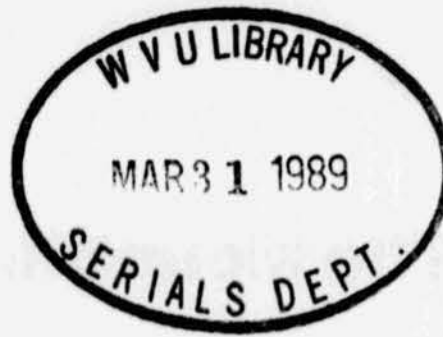




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A Groundwater Program For WV

Unlike surrounding states, WV has no comprehensive program for the protection of groundwater. Groundwater is the source of drinking water for 95% of the rural population of the State. Last year, the legislature recognized the need to bring WV's environmental standards up to par with surrounding states as part of our effort to reduce the flood of imported garbage which has so mobilized public opinion. The solid waste bill passed last year has gone far to meet this goal, but without a comprehensive groundwater protection statute, it will always be cheaper to dump garbage in WV than in PA.

Limited authority to regulate groundwater already exists in fragments in DNR and other agencies, but their approaches and standards are different, causing much confusion. A natural resource such as groundwater by its very nature can be successfully protected only by a comprehensive program which consistently regulates all activities affecting the resource. Additionally, because we have much to learn about our groundwater resource and the activities which affect it, we must begin now to resolve these questions so that vital future development decisions can be pursued without the destructive controversy that is inevitable when citizens know their wells are not being protected.

No system of groundwater regulation will serve the public's need for protection of its drinking water unless it begins with the presumption that groundwater should be protected at its existing quality, with very limited allowance for degradation of that quality where the polluter demonstrates both a compelling need and a significant margin for safety.

The size and impact of such a program can be minimized by allowing DNR to treat classes of industry which do not significantly harm groundwater quality alike, issuing "general permits" which relieve individual companies from the need to obtain individual permits. The program would be implemented through existing agencies, with DNR as the lead agency, which would ensure that the state could respond quickly to any federal initiatives on the topic. Also, because ground and surfacewaters are interconnected and influence one another's quality, location of the program in DNR will ensure that both are protected consistently. Where another agency is already charged with responsibility for an industry's activities which also affect groundwater, review and a "certification" by DNR could accomplish the need for consistency without duplication.

Acid Rain Update

A forum exploring current scientific and political aspects of this issue in the Appalachian context.

APRIL 15, 1989 at 7:00 pm

BLACKWATER FALLS STATE PARK LODGE, DAVIS, WV

Sponsored by the WV Highlands Conservancy, in connection with its annual Spring Review of outdoor trips, education and fellowship.

Acid rain, its affect on our region, and the current status of Congressional action to require cleanup of sulfur emmissions will be addressed and discussed with the audience by two leading regional authorities.

RICK WEBB, formerly one of WV's best known environmental activists and now a researcher at the University of Virginia will focus his presentation on the effects of acid precipitation on appalachian troutwaters and other natural resources. NED HELME, formerly a school teacher in Randolph County and now the director of a DC based environmental think tank, the Center for Clean Air Policy Analysis, will address how WV will fare under different approaches to solving the problem. Together with the audience, both hope to explore the connections between the science and the politics of the issue.

The forum is open to the public without charge. Persons wishing to join the Conservancy for any of the weekend's activities, including hikes, a canoe trip, nature school or day care for children, contact Donna Borders, 1012 Tenth Avenue, Marlinton, WV 24954 (304/799-4381). Registration form on page 8.

K & B Permit: Denied In Part—Approved In Part

K & B Coal Company applied for a permit to mine the Kittanning and Stockton Coal Seams on some 105 Acres in Webster County on Hodam Mountain. Drainage from the site discharges to Hodam Creek and an unnamed tributary, both Trout Waters and High Quality Streams that flow to the Left Fork of the Holly River not far downstream from Holly River State Park.

Except for an older, small operation on the Right Fork and some old punch mines, there has been no mining in the Holly River watershed. This area constitutes the last unmined major coal reserves in Webster County, and other applications can be expected in the future.

A public hearing was held at the Webster County Court House January 12, 1989. Comments in opposition to the permit were presented and submitted by the WV Highlands Conservancy, the Mountaineer Chapter and WV State Council of Trout Unlimited, Braxton County Bass Masters, and the Buckhannon-Tygart River Coalition. Those speaking in favor of the permit were K & B representatives, Sturm Environmental Services for the Company, the landowners and other Webster County residents.

The outcome of all this has been a compromise permit that has received mixed reviews. Earlier in the permit process K & B withdrew their proposal to include the Middle Kittanning and augering as part of their application. The DOE took things one step further and denied K & B the right to mine any Kittanning coal on the property "due to the potential acid mine drainage problems associated with mining of the Kittanning seams in this location."

Mark Scott, Director of the DOE's Division of Mines and Minerals said in a February 10th Memo "DOE sought a compromise which would recognize and address both the concerns of the environmental groups and the need for job creation in the mining industry . . . DOE reached a decision to permit mining at this site on the Stockton coal only. This would permit mining to proceed at greatly reduced risk to the watershed."

Cindy Rank, President of the WV Highlands Conservancy and Upshur County resident is cautiously optimistic about the decision: "It is a step in the right direction — a first step toward official recognition of the acid problem associated with mining the Kittanning Coals in the north-central part of the State, a problem which has plagued the Buckhannon River for the past 10 years."

"The Kittanning would have been a disaster . . . We can only hope that the Stockton will be better," Rank said. "It was a wise and courageous decision on the part of the Commissioner, but the Holly is still a very fragile watershed. The Stockton is unproven and could produce acid. Also, the terrain of the area is very steep and ineffective sediment control measures could allow sedimentation problems to negatively impact the River."

Richard Showalter, owner of K & B Coal Company disagreed with DOE's assessment of the mine site. Showalter believes his company and their consultants proved that the situation on Hodam is "not similar to the watersheds in the Buckhannon River," but rather, more like Erbacon where Julianna is

(continued on page 3)

Legislative Coalition Formed

Groundwater is top priority for Governor Caperton in 1989 session.

A new era in statewide environmental advocacy began with the formation, in January of 1989, of a legislative coalition of conservation and sportsmen's groups. Meeting together under the guidance of Speaker of the House of Delegates, Chuck Chambers, the group identified three top priorities for the upcoming session of the WV Legislature. Groundwater protection, mandatory separation and recycling of materials from sold waste, and enhances surface water protection emerged as the issues selected by a consensus of the groups present.

Groups participating included the Conservancy, Trout Unlimited, the Mountaineer Chapter of the Sierra Club, League of Women Voters, West Virginians for a Clean Environment, WV Citizen Action Group, Audubon, and other state and local groups. Meeting just before the beginning of the session in early February, the group's steering committee agreed to hire former Kanawha County state senator and gubernatorial candidate Mario Palumbo to coordinate the legislative effort. Senator Palumbo has long been a friend of the environment, and has led past legislative fights on air and water quality issues, and on the solid waste disposal legislation passed in 1988.

Governor Gaston Caperton, who ran for office on a platform which included environmental issues, responded to the coalition's initiative by himself announcing, in his State of the State message on February 13, 1989, his intent to introduce and support an administration bill implementing a groundwater protection program. Though the details of the administration bill are still being developed, the Governor's recognition of the critical need for this program greatly assists the chance of passing some version of a bill this year.

From The Heart Of The Mountains Mario

February 21st was a memorable day.

Supported by funds mainly from the Highlands Conservancy so far, some 13 WV citizen and environmental groups have contracted with Mario Palumbo to represent us at the 1989 Legislature.

Mario is a former State Senator and a former Candidate for Governor . . . But perhaps even more importantly, he is a man who is accessible to the PEOPLE of West Virginia, a man of great principle and personal integrity, a man who places a premium on the common good rather than private gain. He brings a wealth of experience and credibility to our concerns this year . . . We welcome him; and, thank him for his efforts at the Legislature.

