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THE HIGHLANDS' FOOTHILLS

Here We Go Again

The W. Va. Rivers Coalition petitions to halt a major coal mining development until effective reclamation is feasible.

A petition designed to halt coal mining in a broad swath of northcentral West Virginia just east of the highlands has been filed by the W. Va. Rivers Coalition, a consortium of the Mountain State's environmental groups.

The petition — comparable to one which unsuccessfully sought to halt mining on the Shavers Fork of the Cheat River in Randolph County — proposes that virtually all of the Buckhannon and Middle Fork rivers' watersheds from their headwaters in Randolph County to their confluence with the Tygart River be declared off-limits to mining.

The area, a total of 151 square miles, includes what has been projected by the Island Creek Coal Company to become the largest strip mine east of the Mississippi, a sprawling

and steadily growing, 600-acre tract of land at Ten Mile in Upshur County. The Island Creek operations, coupled with mining efforts by the DLM Coal Company and mines of several smaller firms, form a corps of companies which are attempting to develop the minerals in the state's north-central Appalachian's foothills. The petition area does not include acreage which is proposed for mining by the Holly Grove Coal Company nearby at Canaan in Upshur County. Those lands are in a different watershed.

"Our petition makes it clear that we are not anti-coal or anti-resource development," insisted Rick Webb, a spokesman for the W. Va. Rivers Coalition which filed the petition. He serves as chairman of the petition committee, while Perry Bryant of

Charleston serves as president of the Coalition itself.

"We are instead calling for a higher level of responsibility in resource management than is now prevailing," Webb asserted. "It is our contention that while mine reclamation in West Virginia has advanced in recent years, and coal can be mined in many

(Please turn to page 2)

CHARLESTON

Some Weaknesses

Perry Bryant suggests some strengthening of the DNR's proposed hazardous wastes regulations.

By PERRY BRYANT

The Water Resources Board and the W. Va. Department of Natural Resources have released 222 pages of draft regulations governing hazardous waste disposal in West Virginia.

These regulations generally follow the federal regulations developed under the Resource Conservation and Recovery Act (RCRA). Under RCRA, EPA is required to regulate hazardous waste from cradle to grave. The state regulations, in part, close several important loopholes in the federal regulations.

Perhaps most importantly is that small generators and persons who reuse or recycle hazardous waste will be required to register with the DNR, and small generators will be required to keep records of the hazardous waste they produce and how they have disposed of it. This stops short of requiring small generators to comply with the "manifest system" which applies to large generators. (Small generators are defined as those producing less than 1,000 kilograms of hazardous waste per month.)

The manifest system is a multicopy form which is transported with the hazardous waste from the generator to the licensed transporter, then to the permitted disposal facility. After the permitted disposal facility receives the hazardous waste, the manifest is returned to the generator. If the manifest system is complied with, most of the hazardous waste will be disposed of in permitted facilities. Only "most," however, because small generators are not required to send their waste to permitted facilities.

Small generators have been a target of some environmental groups for some time. They are least likely to be able to comply with complex and, in some instances, costly regulations. Additionally, the cumulative effect of many small generators disposing of hazardous waste by improper

methods can have the same impact as one large generator improperly disposing of the hazardous waste.

Exasperation

The problem of small generators is exasperating in West Virginia since there are no permitted, off-site disposal facilities. This means that all hazardous waste produced in West Virginia is either disposed of at the manufacturer's site or transported out of state.

In turn, this means that small generators of hazardous waste in West Virginia must comply with extensive and costly requirements for a disposal site; transport their waste to licensed, out-of-state facilities; or dispose of their hazardous waste improperly.

Others have agreed that small generators — at least for the time being — should be exempt. They argue that limited EPA and state regulatory agency personnel should target their time at large generators. After insuring that large generators are complying with state and federal regulations, then EPA and the state should repeal the small-generator exemption.

The Water Resources Board and the DNR seem to have found an excellent compromise between these two arguments. By requiring small generators to notify DNR and by requiring some record-keeping but not other regulations required of large generators, the DNR should be able to keep an eye on small generators without using large amounts of the agency's personnel time.

One important addition to the draft regulations governing small generators should be a requirement that they send a copy of their record-keeping to the DNR at least twice a year. These records should provide invaluable information about how small generators are disposing of their hazardous waste. If, after reviewing

plans which will examine all the state's river basins.

The chief recommendations arising out of the study include:

— the need for better data management, especially through the acquisition of data processing equipment and the more thorough exchange of data among state agencies.

(Please turn to page 6)

FAIRMONT

Dirty Water

A 400-page document surveys the water quality of the Monongahela River basin — and finds it polluted by acid and sewage.

New data and analyses of the water quality in an 11-county area of West Virginia — the sprawling, 4,180-square-mile Monongahela River basin — is contained in a 414-page report released by the W. Va. Department of Natural Resources.

The massive plan was more than a year in the making and is expected to be the first of a new series of revised

these records, the DNR finds that small generators are improperly disposing of their waste, additional requirements — such as the use of the manifest system — should be imposed on small generators.

