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Rivers Bill Update

Senator Jay Rockefeller has introduced a bill in the Senate similar to HR 900, The West Virginia National Interest Rivers Conservation Act. His bill also calls for designating the Gauley River a national recreation area and incorporating parts of the Bluestone and Meadow rivers into the National Wild and Scenic Rivers system.

However, the Rockefeller bill does not contain provisions for the Greenbrier River, which was amended into the House bill before passage. HR 900 passed in the House by an overwhelming 344-49 vote last May. Rockefeller's bill will be assigned to the Democratic-controlled Senate Energy and Natural Resources Committee, where it is expected to receive favorable treatment.

The decision to drop the Greenbrier from the Senate version of the bill came after a series of meetings held September 8-10 in Durbin, Marlinton, and Lewisburg. Rockefeller's staff heard from both proponents and opponents of the Greenbrier's inclusion. WVHC board members attending the meet-

ings reported that many people opposing HR 900 nevertheless expressed their general belief that some other means of protection for the Greenbrier was needed to ensure the continuation of the environmental and recreational values the river gives the valley communities. Many of those opposed to any form of river protection cited fears that government management of the river would mean land condemnation and controls.

MOORE OPPOSES RIVERS BILL

Governor Moore has written to Senate Majority Leader Robert C. Byrd expressing his objection to HR 900. Apparently unaware that Congressman Harley O. Staggers, Jr., had already requested removal of the Greenbrier River from the bill because of constituent concerns about federal management of that river, Moore expressed concern

in his September 28, 1987, letter that inclusion of the Greenbrier "precludes the full and careful consideration which should attend an action of this magnitude."

Moore's main objection to the bill is one of federal interference. "HR 900 unacceptably infringes upon the right and obligations of the State of West Virginia to manage, preserve, and develop its rivers for the benefit of all West Virginians," he stated.

Congressman Nick Rahall, the original sponsor of HR 900, expressed his surprise "that it took until late September for the Governor to provide comments on the legislation." Rahall listed in a September 29, 1987, letter to Byrd three requests to Governor Moore or Department of Natural Resources Director Ron Potesta (November 1986 and in March and May 1987) for their views on the Rivers Bill. No response was ever made by either DNR or the governor's office to these invitations. (See page 2 for Congressman Staggers's views on the Rivers Bill.)

GREENBRIER, AN ENDANGERED RIVER

The Greenbrier River is among the 10 most endangered rivers nationwide, according to American Rivers. In August, American Rivers released a list of the nation's most endangered free-flowing rivers based on the possibilities of dam construction or other major projects. Kevin Coyle, Vice President and Conservation Director of American Rivers, said the Greenbrier River is included on the endangered list because the U.S. Army Corps of Engineers is considering building a flood control dam in Pocahontas County.

The list of rivers also includes Kings and Merced, both in California; Merrimack in New Hampshire; Platte in Colorado, Wyoming and Nebraska; Little Big Horn in Wyoming; Black in New York; Klamath in Oregon; Illinois Bayou in Arkansas; and Verde in Arizona.

Historic Agreement Protects 112 Rivers

"This is the largest single action ever to protect rivers listed on the Nationwide Rivers Inventory," said W. Kent Olson, American Rivers President, as he signed a legally binding agreement with the Eastern Region of the U.S. Forest Service. The action will result in the evaluation and interim protection — for five to ten years — of more than 112 potential wild and scenic rivers. An estimated 1,000 river miles, and 300,000 riverside acres in the fifteen national forests of the east and the midwest are positively affected, as are 11 states. "We have taken an important — and historic — first step in making good on the recommendation of the President's Commission on Americans Outdoors that the country protect 2,000 rivers by the year 2000. Greenways are at the heart of the Commission's report, and protected rivers are the heart of greenway."

"Never before in the history of the Wild and Scenic Rivers Act, or of the nation itself, have so many rivers been protected at one time," Olson continued. "The Forest Service has given interim protection to four times as many river segments as were preserved under the Alaska Lands Act, which until now was largest single action. The Alaska Act protected river more miles, but our private action protects more rivers. We are working toward protecting rivers in the eight other forest service regions as well."

Olson commended Regional Forester Floyd Marita and his staff for taking remedial action to bring the individual forest plans of the region into compliance with the National Wild and Scenic Rivers Act and Forest Service administrative direction to protect rivers listed on the National Park Service's 1982 Nationwide Rivers Inventory (NRI), a list of more than 1,500 rivers that appear to qualify for inclusion in the Wild and Scenic Rivers System. The agreement contains the conditions upon which American Rivers consented to release five forest plan appeals: the rivers

will be evaluated, and later studied, for possible inclusion in the Wild and Scenic Rivers System. In the meantime, the rivers will be protected from clearcutting, dams and diversions, certain types of mining, and other forms of incompatible development for five to ten years.

American Rivers, with its counsel the Sierra Club Legal Defense Fund, has worked with the Forest Service over the past year to develop the terms of the agreement, which will buy important time for these rivers. The defense fund is a public interest law firm specializing in natural resource issues.

"It is also gratifying," said Kevin Coyle, American Rivers' Vice President and Conservation Director "to have representatives of the forest products industry join American Rivers and the Forest Service as signatories." Coyle was referring to the fact that several midwestern timber groups had been involved in the negotiation and were satisfied that a balance existed between wild and scenic river corridor protection and careful management of timber resources. Coyle thanked Robert Dreher, the staff attorney at the Sierra Club Legal Defense Fund for his skillful handling of the agreement and the Rivers-In-Forests project in general.

This region-wide agreement entered into between the Forest Service and American Rivers will serve as a model for similar agreements being pursued in other regions.

Said Olson, "Kevin Coyle, Bob Dreher, and our able intern, Jamie Fosburgh, have done a stellar job of river conservation. The protection gained for an estimated 1,000 river miles and 300,000 corridor acres is a tangible achievement for which all American Rivers members and donors share the credit."

West Virginia Rivers Protected In American Rivers/Forest Service Pact

	Miles within Forest Proclamation Boundary*	USFS Acreage
Monongahela NF (W)		
Blackwater	20	920
Cheat	20	1,000
Shavers Fork	30	4,800
Dry Fork Cheat	9	432
Shavers Fork Cheat	43	6,720
Gladly Fork Cheat	30	7,200
Cherry (and South Fk)	13	2,080
West Fk. Greenbrier	18	4,320
East Fk. Greenbrier	19	2,280
Greenbrier	97	9,315
North Fk. So. Br. Potomac	19	608
South Br. Potomac	23	740
Gauley	25	2,370
Cranberry	33	10,560
TOTAL	399	53,345

*"Proclamation boundary" refers to the congressionally authorized boundary of a given national forest. Not all land within the national forest proclamation boundary is owned by the federal government. This is particularly true in the eastern part of the nation where a good deal of the land is in private ownership. The agreement affects only federally owned land and not private land.

(Reprinted with permission from American Rivers, September 1987.)

Mountain View

RIVER POLITICS AND PLANNING

by John Purbaugh

Perhaps river issues inspire such passion on all sides because of rivers' historical role as the arteries of commerce and because of their awesome natural power. Though West Virginia's mountain rivers are no longer the highways into the Appalachian frontier, they are still commercially important as the assimilators of our wastes, as suppliers of drinking and industrial process water, and as the focus for fishermen, trappers, rafters, and family outings. Rivers and streams remain a primary feature of the State's cultural landscape. "Where do you live?", when asked of someone living outside an incorporated town, is answered by "Up Laurel" or "On Beech Lick of Spruce Fork." Somehow it diminishes the value of both the man and land to say, instead, "on county road 120/17, off state route 41." The asphalt is temporary.

Like our other valuable natural resources, the water caught by our mountains and channeled by our streams leaves the state as a raw material for refinement, use or manufacture elsewhere. Much of what we like to think of as "our" water is in fact, if not in law, appropriated to dilute the sewage and drive the economies of Washington, D.C., Pittsburgh, and Cincinnati. West Virginia has only a handful (less than three; consensus is not available on the exact number) of natural lakes, since our geography is shaped by erosion. Continuing pressure for man-made impoundments is probably inevitable since navigation, industry, and some forms of recreation crave more flatwater.

