestrial habitat, and restoring forest health. I believe the 160 mile target for road decommissioning during the first decade of the draft plan should be increased. This will also save money .

Economic Analysis:

Budget – The current timber program on the George Washington National Forest is costly because of the large expense in administering the program. Virtually all timber sales are ~~–b~~elow cost‖, costing the US taxpayers more money that the sales recoup. The George Washington National Forest Plan should be as cost effective as possible and have the lowest possible budget while maintaining existing ecological and recreational resource values.

Ecosystem Services – The economic analysis on the George Washington National Forest should include a full cost/benefit analysis of ecosystem services. Economic benefits should include clean water, improved air quality, soil stabilization, carbon sequestration, and improved recreational value. Costs should include impairments to air quality and visual quality, acres of species habitat degraded, soil compacted, land infested with non-native invasive species and

water quality diminished. All forest plan alternatives should have this valuation and net public benefits should be compared at both the beginning and over the full 15 year life of the plan.

Alternative C - As presented in the Draft Environmental Impact Statement, Alternative C has the lowest budget cost of all alternatives. It maximizes net public benefits and protects all resource values in the long term instead of liquidating them in the short term. For this reason, I request that you adopt Alternative C as the Preferred Alternative and as the Final Land and Resource Management Plan for the George Washington National Forest.

Thank you for the opportunity to comment on the draft plan.

Sincerely,
Shay H Clanton ,Kim Clanton and Kim Bass Clanton

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Comment on George Washington National Forest PLan
Date: Sunday, October 16, 2011 3:50:14 PM

I support a complete ban on horizontal drilling for natural gas within the forest. Hydrofracking uses far too many chemicals with known health risks. It is foolish to allow these chemicals to be introduced into the water table from which so many individuals and towns draw their drinking water. Safe, clean water is essential to human life, as well as to the plants and animals that live within the forest.

Additionally, the 24/7 nature of gas drilling is incompatible with the mission of the national forests to provide a refuge for wildlife and humans. These lands are far too valuable to risk for short term profit.

Sharon Van Name

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Horizontal Drilling in the George Washington National Forest
Date: Sunday, October 16, 2011 7:54:02 PM

Please record me as an individual AGAINST Horizontal Drilling (hydrofracking) in the National Forest. I believe this will negatively impact plant and animal life, as well as water resources in the area. Research must be done before such valuable resources are destroyed, perhaps forever.

Therefore, I support the ban on this procedure in the National Forest.

Thank you,

Susan Schmidt

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: comments on GWNF management plan
Date: Sunday, October 16, 2011 12:08:35 PM

I am writing because am very concerned about the management of the George Washington National Forest (GWNF), and especially about protecting the quality of water throughout the GWNF and the potential dangers of fracking. The current practice of horizontal drilling via unregulated, unmonitored hydraulic fracturing of the earth to access natural gas is highly destructive to the environment in many ways, and wreaks untold havoc upon the water both above and beneath the earth's surface. In addition, I have read of studies that link fracking with earthquakes, and heaven knows we don't need anymore rocking and rolling here!

Hydrofracking should be prohibited on all public lands. Vertical drilling should be prohibited as well, to prevent its negative impacts upon watersheds and sensitive ecosystems. Many miles of streams would be unnecessarily and irresponsibly put at risk due to the general operation requirements for drilling, which include roads and heavy trucking. We need to protect the GWNF from shortsighted, profit-driven industries that will irreparably damage the environment.

To protect public drinking water, we should identify all drinking water supply areas and insure adequate riparian buffers around these areas. All drinking water supply areas should be identified as priority watersheds. We also need more detailed and stringent requirements to protect priority watersheds, particularly with respect to limits on road construction, which is known to degrade water quality.

Thank you for your consideration of these important matters.

Lise Stoessel

Charlottesville, VA

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: GW Forest Plan Recommendations
Date: Sunday, October 16, 2011 4:07:40 PM

I support a ban on horizontal drilling for natural gas. This operation is a threat to drinking water as the rock formations are so varied that any cracks could drastically alter ground water protection.

Thank you.

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: GWNF plan--comments
Date: Sunday, October 16, 2011 1:13:34 PM

Hello:
Just to let you know I support the ban on hydrofracking anywhere in the national forest, and would like a more thorough study of the impacts of vertical gas drilling as well, especially near our water supplies.
2. I support the identification of drinking water supply areas and expansion of protective buffers. I would like more clearly defined management standards to protect priority water supplies.
3. I support a ban on new wind towers on sensitive ridgelines, however I am not opposed to windpower per se. I would like instead to see offshore wind developed in Virginia, which as I understand it, is uniquely well-suited to such development.
4. Keep the national forests for everyone to enjoy, not to profit the few. . .

thank you,
Diana Woodall

Diana Woodall, NCTMB
Yoga classes with personal attention--
Challenging and inspiring, never routine!
Also offering Zen Shiatsu--(acupressure massage)
www.agoodstretch.com

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Comments GW Jefferson Forests Plan
Date: Sunday, October 16, 2011 1:13:49 PM
Attachments: comments GW jefferson.docx

---

comments-southern-georgewashington-jefferson@fs.fed.us

Dear Washington and Jefferson Forest Representatives,

David and Alex Johnston here. We are residents of Bath county. We are hereby submitting our comments to the revised plan.