Another significant area where the state regulations differ with EPA's regulations is the state prohibition on locating new hazardous waste disposal facilities on wetlands. EPA had dropped the prohibition of construction on wetlands, stating that the requirements under NPDES and the 404 permit under the Clean Water Act provided adequate prevention of significant harm to wetlands. Since the state does not have control over the 404 permit it is logical for the state to prohibit construction of new facilities on wetlands. This prohibition should not hamper industry since wetlands comprise only a small fraction of West Virginia and are generally located great distances from industrial areas.

A final difference between the federal regulations and the proposed state regulations is the prohibition of deep well injection by the state. Deepwell injection involves pumping hazardous waste 3,500 to 10,000 feet below the earth's surface. As I read the state's proposed regulations, they would not only prohibit future deep well injection, but would also stop present facilities from disposing of hazardous waste by deep well injection. It is unclear if any disposal of hazardous waste by deep well injection is presently taking place in West Virginia. There is some speculation that the Du Pont plant in Belle is using deep well injection for disposal of hazardous waste. This prohibition is certain to draw industry criticism and deserves strong support from citizens.

(Please turn to page 6)

CHARLESTON

Supreme Surprise

Justice Neely outlines a plan designed to prevent DLM-like suits from deterring citizen dissent.

CHARLESTON, W. Va. (UPI) — A new regulation system to deal with the "free speech" guarantee of the First Amendment has been outlined by Justice Richard Neely in a dissenting opinion.

The dissent was issued in a suit DLM Corp. had filed against environmental activist Rick Webb for libel. The coal firm said it was libeled because of a news periodical Webb published and because of allegations Webb made to government agencies about environmental damage caused by DLM.

The 4-1 majority decision written by Justice Darrell V. McGraw Jr. rejected DLM's case, said it had a "chilling effect" on a citizen's First Amendment rights.

"The effective exercise of First Amendment rights requires immunity from liability for good faith and negligent false statements, but there must be some protection against the deliberate lie," Neely said in his dissent.

"Some balance must be struck which allows the one to proceed uninhibited while also punishing those who hide irresponsible and malicious actions behind the guise of First Amendment freedom," said Neely.

The core of Neely's plan was to require the person bringing a suit similar to DLM's case — if he lost — to pay the legal fees of the defendant.

"I would require that the defendant be awarded the full costs of his defense as a matter of course without exception," Neely wrote.

"Furthermore, if after the trial it becomes apparent that the plaintiff actually was using the legal process in the same despicable way that he had alleged the defendant had namely, to oppress citizens who have legitimately exercised First Amendment rights, then the courts should exercise their equitable powers to impose costs against the plaintiff in excess of the actual costs of defending the case."

Neely would also have permitted a trial court to order the advance of a defendant's costs associated with discovery of evidence sought by the plaintiff. "Should the plaintiff succeed (to get to trial) on the merits, these payments would be refunded," he said.

"I am disappointed that the majority of this court did not take this occasion to fashion remedies which address more fairly both aspects of the First Amendment problem and allow redress for malicious attacks."

"I have outlined procedures that will essentially be cost-free to defendants in these cases and, therefore, should prevent suits of this kind from deterring citizens from exercising their rights," said Neely.

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Petition

Continued from page 1

areas without serious problems, there are places and conditions where coal cannot, at this time, given the currently available technology, be mined without serious, and irreversible, environmental degradation."

Excluded from the area proposed as off-limits for mining have been those areas where mining permits are already in force. In all, that includes well over 1,000 acres.

However, pending permit applications of nearly 500 acres would be held in abeyance as of Oct. 11 if action on the permit proceeds. As outlined under current regulations, the state's reclamation commission has 30 days from the date the original petition was filed to determine if the petition is "frivolous" or not complete. From the time of that determination, the state has ten months to prepare a study which examines the merits of the petition. During that ten-month period, new permits for mining may not be issued.

Some sections of the area included in the Coalition petition have already been "declared" off-limits to mining in an administrative decision by David C. Callaghan, the director of the W. Va. Department of Natural Resources. Callaghan also serves as chairman of the state's reclamation commission. Earlier this year, at the same time he issued an additional stripping permit to the Island Creek Coal Company for their burgeoning operations at Ten Mile in Upshur County, he also informed them that until their current operations could demonstrate firm control of acid mine drainage, no more permits would be issued to them or other companies mining the area.

In fact, the DNR's internal decision-making process which led to that administrative "moratorium" are heavily-cited in the petition as the basis for the Coalition's contentions.

"The record of mining through the past ten years shows a consistent pattern of reclamation failure and severe pollution of otherwise high quality streams," the petition alleges. "Even the most recent operations in the petition area, employing the best practical, available technology, have not demonstrated the ability to meet the applicable standards of reclamation and performance . . . the petitioner also recognizes the ongoing efforts of the mining industry to develop mining methods that will allow mining in the petition area in accordance with the standards of performance and reclamation, and without the residual acid seepage problems cited in this petition. The petitioner believes, however, that if indeed such a mining methodology can be developed, more than sufficient acreage is currently permitted in the petition area and therefore available to allow the mining industry to demonstrate that methodology."