All of these forces combine to make river and water issues (including groundwater, which is the source of much of our surface-water flow) ones which demand our attention, and which receive that attention in an intense fashion. Manufacturers coal, oil gas and timber companies, raft guides, sportsmen and average families all fight hard whenever a proposal for either development or preservation threatens their perceived self-interest. Yet when battle is joined over any of these issues, no serious consideration is given to the broader context that water resources planning could and should be offering to the decisionmakers.

In a rational (and therefore, dream) world, state government would have had the foresight to identify present and future water use demands, water quality problems, unique or valuable aquatic life, and recreational value for a given river. We would then base our decisions on a proposal, whether for flood control dams, protected wild rivers, or an industrial plant, on this knowledge. Alas, in West Virginia, state water resources planning is an all-too-familiar joke. Though we have extensive legal requirements for such planning, the planning section of DNR's water resources division receives no state money to fulfill these duties. Instead, they exist on federal grants for various water-quality programs, writing documents necessary to fulfill the State's obligation under the Clean Water Act, and only incidentally addressing state water resource planning needs.

Without this base of planning information, river and water issues are left to be addressed in the worst sort of political process: the politics of ignorance and its manipulation, rather than the politics of open and informed debate that we were told about in high school civics class, and that we are entitled to have.

Staggers Comments On WV Rivers Bill

Sir:

The future of the Greenbrier River has created a good deal of local discussion.

The surprising thing is that most people agree on the goals which need to be achieved. Those goals include local control of the river valley and flood control to protect against the kind of devastation which took place in 1985.

During regularly scheduled town meetings in the Greenbrier River valley earlier this year, a great number of constituents expressed their view that the Greenbrier River should be included in the W.Va. Rivers Bill. The reasons for their support included:

1. No land would be purchased by the government unless a seller wanted to do so.
2. The land management plan in the bill would mean that local people would control management of the river, not some outside group.
3. Potential economic expansion due to the protection of a valuable natural resource.

However, flood control was not addressed by the West Virginia Rivers bill; therefore, I asked the House Interior Committee to invite interested parties, including such officials as the county commissioners in each of the affected counties, to testify at the hearing on House Bill 900. At that hearing, support for including the Greenbrier River in the bill was overwhelming.

Still concerned with flood control, I designed language to keep flood control options open for three years in Pocahontas County. A three-year period was chosen because it was believed that the Army Corps of Engineers would make its flood control report to Congress by December 1987, allowing Congress time to authorize legislation, even if appropriations would take somewhat longer.

At the time, it appeared that the goals of all of my constituents would be met by this legislative action. Unfortunately, since the House passed the bill, initial support for including the Greenbrier in the W.Va. Rivers Bill has drowned in misinformation, which has increased local concern about the overall bill.

People were told that they will have to sell their property to the government, that they will have to paint their houses a different color, that they can't plant their gardens anymore, that they can't will their property to their heirs, that they can't rebuild flood-damaged camps along the river, that the federal government will control everyone's lives and on and on and on. Some misinformed persons even stated in the newspaper that the Howes leather plant would have to close down because of the bill. All of these rumors, as well as all others which I have heard, are completely false.

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I want you to have this information so that your thinking about this entire issue is not clouded with misinformation, and also because I do not expect the Greenbrier to be included in the Senate version of the bill. The enormous cloud of misinformation has caused too many of my constituents too much concern.

Because I have always legislated based on the views of my constituents, and because I do not want to see the very important rivers bill bogged down by the controversy surrounding the Greenbrier's inclusion as part of the rivers bill.

The remaining part of the W.Va. Rivers Bill is very important to the area's economic future and I will work with the entire delegation to see it enacted. I believe that everyone will agree that this decision is in the best interest of all West Virginians.

Harley O. Staggers Jr.
U.S. House of Representatives

Washington, D.C.

Is There A Role For Science In Environmental Regulations?

by Kim Taylor

In the summer of 1984, a group of people sat in a conference room at EPA headquarters in Washington trying to hammer out explicit drinking water regulations. The Safe Drinking Water Act had been passed by Congress 10 years previously, calling for EPA to regulate chemicals found in drinking water. At the time of the conference, only nine out of the hundreds of compounds found in drinking water had been regulated.

Representatives of the Environmental Defense Fund and the League of Women Voters were arguing for maximum caution - limit exposure to chemicals in drinking water as much as possible because contaminants may be proven harmful in the future. Industry representatives claimed that an exceedingly cautious approach would be economically devastating and that there were no grounds for believing unknown chemicals harmful. Representatives from both sides frequently turned to the toxicologist in the group and asked about the health effects of one or a combination of compounds found in drinking water. The toxicologist gave the same answer each time, "it is impossible to tell."

The dilemma discussed by the group that summer has been echoed almost every time environmental policy has been debated. Answers to the questions "is it toxic?" and "how much is harmful?" come slowly, if at all. The detailed research involved takes decades to prove a substance is harmful (or safe) to small animals with short life spans. It would take centuries to compile accurate data on how a single chemical affected humans.

The fact that science can not provide technical answers has been acknowledged, but not accepted by those involved in policy debates.

Regulatory study groups can almost always agree that more information is needed, and frequently ask for it before they make final recommendations. As a consequence, no regulations are developed.

Those opposed to stricter environmental regulations (usually industry) often consciously use the "need" for more information to delay entire programs. The groundwater policy debate currently underway in the state is an illustration of such a tactic.

Industry and EPA both advocate protecting groundwater on the basis of current and potential "usage." To properly define what use groundwater should be put to, they suggest a complete inventory of the state's groundwater resources. On the basis of this inventory, individual aquifers will be designated for drinking water, industrial, or other uses. Then, numerical limits will be placed on contaminants and these limits will be the basis for regulations.

First, the numerical limits on contaminant concentration are based on the health studies mentioned previously, and usually come from EPA. There are no numerical limits for thousands of chemicals including the 25 thousand brand new ones introduced every year. There are aggregate numerical limits, but these would easily allow polluters to contaminate groundwater with toxic compounds.

Second, an exhaustive inventory of the state's ground-

water supplies is hardly even relevant to their protection. Companies requesting permits for any industrial processes should be required to test the groundwater in the vicinity of the activity site before a permit is issued. Alternatively, groundwater upgradient (and theoretically unaffected) from industrial activity can serve to compare with contaminated resources.

Successful environmental protection is more often the result of popular opinion than scientific "truth." A large number of people in WV's eastern panhandle stopped a plan to build a commercial landfill dead in its tracks. The people there did not always have accurate information or well-researched arguments, but they won their battle against out-of-state waste anyway.

During the 1970's, Congress passed sweeping new legislation designed to protect Americans and their environment against pollution. Now in the 80's we have found that few of the programs envisioned in the 70's have actually been implemented. Responding to outraged citizens, Congress has recently forced EPA to set regulations for a long list of compounds. EPA has also started to look at groups of compounds classified by their chemical structure as an alternative to regulating individual compounds. Political pressure is beginning to yield results in the regulatory field.

We have to start taking responsibility for the tough moral and economic choices in the field of environmental protection and relegate science to the supporting role where it has always belonged.

Effects Of Underground Mining On Water Supplies

by Richard S. diPreto

(Richard S. diPreto is an independent environmental consultant and land surveyor in Morgantown, West Virginia. He has been a resident and landowner in the coal fields of northern West Virginia for 16 years. For three of those years he was a rank and file underground coal miner. The following is his written submission to the House Interior Committee oversight hearing — August 3, 1987.)

Introduction

My comments here will be divided into brief discussions of 1) Geology, 2) Hydrology, 3) Mining Process and 4) Effects on Water Supplies. My experience is drawn from Central Appalachia, mostly in West

Virginia. The brevity of this presentation requires simplification of the topics.

Geology

Coal is the preserved remnant of peat swamps which flourished millions of years ago. It is found in nearly horizontal layers sandwiched between other horizontal layers of rocks derived from the erosion of pre-existing land forms. Those other rocks are predominantly of two types: sandstone and shale. Sandstone is composed of sand-sized grains from ancient river channels and shale is composed of much finer mud-sized grains from associated ancient floodplains beside the rivers.

The peat and associated sediments were

buried, compacted, hardened, and eventually uplifted from near or below sea level into their present elevations. In the process, ubiquitous fractures were induced, particularly in the sandstone and coal and to a lesser extent in the shales.