David and Alex Johnston

- **We attended the recent community meeting regarding the draft plans. Per my comments then, followed up below, two main points. Also, thank you very much for presenting the community meeting. It allowed us an opportunity to verbally comment on the plans. I also greatly appreciated the concern I saw in the Forest employee's comments and the presentation itself regarding the Forests. You are not federal government puppets. Thank you for your past, continuing, future hard work in preserving these national treasures for future generations.**
- **No wind power in Bath county.**
  - **This area's main source of income is tourism. Visible industrial development of any kind is directly contrary and highly likely potentially harmful to our main economy.**
  - **We already are required to co-exist with the hydroelectric dam. One major source of alternative energy is enough for one county.**
  - **Although visually more appealing, Lake Moomaw can also be considered a second major source of industrial development; it provides the water for downstream paper plants to meet EPA emissions requirements. Enough.**
  - **Industrial wind towers flat out kill airborne creatures. We**

are host to eagles, hawks, flying squirrels, and other rare, protected, beautiful creatures. Were any citizen to purposefully kill some of these federally protected species we would be jailed and/or fined. I see little to no legal distinction in establishing an industrial wind tower that will knowingly kill these species. I look forward to seeing that legal theory tested in court should I receive proof of one wind tower killing one protected critter.

- **This latest fad in alternate energy has its place in the United States but not in Bath county. South Dakota, Nebraska, Texas where the land is open and the wind actually blows with constancy. There are few locations in Bath county where wind power has any chance of being effective. The cost/benefit analysis of effectively nonexistent power grid improvement versus the certainty of view shed destruction and endangered or protected species death is nonsensical. Made further nonsensical if the artificial economic benefits of such nominal wind power facilities were removed. Meaning, if tax and other incentives were removed. Just don't do it.**

- **No fracking in Bath county.**
  - **Fracking is clearly environmentally controversial. Hence the legislation passed in many jurisdictions to stop the practice until more can be learned.**
  - **What is certain is, if the environmental damage that is highly suspected may arise from fracking is correct, it is irreversible and potentially devastating to the local water tables. Were our water tables polluted to the extent that ground water were not safe for animal or human consumption, it would eliminate the value of all real estate in the area. Only massive toxic or nuclear waste pollution could possibly have a similar detrimental effect. We as a society would not be so tolerant of permitting a risk of these types of pollution. Let's pull the prejudicial wool off our eyes and not permit the same for fracking. It is also not a genius equation to see massive lawsuits preventing or, should it go forward, obtaining damages for that lost value.**
  - **The risk of permanently damaging the usefulness of this**

land for the temporary benefit of some carbon energy is penny wise and pound foolish. Let's let this "energy crisis" pass without taking the risk of permanently destroying the underlying value and usefulness of the real estate in Bath county.

- **Minor points, or counterpoints.**
  - **Many Bath residents in the meeting were angered about closing roads. It is not a seniors issue. I'm nearly there in age myself. It is a get your butt off the couch and truck seat and walk issue. Were I to decide between committing limited budget dollars to maintaining additional back woods roads versus other forest issues, close the roads. My dog buddy and I would appreciate that for grouse hunting without interference from motorized vehicles.**
  - **Many Bath residents were very concerned about logging and where the chopped trees go. I don't know diddly about maintaining a healthy large forest. I found it very illuminating to learn the lumber is a byproduct of maintaining a healthy forest. You don't allow trees to be chopped just to get at the wood for sale. Do what you need to do. When it comes to where the chopped logs go, that's the free market. I rather doubt they're winding up in China or Japan and, if so, who cares? That's the free market. Chop, burn, dig, plant. Put your experience and education to task to keep these forests healthy.**
- **Otherwise, we see enough study and concern has been done regarding other portions of the plan to believe it has been well thought out. Go for it. The longer we live here the more we'll have to say. Talk to you again in ten years. Thank you again for your time and concern put into these decisions.**

Best Regards,
David Johnston
Alex Johnston
Wild Things of Bath County

Do not hesitate to contact me with questions or as I may be of further assistance.

Best Regards,
David Johnston

David Johnston& Associates, PLLC

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Concerns regarding Forest Plan Revision
Date: Sunday, October 16, 2011 7:04:02 PM

To Whom It May Concern:

As a member of State Line Acres, LLC, I am a private landowner on a ridge top in the Cow Knob area of Shenandoah Mountain in Rockingham County. I, my fellow landowners, and my neighbors as well as the greater community strongly support wind energy as an alternative to nonrenewable energy resources. We are aware that the ridge top where we are located has great potential for such development.

I am concerned that the Draft Revised Land and Resource Management Plan released on May 18, 2011 proposes to designate certain areas surrounding my property as not suitable for wind development. I realize that wind energy development of my property and others is not possible without Forest Service approval for road access and transmission corridors through areas of the George Washington National Forest that may be designated as not suitable for wind development.

I am requesting that the Forest Service management be sensitive to private landowners in my community by allowing for the special use permitting process to apply in the area surrounding my property.

Thank you for your consideration.

Sincerely,

Keith A. Harman

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: George Washington National Forest plan
Date: Sunday, October 16, 2011 12:12:39 PM

My objection to the George Washington National Forest plan is its deceptive use of the word forest. This practice was brought to my attention in an article in The News Leader whose headline read "Forest Service seeks more cutting". A more accurate rendering would read "Tree Farm Agency seeks more clear cutting". This makes perfect sense since the primary purpose of the U. S Forest Service is to supply trees to the lumber and paper industries. It is not, as the public is frequently led to believe, the restoration, conservation or even maintenance of forests.