The most important item in the environmental agenda that Mario has supported is a Groundwater Bill that protects WV groundwater resources at least at their PRESENT QUALITY. Although 95% of the State's rural population depends on groundwater, we have no law that protects the quality of this resource.

Both the Governor who noted ground water protection in his State of the State Address February 13th, and members of the Legislature must be encouraged to support Groundwater Legislation that allows NO DEGRADATION.

Provision for site specific review for exemption from this basic assumption properly places the burden of proof on the developer or industrial user rather than on the individual citizens of the State.

All segments of our society have the capability to comply with such a law. And, whatever the cost, strong protection of our groundwater is an investment in the future that is more than worth it.

Other items on the environmental agenda this year are a comprehensive waste reduction and mandatory recycling programs, increased protection for surface waters and an emphasis on increased enforcement of existing environmental laws.

—And finally, a note of appreciation to our departing Vice President for State Affairs, Ron Shipley. Ron served us well in the Legislature last year and has been a motivating force in preparing our current arrangement with Mario Palumbo.

Good-bye, Ron . . . And thanks . . . We wish you well.

State Of The State Excerpts

Governor Gaston Caperton delivered his first State of the State address to the WV Legislature on February 13, 1989. The environment and related issues received direct attention in several areas, including proposals for groundwater protection and local control of waste disposal facility siting. Excerpts from the speech on environment and energy issues include:

United States constitutional law, however, does not allow state government to simply ban out-of-state garbage, either by executive order or under provisions of the current statute. Nor can we control the construction of landfills in unacceptable locations under our current law.

Therefore, I will submit for your consideration legislation which will give counties the authority to control the location of landfills and hazardous waste facilities in a manner consistent with federal constitutional limitations and this administration's commitment to the vigorous protection of our environment.

Decisions by county authorities will be based upon criteria that give consideration to existing and potential transportation networks; protection of groundwater and surface waters; geological and hydrological conditions; the present and/or future potential use for residential, commercial, recreational, industrial or environmental conservation purposes; and the public health and general welfare.

Additionally, I will cause to be introduced legislation which will establish a program for the protection of groundwater in West Virginia. For some time, industry and environmental groups have been working on such a program, and now is the time to complete that work.

Our current program is fragmented and largely ineffective. Protection of our groundwater is essential to the industries of tourism, farming, agriculture and the existence of healthy sources of drinking water throughout the state for generations to come.

As regards the matter of energy, it has been suggested that diversification away from the coal industry should be the focus of the state's economic development efforts.

While I agree that the development of a diverse economy is essential to the future of West Virginia, I will not concede West Vir-

ginia's position in the coal industry. Initiatives involving the use of coal in the area of electric power generation have been undertaken by the West Virginia Public Energy Authority.

The potential of those initiatives, however, is yet to be fully realized. I plan to continue to work to develop the potential of these multimillion-dollar power generation plants and to seek refinements in the law to put West Virginia in a position to be the primary supplier of electricity for the Northeastern and Mid-Atlantic states.

I will ask the United Mine Workers of America, electric utility companies and coal producers to join with the West Virginia Public Energy Authority, in partnership, to accomplish this goal. We will make West Virginia the state that utilities choose for their electric generating capacity because it will be in their competitive interest to do so.

Just as coal is essential to the economy of West Virginia, I recognize the equal importance of the oil, natural gas and timber industries. I pledge my cooperation and that of my Office of Community and Industrial Development to assist those industries in the realization of their contribution to the revitalization of our economic development.

The priority in determining projects to be developed will be job creation, particularly in high unemployment areas. By moving in this direction we can create a new and important stimulus for jobs.

Let's turn our attention to the environment and to the issue of waste disposal.

In 1988, this Legislature passed a tough new solid waste management act which established stringent environmental standards designed to protect West Virginia from becoming a dumping ground for out-of-state garbage and hazardous waste. This new law has given the Department of Natural Resources the necessary enforcement powers

(continued on page 3)

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"My God - Neptune!"

The Costs Of Cleaning Up DOE

The Department of Energy (DOE) has taken a lot of criticism in recent months for the management and safety of its aging defense facilities, which produce nuclear material for weapons (SN: 8/27/88, p. 133). Last July, the General Accounting Office estimated that cleaning up DOE's defense facilities would cost about \$20 billion. Two new DOE reports suggest this estimate seriously understates the agency's defense-cleanup needs — perhaps by a factor of four. Moreover, these reports indicate that the 17 sites conducting DOE's defense work are far from the only DOE facilities in need of costly environmental cleanup.

One report charged with estimating the agency's environment, health and safety needs through the year 2010 found that 31 of DOE's 45 sites will need changes to bring air pollution, liquid discharges and trash management into compliance with existing federal laws. DOE figures those changes will cost \$7 billion to \$14 billion. Removing or stabilizing DOE's hazardous and radioactive wastes, now contaminating soil or water at about 37 sites, could cost \$64 billion more. Additional costs to manage the agency's radioactive wastes, now contaminating soil or water at about 37 sites, could cost \$64 billion more. Additional costs to manage the agency's radioactive wastes and to decontaminate and decommission inactive facilities (which had once handled nuclear materials) could add another \$13.5 billion to the tab.

The second report, estimating only what's needed to take care of the agency's defense-complex problems, indicates investments of more than \$80 billion may be required over the next 20 years — with almost \$30 billion for environmental cleanup alone. Most cleanup funds would go to three sites: the Rocky Flats Plant near Golden, Colo. (now scheduled to be shut down); and the Hanford Plant in Richland, Wash., and Fernald (Ohio) Materials Production Center (both slated to lose nuclear-materials production responsibilities).

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EPA To Seek Tighter Control Of Pesticides

WASHINGTON (UPI) — The new head of the Environmental Protection Agency says he will seek legislation to give his agency greater powers to immediately halt use of pesticides posing significant cancer risks.

In an interview with United Press International, EPA Administrator William Reilly expressed concern that, under current law, his agency cannot act quickly to take pesticides off the market even if it has compiled extensive data documenting a substantial threat to public health.

Reilly said that, except in extraordinary "emergency" situations, the EPA must follow a lengthy bureaucratic process before suspending use of a suspect pesticide. The process, which can take years, is designed to give a pesticide manufacturer a chance to challenge a ban.

"The principal surprise I've gotten since I've been here is, even after you get a lot of data and information about chemicals, the EPA is not empowered under the law to get rid of these chemicals without an extensive process of appeals, of hearings and of reviews," he said.

Reilly said other government regulators had far more sweeping authority to take bad products off the market, if only temporarily until questions were cleared up. For example, he cited the Security and Exchange Commission's powers to halt trading of a stock.

"It seems to me, if it was a bad stock, you would suspend trading in it right now, and there would be no question that you did the right thing, even if later something emerged that allowed it to be traded again," he said.

He said the position that the EPA is in is "difficult to justify and even harder to explain to the public."

Reilly said he would have to study the EPA's regulatory system for pesticides more closely before making any specific proposals to Congress, but, in general, he saw a need to streamline the suspension process.

Mon National Forest Trail Project Begins Fourth Year

by Mary Wimmer
Public Lands Chair, WV Sierra Club

The Mon Trail Project, a cooperative venture between the West Virginia Chapter of Sierra Club and the U.S. Forest Service, is beginning its fourth year repairing and constructing hiking trails on the Monongahela National Forest.

Additional volunteers are needed this year to do such jobs as trail relocation, waterbar placement and other drainage work, trimming of vegetation, and clearing of downed or hazard trees from the trails. "We are also planning to add some wildlife habitat work to the trail maintenance projects this year to expand our diversity and skills," says Lovell Mayle, Bruceon Mills volunteer and coordinator of the 1989 work schedule.