Hydrology

Some of the water falling on the surface of the land as rain and snow, finds its way past the soil and plants into the fractures in the rocks. There, it moves slowly and mostly horizontally down gradient in the fractures to discharge from the rocks in the form of springs and base streamflow. On the way, it can be intercepted by wells drilled or dug into the fractured, water-bearing rocks,

which are called aquifers. The water is kept in the aquifers and forced to flow horizontally by less permeable rocks, usually shales, called aquicludes. Water reaches the aquifer during the recharge period November-May. From May-November, the discharge period, heat, dryness and vegetation keep water from reaching aquifers. It is important to note that there is no sharp permanent distinction between ground and surface water: each can and does become the other depending on the circumstances.

Mining Process

Coal is mined underground by two basic high-extraction methods: 1) retreat room and pillar and 2) longwall. The effects on
(continued on page 6)

AIR OF ZEALOTRY

by Rochelle L. Stanfield

Of all the causes that favor a heavy government hand, only environmentalism has held its own in this era of deregulation. Of the many reasons for this phenomenon, the enthusiasm, aggressiveness and sheer doggedness of environmental organizations must rank near the top. Now, however, the ardor of some environmental groups on the issue of acid rain control could end up being counterproductive.

As a political strategy, zealotry must be used carefully. The original Zealots, a small band of fanatical Jews who refused to assimilate into the Roman Empire nearly 2,000 years ago, held off the Roman legions for seven years in the Judean desert. But in the end — in 73 A.D., with a dramatic mass suicide at Masada — the Zealots died and so did their cause.

If there's a parallel to modern environmentalism in this ancient history lesson, it might be that zealotry is more useful to the foes of acid rain control than to the proponents. By stubborn adherence to the refrain that the link between coal-burning boilers and acid rain damage has yet to be proved and, therefore, that expensive control legislation might be wasteful, the coal and utility industries, their representatives in Congress and the Reagan Administration have been able to hold off acid rain legislation for six years.

Meanwhile, the equally stiff-necked insistence of the

National Clean Air Coalition on a very ambitious and high-cost acid rain control program has gained the groups in the coalition only a sense of frustration. Despite all their self-righteous demands, loud cries of outrage and political posturing, since 1981 not one additional ton of sulfur dioxide has been removed from the air beyond the reductions already required by the 1977 Clean Air Act, which environmentalists consider inadequate.

It might be argued, of course, that for the past six years zealotry was the only strategy possible for the National Clean Air Coalition. There was never any indication that a willingness to compromise would have achieved a control program. Congressional foes of acid rain legislation weren't inclined to compromise on even a modest program, the Reagan Administration was steadfast in its opposition and the politics were such that no control program could get a vote on the floor of either chamber of Congress. If the coalition was unable to make any headway against sulfur dioxide in the air, at least it was able to keep its principles and its support groups intact.

Now all that may be changing in a new atmosphere of moderation on Capitol Hill. George J. Mitchell, D-Maine, chairman of the Senate Environment and Public Works Subcommittee on Environmental Protection and author of a

comprehensive Clean Air Act reform bill, has agreed to work on a compromise with Alan K. Simpson, R-Wyo., Senate Minority Whip and co-author of a moderate acid rain bill. Perhaps more significant, John D. Dingell, D-Mich., House Energy and Commerce committee chairman and hitherto arch foe of acid rain legislation, has called for unprecedented talks with his subcommittee chairmen that could lead to a compromise. Skeptics discount these moves, however, particularly in the House. Dingell has conditioned his offer of compromise on a demand that talks begin from a clean slate, while Henry A. Waxman, D-Calif., chairman of the Subcommittee on Health and the Environment, has been committed to a stringent acid rain reduction program for several years. A clean slate would be difficult for him in the absence of a face-saving measure. Nonetheless, the first step toward possible action has been taken.

In addition, a small voice for moderation has come up with the outlines for what appears to some to be a reasonable compromise. The Center for Clean Air Policy, a study group established by a group of governors to seek a middle-of-the-road solution, brought together state environment officials, utility executives, grass-roots environmentalists and some coal companies and, over the past year, hushed out the elements of a low-cost acid rain control bill. This compromise
(continued on page 5)

Special Group Formed To Fight Gypsy Moths

The vast oak forests of the Appalachians are facing a tremendous threat from the gypsy moth. Moving steadily southward from the Northeastern states the ravenous caterpillars have reached the Virginias, according to Dr. Dick Reardon, Project Leader of a special group recently formed to fight the pest.

A demonstration project is being set up in

the three National Forests that are within the two Virginias in an effort to slow the advance of the gypsy moths. Formed in July and financed by a special appropriation in the federal budget, the project is named the Appalachian Gypsy Moth Integrated Pest Management Demonstration Project (AIPM).

The lead organization of AIPM is the USDA, Forest Service, in cooperation with

other Federal and state agencies, universities, environmental groups, and private industry.

Dr. Reardon, with the Forest Service in Morgantown, West Virginia, said that the goal of the project is to demonstrate the effectiveness of new and existing management technology to slow the natural spread of the gypsy moth and to lessen the damage

that it causes. According to Reardon an important first task in the program will be to establish a systematic survey and monitoring system throughout the project area. The majority of the project will concentrate on finding low level populations of the gypsy moth and using new technology to keep these populations low.

"The gypsy moth is already here in the (continued on page 5)

GREENBRIER COUNTY WANTS NATIONAL CAVE MUSEUM

Either Lewisburg or a place known as Horse Cave, Ky. is likely to get the proposed \$5 million home and museum of the American Cave Conservation Association.

Such an asset to either town is apt to bring merchants plenty of tourist dollars spent by growing legions of spelunkers and researchers.

Lewisburg Mayor Phil Gainer believes Greenbrier County has the edge in some respects. It is pocked by more than 600 caves and enjoys a reputation as a favorite among spelunkers. What's more, Ralph Blake, the owner of a cave known as Lost World, is willing to put up some land on which to build the museum.

Until a year ago, when it decided to move, the ACCA called Richmond, Va., its home. Learning of the impending move, Gainer got in touch with the group and asked that Lewisburg be considered.

Five towns initially were in the running.

"We had the site selection committee come in here last week and we showed what we could do," Gainer says. "The site donated meets the requirements. We're awaiting the decision, which hopefully will come by the end of October."

Gainer says there is no doubt that such a facility would

give any area an economic boost.

"They anticipate 250,000 tourists a year, wherever it's located," the mayor said. "But we get only 50,000 a year, that would be great. It would be ideal for this area. It's a clean type of attraction, the sort of thing we want to encourage."

A second commercial cave in Lewisburg is Organ Cave, where Civil War soldiers once fashioned gunpowder in saltpeter troughs.

Gainer has been working nearly a year to land the museum, which he says would attract educators, as well as recreational explorers.

"Educators from all over the Eastern United States have contacted us to do research," he said. "There's been a great outpouring of academia supporting this site."

Another plus for Greenbrier County is that Interstate 64 runs through it and soon will stretch all the way to the West Virginia Turnpike.

Horse Cave has at least one advantage over Lewisburg. The town has offered a building for the museum, something West Virginia officials have not been able to match.

Senator Jay Rockefeller, whose state staff has been

working with private and public officials in Greenbrier County on the project, sent a letter to the chairman of the search committee of the ACCA, urging him to locate the proposed center in Lewisburg.

"Greenbrier County, West Virginia, is uniquely suited to house a facility honoring cave exploration and conservation," Rockefeller said in his letter to association chairman Tom Aley of Missouri. The county is nationally known for its beautiful and spectacular caves — some 600 of them, Rockefeller noted.

"For many years, Greenbrier caves have attracted researchers and explorers from all over the country — even Canadians have come to study and visit. In addition, two of the nation's most popular tourist caves — Lost World and Organ Cave — are located in the county. Each attracts thousands of visitors a year," the Senator said.

Rockefeller also pointed out that Interstate 64 makes Lewisburg very accessible. Over 12,000 vehicles drive through Greenbrier County every day on I-64. When I-64 is totally completed next year, that figure will increase by an estimated 25 percent, he noted.