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Don't Miss
Conservancy meeting Oct. 2, 3, 4
Canaan 'media event' Oct. 3
Allegheny Trek Oct. 9
Holly Grove hearing Oct. 14
Solid waste conference Oct. 15, 16
Hazardous wastes hearings Oct. 19, 20
Mon River plan meetings Oct. 20, 21
Hiking guide deadline Oct. 30

EPA U.S. ENVIRONMENTAL PROTECTION AGENCY
WILL HOLD A PUBLIC HEARING
ON THE HOLLY GROVE COAL CO. NPDES PERMIT APPLICATION
LITTLE KANAWHA/BURNSVILLE DAM AREA, W.VA.
AT WEST VIRGINIA WESLEYAN COLLEGE, BUCKHANNON, WV
OCTOBER 14, 1981, 7 P.M.
EPA has completed a Draft Environmental Impact Statement (EIS) concerning the National Pollutant Discharge Elimination System (NPDES) permit application submitted by the Holly Grove Coal Company to surface mine a 251-acre site located near Canaan in the Banks District of Upshur County, West Virginia.

Join THE W. VA. HIGHLANDS CONSERVANCY
Description of membership categories.
Individual membership:
Regular-\$10 from the rank and file who can give time and interest to the conservancy.
Associate-\$20 from those who can afford a small extra gift in addition to their interest in West Virginia's outdoors.
Sustaining-\$50 from those able and willing to give larger amounts necessary to underwrite our programs.
Senior-\$8 from conservationists over 65 years of age.
Organizational membership:
Regular-\$20 from a small organization anxious to help the Conservancy score conservation gains in the Mountain State.
Associate-\$30 from a larger organization whose membership approves the efforts of the Conservancy.
Sustaining-\$60 from a large national organization which appreciates the importance of a highlands area to the people of the eastern seaboard.
Membership category (see descriptions opposite)
Individual: \$10 Regular, \$20 Associate, \$50 Sustaining, \$8 Senior
Organizational: \$20 Regular, \$30 Associate, \$60 Sustaining
Name, Address, City, State, Zip, Organization you represent(if any)
Membership category (see descriptions opposite)
Brief statement of present position, interest, or activities in conservation activities (optional)
Make checks payable to The West Virginia Highlands Conservancy.

PITTSBURGH

Promoting the Monongahela's Richness

Bruce Sundquist seeks contributions for a fourth edition of the hiking guide to the Monongahela National Forest.

By BRUCE SUNDQUIST
We'll be all sold out of the 5,000 copies of the third edition of our "Hiking Guide to Monongahela National

Forest and Vicinity" by early this winter. So it's time now to think about what additions and improvements to make before we get another 5,000

copies printed around years-end. In order to keep our guide up-to-date, we need the help of all our hiking members to revise the existing trail

articles and other material. Next time you go hiking in or near the Monongahela, take a small notebook along and jot down whatever

you learn that might be useful to other hikers in planning and executing the same trip. Some examples of useful information might include:

CHARLESTON

Flubbing It at the HD

A Conservancy leader and WV-CAG staffer critiques the Department of Health's management of the state's trash crisis.

By PERRY BRYANT
West Virginia is facing a severe crisis in trash disposal. Less than a third of West Virginia's sanitary landfills have a life expectancy of more than five years, and most of the landfills in the state cannot meet state and federal regulations.

Despite the urgent need to open new landfills and the need to close open dumps, the state agencies responsible for trash disposal regulation seem caught in a quagmire of red tape — and, in some instances, ineptitude. Only recently have they begun to emerge from that quagmire — and even the emergence is slow.

The lead state agency for inspecting landfills, issuing compliance orders and permitting new facilities is the solid waste division within the W. Va. Department of Health (HD). Under the federally-passed Resource Conservation and Recovery Act (say "rick-ra"), the HD was supposed to develop the state plan for trash disposal. The plan was to include present disposal practices and a timetable for closing open dumps as well as opening new sanitary landfills.

The HD began their task about a year ago. Without consulting trash haulers, without asking municipalities or counties (who operate landfills in many areas), without questioning other state agencies involved in trash disposal (the Department of Natural Resources' division of water resources and the solid waste authority, for example) — the HD sat down and wrote the state's solid waste plan.

Disaster
It was an unmitigated disaster. Basically, it was a critique of why federal regulations wouldn't work in West Virginia. As one knowledgeable person stated: "If you took out all the editorial comment, you would have ended up with about two paragraphs of plan."

During the public hearing on the draft plan in December of 1980, virtually every speaker attacked the proposal. The HD promised to review the comments made at the public hearing and revise the plan accordingly.

One month later, the HD held a second hearing on the plan. The second plan was, for all intents and purposes, the same plan they had submitted a month earlier. It produced the same results. As a participant at the hearing, I cannot remember a single comment made in support of the proposed plan.