The Mon Trail Recovery Project began in response to the damage caused by the 1985 Flood. In its first year, 90 people from West Virginia and surrounding states put in over 1,800 volunteers-hours working on 85 miles of trail. The effort brought WV Sierra Club special recognition by the Chief of the U.S. Forest Service.

Under the cooperative agreement, the Forest Service provides tools, hard hats, technical advice and identification of individual projects. The Sierra Club organizes the work schedule and volunteer work crews, and provides trained leaders for each

outing. Outings usually last all day Saturday and a half day Sunday, with camping or a cabin stay on Saturday night. An average of one outing per month is held between April and November, weather permitting.

Mon Trail Project volunteers have come from all over the state, all age groups, and all kinds of professions and interests. No prior experience is required. "The things we all have in common are strong desires to get out into the woods, have fun, and do some service work at the same time," says Mary Wimmer of Morgantown who organized the Project with former Bluefield resident Paul Turner in 1986.

Work crews are put together by sign-up sheets that are mailed out in early spring and late summer describing the year's projects. "An ideal crew size varies with the individual work project," says Linda Scandale of Morgantown who is organizing the 1989 crews. "We like to have at least 6 workers; and have had up to 20 for larger projects. We have not actively recruited volunteers since 1986, and because of turnover, we are in now need of more people," she said.

To become a 1989 volunteer, drop the Mon Trail Project a line at WV Sierra Club, P.O. Box 4142, Morgantown, WV 26504. If you have any questions, call Linda Scandale at 599-5476 evenings.

State of State (continued from page 2)

to protect our state from environmental damage.

As I indicated earlier, a portion of the lottery proceeds will be directed to tourism and economic development. We have only scratched the surface with our tourist industry potential. Given the right direction, the proper support and energetic promotion, our tourist industry can generate millions of dollars of additional revenue for West Virginians and thousands of new jobs.

I will ask you to create the West Virginia Parkway, Economic Development and Tourism Authority, which will assume all assets and obligations of the current West Virginia Turnpike Commission. All of the present employees of the Turnpike Commission will become employees of the new Parkway Authority, and their jobs will be protected. This authority will immediately issue new bonds to refinance the existing bonds of the Turnpike Commission, which

will be in default on Dec. 1 of this year is we do not act.

In connection with the refinancing, I will direct the Parkway Authority to remove 12 interchange toll booths from side roads at the turnpike so that residents of Southern West Virginia will not continue to be burdened with these additional tolls.

We will also authorize a "Frequent User Token System" discounting fares for those who must travel the turnpike on a regular basis. Permission has been received from the federal government for the Turnpike Authority to repay the people of West Virginia in excess of \$80 million which was originally used to construct parts of the turnpike. This money will be placed in a special account within the new authority to pay for improvements I have just mentioned, together with future road, economic development and tourism projects.

K & B (continued from page 1)

mining the Kittanning Seams without producing acid mine drainage.

However, Mr. Showalter has said it is economically feasible to mine just the Stockton. The permit as granted will reduce the mine about one half, but the company intends to deep mine just behind the newly permitted strip area. They will leave an opening for the deep mine, and the roads and drainage structures will be in place as a result of this mine.

Lou Schmidt, President of the Mountaineer Chapter of Trout Unlimited, pointed to his organization's interest in the Holly River from a fisherman's point of view: "We have some interests in the area. Our chapter is involved in a liming device on Laurel Fork, inside Holly River State Park. Laurel Fork was a very sterile, low-buffered stream. Acid rain was causing problems there."

"We're glad Commissioner Dials took the initiative to eliminate the Kittanning from the permit," Schmidt said. "I guess you can't say we're dissatisfied... We're just not as well pleased as we would like... There is a conflict between tourism and mining in the area," Schmidt said. "On the one hand, you have Holly River State Park. Then you have a haul road coming out on Route 20 from K & B's new mine. I see the two as paradoxical."

Schmidt also believes mining near the Holly River could create another environmental disaster like the one left behind by DLM Coal Co., on the Buckhannon. "I don't think the citizens of West Virginia can afford to pay for another DLM... We can't afford it economically or morally."

A precedent has been set for future mining permits in the Holly River watershed. Only time and careful scrutiny can tell just what the long range impacts will be.



American Dogwoods Are Unable To Resist Devastating Fungus

by William K. Stevens

The hope that some native American dogwoods might be resistant to a spreading fungal disease that is killing many of the flowering trees has been dashed by a new study.

The findings mean that "there is very little hope" for breeding native strains of Eastern dogwood that would resist the plague, said Frank S. Santamour, a geneticist at the National Arboretum in Washington, who conducted the study.

Since the late 1970's, when the fungal disease, anthracnose, first struck dogwoods in New York and New Jersey, there have been fears that the trees might be facing the same fate as the American chestnut, which was all but wiped out by blight in this century, and the American elm, whose numbers have been catastrophically reduced by Dutch elm disease.

Scientists who have been following the situation believe that the dogwood species called *Cornus florida*, whose soft white flowers make it one of spring's loveliest heralds in the Eastern United States, will not go the route of the chestnut and the elm.

One reason, they say, is that dogwoods that grow in parks or on lawns survive better than those in the wild. This is because *Cornus florida* is most readily damaged when it grows in closely packed stands of forest, where wind and water are more effective in spreading the fungus from tree to tree.

While the Santamour findings show that there is not much chance of producing a disease-resistant hybrid within the *Cornus florida* species, "that's not to say that you can't cross *C. florida* with another species and find resistance," said Dr. Craig Hibben, a scientist at the Brooklyn Botanic Garden Research Center in Ossining, who has been studying the disease for years. He said fungicides have been found effective in treating the disease in ornamental trees, but their use is not feasible in the wild.

NYT, Feb. 14, 1989

Let Management Take Its Course

The loudest, most visible criticism of the management of the national forests has centered around the loss of revenue from poorly administered timber sales. The **Forest Land & Resource Management Plan** chosen for Monongahela National Forest (MNF) and applied since 1982, (choice "F" in the complete report) is designed to be cost efficient and effective for the long range management of the Forest. An evaluation of the 1989 Budget by the Sierra Club gives a dollar breakdown (Voice 12-88).

Continuous evaluation of each "opportunity area" within the Forest allows for adjustments that should ensure the cost efficient management of MNF.

Other, softer concerns, less frequently expressed and less clearly articulated are also a part of the Forest management plan. The multiple use management philosophy applied in the administration of the Forest and its resources is described by the Forest Service as an appropriate piano-forte: reconciliation of the loud and the soft concerns.

Execution of this resolution requires public participation. Several local conservation groups participate by providing suggestions and expressing concerns to the Forest Service. Specific provisions within the National Forest Management Act require the Forest Service to solicit public comment.

The multiple use management objective applied to policy making is the current methodology. It encourages stewardship of the land and resources. Public involvement in decision making is intended to ensure representation of community issues. The management is a product of applying "management prescriptions" to community needs. Ideally, the loud and the soft concerns resolve into a balance reflecting the principal goal of each prescription.

As each "opportunity area" within the Forest is reexamined, a public comment period is initiated from one of the six District Ranger offices. (Petersburg, Parsons, Bartow, Marlinton, Richwood, White Sulphur Springs). The companion article is a reprinting of a letter mailed by the Marlinton office.

The Forest Plan chosen for MNF, choice "F" was one of six proposals for managing the 851,000 acres. This proposal, the other five proposals and the Environmental Impact Statement (EIS) is available from the Forest Supervisor's Office. (MNF, P.O. Box 1548, Sycamore Street, Elkins, WV 26241, 304-636-1800)

Along with other state and federal agencies (around 20 different agencies) the Forest Service administers and manages the Forest. An exhaustive listing of the guidelines applied is given in the **Land and Resource Management Plan**. Highlights of some of the most controversial areas follows.