The crux of my argument is the blatant misapplication of the word forest. What is a forest? I would contend that it has at least three entirely different meanings; 1) a climax forest community, 2) a secondary forest, and 3) a tree farm. The key to evaluating any forest management plan, is understanding what is meant by the word forest. I would contend that the George Washington National Forest plan refers specifically, to tree farm management.

Reference to a forest in the plan in the sense of a climax community can be eliminated since they were destroyed by clear cutting. Historic accounts describe vast areas of widely spaced old growth trees with a diverse understory. It would be absurd to call this kind of forest as "too old", because it represents the end stage of a centuries old process. One of the tragic consequences of clearing cutting and subsequent grazing is the near total destruction of the understory, including many wild flowers. The other perhaps more damaging consequence, was
the erosion of the nutrient rich organic humus layer of the soil. Since the plan does not address the restoration of the missing understory or the missing soil layer and it considers 100 year old trees as "to old" it can't possibly be considering this concept of a forest.

Secondary forests are forests that have been clear cut at least once or more in the last
100 to 500 years. They are characterized by a thick growth of small, young trees and a less diverse understory than a climax forest. This is the common idea of what a forest is because climax forests are so rare that most people have never experienced them. If cutting is stopped, secondary forests move toward climax. Cutting reverses the process. Continual cutting can cause the local extinction of species, thus preventing their complete return to a former climax condition.

So what is the difference between a secondary forest and a tree farm? Tree farms are plantings of economically desirable trees. Tree farms concentrate on the production of one species and consequently the exclusion of other species. Much of the George Washington National Forest by this definition is already a tree farm, it was planted. Tree farms lack diversity. Trees grow there but they are not forests. Their management does not require any consideration other than maximizing the amount of wood produced and minimizing the time and cost. This does not require a million dollar plan.

Few people realize that all National Forests, outside of designated wilderness areas, are scheduled to be cut down in fulfillment of the Forest Service's mandate to supply trees to the lumber and paper industries, as is befitting an agency under the supervision of the U. S. Department of Agriculture. If you have read this far you probably think I'm a tree hugger. I don't deny that I love trees and have spent most of my life studying plants and their ecology. Now that I have confessed, I can add that I am not against tree farming. What I object to is the implication that this plan is intended to promote the health and well-being of forests as opposed to supplying lumber to industry.

John Schmidt

From:	E
To:	FS-comments-southern-georgewashington-jefferson
Subject:	comments on GWNF management plan
Date:	Sunday, October 16, 2011 11:23:18 AM

I am very concerned about the management of the George Washington National Forest (GWNF), and especially about protecting the quality of water throughout the GWNF. The current practice of horizontal drilling via unregulated, unmonitored hydraulic fracturing of the earth to access natural gas is highly destructive to the environment in many ways, and wreaks untold havoc upon the water both above and beneath the earth's surface. Hydrofracking should be prohibited on all public lands. Vertical drilling should be prohibited as well, to prevent its negative impacts upon watersheds and sensitive ecosystems. Many miles of streams would be unnecessarily and irresponsibly put at risk due to the general operation requirements for drilling, which include roads and heavy trucking. We need to protect the GWNF from shortsighted, profit-driven industries that will irreparably damage the environment.

To protect public drinking water, we should identify all drinking water supply areas and insure adequate riparian buffers around these areas. All drinking water supply areas should be identified as priority watersheds. We also need more detailed and stringent requirements to protect priority watersheds, particularly with respect to limits on road construction, which is known to degrade water quality.

Thank you for your consideration of these important matters.

Sincerely,
Dr. Eleanor M. Amidon

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Drat Foreat Plan & Draft Environmental Impact Statement
Date: Sunday, October 16, 2011 8:25:51 AM

I am not in favor of drilling on public lands.

I am in favor of protecting our water quality at all costs.

We need to be more conservative in our lifestyle and allow responsible and thoughtful decisions to be made with regards to energy needs,

We need not to be lead by corporations whose sole intent is to make the next buck for no regard for our fragile environment,

Sincerely,
Mary Baldwin

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: George Washington Forest Plan
Date: Sunday, October 16, 2011 9:59:28 PM

Thank you all for the hard work you have put into developing this plan. As you finalize your decisions, please consider:

Continue the ban on horizontal drilling for natural gas
Re-examine vertical drilling in any areas of the forest for previously unseen effects on our environment and our water quality.
Identify drinking water areas and provide appropriate buffers; identify these as priority watersheds.

Thank You

Sandra Parks

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: George Washington National Forest Plan Reision
Date: Sunday, October 16, 2011 11:31:57 PM

October 16, 2011

I urge your reconsideration of Alternative D for the Forest Plan Revision for the George Washington National Forest. Alternative D will maximize the multiple use principles of the national forest by:

- increasing early successional habitat to improve populations of grouse and other small game, a variety of non-game species, and deer and thereby improve usage of the forest
- increasing the utilization of our own natural resources
- bring about increased economic activity in many local communities in stressful financial times.

Your preferred Alternative G seeks to maintain current levels of timbering which has resulted in severe underperformance of annual timber harvest objectives. While Alternative G does recognize fire as a way to boost early successional habitat, fire alone will not accomplish the desired species diversity needed to gain increased citizen usage of the forest.