It Will Not Do
Despite all this, the HD submitted

the plan to EPA for their approval. EPA's response was clear: the plan would not do. In fact, EPA decided that they would contract the task of developing the state's plan to a consulting firm.

By June, a Washington, D. C.-based consulting firm had submitted another plan to the HD. The solid waste authority, a separate agency designed to provide planning, technical assistance and funding for new facilities, urged the HD to hold a meeting of interested parties before the plan went to public hearings.

It was an apparent attempt to get some consensus on the plan. Almost reluctantly, the HD agreed.

Butchery Revealed
Before the meeting, participants were given what was believed to be the consultant's plan. One week later, during a public hearing on the revised state plan, it was revealed that the consultant's very comprehensive plan had been butchered by the HD.

For example, the section of the plan outlining the steps that were going to be taken to meet the objectives of the plan was shortened from 15 pages to four pages. The HD had eliminated from the consultant's plan:

- identification and funding for cleaning up promiscuous dumps by the HD;
- completion of landfill regulations by the HD;
- revising the Public Service Commission's rate-setting regulations;
- evaluation of innovative landfill techniques by the HD;
- completion of a statewide site inventory by the HD;
- enforcement activities against unpermitted facilities;
- and more.

The HD also eliminated a reserve fund for the solid waste authority. The authority had argued that they have the authority to float \$50 million worth of bonds to finance new landfills but have been unable to float the bonds because they haven't established a track record of repaying loans, nor do they have a reserve fund to guarantee repayment on the bonds.

In butchering the consultant's plan, the HD had staked the improvement of trash collection and disposal in West Virginia to the passage of two laws. One law would have required mandatory subscription by all West Virginians who lived in an area serviced by a hauler. The second law would have required county governments to prepare county-wide solid waste management plans. Why the HD thought that the counties had the

expertise to develop county plans when they were having such trouble developing a state plan is unknown.

During the public hearing on the revised HD state plan, reliance on two pieces of legislation as the cornerstone of the plan was attacked by the W. Va. Citizens Action Group, the League of Women Voters of West Virginia, the state Chamber of Commerce and others.

The Sordid History Improves
Despite this long and sordid history of the development of the state's solid waste plan by the HD, there are some signs of improvement. Earlier this year, the HD started printing a newsletter. This is certainly a step in the right direction. Also, an advisory committee has been formed by the HD. During the last advisory committee meeting, they voted unanimously to delete the passage of the two bills from the state plan and to reinstate



- how to get to the trail-head by car;
- the location of sources of water along or near the trail;
- possible campsite locations along or near the trail;
- directions for staying on the trail in areas where the possibility of getting lost exists;
- a description of the natural and scenic values to be seen along the trail;
- a description of interesting side-trails;
- and anything else that comes to mind.

Send whatever material you collect (regardless of how insignificant it may seem) to me, Bruce Sundquist, 210 College Park Drive, Monroeville, PA 15146.

If you can recall any of the details of hikes and backpack trips you have taken in the past, send these along also. Everything should be in by Nov. 1. Comments on ways to make general improvements would also be appreciated as would black-and-white photographic prints. They will be returned. Contributors to the guide receive a free copy as soon as it comes off the press.

If you would like suggestions as to areas that need exploration, contact me at the same address.

The way the Monongahela National Forest is managed depends a lot on the attitude of those who use it. By promoting non-consumptive uses of the forest, we build support for forest management that gives careful attention to the natural and aesthetic values in which the Monongahela is so rich.

the reserve fund for the solid waste authority. Since then, the HD has accepted those ideas. Whether they continue to improve remains to be seen.

While the HD has been fooling around, the state's Solid Waste Authority is about to sponsor a resource recovery conference to be held Thursday and Friday, Oct. 15 and 16 in the Huntington Civic Center.

The conference will begin Thursday with an exhibit opening and registration at 6:30 p.m. No fees will be charged.

Beginning at 7:45 p.m. will be a presentation by the U. S. Environmental Protection Agency "Source Separation: A National Perspective; that will be followed at 8 p.m. with "Techniques of Material Recovery Through Source Separation," again sponsored by the EPA. The Thursday session ends at 9 p.m. The next morning opens at 9:15 a.m.

with a presentation on "Materials Marketing Considerations" — that is how to sell whatever gets recycled. Following a mid-morning 10:15 a.m. break, the conference will resume at 10:30 a.m. with a presentation on the "Implementation of Materials Recovery Programs." Subsequently, an 11:15 p.m. session on "Publicity" will be followed with an hour's break for lunch at noon.

Slated for 1:15 p.m. is a discussion of the state's role in source separation and a subsequent discussion of a project proposed for the Morgantown area of Monongalia County where a resource recovery project is being contemplated by the state's Solid Waste Authority.

Concluding remarks will be followed with a 3 p.m. poster judging contest for children.

Further information about the conference is available from the W. Va. Solid Waste Authority at 348-0585. The executive director is Sam Colvin.

MIDDLE MOUNTAIN

The Business of the Forest

The Forest Service becomes more aggressive in its management of the Monongahela.