Minerals

Coal leases are determined on a case by case basis using current environmental analysis procedures. Strip mining is prohibited. The procedure is less clear for oil and gas leasing.

MNF Opportunity

The Monongahela staff is continuing to implement the Forest Plan, approved in 1986. This Plan was developed with public involvement and is a comprehensive guide for managing the entire National Forest.

This winter, the Marlinton Ranger District will be designing and scheduling projects which carry out Forest Plan direction for three areas in southeastern Pocahontas county. These areas contain close to 13,000 acres of National Forest Land.

The first area, called Rimel, contains Lockridge Mountain and is bordered by Lucy Draft to the north, the state line on the eastern side, State Route 39 to the south, and State Route 92 on the west boundary.

The Douthat Creek area is bordered by State Route #39 to the north, State Route #92 and the Divide Road from the east and southern boundary, and the Douthat Creek Road is the western border. This area includes the north end of Middle Mountain.

The third area, called High Top, is bordered by State Route #39 to the north, the state line on the east, the Marlinton Ranger District boundary to the south, and State Route #92 on the west side.

Forest Plan direction for these areas is to provide for remote habitat for wildlife and a non-motorized recreation environment. The following list describes what is desired for these areas in the future, as stated in the Forest Plan:

1. The Forest area will be made of different patterns of tree ages and sizes intermixed with openings. This pattern

MANAGEMENT PRESCRIPTION SUMMARY

Forest Management Prescription	1000s Acres	Summary of Desired Land Conditions Emphasized in Management Prescriptions
1.1	1.1	Location of mineral extraction developments.
2	22.5	—A continuous, forested scene. —Wildlife species primarily associated with shade-tolerant vegetation. —Primarily tolerant hardwood trees for fiber and sawtimber achieved through uneven-aged silviculture.
3	198.3	—A variety of forest views and a feeling of openness within older tree stands. —A primarily motorized recreational environment. —Large, high quality hardwood trees for lumber and veneer, hard mast (acorns and nuts) production, and scenic attributes. —Primarily intolerant hardwood trees for sawtimber achieved through evenaged silviculture.
4	3.3	—A variety of coniferous forest views and scenes. —A primarily motorized recreational environment. —Wildlife species associated with conifers. —Softwood trees for fiber and lumber.
5	78.1	—Protects the Wilderness attributes for future generations. —Provision of a Wilderness experience. —Natural ecosystems.
6.1	416.2	—Remote habitats for wildlife species intolerant of disturbance. —A mix of forest products.
6.2	124.5	—A semiprimitive nonmotorized recreation environment. —No timber management. —No Forest Service road construction.
7	0.7	A high density, self-contained forest recreation environment.
8	12.5	—The preservation of unique ecosystems. —Areas to conduct research. —The protection of unique areas of National significance.

From Land and Resource Management Plan, MNF

Transportation

Designated trails exist for all-terrain vehicle (ATV) use. Trails are designated as suitable for snowmobile, motorbike, ATV. The roads themselves are maintained by the Forest Service with the benefit of special agreements with the state Department of Highways. Maintenance and construction of roads must be compatible with the area.

Timbering

Production of large, high quality sawtimber will be emphasized on appropriate sites; encourage wood using industries in West Virginia; contract for the commercial sale of timber. Standards applied include: few exceptions to the maximum size of a clearcut set at 25 acres; openings spaced at 1/8 mile and of asymmetrical shape; certified silviculturist approval for development and treatment of timber stands.

Recreation

Maintenance and/or relocation of existing trails given priority over constructing new trails. Three nationally recognized/designated trails. (Spruce Knob, Laurel Creek, Beaver's Tale Trail) Caves available to public use unless closed for species protection. Encourage private enterprises to offer recreational opportunities. Camping in areas on carry in/carry out policy observing a 14 day limit on site occupancy.

Water and Soil

Soil cannot be removed from the Forest. Activities include inventoring, planning mitigating measures and monitoring the land's capacity. Development and evaluation of systems to monitor and evaluate water and soil to predict effects of activities on these resources.

Air Resources

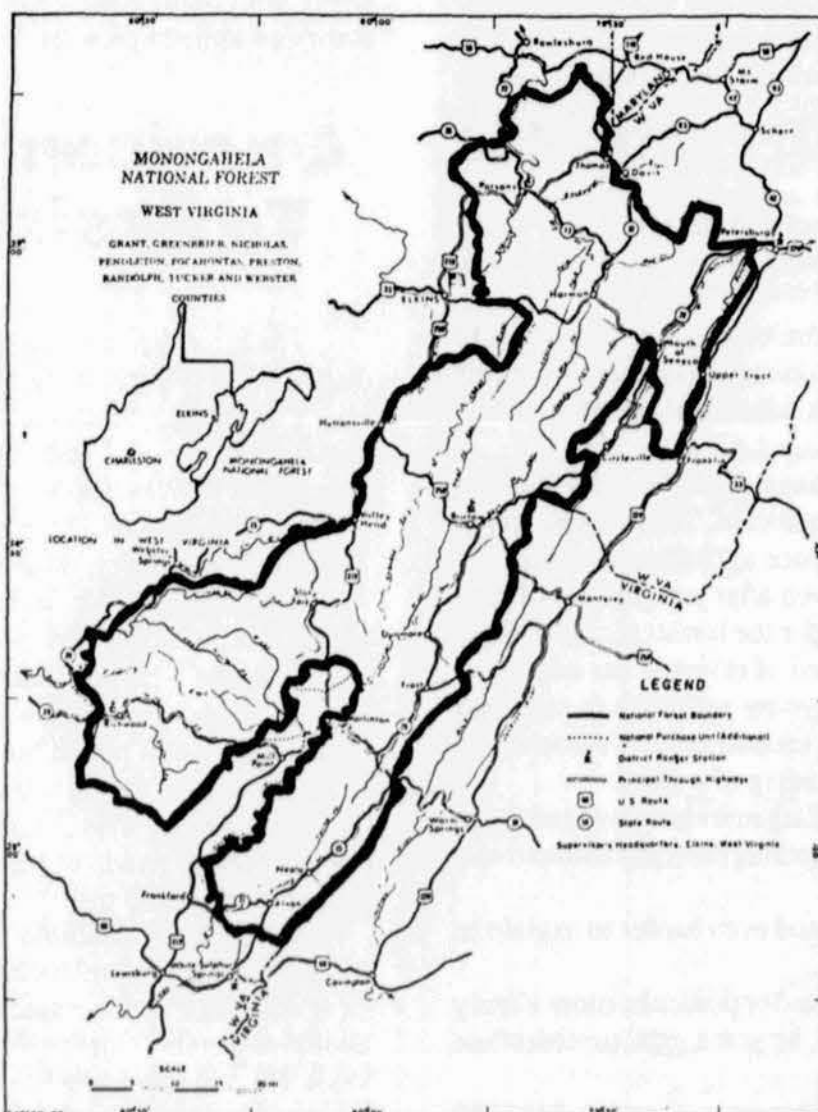
Maintain air quality standards to meet or exceed state and federal guidelines. Assis pollution control authorities in identifying and presenting pollution.

Wildlife/Threatened and Endangered Species

Look for the cougar. Look for the eagle. Look for the osprey. Enhance habitat for sensitive and threatened species where compatible with the areas other uses.

Conclusion

The Forest Service motto "Caring for the land and serving people" is a noble sentiment. The orchestration requires technical expertise and public involvement. Individual concerns and ideas about these topics or others should be shared with the Rangers.



of diversity will benefit turkey, black bear, and other wildlife species such as songbirds, small mammals, fur-bearers, amphibians, and reptiles.

2. Management will put emphasis on trees that bear fruits, such as acorns, beechnuts, or cherries to insure a continuous supply of these fruits.