Scarce financial resources should not drive the GWNF plan revision when greater collaboration with the Virginia Department Game and Inland Fisheries, other Virginia agencies, private for profit and non-profit voluntary organizations could and should be employed to leverage National Forest Service resources.

Thank you for your devoted service to forest and their availability to our citizenry. Your consideration of my arguments for Alternative D are much appreciated.

Sincerely,

Harold V. Tate, Jr.

The George Washington National Forest: Success and Potential

Lauren Bykowski

10/16/11

The obvious strength of the George Washington National Forest Plan is that it has been written to ensure the sustenance of both the forest itself and human beings. It is because of its commitment to a number of things such as healthy communities of plants and animals, the preservation of historical and cultural sites, and the providence of resources that this document stands as an example of how land can be managed in a way of stewardship.

Drilling for oil is one activity that the George Washington National Forest is available for in order to serve people as a whole. But, when this action involves the technique of hydro fracturing, many aspects of the park may suffer due to the disruption it causes to the land, the fluid that is used and any leftover material. It may be difficult to restore areas above ground and underground after earth has been moved around for drilling, and any fluid or leftover waste has the potential to pollute aquatic habitats. Furthermore, hydro fracturing, if it is extensive enough, might require structures and other artifacts significant to previous time periods and cultures to be removed to accommodate the site of drilling, making it so that these objects can't be viewed by visitors in their original contexts. Drinking water is another crucial resource that could be compromised.
If contaminated by the fluid, it would no longer be suitable for nearby cities. The Plan emphasizes that this particular type of drilling shall not be used anywhere at all in the forest unless there is no threat to public water. Given the possible outcomes of hydro

fracturing and the priorities of the park, alternative modes of drilling should continue to be used so that the futures of ecosystems and people can be and stay healthy.

Thus far, the core purpose of the George Washington National Forest Plan to benefit both nature and the public through its various activities has proven to be successful. The Plan has a clear set of priorities, like protecting and supporting unique areas and species, keeping historical and cultural artifacts, and making sure that things like drinking water are safe for consumption. Since hydro fracturing is a form of drilling that could inhibit these commitments from being met, it should remain banned in all regions of the forest. The George Washington National Forest Plan will always be a means of creating a balance between the needs of nature and the needs of people as long as hydro fracturing is made obsolete in the forest.

From:
To: FS-mmrrep ts-soy them-georaewasbjpgtop-jeffersop
Date: Sunday, O:tober 16, 201110:03:16 PM

Submitted by: Douglas T Beale
At: Remark: !\"DOUGLAS T BEALE\" STRONGLY SUPPORT THE BAN ON HORIZONTAL NATURAL GAS DRILLING AND ALSO OPPOSED TO ANY WIND TURBINE CONSTRUCTION ON NATIONAL FORESTS LANDS

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Draft forest management plan for the George Washington National Forest
Date: Sunday, October 16, 2011 9:28:55 PM

October 16, 2011

Friends,

The mission of the Forest Service, as you know, is “To sustain the health, diversity, and productivity of the Nation’s forests and grasslands to meet the needs of present and future generations." The 1997 “U.S. Forest Fact and Historical Trends” said that the U.S. had 204 million hectares of timber land, and only 21 million hectares of reserved forest. That is, less than 10% of our most valuable forests are protected. If you throw in the less productive “other forest land” category, the portion protected drops to less than 7%. Clearly, there is no compelling need to timber so much of our national forests, other than to satisfy the timber firms’ appetite for a bargain.

As I read the plan, it would allow almost half of the forest to be outright logged and most of the rest could be logged under certain conditions. That is the “productivity” part of the mission; only two percent, on the other hand, is proposed for “wilderness study.” That imbalance is a violation of both common sense and the intent of the Forest Service’s charter.

Biodiversity is almost universally acknowledged to be threatened both nationally and globally. Development, parcelization,destruction of habitat, the replacement of forests with tree plantations, significant increases in fires and droughts, and the spread of diseases and invasive plants all put forest species at risk. Given the pressure forests and forest species are under, the protection of biodiversity through the creation of large-scale wilderness areas has to be prioritized in a responsible forest management plan.

Why “large-scale wilderness areas”? The famous “island biogeography” study by Robert MacArthur and E. O. Wilson examined the relationship between an isolated location and its species richness. Although the field work was arduous and complex, their conclusions are simply stated. What they found was, first, that there is an area effect, and second, that there is a distance effect. Moving from one “island” to another a tenth its size, we see the number of species drop by 50%; that is the area effect. And the farther one “island” is from another, the fewer species it contains; that is the distance effect. Put these together and the conclusion is that as “islands” become smaller and farther apart, species vanish at an accelerating rate.

I have placed the word “island” in quotation marks here because the effects hold true not just for islands in the literal sense, but for islands in the figurative sense--patches of habitat that are isolated from other patches of the same type. And we are seeing these two effects occur with forest types as forests shrink and are chopped up into separate, smaller chunks.

In stressing the need for large-scale woodlands to preserve diversity, I've simply reversed the direction of MacArthur and Wilson's logic: to increase the number of species and reduce the threat of extinctions, it is necessary to increase the size of forest "islands" and reduce the distance between them.