More than 100,000 acres of the Monongahela National Forest — a vast expanse of rugged mountain land high atop the Allegheny mountains — has been targeted for major development by the U. S. Forest Service and will be the subject of an intensive, two-day meeting in mid-October.

Commonly referred to as "Middle Mountain," the vast area includes more than an eighth of the total forest and stretches from a point halfway between Mouth of Seneca and Elkins on the Randolph-Pendleton counties' border to U. S. 250 near Frank in Pocahontas County.

There, growing for that last two-thirds of a century, have been vast stands of hardwood timber valued — if there were a market for it — at literally millions of dollars.

Finding a market, foresters say, has been the problem, and that is what the mid-October meeting in Elkins is all about. It is slated for Oct. 14 and 15 and will include a day "on the mountain" as well as a day back in Elkins in a round of staff meetings.

"West Virginia's hardwood forests are presently under-utilized," according to forester Steve Yurich of the Forest Service's regional headquarters in Milwaukee, Wisc.

"Growth," Yurich noted, "exceeds removals three-to-one for growing stock and two-to-one for sawtimber. For this resource (on Middle Mountain) to approach full productivity, increased utilization of small and low-quality hardwoods must be achieved."

Yurich's reference, foresters in Elkins explain, is especially applicable on Middle Mountain where some of the Monongahela's most productive soils are located. There, the trees are crowded so close together that they have begun to impede each other's growth. Only if the smaller ones are harvested — and soon — can the vast acreage reach its full potential.

That harvest may be difficult to arrange however, inasmuch as the housing industry's slump has slowed or closed sawmills throughout the region. Even those wood industries which have markets immune to the current slump are not using the highlands' resources.

Scheduled to be brought to bear on the problem has been a panoply of expertise across a broad range of disciplines. Not only will research foresters from two states be attending the two-day meeting at Elkins, but also representatives of the nation's forest industries as well as the Governor's Office of Economic and Community Development and the state Department of Natural Resources.

"The results" of the meetings, asserts Yurich, "will have application to many others areas in the state and the East."

Special participants and resource people attending the meeting will be forest scientists from two federal research labs in West Virginia, one at Princeton, the other at Parsons, as well as W. Va. University in Morgantown. Independently, though in a coordinated fashion, all three have been engaged in an on-going assessment of the problems of Middle Mountain's usage.

Scientists at the Forest Service's

experimental laboratory at Princeton, for instance, have developed in the past few years a new technique for utilizing smaller-diameter hardwood trees such as those which need to be harvested from Middle Mountain. With a technique dubbed "SEM" in which glue is used to bond smaller pieces of hardwood into large sheets of any size, it may be possible to find a commercial use for hardwoods such as are languishing

along the mountains' ridges. Scientists at Princeton have even gone so far as to open up a test harvesting site in the mountains east of Glady in Randolph County.

Similarly, scientists at the Northeast Forest Experiment Station at Parsons are planning a research project on a test site about eight miles north of Bartow.

Able to provide an overview of the area will be a team from W. Va.

University which has been studying the area to determine what its resources are and how they might be most effectively tapped and expanded.

Major questions slated to be addressed are:

— What silvicultural treatments are planned for Middle Mountain and can relevant silvicultural treatments be demonstrated to non-industrial private forest owners?

— What equipment is presently being used to harvest timber comparable to that found on Middle Mountain, and are the silvicultural treatments proposed for the area compatible with today's harvesting equipment?

— Is cable logging a viable technique for the area — and can it be demonstrated?

— What can be done with the
(Please turn to page 6)



Computers in the Trees

A new computer program and an array of technology are about to be used to produce the most comprehensive plan in the history of the Monongahela National Forest.

All the power of the largest computer in the United States will zero in on the Monongahela National Forest within the next year as foresters in Elkins prepare to produce the most ambitious plan for the use of the Monongahela National Forest in its history.

Currently underway is the most complete study of the Monongahela's 800,000-plus acres ever undertaken, a massive study of every attribute pro-

fessional foresters as well as the public have been able to conceive.

The computer study is designed to lay out — in mind-boggling detail — every possible option for managing the forest's 800,000-plus. Included in the computer analysis — FORPLAN, it's called for short — will be information about "very nearly every tree," according to Danny Houmand, a computer analyst employed by the Forest Service in Elkins. Houmand, with

operations research analyst Roger McCay, is coordinating the "on-the-ground" work in West Virginia, then plugging the forest into a "main-frame" computer in Ft. Collins, Col.

There, a third-generation computer program is ready to arrange information into a vast "matrices" or "arrays," easily the most ambitious effort to catalog the nation's national forest resources ever undertaken. In all, some 150 national forests spread

all across the nation will eventually be feeding data into Ft. Collins. The breadth and depth of the information is so great that even that facility will not be able to handle it all. Ft. Collins, foresters expect, will have to be tied into two or three other computer banks elsewhere in the nation as the system of national forests begins pouring in their data and fetching back the analyses during the next year to 18 months.