3. The wildlife populations will increase and become stable.

4. Vegetation management projects will directly or indirectly benefit wildlife either by providing cover or by regenerating habitat types that are in short supply throughout the area.

5. There will usually be a low level of established motor vehicle use and activities involving significant disturbance to wildlife populations.

6. When not open for vehicle traffic, roads will be seeded to a food preferred by wildlife, such as grasses or clovers.

7. Visitors will see a naturally-appearing environment mostly free from the sights and sounds of other people.

8. The roads will be constructed to the lowest standard possible to protect soil and water resources.

9. Gas lines, mining, mineral exploration, electric lines, and other facilities will be permitted, provided their operations are compatible with minimizing disturbances to wild turkey and bear populations.

10. Timber removed from the area will provide products to the local and national economy.

If you want to share your thoughts about management of the Douthat Creek, Hightop, or Rimel areas, please contact the Marlinton District office.

Dear Public Landowner Of Coopers Rock State Forest:

Your help is needed in the development of a long-range management plan for Coopers Rock State Forest (Coopers Rock). Such a plan will establish a set of guidelines for the types of activity the public wants to see in Coopers Rock over the next ten years. Please take a few minutes of your time to read this letter and answer the questions. **This is your opportunity to have direct input early on in the planning process.**

Development of this management plan is being facilitated by the Friends of Coopers Rock (FOCR), a diverse group of local citizens, **along with the four state agencies involved in the management of Coopers Rock State Forest** (Departments of Agriculture, Commerce and Natural Resources, and West Virginia University). You may not be aware that FOCR came together last fall, when it was realized that no comprehensive plan exists for the variety of uses of Coopers Rock. There are separate timber and wildlife plans, but no recreation plan in spite of the large recreational use of the area.

A variety of ideas exist for generating increased revenue from Coopers Rock users, as well as ideas to save money. **Making future management decisions within the framework of a master plan, put together with public involvement, was considered desirable.** The plan would integrate the multiple uses of Coopers Rock (listed below), and would be environmentally and economically sensitive.

The process being used to develop this Plan is the same one used by the U.S. Forest Service in managing our Monongahela National Forest. The first objective is to put together a set of alternative draft plans for public response. Each option will have a different emphasis, for example, from less developed to more developed in nature. After evaluation of these alternatives, one Final Plan will be put together.

To form these alternatives, we need your help. Please take a few minutes now and complete the questionnaire. It is only with **your response** that a management plan for Coopers Rock State Forest, our Forest, can become a reality and be successfully implemented. If you have any questions, please write FOCR at P.O. Box 1389, Morgantown, WV 26507.

Sincerely,
The Friends of Coopers Rock

Note: The established uses of Coopers Rock State Forest are, alphabetically:

1. Cultural/Historic Resources
2. Mineral Extraction
3. Natural Beauty and Other Aesthetic Resources
4. Recreation
5. Teaching and Research
6. Timber Production
7. Watershed Protection
8. Wildlife (Plants and Animals), including Threatened and Endangered Species

**FULL MANY A
GLORIOUS MORNING**

*Full many a glorious morning have I seen
Flatter the mountain-tops with sovereign
eye,
Kissing with golden face the meadows
green,
Gilding pale streams with heavenly
alchemy;
Anon permit the basest clouds to ride
With ugly rack on his celestial face,
And from the forlorn world his visage
hide,
Stealing unseen to west with this disgrace:
Even so my sun one early morn did shine
With all-triumphant splendour on my
brow;
But out, alack! He was but one hour mine;
The region cloud hath mask'd him from
me now.
Yet him for this my love no whit disdaineth;
Suns of the world may stain when heav-
en's sun staineth.*

Will Shakespeare

*Variety is disappearing from the human
race; the same ways of acting, thinking
and feeling are to be met with all over the
world. This is not only because nations
work more upon each other and copy
each other more faithfully, but as the men
of each country relinquish more and
more the peculiar opinions and feelings
of a caste, a profession, or a family, they
simultaneously arrive at something nearer
to the constitution of man, which is ever-
where the same. Thus they become more
alike, even without having imitated each
other. Like travelers scattered about some
large wood, intersected by paths converg-
ing to one point, if all of them keep their
eyes fixed upon that point and advance
towards it, they insensibly draw nearer
together, though they do not seek, though
they do not see and know each other; and
they will be surprised at length to find
themselves all collected at the same spot.*

*Democracy in America,
Alexis de Tocqueville*

Public Survey For Management Of Coopers Rock State Forest

Conducted by the Friends of Coopers Rock in cooperation with
WV Departments of Commerce, Natural Resources, and Agriculture,
and West Virginia University Division of Forestry

1. What are your uses of, or interests in, Coopers Rock State Forest (Coopers Rock)? If more than one, please indicate the order of importance to you, with #1 most important.
2. What is of value to you at Cooper Rock? (Attach additional pages.)
3. How would you like to see Coopers Rock used during the next ten years?
4. What would you like Coopers Rock to look like 25 years from now?
5. Are there any improvements, additions to, or deletions from the opportunities currently available at Coopers Rock that you would like to see?
6. Do you have any concerns about Coopers Rock? Please explain.
7. Do you have any other comments about management of Coopers Rock?
8. **Optional:** If you would like to be on our mailing list and be kept informed of our planning progress, include your name, address and telephone # in the space below:

Please Mail By April 7 To:

Coopers Rock Survey, WV Department of Commerce,
Division of Parks and Recreation Room B451, 1900 Washington St. East,
Charleston, WV 25305

Thank you for assisting us in the management of your public lands.
—Even if you miss the deadline your response counts—

Monongahela National Forest Hiking Guide Now Out

Edition 5 of the WVHC **Monongahela National Forest Hiking Guide** is now available. This edition is bigger and better than ever, with 320 pages, 60 maps, 39 photographs, descriptions of 164 trails totalling 780 miles, a new section on ski-touring, and a full-color cover. The authors are Allen de Hart and Bruce Sundquist. Allen has hiked all the trails of the Monogahela N.F. over the past few years. Bruce edited Editions 1-4. The hiking community and the U.S. Forest Service provided the authors with trail reports and photographs.

In the U.S. Forest Service's planning process that led to

the 1986 Land and Resource Management Plan, over 35,000 comments were received from the public. The gist of these comments is that the Monongehela is a "Special Place." And indeed it is. The hiking and backpacking opportunities it provides are among the best in the eastern U.S. The more outstanding areas are becoming known far and wide — Otter Creek Wilderness, Dolly Sods Wilderness, Flat-rock Plains, Roaring Plains, Blackwater Canyon, Spruce Knob, North Fork Mountain, Shaver's Mountain, Laurel Fork Wilderness, Cranberry Back Country, Cranberry Wilderness, among others. This guide will help you get to know

these and other special places in the forest.

Profits from the sale of these guides support a wide variety of worthy environmental projects in the West Virginia Highlands Conservancy.

To order your copy of **Monongahela National Forest Hiking Guide**, send \$9.95 plus 6% sales tax for WV residents, plus \$1.25 postage (book rate) to West Virginia Highlands Conservancy, 1205 Quarrier St., Lower Level Charleston, WV 25301.

Along The Laurel Fork

by Robert Stough

Many people who go to the wilderness do so at least in part for the sheer grandeur of primeval nature, for experiences that cannot be gained in any other way or place, such as following a wild mountain stream as it roars and tumbles down through giant boulders under a soaring canopy of tall, old trees, or standing on a high and lonely outcropping on the summit of a great ridge, with a boreal wind keening through the ragged spruce, and wave upon wave of wild mountains stretching as far as you can see. These are indeed experiences that can enrich and enlarge our lives, but if we go to the mountains solely in pursuit of such things we must sooner or later become satiated, and assume that we have then 'seen' this place or that, and thus gained the measure of it. One unfortunate outgrowth of such an attitude is that an area that does not have spectacular vistas or roaring whitewater must, by rote, be less of a wilderness, and so less worthy of one's attention.