I live just a couple of hours from the George Washington National Forest. At more than a million acres, it is the largest national forest in the eastern United States, and contains large patches of relatively undisturbed and unfragmented forest--just the kind of large- scale woodland it is essential to conserve in order to maintain diversity. And as it happens, the George Washington contains 85 wildlife species that fall within the threatened, endangered, or sensitive categories. Yet only 2 percent of the forest is recommended for wilderness study. The Little River area, the largest potential addition, is about 30,000 acres in size, but only 9,000 acres of that region, for some odd reason, is included in the portion recommended.

The line of reasoning I just developed to support the preservation of large, intact woodlands has a particular importance because when a final plan is approved, it will guide the management of the forest for the next ten to fifteen years. The proposed management plan for the George Washington National Forest places far too much emphasis on the "productivity" part of its mission and not nearly enough emphasis on the "diversity" and "future generations" portions. This is a decisive turning point for the Forest Service; it can help preserve diversity on a long-term basis, or it can become an ally and agent of the forces of destruction.

As currently proposed, the draft plan violates the exact principles needed to preserve the forest's integrity and support continued diversity. It would lead to the very conditions MacArthur and Wilson warned us about--much smaller "islands" of intact forest, farther and farther apart. Consequently, I strongly urge the adoption of "Alternative C." As Ernie Reed has written, Alternative C "recognizes the value of clean water, air, wildlife habitat and recreation in the forest while limiting the logging, mining, and drilling that can be so destructive. Most importantly, this protection happens with a significantly decreased budget that protects the best values of the forest for the future and for us all."

Sincerely,

Tony Russell

cc: Rep. Robert Hurt
Sen. James Webb
Sen. Mark Warner

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: GW National Forest Plan
Date: Sunday, October 16, 2011 8:04:20 PM

To Maureen Hyzer, Forest Supervisor

My family owns 19 acres in the Deerfield area, with a large border on the GW National Forest. We've used the cabin there for over 50 years and have always loved the beauty, the quiet and the wonderful solitude. Cold Springs Rd borders our land, which is a National Forest Rd and not state maintained.

Living in Radford, Va, I was unaware of the Forest plan, the alternatives and the public comment deadline. I just found out this weekend. I haven't enough time to study the alternatives and respond, but I hope you'll accept my comments in this email.

I am solidly for very little change in the way the GWNF is managed. I consider it a modern day miracle that we have such a beautiful largely undisturbed tract of land in Va. I don't want drilling, or wind farms, or new roads, or energy exploration, or any hot button issue. I want the GWNF to stay as untouched and unaffected by these political hot potatoes; let these issues be resolved elsewhere. We should keep the GWNF to a higher standard, one of minimal impact by man.

I realize the pressures are great to exploit the Forest. It has never been easy to preserve wilderness; the nature of man is to control and profitize and manipulate his environment. We are not good at leaving something alone. But that is what we should do with the GWNF. Let it continue to be the miracle that it is.

So cast my vote for whichever alternative is the least invasive, with the smallest footprint from man. Thank You, Wilson Rankin

Sent from my iPad

From: T
To: FS-comments-southern-georgewashington-jefferson
Subject: Comments on GWNF draft plan
Date: Sunday, October 16, 2011 9:43:40 PM

Dear Sir or Madam,

I am writing in regard to the George Washington National Forest draft plan, to ask that you consider more active management of the forest, to increase the diversity of habitat for wildlife. I am a grouse hunter and am interested in the creation and maintenance of early successional habitat. To that end, I would hope to see the timbering of at least 4400 acres per year, in the suitable for timbering areas throughout the forest, resulting in a 100 year rotation.

Increased timbering will be beneficial to ruffed grouse and other young forest dependent wildlife, and contribute to the economy of Virginia.

Thank you for your consideration.

Sincerely,

Tom Pratley

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: abuse of national forests
Date: Sunday, October 16, 2011 10:37:36 PM

I believe it would be biologically harmful and counter to the public interest to permit fracking on public land in the George Washington National Forest. This is well known to the public to involve risk to water supplies, which can bring harm to humans as well as wildlife indigenous to the forest.

Although concerns have been raised about siting wind turbines on ridges in the national forest, I think that is more of an aesthetic issue. Personally, I would much prefer to see wind turbines on public lands than continuing mountaintop removal for traditional coal energy. Fracking, on the other hand, carries significant risk, and is a source of biological disruption of ecosystems, and has no place in a national park.

Sincerely,

Douglas H. Hendren, M.D.

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: Comments for GW Management Plan
Date: Sunday, October 16, 2011 9:08:59 PM

Dear Supervisor Hyzer,

Thank you for the opportunity to comment on the draft management plan for the George Washington National Forest (GW).

I strongly **support the ban** on horizontal drilling in the draft plan. I am concerned though, that oil and gas leasing will be possible on roughly 994,000 acres, or 93% of the forest. The full potential impacts of vertical wells, including hydraulic fracturing that accompanies them, have not been adequately analyzed. Oil and gas leasing should not be allowed in the GW where mineral rights are federally owned, and nothing in the National Forest Management Act or the Multiple Use Sustained Yield Act requires the Forest Service to open our National Forests to energy extraction.

I appreciate the increased focus on drinking water and water resources in the draft plan. More protective measures are needed though. There should be specific management objectives for watersheds that provide public drinking water. The desired conditions described in the draft plan are too general to be useful. Sedimentation is a major threat to water quality everywhere, including the GW. The draft plan should be revised to require measuring sedimentation in strategic locations and waterways.