(From News stories)

Nature Guide A Delight

by Skip Johnson

Amphibians and Reptiles in West Virginia

N. Bayard Green and Thomas K. Pauley

"The first comprehensive scientific report on the amphibians and reptiles of West Virginia... a valuable contribution to the field of herpetology."—Robert H. Mount, Auburn University

Amphibians and Reptiles in West Virginia collects the available information on the distribution, habitat, and seasonal activities of the eighty-six species and subspecies of amphibians and reptiles in West Virginia. It will be of great value to conservationists and naturalists, as well as to students and laymen who have little or no experience with these fascinating but rarely seen animals.

The book opens with a brief history of herpetology in West Virginia, an overview of the state's physiography and climatology, and hints on how to locate and photograph amphibians and reptiles. Taxonomic keys provide guidance in identifying unfamiliar species, and a bibliography offers suggestions for further reading.

Each species account includes a West Virginia range map, a color photograph, and a complete description of the species—its coloration, pattern, size, and a comparison with similar, often confusing species. This is followed by a discussion of the habits and habitat of the animal and details on its breeding behavior. Throughout the text the authors offer personal comments based on their experience in the field.

N. Bayard Green, Professor Emeritus of Zoology at Marshall University, was until 1971 Curator of the Herpetological Collections of the West Virginia Biological Survey. Thomas K. Pauley is Associate Professor of Biology at Marshall University.

AMPHIBIANS & REPTILES IN WEST VIRGINIA. By N. Bayard Green and Thomas K. Pauley. University of Pittsburgh Press. 241 pages. \$29.95 cloth, \$14.95 paperback.

This book, published in cooperation with the West Virginia Department of Natural Resources non-game wildlife program, is sure to delight nature-lovers, either the arm-chair variety or the real thing.

It's the first complete field guide to the 86 species and sub-species of snakes, salamanders, turtles, lizards, toads, frogs and other creeping and crawling things found in West Virginia.

Each species account includes a color photograph, a West Virginia range map, a

complete description of the species, and discussions of its habits and habitat.

For those of us who wouldn't know a Cheat Mountain salamander from an upland chorus frog, sections are included on how to find and observe various species, how to collect and care for amphibians and reptiles, and how to identify poisonous snakes.

The section on snakes will, I predict, attract the most reader attention, for the same reason that people are attracted to automobile accidents. There is a certain morbid fascination with the dark side of life in all of us.

Don't get me wrong. Most snakes are harmless, and all of them — well, almost all — will avoid man if they possibly can. But they all have sinister eyes, even harmless little garter snakes, and they all slither and coil in a repulsive way.

Well, Green and Pauley do their best to shoot down some of the bum raps that have been pinned on snakes and are an integral part of Appalachian folklore. For example, black racers will not chase you, contrary to popular public opinion, along the highways and byways of West Virginia. They simply go so fast they give the impression they're attacking you.

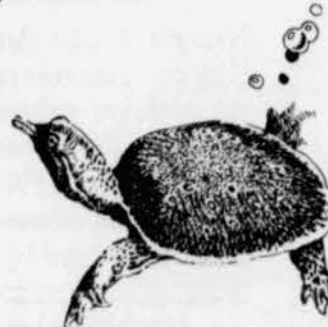
West Virginia's two poisonous snakes are, of course, copperheads and timber rattlers. But if you don't bother them, they won't

bother you, the authors assure us.

The rattler's rattle is one of the strangest structures in nature, according to Green and Pauley. Nothing remotely resembling it occurs anywhere else in the animal kingdom.

Some things never change, and among them are turtles. Green and Pauley tell us that turtles have existed nearly unchanged for almost 175 million years. Compare that track record with that of the family automobile. They also live a long time, which is a good recommendation for taking it slow and easy.

Anybody who lives along a West Virginia river knows that bullfrog populations are declining, a fact the authors duly noted. They suggested the reasons may include habitat destruction, over-harvesting, use of pesticides and herbicides, drought, and improper land use.



Green and Pauley are native West Virginians and both live in Huntington, where Green is professor emeritus of zoology at Marshall University, and Pauley is associate professor of biology at the same school.

Green, an Elkins native, graduated from Davis and Elkins College and also attended West Virginia University and Ohio State. He has taught at Marshall since 1938, and had published widely in the field of herpetology. He has collected specimens of amphibians and reptiles for some of the country's leading museums.

Pauley, a native of Ansted, graduated from the University of Charleston and also attended WVU and Marshall. Like Green, he has done extensive field work on the amphibians and reptiles of the state.

Johnson writes about the outdoors for the *Gazette*.

(Reprinted with permission from *The Charleston Gazette*.)

New State History Volume Ready

Articles about establishment of women's political rights in the state, memoirs of the Hatfield-McCoy feud and legendary characters in the Paint Creek and Cabin Creek strikes are featured in Volume 46 of "West Virginia History," now available from the state Department of Culture and History.

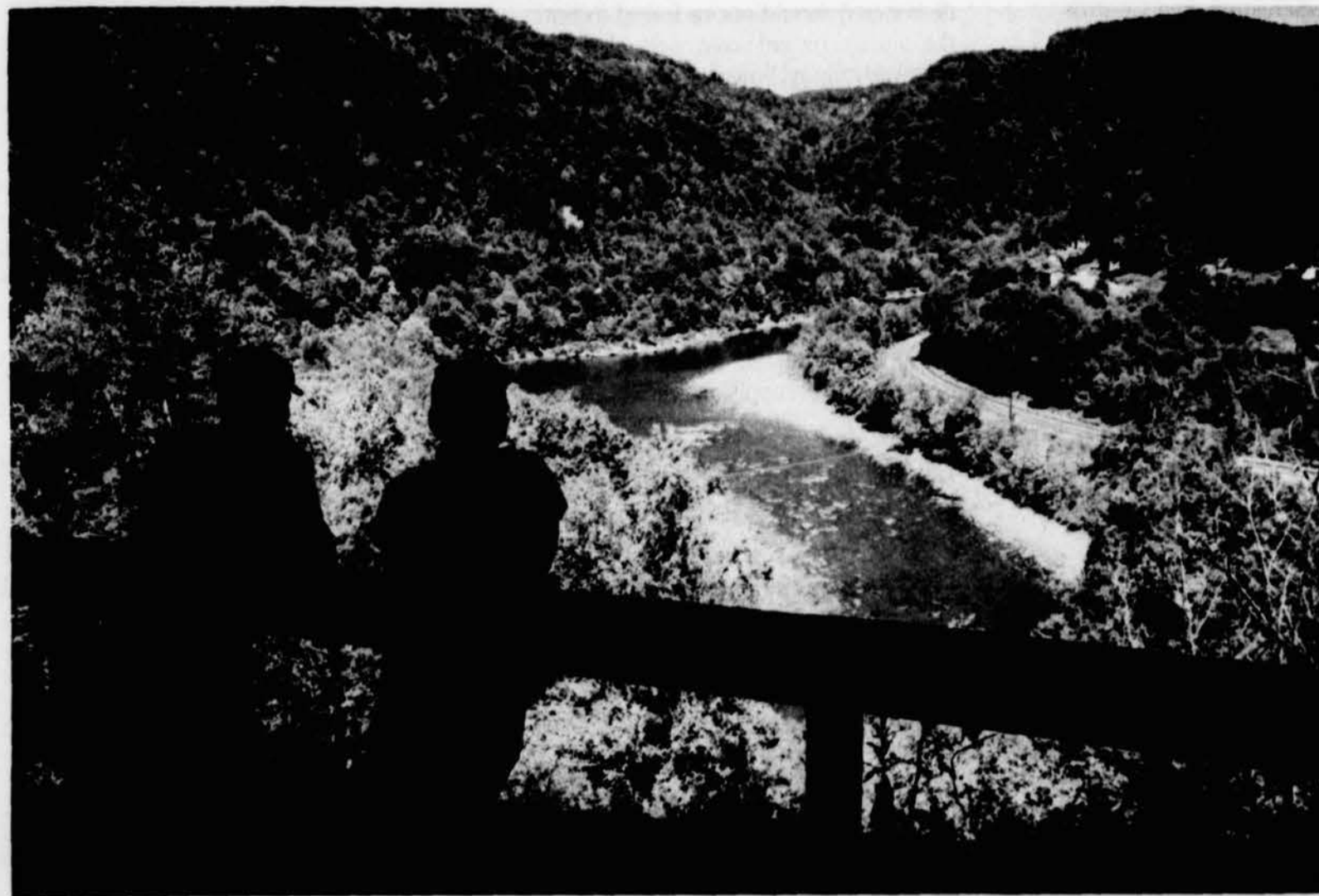
Other articles in the 300-page book focus on economic, political, social and cultural history of the state and the Appalachian region, including mining development in the Southern coalfields and the 19th century Grave Creek Stone archaeological controversy.