Such would seem to be the case with the upper Laurel Fork river, which is visited much less often than many wild areas in the West Virginia highlands, even though about 12,000 acres have recently been incorporated into the national wilderness system. It is, by comparison, a gentle land, situated in the heart of the Allegheny plateau, and is composed of relatively wide and level valleys and modest sized ridges. There are no views at all worthy of note, and the river itself descends very gradually through the wilderness, and so has little of the power of Otter Creek or Red Creek in the Dolly Sods Wilderness. But what the Laurel Fork may lack in

grandeur it atones for in many subtle and yet compelling ways. It is an area extremely rich in a wide variety of wildlife. The river itself and every sidestream supports an abundance of fish. There are numerous active beaver colonies all along the river; and, many more old beaver meadows now gone back to seed and often rimmed with fine strands of red pines. White-tailed deer are so abundant that it is unusual to go more than a short while without seeing or hearing them, no matter where one may be. Plant life is also quite diverse, including fine examples of riverine, cove hardwoods and northern boreal forests, with a few patches of old growth here and there.

What follows is a description of a day spent on the Laurel Fork. I have compressed a number of personal experiences from several different trips one day, and I have purposely avoided mentioning specific locations along the river. The Conservancy's MNF hiking guide contains a good description of the Laurel Fork area, though all you would really need would be a decent map, for the area is blessed with abundant campsites, many of outstanding quality. Keep in mind that the water from the side streams flowing into the Laurel Fork from the east, as well as the Laurel Fork itself, should not be consumed without treatment, since there is extensive cattle pasturage on Rich Mountain. Streams flowing down from Middle Mountain drain wilderness forest.



The morning sunlight is pouring through the old hemlocks and glittering off the river as we start upstream on this fine spring day. Sky-blue Virginia bluebells are flowering here and there in the grassy margins along the stream. The sweet, lilting songs of wood thrushes and the loud, rolling melodies of winter wrens echo through the forest. We come out into an open meadow and disturb a small tribe of deer, and they bound off with their white-tails flying over the dew-soaked grass. Further along we hear the rattling call of a belted kingfisher as he rounds a bend in the river and flies swiftly past us, flowing along with the creek. A small snake plops in the water beside the stump of a young cherry tree cut by a beaver. The trail goes into the forest for awhile, the dark shadows of the spruce and hemlock lit by patches of thick, luminous moss growing on their fluted trunks, then the 'kee-yar' scream of a red-shouldered hawk, followed shortly by the just slightly different scream of a mischievous blue jay doing his hawk impersonation. We come back out along the stream in a grove of old, contorted yellow birch trees, which continue to the edge of a large beaver marsh, where we just catch sight of a great blue heron flying away on its huge wings. At our feet a patch of delicate flowering bluets dances with the morning breeze. We stop for lunch at a quiet spot along the river shaded by graceful hemlock branches, the silvery undersides of their needles glowing with the reflected light of the clear water. As we're ready to leave we notice a large dark object drifting back downstream that suddenly sticks its head up for a breath, and we see that it's a big snapping turtle, it's ridged carapace covered with dark green algae. As we go along upstream the morning's chill gives way to the comforting warmth of a long spring day, and many swallowtail butterflies begin to stir in the valley, their brilliant golden-yellow wings flashing like shards of the sun as they flutter along the creek. Then we go back in the forest again, catching a glimpse of a scarlet tanager among the yellow-green buds of an old oak, and a pair of yearling deer watching from the dappled shadows. As we cross a small side-stream dozens of tiny minnows skitter out of the way when we place our booted tracks on the

muddy bank beside those of a raccoon. Soon the land begins to change somewhat, and the wide-open valley of the north wilderness gives way to the narrower, rockier south wilderness. In the dense hardwood forest we find the huge tail feather of a wild turkey beside a large patch of blossoming wood violets, where we eat some of the sweet purple flowers and have a long drink of cold spring water tumbling down from Middle Mtn. For awhile the trail goes high above the stream and we catch sight of the other side of the valley, forested in green pines and new-budding maples, over which a flock of vultures is soaring on the afternoon thermals. Then again the shape of the land changes as we round a rocky point and head into the beaver meadows and pine forests of the headwater valleys as evening begins to gather. At a wide bend in the creek we notice a mink on the far bank, and several more deer in the farther meadow, eyeing us curiously but without fear as we quietly pass by. A little ways along we come into an ancient grove of spruce trees towering up from a lush mossy log along the stream, and listen to the hauntingly beautiful song of a hermit thrush high in the spruce-crowns. For awhile we're held spellbound by the peace and harmony of the old forest, but at last the deepening evening moves us along upstream to our camp in a stand of pines bordering the creek and an old beaver meadow. After dinner we sit under an old pine in the fading twilight as a large barred owl flies on silent wings into another tall pine close by, perching there and looking at us quite calmly with its penetrating eyes before flying away into the gathering night. On the far bank a red fox passes by, moving easily through the tangled thickets. As night falls a tribe of wood frogs begins chanting a ways upstream, and the last, lyrical thrushsongs give way to the deep, booming whooo of the owl echoing through the high valley. We sit in quiet contemplation listening to the soft whisper of the nearby stream mingling with the distant frogsongs. A bright, waxing moon slowly climbs over the far ridge as we fall asleep on the soft loam, wrapped in moonlight and pine-shadows.

Reasons to join WVHC

The West Virginia Highlands Conservancy is a private, non-profit environmental organization started in 1967. Its objectives are "to promote, encourage, and work for the conservation - including both preservation and wise use - and appreciation of the scenic, historic, open space, wilderness, and outdoor recreation resources of an related to West Virginia, and especially the Highlands Region . . ."

Members include people and organizations diverse in their personal interests and professions but united by a common interest. Most WVHC members are West Virginians but many live outside the state.

The Highlands Voice, a monthly 8-page

newspaper, is sent to all Conservancy members. It is filled with environmental news on topics of interest and concern to members as well as articles about trips and outings.

The Conservancy sponsors two special weekends each year. These are usually at some scenic spot in the highlands and feature speakers, outings and board meetings.

Your contribution to WVHC is tax deductible and joining is as simple as filling out this form and returning it to the office in Charleston.

Join today and become part of an active organization dedicated to preserving West Virginia's natural resources.

WVHC Membership Categories (Circle One)

Category	Individual	Family	Organization
Senior/Student	\$ 12	\$ ---	\$ ---
Regular	15	25	50
Associate	30	50	100
Sustaining	50	100	200
Patron	100	200	400
Mountaineer	200	300	600

Name: _____ Phone: _____

Address: _____

City/State/Zip _____

Make checks payable to: West Virginia Highlands Conservancy
Mail to: 1205 Quarrier St., Lower Level, Charleston, WV 25301

Membership Benefits

- 1-year subscription to **The Highlands Voice**
- Special meetings with workshops and speakers
- representation through WVHC's efforts to monitor legislative activity.

The West Virginia Highlands Conservancy is a non-profit organization. Your contribution is tax-deductible. Please keep this for your records.

Date _____

Amount _____

Check number _____

ACID RAIN National Stream Survey (NSS)

Conclusions from the National Acid Precipitation Assessment Program (NAPAP) demonstrate the fears of many environmentalists. About 25% of West Virginia's streams are endangered by acid deposition.

The Aquatic Effects Research Program, a division of the U.S. EPA Office of Research and Development, began surveying surface waters in 1983. This interagency task force mandated by Congress in 1980, is systematically researching four other related projects to determine the effects of acid rain. The complete report is due next year.