Closing roads is a very concrete way to decrease sedimentation while improving aquatic and terrestrial habitat and forest health. I am very glad to see road decommissioning targets in the draft plan but believe the goal of 160 miles during the first decade should be increased.

In addressing climate change, standing forests and soils are more valuable as carbon sinks than as a source of renewable energy. The final plan should not allow harvesting fuel (trees) for biomass incineration, industrial scale wind energy projects, or further gas and oil leases. In particular, "whole tree" harvesting for woody biomass is harmful in many ways and should not be permitted.

The GW is one of the few places in the eastern U.S. where large areas of undisturbed, mature forest still exist. These forests and the remote settings they provide must be protected. In addition to the public benefits they provide, many wildlife species that need large geographic areas or habitat conditions found here depend upon these special areas.

Prohibiting timber sales and new roads in the 242,000 acres of inventoried roadless areas is a very important step, which I applaud. However, all 372,000 acres identified as potential wilderness areas should be given this protection. Similarly, to protect rare and uncommon species in the GW, all areas recommended for protection by the Virginia Division of Natural Heritage should be assigned to Special Biological Areas or similar designations.

Creating wilderness study areas (WSA) is also an excellent way to protect large, remote forests. The meager recommendations for WSA in the draft plan (20,300 acres) are disappointing. Each of the four areas recommended are important, but should be increased in size.

I support the proposal for wilderness and scenic area designations proposed by the "Stakeholder Group". We cannot act quickly enough to conserve our intact eastern forests for all of the values that roadless forest areas provide. I have hiked the GW over

many years and do not want to see the forest comprised with drilling or the roadless areas disturbed.

Thank you.

Rosemarie Sawdon

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: GWNF comments
Date: Sunday, October 16, 2011 8:52:22 PM

Dear Supervisor Hyzer:

I support the prohibition of horizontal hydraulic fracturing anywhere on the Forest. The effect on the drinking water supply is too uncertain to take the risk of this activity.

I favor a ban on vertical drilling for natural gas in drinking water supply areas and other environmentally and scenically sensitive areas.

I support any actions that will enhance protection of drinking water supplies, including expansion of protective buffers, limits on road construction, and decommissioning of existing roads as feasible.

I support increased permanent wilderness acreage and oppose any significant increase in motorized access, particularly by all-terrain and off-road vehicles.

Thank you for the opportunity to comment on the Plan.

--
Tom DuVal

From:
To: FS-comments-southern-georgewashington-jefferson
Subject: GW National ForestComments
Date: Sunday, October 16, 2011 8:25:55 PM

I am writing in opposition to the proposed ban on horizontal drilling found in the Draft Forest Plan for the George Washington National Forest. The proposed ban is not supported by the kind of scientific data or analysis that would be necessary to declare off-limits a potentially valuable resource that could meet our nation's and the Commonwealth of Virginia's future energy needs. Comments like "may impact water quality" are not strong enough reasons to ban techniques that have been incorporated safely and effectively in many other areas of the country for years, including Virginia, without incident.

Hydraulic fracturing is a technique that has been used over one million times since the the 1940's without a documented instance of contamination, a fact confirmed by the EPA's own Lisa Jackson when she testified before congress saying that hydraulic fracturing doesn't affect water. Therefore there is not one shed of vetted scientific data that would support the proposed plan's assertion that drilling in the Forest would potentially affect water resources.

Furthermore, the proposed plan specifically bans horizontal drilling, a technique that has been utilized for 20 years in North America with amazing results. Drilling horizontally is the most effective and environmentally friendly way to harvest the resource. Horizontal wells expose more of the formation, which allows for production of a greater percentage of the natural gas. Also multi-well-single-pad drilling, the current dominant technique made possible through horizontal drilling, minimizes surface disturbance by concentrating wells in one location. This concentration of wells also limits the amount of pipelines, which further minimizes surface disturbance.

Lastly, the 900,000 acres that comprise the Forest is very close in size to Virginia's current natural gas producing area in the southwest corner of the State. Over the past 20 years, Virginia's natural gas industry has invested over $2 billion in the Commonwealth, paid over $600 million in royalties, paid over $150 million in severance taxes plus millions of additional dollars in real estate taxes and mineral taxes, while currently providing 3,000 good paying jobs. During that same 20-year period over 5,000 wells were drilled, under a very rigorous state-supported regulatory regime, without one water contamination issue. How can the Forest Service consider a ban that would forego all of the above benefits without the science to back it up?

In closing, I urge that you reject the ban on horizontal drilling in the Draft Forest Plan for the George Washington National Forest. Instead, consider the nation's energy needs that can be met by safely drilling in the Forest and producing clean-burning natural gas.

Gus Janson

Virginia Forest Watch

October 17, 2011

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

Dear Supervisor Hyzer:

Virginia Forest Watch ("VAFW") offers the following comments on the Draft Revised Land and Resource Management Plan for the George Washington National Forest ("Draft Plan").

As an underlying framework for our comments, VAFW has reviewed the scores of electronic mail communications from Mr. Jim Loesel of The Citizens Task Force on National Forest Management, to Forest Service staff, in which Mr. Loesel identified a multitude of substantive data-reporting and other errors in the Draft Plan and the Draft Environmental Impact Statement (DEIS). **VAFW adopts by reference herein, the comments submitted by The Citizens Task Force for National Forest Management**.