The book also includes the 1860 census index for Fayette, Greenbrier, Mercer, Monroe and Raleigh counties.

Copies of the book are available at The Shop in the Cultural Center for \$10 or may be ordered by calling 348-0230 or writing to the Archives and History Division, Department of Culture and History, Capitol Complex, Charleston, W.Va. 25305.



HIKING TRAIL OPEN IN THE NEW RIVER GORGE



Hikers pause to enjoy the beautiful view of the New River Gorge at one of the three scenic overlooks on the Minden to Thurmond Hiking Trail. (Photo by Don Kodak for the NPS)

The National Park Service at the New River Gorge National River and the Mary Ingles Chapter of the West Virginia Scenic Trails Association celebrated the opening of a 3.2-mile section of the Mary Draper Ingles Hiking Trail with a commemorative hike on September 19. The public was invited to attend, and approximately 60 hikers turned out for the ranger-led walk to an overlook where the old town of Thurmond can be seen across the New River. A parking lot and trailhead have been established off Route 25 about 6.5 miles from Glen Jean.

The Trail follows the grade of the former Minden to Thurmond railroad spur. Members of the Mary Ingles Chapter began working on the grade in 1984 and put in nearly 400 hours of volunteer labor in clearing brush, stabilizing the

trail, and constructing a parking lot at the Thurmond end of the trail. In addition the Chapter received a \$500 grant from the West Virginia Department of Natural Resources Non-game Division to use in working on the Thurmond trailhead and parking area. A local businessman donated dozer time to level the site; another provided free reddog for the base; and a trucking firm donated the hauling.

During the summer the Navy Sea Bees spent a week-end adding decking to the trail's five railroad trestles and clearing brush. The Park Service installed gates, cleared right-of-ways near the Thurmond trailhead and added gravel to the parking lot. Also, the Park Service established the Minden trailhead, added signs, and built three overlooks on the trail.

The cooperative effort has produced a sturdy trail with views of the historic town of Thurmond and the New River Gorge. The 3.2-mile trail is the first National Park Service managed trail to be completed in the New River Gorge National River. According to the Draft River Management Plan for the New River Gorge, the NPS should have a park-wide hiking trail plan developed by 1991.

The Mary Draper Ingles Trail will be the central artery of the Park's hiking system.

At present there is only one other federally-owned hiking trail within the NRGNR. This trail, also a section of the Mary Draper Ingles Trail, runs from Wolf Creek, off old Route 82, to the abandoned mines at the Kaymoor Mining complex. The Mary Ingles Chapter put much time and energy into creating and maintaining the Kaymoor section of the trail, and the NPS and the Sea Bees assisted the Chapter in constructing a foot bridge across Wolf Creek.

The NPS will not open the Kaymoor Trail until the entrances to the mine shafts located along the trail have been sealed. In addition, the Kaymoor site is being studied to determine if the remaining structures of the abandoned coal-mining community can be stabilized. Both of these projects are currently under way.

The NPS signed a Memorandum of Understanding with the WVSTA in 1986 to facilitate volunteer work on the trails within the boundaries of the New River National Gorge. As more federal land is acquired, more trails could be developed and opened.

"It's the waiting for the land acquisition that's the hard part," said Liz Watson, secretary of the Mary Ingles Chapter. "The Chapter has a dozen or so eager workers just waiting to be told when to clear the trail. I'm not sure they want to wait until 1991 to begin. We could have the 13-mile section from Wolf Creek to Thurmond finished by next summer if we could get permission from the landowners."

Last spring, Watson pointed out, the Chapter sent a letter to Park Superintendent Joe Kennedy to enlist his support in getting permission, but "We haven't received a reply from him," she said. "We don't know where we stand at the moment on future work within the proposed Park boundaries."

"The Kaymoor Trail and the Thurmond-Minden Trail," she added, "are excellent trails. The Park Service and the Chapter Members are proud of them, and we should be able to build more just as good."

SPECIAL GROUP FORMED TO FIGHT GYPSY MOTHS (continued from page 4)

northern parts of the Appalachians in Virginia and West Virginia," Reardon said. "We have rough estimates that indicate almost 68,000 acres in Virginia and 14,000 acres in West Virginia were defoliated last year by the gypsy moth caterpillars. We have to find out exactly how bad the problem is already," he said.

In addition to intensive monitoring and trapping, other methods of fighting the moths are being considered for use in both states. These methods include: spraying with Dimilin, a chemical that disrupts growth while the moths are still in a larval stage; spraying with Bt (*Bacillus Thuringiensis*), a

biological insecticide; introducing and refining the use of the virus NPV (Nuclear Polyhedrosis Virus), a naturally-occurring virus specific to gypsy moths; trapping through the use of pheromones (sex scents); and using a lure-tape, which confuses moths and interrupts mating.

Reardon said that public information and education about the gypsy moth will be a key element for the group. He said that every effort will be made to keep the public informed about activities to be undertaken by the group, including rationale for the proposals and the outcome of implemented activities.

The gypsy moth was introduced to North America in 1869 from the forests of Europe and Asia. It was brought to Massachusetts in an attempt to cross it with the silkworm to obtain a hardy race of silk producers. The caterpillars escaped, and their populations have now spread to over 200 thousand square miles, defoliating forest and ornamental trees. Oaks and hickories are favorite foods, so these valuable trees in the Appalachian Mountains are prime candidates for the caterpillar feast. After the larvae are half-grown, they will attack conifers, but they usually do not infest ash, black walnut, catalpa, and yellow poplar.

The eggs of the gypsy moth hatch in late April or early May, and the larvae complete feeding in late June or early July. Older larvae may be recognized by the five pairs of blue spots and six pairs of red spots along the back. After feeding, the larvae pupate and emerge as adult moths in about 2 weeks. Shortly after the female emerges, she mates and begins laying eggs to fly, deposits buff-colored masses of 100 to 1,000 eggs. The current year's egg masses can be found from late July or August until April or May of the following year. The gypsy moth has one generation per year.

AIR OF ZEALOTRY (continued from page 3)

proposal would achieve a 10 million-ton reduction of sulfur dioxide by 2000. That's less than the 12 million tons demanded by the National Clean Air Coalition, and it would take longer than the coalition's target date of 1996. However, the compromise would require reductions to begin immediately, and so it would achieve a 3 million-ton reduction after three years. The more stringent approach, which generally relies on the installation of expensive scrubbing equipment, wouldn't produce benefits until 1996 because it would take that long to install the scrubbers.

In addition, the compromise would tighten pollution control requirements on new coal-burning boilers so that sulfur dioxide pollution would not start to increase at the end of the century, when the need for new generating capacity

likely will force the utility industry to build additional boilers. The burden on the coal states would be eased somewhat by a clean-coal technology program. This proposal has no exact match in bills currently under discussion in Congress, but it does parallel some provisions in legislation introduced by Simpson and William Proxmire, D-Wis., which would require a 10 million-ton reduction program.

The reaction of national lobby groups to the congressional thaw on acid rain has been, perhaps predictable, frigid. From the coal and utility groups, that posture is understandable. They have nothing to lose and everything to gain — in the short run, anyway — from intransigence. So they are doing what the Zealots did in the face of a Roman siege: They are strengthening their fortress walls with newly

commissioned studies that they say prove their point. And they are singing their old refrain ever more loudly in an effort to bolster their own spirits, whether or not it convinces anyone outside the fortress.

Zealotry is harder to fathom on the part of the National Clean Air Coalition. Any sulfur dioxide reduction appears to be better than no reduction. Given the divisive politics of the issue, the coalition appears to have no chance of prevailing on its current demands. A strategy of standing firm to negotiate from a position of strength won't work if you refuse to negotiate at all. The Zealots of Masada might have won a place in the history books with their mass suicide, but their cause died with them.