In the spring of 1986, samples were collected from 450 streams in the Mid-Atlantic and Southeastern regions that could be extrapolated validly to 124,000 miles of streams. The streams were sampled at two points, averaging 1.86 miles apart, twice during normal flows between March 15 and May 15. The streams were from three (3) feet to eighteen (18) feet wide and thought to be large enough to be of fishery interest yet small enough to reflect atmospheric acid inputs.

West Virginia and Pennsylvania make up most of the Northern Appalachian Sub-region. The tables show 6.6% of these streams had a pH less than 5.0, and 14% less than pH 6.0 at normal springtime flows. The report notes the lower pH values of all streams at wet deposition (after a rain or snow melt). The acid-neutralizing capacity (ANC) is shown below $\mu\text{g/l}$ (10 ppm) in 60% of the streams sampled.

Researchers believe their structured approach is essential to provide a basis for accurate risk assessment for each region. Described as a marriage between geography, ecology, and statistics, "ecoregions" are defined across traditional boundaries.

The Acid Precipitation Assessment Program's four other projects include: an investigation to predict changes at different stages of pollution; verify predictions for each region; monitor any short-term acidification; and validate long-term projections made for each region.

The Survey

The goal of the National Surface Water Project is "to determine the present chemistry, characterize the chemical

temporal variability, and determine the key biological resources of lakes and streams in potentially sensitive regions of the U.S."

Fifty-three (53) streams were selected in West Virginia. Eight (8) were found to be disturbed by mine drainage and were not sampled. The remaining 45 streams met the criteria of being little altered natural streams from three (3) to eighteen (18) feet wide, averaging eight (8) feet in width. Cooperating state officials enthusiastically approved the choice of streams as representative WV streams.

Downstream (D) and upstream (U) sampling points were an average of 1.86 miles apart. Each site was visited twice. The chemical analysis of these streams were statistically evaluated to include about 8,800 stream reaches.

Alkalinity and Acidity

The precise chemistry of acid deposition involves complex chemical reactions. Measures of atmospheric reactions consistently result in unexpected variables. Highly acidic water facilitates the precipitation of metals generally only present in trace amounts.

The chemical concept of base-neutralizing capacity (BNC), showing the acidity of water; and, acid-neutralizing capacity (ANC), showing the buffering capacity of a body of water, are both accepted measurements for demonstrating the effects of pollution on surface water. pH (BNC) and ANC figures given here measure the water charge balance of a body of water. Known ranges exist for the life forms once seen in all streams.

	ANC < 0 ACIDIFIED		ANC < 50 $\mu\text{g/l}$ (2.5ppm) EXTREMELY SENSITIVE		ANC < 100 $\mu\text{g/l}$ (5ppm) SENSITIVE		ANC < 200 $\mu\text{g/l}$ (10ppm)							
	Percentage		Percentage		Percentage		Percentage							
	D	U	D	U	D	U	D	U						
WEST VIRGINIA	1.7	3.2	1.7	3.2	19.7	31.3	3.3	8.4	40.5	39.9	10.9	21.1	57.1	64.5
PENNSYLVANIA	.4	9.3	-	2.4	3.1	15.3	.8	11.3	13.9	21.0	1.8	11.9	40.4	46.6

TABLE I

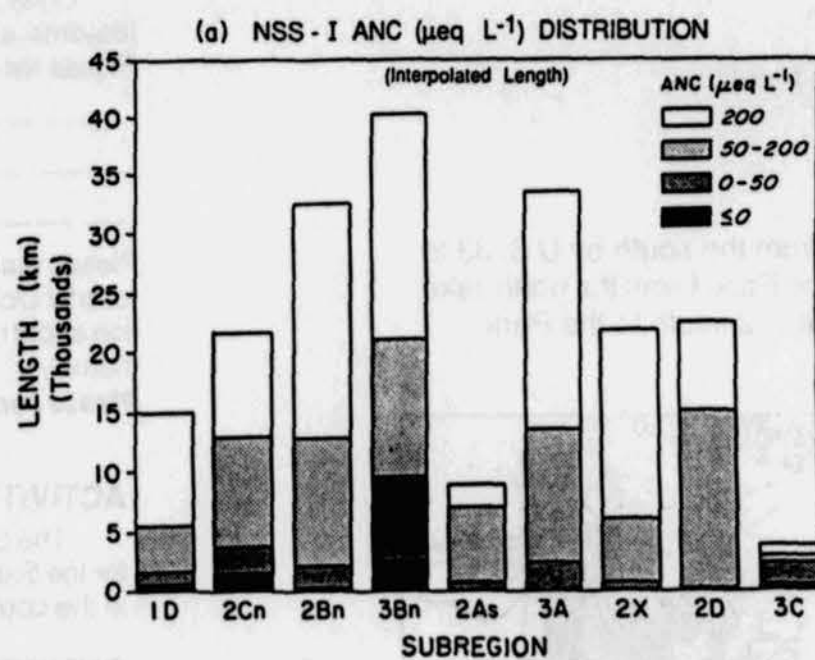
Population Estimates of the Combined Length (km) and Percentage of NSS-I Target Stream Reaches with Spring Baseflow pH Less than Reference Values (Standard Errors in Parentheses).^a

Subregion	pH \leq 5.0		pH \leq 5.5		pH \leq 6.0		Total Length (km)
	Length	%	Length	%	Length	%	
Poconos/Catskills	550 (290)	3.6 (1.9)	906 (420)	6.0 (2.8)	1,354 (520)	8.9 (3.4)	15,144 (1,912)
N. Appalachians	1,424 (700)	6.6 (3.2)	1,870 (710)	8.6 (3.2)	3,044 (900)	14.0 (4.2)	21,738 (2,746)
Valley & Ridge	257 (260)	0.79 (0.8)	1,937 (1,300)	5.9 (4.0)	4,116 (1,900)	12.6 (5.9)	32,687 (4,492)
MA Coastal Plain	3,147 (1,300)	7.8 (3.3)	9,565 (3,000)	23.7 (7.5)	18,707 (4,300)	46.4 (11)	40,296 (5,799)
S. Blue Ridge	-	-	-	-	-	-	9,036 (960)
Piedmont	-	-	-	-	2,390 (1,200)	7.1 (3.7)	33,531 (4,402)
S. Appalachians	-	-	313 (310)	1.4 (1.4)	920 (540)	4.2 (2.5)	21,892 (2,807)
Ozarks/Ouachitas	-	-	410 (290)	1.8 (1.3)	2,437 (990)	10.8 (4.4)	22,480 (2,507)
Florida	522 (250)	13.6 (6.5)	1,708 (440)	44.4 (12)	2,828 (620)	73.5 (16)	3,848 (678)

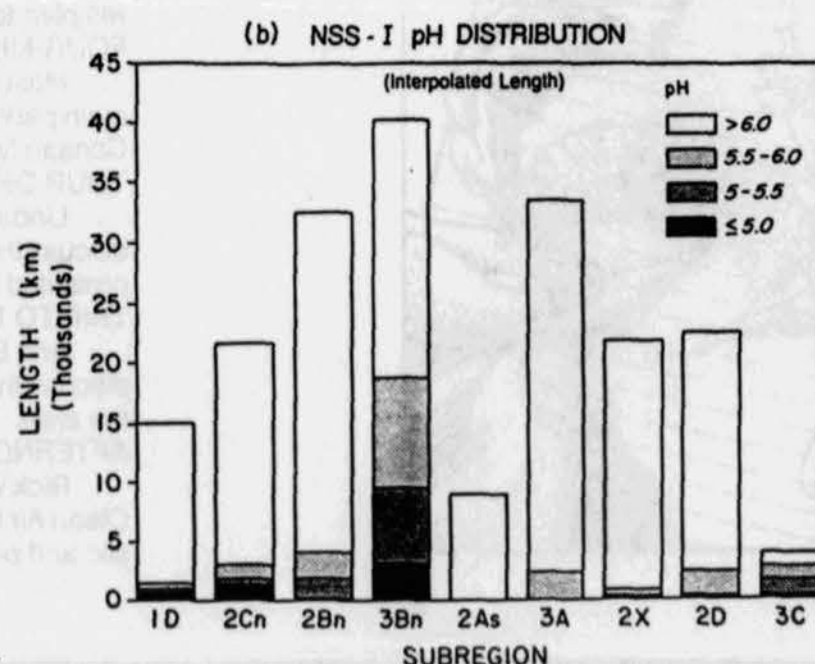
TABLE II

Population Estimates of the Combined Length (km) and Percentage of NSS-I Target Stream Reaches with Spring Baseflow ANC Less than Reference Values (Standard Errors in Parentheses).^a