The environmental analysis prescribed by the National Environmental Policy Act ("NEPA") -- regardless of the degree to which its purpose has been eroded by practice as well as the judiciary -- remains the process for assessing and evaluating the factual basis for federal government decision-making that impacts natural resources. The DEIS is the factual basis for National Forest plan development.

In the case of the proposed Draft Plan and DEIS, the factual basis is extraordinarily flawed, and therefore unreliable. Only a Supplemental Draft Plan and DEIS can restore confidence in the process.

The degree to which errors have been made, subsequently embedded into the analysis, and carried forth in substance as well as the preference for an alternative, calls into question not only the soundness of the planning process, but also the reliability of all of the information set forth. Stakeholders have differences of opinion about how best to manage our National Forests

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that are just that -- differences of opinion. **The errors in the Draft Plan/DEIS reach to the underlying factual support for opinions, and significantly undermine public confidence in the decision-making process**.

Regardless of the attempts to fix the draft documents by issuing "errata," which in some cases also contain errors, the damage to credibility is done. Not only that, the process of producing errata has created an unwieldy collection of documents that requires the public to cobble together the semblance of a Draft Plan. How can a member of the public know whether they have pieced together the factual basis in the manner in which the Forest Service intended the information to be compiled and subsequently reviewed by the public?

Developing management plans for our National Forests is complicated business. The 1982 regulations upon which the Draft Plan is required to be based, however, provide a structure and guide by which planning should be accomplished. Instead, the Forest Service tried to hybridize the process with the later planning rules that were found illegal by the judiciary. The results of that ill-fated attempt were this seriously flawed Draft Plan. The story of Frankenstein is a fitting metaphor.

Everyone wants to get on with managing our National Forests for all of the benefits conferred and values supported by the forests, but not at the risk of promulgating a forest plan that creates more problems than it solves. In addition to the flawed factual and procedural basis for the plan, many individuals and conservation organizations have commented on serious resource management concerns, and numerous inconsistencies in management, throughout the Draft Plan. VAFW's concerns are represented in the comments submitted by the Southern Environmental Law Center, and we share the concerns of many citizens and organizations.

The only way the Forest Service can restore public confidence and credibility in the forest planning process is to correct the flawed and illegal process, and to incorporate the public's significant resource management concerns into a Supplemental Draft Environmental Impact Statement and Supplemental Draft Plan.

We strongly support the ban on horizontal drilling in the Draft Plan. We are nonetheless concerned that oil and gas leasing will be possible on roughly 994,000 acres, or 93% of the forest. The full potential impacts of vertical wells, including hydraulic fracturing that accompanies them, have not been adequately analyzed. **Oil and gas leasing should not be allowed in the George Washington National Forest ("GW") where mineral rights are federally owned**, and is not a use of the National Forests contemplated by the Weeks Act, the Multiple Use Sustained Yield Act, or the National Forest Management Act.

We are encouraged by the increased focus on drinking water and water resources in the Draft Plan; more protective measures are needed. **There should be specific management objectives for watersheds that provide public drinking water**. The desired conditions

described in the Draft Plan are too general to be useful. Sedimentation is a major threat to water quality everywhere, including the GW. **The Draft Plan should be revised to require measuring sedimentation in strategic locations and waterways, and perform the monitoring necessary to lawfully implement the National Forest Management Act**.

Closing roads is a very concrete way to decrease sedimentation while improving aquatic and terrestrial habitat and forest health. We are very glad to see road decommissioning targets in the Draft Plan but believe **the goal of 160 miles during the first decade should be increased**.

In addressing climate change, standing forests and soils are more valuable as carbon sinks than as a source of renewable energy. The final plan should not allow harvesting fuel (trees) for biomass incineration, the development of industrial scale wind energy projects, or the grant of further gas and oil leases. "Whole tree" harvesting for woody biomass is harmful in many ways and should not be permitted. Neither the Multiple Use Sustained Yield Act nor the National Forest Management Act contemplates industrial energy-resource-extraction from our National Forests for either biomass burning or for wind energy development. **The entire GW should be designated as unsuitable for wind energy development if only because the entire forest is habitat for the endangered Indiana Bat**.

Global climate change is a significant and potentially life-altering phenomenon for all forms of life. Rising temperatures are implicated in rising sea levels, rapid changes in habitat and potential worldwide extinctions of flora and fauna. At the same time, accelerating destruction of wildlife habitat is also a global crisis.

It is therefore imperative that global climate change be addressed in ways that do not further eliminate or reduce wildlife habitat. VAFW strongly supports shifting to renewable energy sources for production of electricity in the United States. However, because forests sequester carbon and are therefore important in mitigating climate change, as well as conferring many other benefits such as clean air, water, and native biodiversity, we do not support industrial-scale energy alternatives that destroy, degrade or fragment existing forests.

The development of wind factory sites, transmission-line corridors, and very wide access roads result in the loss, degradation, and fragmentation of forest habitat; erosion and sedimentation of streams; continuing, long-term wildlife fatalities and injuries; noise and light pollution for large swaths of surrounding areas; and permanent net-loss to forested carbon storage.