(Reprinted with permission from the *National Journal*)

COAL ANNOUNCES VICTORY

On August 26, 1987, the Fourth District Court of Appeals handed down its decision in the case brought by Citizens Organized Against Longwalling (COAL) against the Division of Reclamation, Ohio Department of Natural Resources, dating back to March 1983.

COAL had sued the Department of Natural Resources Reclamation Board of Review, saying that the Southern Ohio Company's coal mining permit application was inadequate in several areas, notably its provisions for water protection and replacement.

COAL alleged that the longwalling method of mining damaged and destroyed area water resources in violation of the 1977

Surface Mining, Reclamation, and Control Act (SMRCA). This is a particular problem because the SMRCA legislation predated knowledge of the longwalling (and/or full extraction) methods, and the impact that subsidence would have on the water supplies and surface land.

The citizens' group views the Court decision as a victory because, in eloquent and dramatic language, the Court upheld the absolute responsibility of the coal operator to provide an adequate water replacement immediately and without cost to landowners.

In his concurring opinion, Judge Grey stated:

The landowner whose water supply is

de-watered should not be forced to bear the entire economic cost of the effects of longwall mining. Since society as a whole and the permit holder in particular benefit from the granting of the permit, the costs of de-watering equitably, and legally under R.C. 1513.162, ought to be borne by the permit holder . . .

It is in this area where I believe the Board has abused its discretion and has failed to apply the relevant statutes. In order for a permit to be granted, the operator must replace a water supply and reimburse the owner.

Attorney for COAL, Jonathan Sowash,

characterized the victory as "David prevailing over Goliath". He noted that the Court placed the burden of proof and responsibility squarely on the coal operators to assure affected landowners that their access to water would be maintained.

Betty Wells, COAL organizer, applauded the Court's decision: "They recognized that the cost of water replacement is a part of the cost of doing business. Further, the Court pointed out that the Reclamation Board of Review is required to do a balancing of economic and environmental interests. That's what we were asking for."

Comments Sought On Rule To Strengthen State Role In Coal Mine Reclamation Law

The Interior Department's Office of Surface Mining Reclamation and Enforcement (OSMRE) is asking for public comments on a proposed rule that would strengthen the role of states in implementing the surface mining law by giving greater deference to state expertise in coping with environmental problems at coal mines.

"The proposed regulation promotes the concept of federalism, as the surface mining act requires," OSMRE Director Jed D. Christensen said. "The Act states that primary governmental responsibility for enforcing regulations for surface mining and reclamation operations should rest with the states. This proposed regulation reflects that basic policy."

The proposed rule, which was published in the *Federal Register* on September 9, 1987, defines appropriate state responses to federal notices of possible violations of the Surface Mining Control and Reclamation Act. Under the proposed rule, OSMRE would accept as appropriate any state response so long as it was not arbitrary, capricious, or an abuse of discretion.

"The proposed rule is aimed at assuring consistent and even-handed treatment of the state regulatory authorities," Christensen noted. "It also should prevent coal mine operators from being caught between conflicting federal and state interpretations of the law, while promptly resolving any problems that federal officials bring to the attention of state regulators."

Under the surface mining law, most coal-producing states have achieved regulatory "primacy" — the primary responsibility for inspecting coal mines and citing any violations of the reclamation law. OSMRE oversees the state programs — identifying any problems and providing technical assistance to resolve those problems. OSMRE also notifies state regulators of possible violations of the law that it learns of in its oversight role. If the state fails to take "appropriate" action within 10 days to have the violation corrected, or fails to show good cause for not acting, OSMRE will send federal inspectors to the mine and, if a violation actually exists, will issue a federal notice of violation to the mine operator.

In the past, OSMRE has judged "appropriate" state action on a case-by-case basis, but often refused to accept as appropriate any state action other than issuing a notice of violation to the mine operator.

"Rigid application of the federal interpretation runs counter to the law's goal of state primacy," Christensen said. "It also can leave coal mine operators caught between the states and OSMRE, not knowing for sure what will be considered a violation. The rule we're proposing is designed to eliminate that situation in the future."

"This proposed rule acknowledges that states have expertise in reclamation technology and environmental protection and can find appropriate means for resolving problems at mine sites," Christensen added. "At the same time,

the rule reserves for OSMRE the back-up right to inspect mines and cite violations in case a state does not act reasonably to have a violation corrected, or if there is imminent danger to the public health or safety or to the environment."

"OSMRE's oversight role should be to reinforce state authority for protecting the land during coal mining and seeing that it is reclaimed afterward. OSMRE should act to support state authority rather than second-guess state regulators," Christensen said. "This rule recognizes that states might take actions in response to federal notices that are more effective in protecting the environment than issuing a notice of violation would be. Under primacy, a state should be given discretion to decide which actions are most appropriate in a given situation."

The proposed rule follows a petition by members of the coal industry asking for clarification of the federal process for reviewing state actions.

Comments on the proposal should be sent to OSMRE Administrative Record, Room 5131-L, 1951 Constitution Avenue, N.W., Washington, D.C. 20240. To be considered in the rulemaking process, comments must be received by 5 p.m. Eastern time, November 18, 1987. Upon request, OSMRE will hold a public hearing in Washington, D.C. Requests for hearings or for additional information should be sent to George Stone at the address given above or by phoning 202/343-4295.

Effects Of Underground Mining On Water Supplies

(continued from page 3)

overlying rocks are considered similar in both methods.

Room and pillar mining. Sets of parallel entries or rooms are advanced horizontally into the coal and connected to each other by perpendicular cross-entries. Rectangular pillars are thus left to support the roof over the entries. The roof is also supported by bolts and other systems. After advancing a predetermined distance, the operation reverses direction and extracts the pillars as completely as possible in the retreat phase. The roof is allowed (indeed encouraged) to collapse during retreat to take pressure off the next pillars. Once the retreat is complete, a new advancing room and pillar section is started next to the mined out area.

Longwall mining. Parallel sets of mile-long room and pillar entries are completed leaving a wide (500-foot) block, or panel, or solid coal between. A self-contained roof support and shearing machine is then assembled which cuts back and forth across the entire 500+-foot face between the room and pillar entries. As it advances through the panel, mechanical roof support is kept near the face and the mined out area behind is allowed to collapse. Vertical subsidence on the surface reaches a fraction of the height of the mined coal seam. Most of the movement

is over within a few weeks, but coal field residents have reported ground movements up to three years and more after completion of mining. Mining in the area continues to alter stress patterns in the rocks.

Effects on Water Supplies

The sagging of strata above mined out high extraction coal panels causes vertical and horizontal movement in rocks near the surface. Such movements open new fractures and widen existing natural fractures both in the aquifers and in the aquicludes, draining water from higher to lower levels. Some of the induced and widened fractures close somewhat as subsidence runs its course but they cannot close completely because of crumbling into the fracture of chips of rock. Fractures resulting from tension at the edges of panels do not close. It is often stated by coal operators and regulatory personnel that water supplies will come back after high extraction mining. There is, to date, not a single thorough pre- and post-mining study of water supplies including measurement of yields under seasonal conditions which supports this contention. On the contrary, there are studies (see below) which demonstrate that high percentages of water supplies, once affected by high extraction coal mining, do not fully recover. Anecdotal reports by citizens indicate the water supplies affected by high extraction may still be dry up to twelve

years or more after the mining.

Aquifers and their recharge areas are renewable resource lands. Once damaged by mining they cannot be restored to a condition capable of supporting the uses they could support before mining.

Aquifers and their recharge areas are renewable resource lands. Once damaged by mining they cannot be restored to a condition capable of supporting the uses they could support before mining.

Literature Review

Cifelli and Rauch (1986) studied a high extraction mining operation in north-central West Virginia. They concluded in part:

Ground water sources having at least 50 percent of their recharge areas impacted by complete extraction mining . . . have had a significantly greater frequency effects. At least 90 percent of such supplies were partially or totally dewatered. This trend was highly statistically significant.

Only three of the accessible dewatered wells surveyed have shown significant recovery one to three years subsequent to mine induced dewatering. This represents only about 20 percent of the dewatered wells in mine subsided areas.

Baseflow streams were significantly impacted where at least 10 percent of their watershed was undermined and

subsided, and had dried up where at least 25 to 30 percent of their watershed was so affected.