What FORPLAN is designed to do, according to Gil Churchill, a forest planner on the Monongahela's administrative staff in Elkins, is tell foresters what the impact of any plan they devise would be.

"Let's say we wanted to emphasize the production of wildlife — turkeys, for example," Churchill says. Already in the computer will be everything the Forest Service knows about turkeys: what kind of food they eat and where it comes from, what kind of habitat they thrive in and where it's located, who and where their predators are . . .

With that as background — and with literally millions of other bits of information about everything from soil conditions, how high every tree is, what the weather's like, how steep the land is . . . with that as background, Churchill can sit down at a high-speed data terminal linked by telephone to Ft. Collins and ask:

"What will be the effect on all other aspects of the forest if turkey production is maximized?"

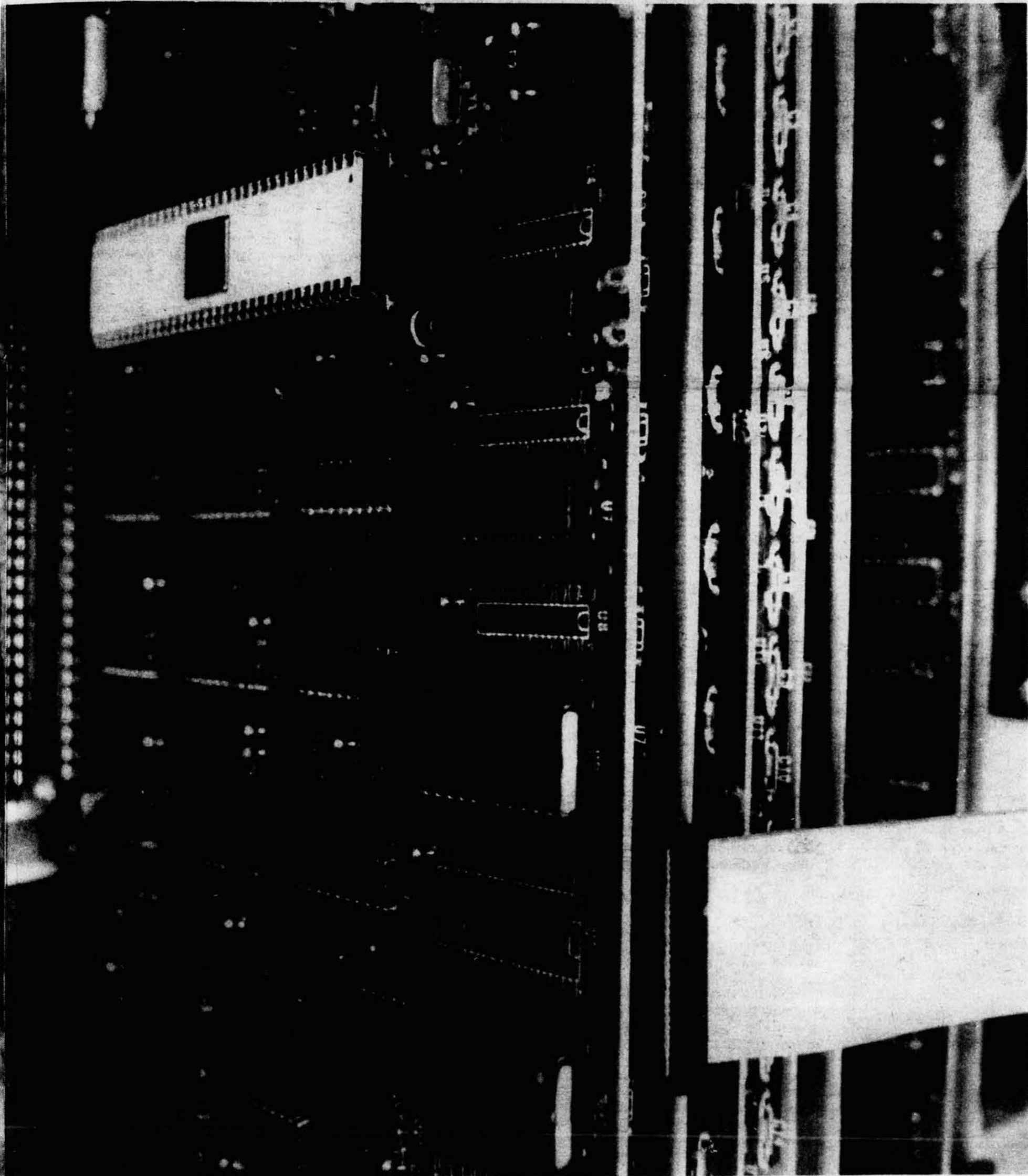
What's spit back, Churchill agrees, will be a badly-skewed management plan, but the point the example makes is that FORPLAN can produce thousands of management plans in a comparative twinkling. Producing such plans "by hand" — that is, without the aid of the computer — would be so cumbersome that it would just never get done. As a result, foresters point out, some possible management options might be missed — perhaps even the "best" one.