The Appalachian Mountains in Virginia are well documented as having many globally unique, rare, threatened or endangered plant and animal species and communities, for which public lands are becoming the last refuge from human development. The development of ridge-top forest habitats will prevent species from moving to higher elevations in response to global warming, which leaves them no alternative except extinction.

In addition to environmental concerns, VAFW objects to exploitation of public lands for private profit. With regard to national forests, **the Multiple-Use Sustained-Yield Act of 1960 states that "it is the policy of the Congress that the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes."** This does not include massive commercial ventures for private profit that threaten most other uses of the national forests.

In regard to all of the values that forests provide, the GW is one of the few places in the Eastern U.S. where large areas of undisturbed, mature forest still exist. These forests and the remote settings they provide must be protected. In addition to the public benefits they provide, many wildlife species that need large geographic areas or habitat conditions found here depend upon these special areas.

Prohibiting timber sales and new roads in the 242,000 acres of inventoried roadless areas is a very important step, which we applaud. However, all 372,000 acres identified as potential wilderness areas should be given this protection. Similarly, **to protect rare and uncommon species in the GW, all areas recommended for protection by the Virginia Division of Natural Heritage should be assigned to Special Biological Areas or similar designations**.

Creating wilderness study areas (WSA) is also an excellent way to protect large, remote forests. The meager recommendations for WSA in the Draft Plan (20,300 acres) are disappointing. Each of the four areas recommended are important, but should be increased in size.

We support the proposal for wilderness and scenic area designations proposed by the "Stakeholder Group." We cannot act quickly enough to conserve our intact eastern forests for all of the values that roadless forest areas provide.

The Stakeholder Group proposal supports the annual logging targets proposed by the Forest Service in the Draft Plan. **The DEIS, however, lacks adequate data and analysis for the assessment of soil productivity, and the Draft Plan lacks adequate protections for the maintenance of soil productivity regardless of the level of logging allowed by the plan**.

Sustainable forest practices are entirely reliant upon sustainable soil productivity. **The Draft Plan must include soil-productivity monitoring and assessment standards and criteria to assure all management prescriptions "conserve soil and water resources and not allow significant or permanent impairment of the productivity of the land. . . . Management prescriptions that involve vegetative manipulation of tree cover for any purpose shall -- (5) Avoid permanent impairment of site productivity and ensure conservation of soil and water resources. . ."** 1892 Planning Regulations, Section 219.27.

And in general, **the Draft Plan lacks sufficient monitoring criteria to support any of the forest management activities that would be authorized by this proposed plan**. The Revised Land and

Resource Management Plan for the Jefferson National Forest contains better, though still inadequate monitoring criteria, and should at least be the base model for the monitoring criteria on the GW.

Finally, VAFW believes that **the Draft Plan and DEIS lack a basis in budget reality**. Logging targets beyond what past and current budgets can possibly support may be only a statement of aspiration, however, VAFW is concerned that the Forest Service is setting up itself for accusations of failure if the Forest Service cannot meet the proposed logging targets due to budget constraints. Some aspects of the Forest Service bureaucracy have already been privatized, taking the activity not only out of the control of Forest Service staff, but also restricting public input and oversight. VAFW fears that privatization of National Forest management may pose a threat to public participation should the logging and other extractive resource industries become reactionary to a Forest Service that can't deliver what's promised.

VAFW looks forward to the opportunity to review a Supplemental DEIS and Draft Revised Land and Resource Management Plan for the George Washington National Forest.

Sincerely,

/s/ Bud Watson
Executive Director
Virginia Forest Watch

Dear Ladies and Gentlemen,

On Behalf of Deel Construction Company I am writing to oppose the part of your plan that would ban hydraulic fracing and horizontal drilling in the George Washington National Forrest. The George Washington National Forest in Virginia is approximately the same size area as the current natural gas producing area in the Southwest portion of the Commonwealth. While the producing potential in GWNF has not been determined, any restrictions on natural gas production would likely cause the Commonwealth to miss out on the economic impact already seen in Southwest Virginia.

Over the past 20 years the Virginia gas industry has invested over two billion dollars in capital expenditures; paid over six hundred million dollars in royalties; paid over one hundred fifty million dollars in severance taxes in the producing counties; paid real estate and mineral taxes, payroll taxes, and sales taxes that all contribute to a robust trickle-down economic effect on the economy, and created more than three thousand good paying jobs for Virginia workers.

The proposed ban is without basis and would prevent Virginia from enjoying a similar benefit should development of the resource become available. The proposal is without basis because there have been no documented cases in the active gas producing areas of the Commonwealth where water has been damaged. The proposal is without basis because the forest service hasn't completed an environmental impact statement that could document damage. Even the Environmental Protection Agency Director has testified before Congress that there is no documented evidence of water damage from hydraulic fracturing.

Baring such activity on public lands in the Commonwealth is a meritless taking of a resource that could have significant economic value to Virginians and our Country. The Department of Energy has recently found that the drilling practices utilized today are appropriate and safe.

Therefore, the preferred option in the Forest Service plan should be rejected and an option selected that would allow development should be selected instead. The Forest Service could stipulate reasonable safeguards that would enable development while protecting the natural resources.

We urge you to seriously consider our Nations energy needs and reject the preferred option. To do otherwise is to turn a blind eye to our country's future energy needs and the national security implications of this short sited proposal.

Sincerely,

Gary G. Deel, Owner

Deel Construction Company