Tieman and Rauch (1986) studied a high extraction mining operation in southwest Pennsylvania. They concluded in part:

Of the accessible ground water supplies over longwall panels, all partly dewatered supplies had partial recovery, but only one-half of the completely dewatered supplies had a partial recovery, with no complete recovery observed.

Johnson (1984), in an internal coal company report of a study in the northern panhandle of West Virginia, stated:

Approximately 80 percent of the wells and springs went dry after mining.

Coe and Stowe (1984) studied a high extraction operation in eastern Ohio and concluded in part:

. . . nearly all water sources were affected as the result of the surface fracturing of a shallow sandstone aquifer, which effectively drained the aquifer.

All of these results for wells were based on levels of water in the wells. If any of the results had been based on pumping tests which indicate yield, it is likely that more supplies would have been judged to have been affected. All wells should be evaluated by carefully conducted pumping tests at the driest time of the year before and after mining.

NEWS BRIEFS

Coal Industry Challenges Reserve Report

WASHINGTON — As part of a broad campaign against acid rain legislation, the U.S. coal industry is challenging the federal government's analysis of national coal reserves, saying there isn't as much of the cheap fuel available as claimed.

It's an argument of centuries — the federal government says there is enough minable coal in the U.S. to meet demand for another 200 years. The industry claims that estimate is wrong and puts the available supply closer to 100 years worth.

The fight is not as dull as it sounds.

Overshadowing the numbers is the fact the coal industry is fighting hard to prevent any acid rain legislation that would toughen the air pollution standards for coal-burning power plants. As part of its strategy, it is trying to change the public — and especially congressional — perception that coal is cheap and abundant. The new message is: coal is expensive to obtain and additional clean air regulations will only raise that cost to everyone.

As part of the message, the National Coal Council has written a report challenging the Energy Information Administration's analysis of coal reserves.

At a Senate committee hearing Friday, NCC officials said the government's estimate overlooks many obstacles, to mining coal. They said economic conditions, environmental laws, geology and market demands are harsher than is generally understood. As a result, NCC says the government's claim that there are 244 billion tons of minable coal in the U.S. is too high. The coal group says the real figure is closer to 170 billion tons.

Sen. Wendell Ford, D-Ky. and a coal advocate, told the Senate Subcommittee on Mineral Resources Development and Production that overestimating the coal supply would only encourage acid rain legislation.

"And acid rain legislation would impose billions in additional cost on consumers in this country," he said.

He said too many congressmen believe the acid rain problem would go away if industry shifted to burning low-sulfur coal that is available in the West. Acid rain legislation would push many industries into shifting to the cleaner fuel.

Ford, who represents a state with large deposits of high-sulphur coal, said there is less low-sulphur fuel than people think.

"The National Coal Council has demonstrated the available reserve is considerably smaller than believed," Ford said.

Daily Mail 9/12/87

DEBATE RESUMES ON COAL PIPELINE BILL

A longstalled drive to break a railroad monopoly on coal transport resumed as a Senate committee took up a bill to clear the way for coal-carrying pipelines. The measure, introduced by Sen. Bennett Johnston, D-La., would grant coal pipeline companies the same power to gain rights-of-way that railroads have historically held.

Debate on the bill granting coal slurry pipelines power of eminent domain opened before the Senate Energy Committee and pitted the railroads against the coal industry and electric utilities.

William Dempsey, president of the Association of American Railroads, said the issue had been debated for 10 years before the panel now headed by Johnston. It had been debated in six of the last seven Congresses — but defeated every time, he said.

The spokesman for the nation's railroads said there is no need for more coal-carrying capacity to help hold down rail rates. Construction of such pipelines, he said, would result in what he called 'disbenefits' to the public, an increase in unemployment, poorer rail service and depletion of the nation's water supply through its use to carry pulverized coal.

But Joseph Lema, vice president of the National Coal Association, defended the plan to pave the way for pipelines that he said would hold down the cost of transporting coal. Pointing to the troubled Persian Gulf, Lema said coal pipelines would help reduce U.S. dependence on foreign oil while also helping make U.S. coal more competitive on world markets.

The proposed legislation, he said, had unique appeal because it would not create any new federal program or seek government financing. "It simply eliminates barriers to enabling coal pipelines to be built by private sector interests," he said.

Arthur Lundvall, vice president of Baltimore Gas & Electric Co., said more than half of U.S. electric generation is fueled by coal and that coal pipelines could sharply reduce consumer light bills. "The charge for hauling coal by rail is nearly \$5 billion annually, all of which is recovered directly from electricity consumers," Lundvall said in testimony for the Edison Electric Institute.

Marvin Boede, president of the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry, said the bill would create more jobs for construction workers. Boede accused the railroads of using "blatantly obstructionist tactics" to head off pipelines he said would carry only 20 percent of coal transports.

But Richard Kilroy, chairman of the Railway Labor Executives' Association representing 19 railway labor unions, said the claim that the bill would create jobs was its "most pernicious aspect." "Nothing could be further from the truth," he said. "This act, if passed, will cost jobs, not create them."

Some environmental and agricultural groups have opposed past coal slurry bills but were not invited to testify. Michael Clark, president of the Environmental Policy Institute, complained in a letter to Johnston about not being invited and asked that no action be taken on the bill "until all interested parties are heard on this matter."

While coal slurry technology has been available for decades, only two pipelines have been built in the United States, one in Ohio and other one in Arizona. However, the Ohio line was closed after a competing railroad undercut its prices.

The Charleston Gazette, 9/11/87

GREENBRIER TRIAL CALLED ECONOMIC FIND

West Virginia's 75-mile Greenbrier River Trail is "an untapped gold mine... an economic find waiting to be exploited," according to an official in a national trail development organization.

Peter Harnik, director of programs for the Washington-based Rails-to-Trails Conservancy, spent part of last week touring the trail, which follows an abandoned rail bed from Caldwell in Greenbrier County to Cass in Pocahontas County.

"It's a gorgeous, very impressive trail," Harnik said. "It has to be one of the most beautiful trails of its kind in the country."

The Greenbrier River Trail is the third-longest former railbed trail in the nation, and offers some of the most remote, rugged scenery available along one-time railroad rights of way, according to Harnik.

A West Fork Trail has been set aside along an abandoned railroad track that passes through National Forest land along the Greenbrier River's West Fork, from Durbin to Cheat Junction, adding more than 20 more miles of former railroad right of way to the state's trail system.

"Most converted rail trails have been developed near urban areas," Harnik said. "The Greenbrier River Trail is far away enough from a city that it will probably from a city that it will probably never get the use of something like the C & O Canal Trail (located near Washington), but the trail could attract as many people as the Cass Scenic Railroad, which gets about 80,000 a year."

Harnik suggested linking the Greenbrier Trail to the scenic railway, by adding a 1.5-mile extension to the northern terminus of the trail, to bring the pathway into the town of Cass. "I think if you focused on Cass — where there are already parking areas, lodging, a store, a restaurant and the scenic railway — as the initial jumping-off point, you'd attract more people," he said.

He also suggested that the state could more actively promote the pathway, which is used by hikers, bicyclers, canoeists, cross-country skiers, and those interested in hunting and fishing.

"I called the state's toll-free travel information number to ask a few questions about the Greenbrier River Trail, and no one knew what I was talking about," Harnik said. "The state's travel division needs to become familiar with the trail, and begin taking it more seriously. It would help to produce some literature on it, as well as some signs directing people how to get there."

Similar trails in Wisconsin are attracting upward of 60,000 bicyclists, not to mention hikers, each year, he said.

The federal government has allocated about \$1.4 million to repair damage to the trail caused by the November 1985 flood. "There is a lot of slow-going on the trail now, because of the flood damage," said Harnik, who rode a portion of the pathway on a mountain bike last week.

The Charleston Gazette, 9/16/87

W.Va. Projects Included In Bill

Items placed in the 1988 funding package for Department of Interior activities by U.S. Sen. Robert C. Byrd, D-W.Va., included \$15 million for a new National Research Center for Coal and Energy at the Morgantown campus, and \$700,000 for an Advanced Hardwood Processing and Technical Resource Center to be built at the Princeton Forestry Sciences Laboratory.