Finding that plan — the "best" way to manage the Monongahela's sprawling acreages — is what FORPLAN is all about. In the end, after all the information has been fed from the forest headquarters in Elkins to Ft. Collins, Churchill expects there will be some 60 to 80 "runs" of the program. Each will add a new wrinkle to what foresters and the public have determined is what they want the forest to produce: whether "production" is timber or wildlife or wilderness or any of hundreds of other options or combinations of options.

What it means, Churchill explains, is that both foresters and the public will be able to examine — in as great a detail as they like — what the impacts of any management plan might be.

If foresters want to tap a mountain-side's reserves of 85-year-old white oak, a few computer punches in Elkins and a lot of number-crunching in Ft. Collins can tell foresters what impact that will have on the economics of the rest of the forest; whether the state's bear hunters are likely to raise the devil about habitat destruction for their prize game; how long it will be before the timbered-over area can re-grow and what impact that time lag will have on the total production of the forest in the years to come . . . the list is endless.

But as Churchill points out, one of the prize payoffs will be in the area of economics and efficiency. As money becomes tighter and the need for efficiency increases, FORPLAN should provide a lot of answers. After a management plan is chosen — and after it's pruned, modified, massaged and refined — then the same program can be used to demonstrate how to implement the plan most efficiently.



Snobbery

(Continued from page 8)

developments on rural communities in Appalachia, a socio-economic survey was conducted of 482 residents living near the site of several proposed energy development projects in northern West Virginia. The objectives of the study were to obtain baseline socio-economic and attitudinal data of the people to be affected in order to monitor changes in these variables that occur with development, and to determine the differentials in characteristics of residents who perceived the developments as beneficial to the area as compared to those who did not perceive benefits from energy-related development in the area.

Business

(Continued from page 4)

small hardwoods found on Middle Mountain and other West Virginia forestlands? Is it profitable now — and what can be done to improve the profit picture?

— Does local industry plan to expand and can the expansion use timber from Middle Mountain?

— What industries have been targeted to increase their demand for the type of timber to be harvested?

— Are industrial sites available near Durbin and does that community favor expansion and new industry?

What Forest Service officials are looking for, they say, is a two-day convocation to organize and develop the information necessary to determine what the problems are with developing innovative harvesting and marketing techniques to make use of the multi-million-dollar lode of mountaintop hardwood.

We want, wrote Yurich, to "develop an action plan."

"Residents with lower levels of education, those with blue collar and service occupations, and those who have energy-related jobs perceived the projects as beneficial to the area significantly more often than highly-educated residents, those with white collar jobs and those not in energy-related occupations.

"Residents who are proud of the area and those who think it is a good place to raise children also perceive the projects as beneficial. However, residents who feel that air pollution and water pollution are problems in the community do not think the area will benefit from the energy developments. Similarly, those who are more concerned with adequate energy and economic growth envision the developments as beneficial significantly more often than those who are more concerned with the environment.

"The research findings can be interpreted in terms of the dichotomy between tangible, economically measurable benefits and costs (e.g., employment opportunities, increased business activities) versus intangible, generally unmeasurable benefits and costs (e.g., pollution, inadequate public services) associated with economic development. Individual perceptions of the potential impacts of developments inherently involve a tradeoff between these two types of associated benefits and costs. Our findings appear to indicate that the tradeoff points vary according to the socio-economic characteristics of individuals. Although these tradeoff points could not be quantified in our research, the residents' attitudes toward energy development provide important insights into the socio-economic adjustment process of Appalachian communities facing potential energy-related developments."

Weaknesses

(Continued from page 1)

Weak Points

Despite the improvements in the state regulations, there are some weak points — primarily because there are weak points in the federal regulations.

As is the case in many federal regulations, there is a clear distinction between existing facilities and new facilities. Under RCRA, facilities in operation before Nov. 20, 1980 and which submitted what is called Part A of the RCRA application were granted interim status permits. Facilities which wanted to open after Nov. 20, 1980 had to submit Part B of the RCRA application. Additionally, existing facilities were to be contacted by EPA or the DNR and requested to submit Part B applications.

There are significant differences between Part A and Part B. For example, Part B of the RCRA application requires:

— contingency plans for emergencies;

— a closure plan which states how a disposal facility will be closed;

— a post-closure plan which states what steps will be taken after a disposal facility is closed to prevent discharge of hazardous waste into the environment;

— the projected cost to implement closure and post-closure plans;

— and an insurance plan required by EPA.

None of these requirements, however, are covered under Part A of the RCRA applications.

Most importantly, existing facilities should be required to submit closure and post-closure plans. Currently, existing facilities are required to have developed closure and post-closure plans but the plans are only kept at the facility and not submitted to EPA. Nor would the regulations proposed by DNR require submission of these plans to the DNR. Both the current EPA regulations and the proposed DNR regulations require only that these plans — plans which are supposed to have been developed already — be submitted to EPA or the DNR 180 days before the facility is planned to be closed.