Subregion	ANC \leq 0		ANC \leq 50		ANC \leq 200		Total Length (km)
	Length	%	Length	%	Length	%	
Poconos/Catskills	543 (270)	3.6 (1.8)	1,606 (500)	10.6 (3.3)	5,489 (1,100)	36.2 (7.3)	15,144 (1,912)
N. Appalachians	1,524 (750)	7.0 (3.5)	3,713 (920)	17.1 (4.2)	12,935 (2,200)	59.5 (10)	21,738 (2,746)
Valley & Ridge	257 (210)	0.8 (0.6)	2,111 (990)	6.5 (3.0)	12,811 (3,400)	39.2 (10)	32,687 (4,492)
MA Coastal Plain	2,527 (1,200)	6.3 (2.9)	9,636 (2,700)	23.9 (6.6)	21,091 (4,400)	52.3 (11)	40,296 (5,799)
S. Blue Ridge	-	-	706 (250)	7.8 (2.8)	7,084 (940)	78.4 (10)	9,036 (960)
Piedmont	-	-	2,390 (1,300)	7.1 (3.9)	13,554 (2,900)	40.4 (8.5)	33,531 (4,402)
S. Appalachians	117 (120)	0.5 (0.5)	763 (440)	3.5 (2.0)	6,130 (1,700)	28.0 (8.0)	21,892 (2,807)
Ozarks/Ouachitas	-	-	205 (150)	0.9 (0.6)	15,092 (2,500)	67.1 (11)	22,480 (2,507)
Florida	461 (160)	12.0 (4.1)	2,356 (530)	61.2 (14)	2,939 (590)	76.4 (15)	3,848 (678)



Combined length of NSS-I target stream resources within specified categories of (a) ANC, and (b) pH, as estimated by linear interpolation of index concentrations between upper and lower reach node sampling locations.



- 1D — Poconos/Catskills
- 2Cn — Northern Appalachians
- 2Bn — Valley and Ridge
- 3Bn — Mid-Atlantic Coastal Plain
- 2As — Southern Blue Ridge
- 3A — Piedmont
- 2X — Southern Appalachians
- 2D — Ozarks/Ouachitas
- 3C — Florida Subregion

Spring Review April 14 - 16 Blackwater Falls State Park

BLACKWATER FALLS STATE PARK

Several Cabins at the Park have been reserved for WVHC members. The Conservancy has secured the rooms for your convenience. All cabins are heated and well equipped with linen and cooking supplies. For a room at the Blackwater State Park Lodge, please call the lodge directly at (304) 259-5216. The park and the lodge is a popular vacation area, so please plan to make your reservations as far in advance as possible. Canaan Valley State Park, a short drive from Blackwater State Park, also offers lodging. Their number is (304) 866-4121. The Blackwater State Park Lodge has a large restaurant overlooking the canyon which serves country cooking and new American cuisine. The Woodchuck Lounge also serves light sandwiches and drinks. There will be a barbecue cook-out for those attending the weekend on Saturday evening at cabin 25.

Program:

Registration and meetings will take place at the Blackwater State Park Lodge Conference Room.

Friday, April 14

- 6:00-11:00 P.M. - Registration and Snacks
- 8:00 P.M. - Slides and Movies
- 9:00 P.M. - Social Hour

Saturday, April 15

- 7:00 A.M. - Bird Walk
- 8:00 A.M. - Breakfast
- 9:30 A.M. - Outings
- 2:00-4:30 P.M. - Seminar
- 5:30 P.M. - Dinner Cookout at Cabin 25
- 7:00 P.M. - Acid Rain Forum (conference room)
- 9:30 P.M. - Social Hour

Sunday, April 16

- 8:00 A.M. - Breakfast
- 9:00 A.M. - Board of Directors Meeting
- 12:30 P.M. - Lunch

Location

Blackwater Falls is accessible from the south by U.S. 33 to Harmon, then WV Route 32 north to the Park. From the north, take U.S. Route 219 to Thomas then Route 32 south to the Park.

Registration Form

Deadlines: Lodging April 1; Meals April 1

Name _____

Address _____

Phone _____

Registration Fee: \$3/adult _____ \$

LODGING — BLACKWATER STATE PARK CABINS

Cabin Reservations

Friday: \$13.00 x _____ = \$ _____

Cots: \$ 3.00 x _____ = \$ _____

Saturday: \$13.00 x _____ = \$ _____

Cots: \$ 3.00 x _____ = \$ _____

Total Lodging..... \$ _____

CAMPING

Available at nearby Canaan Valley State Park and at MNF Campsites.

MEALS

The WVHC members will be offering a Saturday evening cookout at cabin 25. We will also prepare a box lunch for those persons going on the outings. The Blackwater State Park Lodge Restaurant will also be available for breakfast and any other meals you wish to have there.

Saturday

Box Lunch (\$3.50) Number of people _____ \$ _____

Dinner Cookout (\$5.00) Number of people _____ \$ _____

(\$3.00 children) Total for Weekend \$ _____

NATURE SKOOL (for children age 3-10)

Nature Skool hours available: (\$2.00 per child payable to worker)

Saturday 9:00 a.m. to 5:00 p.m. Number of children _____

Saturday 7:00 p.m. to 12:00 p.m. Number of children _____

Sunday 9:00 a.m. to 12:00 a.m. Number of children _____

CHILDCARE

Fee: \$1.00 per hour.

Childcare can be made available for all age children on Saturday (daytime and evening) and Sunday morning if we have enough children. Please list the names and ages of children that may use this service.

Please make checks payable to WVHC Spring Review and return with this form to: Donna Borders, 1012 10th Ave., Marlinton, WV 24954. For information about reservations call Donna at (304) 799-6772 (daytime) or 799-4381 (home).

Please remember to send a check with all reservation forms.

ACTIVITIES

The Saturday outings will last 4-5 hours to allow enough time to return for the Saturday afternoon seminar. All outing guides will meet their groups in the conference room at the Lodge.

OUTINGS

EARLY MORNING BIRD WALKS

Gary Worthington will lead morning bird walks on Saturday and Sunday. You can expect to see those early spring arriving birds and a few unexpected species. Dress warmly. The hike will begin at 7:00 promptly and will plan to be back in time for the outings. Meet in the conference room.

FOUR-MILE NATURE HIKE ALONG THE DAVIS TRAIL

Most of this trail is on the Monongahela National Forest. Leave from the main park road at Engine Run and hike along Canyon Loop Road, on top of Canaan Mountain.

TOUR OF CANAAN VALLEY

Linda Elkinton will lead a tour of the Canaan Valley area and will discuss the history of the conservancy's effort to have this valuable wetland protected from industry and residential development.

TRIP TO DOLLY SODS WILDERNESS AREA

Ann Brunley will lead a trip to the Dolly Sods Wilderness area and will discuss the efforts of conservation groups to monitor military maneuvers in the area.

AFTERNOON FORUM ACID RAIN UPDATE

Rick Webb of the University of Virginia and Ned Helme of the Center for Clean Air Policy will anchor the afternoon symposium on Acid Rain. Scientific and political aspects of this issue will be discussed.