The 1988 Interior Appropriations Bill was approved at the subcommittee level and will now advance to the full Senate Appropriations Committee. That committee will also consider an additional \$2 million sought by Byrd to finance a variety of projects in the Monongahela National Forest, more than \$10 million on National Park Service projects in the state, and \$350 million for the development of clean coal technology projects across the nation.

Under Byrd's proposal, the state of West Virginia would contribute \$20 million for construction of related coal research facilities adjacent to the \$15 million main building the federal appropriation would fund.

The bill also includes \$12 million Byrd sought earlier for the construction of a new administrative wing and research facility at the U.S. Department of Energy's Morgantown Energy Technology Center.

The Monongahela National Forest projects sought by Byrd include:

- The rehabilitation of Spruce Knob Campground and Spruce Knob observation tower on the state's highest peak, for a total of \$112,000.
 - For work on the Cranberry Wilderness Visitors Center, \$134,000.
 - Repairs at campgrounds at Summit Lake and Lake Sherwood, \$80,000.
 - A \$40,000 flood repair project at the Seneca Rocks Visitor Center.
 - Trail development at Meadow Creek, Glade Fork, Beaver Creek and Falls of Hills Creek worth \$343,000.
 - Expansion work at the Bowden federal fish hatchery near Elkins worth \$3.5 million, and \$300,000 worth of work at the Leetown federal hatchery.
 - Gypsy moth eradication funding totaling \$408,000.
- National Park Service projects sought by Byrd include:
- Land acquisition, park headquarters construction, trail building and planning projects totaling \$9.9 million at New River Gorge National River, and \$60,000 for planning work on the proposed New River Parkway scenic highway.
 - Renovation and rehabilitation work on historic buildings, plus completion of a water treatment plant at Harpers Ferry National Historical Park, worth a total of \$1.675 million.

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Canaan Power Project Dealt Major Setback

by Rick Steelhammer

The U.S. Supreme Court may have effectively pulled the plug this week on the Davis Power Project — a proposed pumped-storage generating plant that would have required the flooding of thousands of acres of upper Canaan Valley in order to create a huge reservoir.

For 17 years, lawyers for environmental groups and Monongahela Power Co. have dueled over the project.

After initially applying to build the plant in July 1970, Mon Power eventually obtained a permit in 1977 from the Federal Power Commission to operate a pumped-storage, hydro-powered station on property it had acquired in Canaan Valley.

But later that year, the Army Corps of Engineers rejected the company's application for a permit to dam Blackwater River and build a 7,000-acre holding reservoir in the remote wetlands at the head of the valley, in order to store water for use during periods of high power demand. The Corps of Engineers study that led to the denial of the 404 permit, which is required under provisions of the federal Clean Water Act, noted the area to be flooded was the largest highland shrub swamp wetland in the East and contained a variety of rare plant and animal species.

Since that time, Mon Power attorneys have argued in circuit court, federal appeals court, and eventually the U.S. Supreme Court, that the power company should not be required to obtain a 404 permit, since it had already been issued a federal license to operate the power plant.

On Tuesday, the Supreme Court declined to review an appeals court decision that said if the utility was allowed to bypass the 404 permit process, it would constitute "a betrayal of congressional intent."

"I think this is the end of the Davis Power Project as we now know it," said John Purbaugh, president of the West Virginia Highlands Conservancy, which fought the project from the beginning.

The Supreme Court's decision not to review the matter "answers the question for all time about whether the power company needs a 404 permit to build their plant. The highest court in the nation says they need one, and they don't have one."

Ron Wilson, a Washington, D.C., lawyer who works with the Sierra Club's Legal Defense Fund, represented environmentalists during 15 years of the 17-year court battle.

"We're all growing old together," said Wilson, of the assortment of conservationists, lake proponents, and power company advocates who have taken part in the campaign. But the Sierra Club lawyer stopped short of saying the battle was won.

The Supreme Court's action this week "should certainly provide the power company with an opportunity to re-evaluate its position," Wilson said. "But if they decide they want to persist, they could go back and try to have the district court throw out the denial of the 404 permit, based

on other objections they might have to the way the Corps processed their application. We'd fight that, of course. I would say they're certainly a long way from being able to construct a project in Canaan Valley."

"All we've been able to do so far is to confirm that the Supreme Court did not review the case," said Russ Lorince, a spokesman at Mon Power's main office in Fairmont. "I think it's safe to say there are always some other avenues open to follow, but it's too early to tell what direction to take."

Wilson said the Supreme Court decision could boost efforts to make the upper Canaan Wetlands into a federal wildlife refuge, a proposal that was formally made back in 1977, but basically left in limbo while the power project proposal was being fought.

"West Virginia is the only state in the nation without a federal wildlife refuge," said Linda Elkinton, a Canaan Valley native who heads the Highlands Conservancy's effort to block the Davis power project. Its preservation would provide "a long-term economic asset to the community," she said.

While the power company "promised all kinds of jobs and recreational money" to the community if they were allowed to proceed with the project, Elkinton said, "I think the majority of the people in the valley don't favor it, now." (Reprinted with permission of the author from *The Charleston Gazette*.)

WV Sierra Club Concerned About Dolly Sods Wilderness Area

The WV National Guard has filed a proposal before the State Armory Board to acquire free from Westvaco 460 acres of Stony River Reservoir land just north of the Dolly Sods Wilderness Area. The stated purpose for this acreage would be "an excellent training area to build permanent latrine facilities and a landing strip. This would enhance the training in the area of the National Forest."

The West Virginia Chapter of the Sierra Club is opposed to the land acquisition and expansion of military training so close to the Monongahela National Forest. Mary Wimmer, Chapter Conservation Chair, says the key reason for the opposition is that an environmental impact study by the military with full public involvement has not been done, as required by law.

When asked by Secretary of State Ken Hechler for an Environmental Impact Statement for the proposed permanent facilities, the National Guard tried to use the Envir-

onmental Assessment and guidelines worked out for military maneuvers on the Forest. "The military is attempting to substitute another environmental assessment done for military maneuvers on our Monongahela N.F.," Wimmer says. "That document has absolutely nothing to do with expansion of permanent military facilities so near our Forest boundary."

The Dolly Sods area of the Monongahela N.F. is one of the top tourist attractions of West Virginia and is known throughout the East. Reaching elevations over 4,000 ft., the area has extensive flat rocky plains, upland bogs, and sweeping vistas. The unique plant life and climate resemble northern Canada. The Wilderness Area was designated by Congress in 1975, and is the only federally-protected wilderness in the Potomac Ranger District. Abundant recreation opportunities include wilderness backpacking, camping, hiking, swimming, berry-picking, hunting, picnicking, rock scrambling, nature study, and fall bird banding.

Wimmer states that to put a permanent landing strip for military aircraft only 6 miles from Dolly Sods Wilderness and 3 miles from Dolly Sods Scenic Area would have a significant negative impact on the land's present environment. "Imagine," she says, "sitting atop Bear Rocks and watching noisy military helicopters take off and land, as rifle fire, simulated artillery and grenades, and military vehicles invade the surrounding peace and quiet. Military jets are also a common component of the training maneuvers."

"It seems ironic," she says, "that a federally designated Wilderness owned by the public is now being threatened by a group whose purpose is supposedly to protect that public. There are more-than-ample military training opportunities on neighboring WV land that would not impact negatively on our National Forest. We are not opposing the training or its impact on local economies where it is positive. But what long-term impact will decreasing tourism in the area have?"

WV Sierra Club is informing the public about the military's proposed plans, and the group is confident that enough public opposition will put a stop to the expansion, and thus protect Dolly Sods. Public comments can be sent to Secretary of State Ken Hechler who sits on the State Armory Board (State Capitol Complex, Charleston, WV 25305 or phone 345-4000). Letters can also be sent to National Forest Supervisor James Page (P.O. Box 1548, Elkins, WV 26241 or phone 636-1800) and Senator Robert Byrd (U.S. Senate, Washington, D.C. 20510 or phone 202-224-3954).

Westvaco originally offered the Reservoir to the WV Department of Natural Resources a number of years ago for development as a recreation and fishing preserve. The State has turned down the offer mainly because the extent of the repairs needed on the dam is not known. WV Sierra Club is interested in seeing the DNR review the original offer and study the actual repair needs.

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: Suite 201, 1206 Virginia St., E., 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 _____

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