Closure Funding

The importance of these closure and post-closure plans cannot be overemphasized. EPA's regulations, and the DNR's proposed regulations, require a trust fund (or similar financial arrangement) be established to ensure that funds are available to close and monitor a facility after it is closed, even if the company goes bankrupt. The amount of money placed in the trust fund is dependent upon the cost estimates developed under the closure and post-closure plan. Thus, if

a facility goes bankrupt prior to closure and their plan is insufficient, the monies needed to close and monitor it will not be available. In this case, it is likely that tax dollars will be needed to close and monitor the facility.

EPA's justification for not requiring existing facilities to submit closure and post-closure plans to them was the lack of staff time to review these plans. I would suggest a compromise which will require that existing facilities submit their plans to the DNR for review — but not approval unless a plan were found to be blatantly inadequate.

The other step needed to be taken to ensure that sufficient trust funds are established to protect human health and the environment is for the DNR to exercise their authority to require submission of Part B — including closure and post-closure plans — from existing facilities shortly after the regulations are in place.

Public Hearings

The public hearings on these proposed regulations will be Oct. 19 at the Monongalia County Courthouse in Morgantown and on Oct. 20 in Conference Rooms A and B at the Department of Highways Building at the State Capitol Complex in Charleston. Both meetings are scheduled for 7 p.m. Written comments will be accepted until Oct. 30. Copies of the proposed regulations are available from the Board of Water Resources at 1201 Greenbrier Street in Charleston, WV 25301.

Questions about the proposed regulations may be directed to Perry Bryant at the W. Va. Citizens Action Group at 1324 Virginia Street East in Charleston, WV 25301. The phone number is 346-5891.

Water

(Continued from page 1)

— the need for continued federal funding for sewage construction. The need is pegged, in fact, at \$43 million at a time when the Reagan administration is seriously considering eliminating such funding.

— the need to be more cost-effective in the monitoring of water quality. The plan proposes that consideration be given to reducing the number of permanent water quality monitoring stations.

— the need for coordinating studies of water quality management, ground water strategies, the state's hazardous waste program and water use studies.

— the need to tap the millions of dollars available under the 1977 Surface Mine Control and Reclamation Act, dollars which can be used to help abate old acid mine drainage problems.

The plan's numerous reports also document the fact that violations of water quality standards were found at nearly one-third of the sites where water quality samples were taken. The most frequent violations were those associated with acid run-off from abandoned mining operations and for fecal coliform bacteria, the presence of which usually indicates improper sewage disposal.

Slated for Oct. 20 in Elkins and Oct. 21 in Fairmont have been two public information meetings designed to explain the report. The Elkins meeting will be held at the DNR's operations center, while the Fairmont meeting will be at the Fairmont district office. Each is slated for 7 p.m. Comments on the draft report will be accepted until Oct. 31. Copies are available for public inspection at the DNR offices in Elkins, Fairmont and Charleston.

Greenbrier

(Continued from page 7)

agencies' ability to condemn land scheduled for development.

Other land acquisition being suggested by the study would include 20 to 30 access areas. These access areas would be between two-and-one-half to four acres. Thus, the access areas would encompass at maximum 120 acres of land.

At the Marlinton meeting, there wasn't any opposition expressed to the proposed acquisition policy. However, about half of the local property owners expressed opposition to scenic designation around Marlinton. The main objections seemed to be that the property owner would be prohibited from building secondary homes or camps along the river. Hazel did say that private campgrounds would be allowed, since there is a need for additional camping areas. It should be remembered that new buildings would be allowed if they could be screened from the river. Other objections were based on anti-federal government control of people's lives.

Perry Bryant presented the Conservancy's position. He also presented basically the same position on behalf of the W. Va. Rivers Coalition and the W. Va. Citizens Action Group.

At the White Sulphur Springs meeting, about 40 folks who attended were about equally divided. The most vocal opposition came from Pocahontas residents and W. Va. Hills and Streams members. Support came from the Conservancy via Skip Deegans, the Greenbrier River Hike and Bike Trail's proponents and private citizens. Lots of Izaak Walter

Leaguers attended but were silent. Acme Limestone's management and their lawyer asked questions but expressed no position. They operate a quarry at Ft. Spring, north of Alderson. Generally, most people were there to ask questions and obtain more information. Opposition was generally based on loss of property through condemnation and feelings of antipathy for big government and state government.

At Hinton, there was some opposition expressed to federal involvement from riverside property owners upstream of Hinton. Reliance on state protection is unwise because the W. Va. Streams Protection Act does not preclude federal dams.

Some very vocal opposition included reference to the poor management of Bluestone reservoir area, as well as the need to cut the federal budget.

But overall, most comments favored the Forest Service plan and federal management.

A number of "average citizens" spoke in favor of protection as well. Wilbur Farly, who has been very active in fighting the Bluestone hydroelectric project, was opposed to any dry dam. Others stressed the importance of protecting the river's unique, unspoiled quality.

Overall, the response was favorable, with some voices from riverside property owners and business interests against the proposal. The Hinton area has been a traditional protectionist community towards its rivers, and significant local support, both organized and not, appears to exist for the Forest Service proposal in that area.

Alchemy

(Continued from page 8)

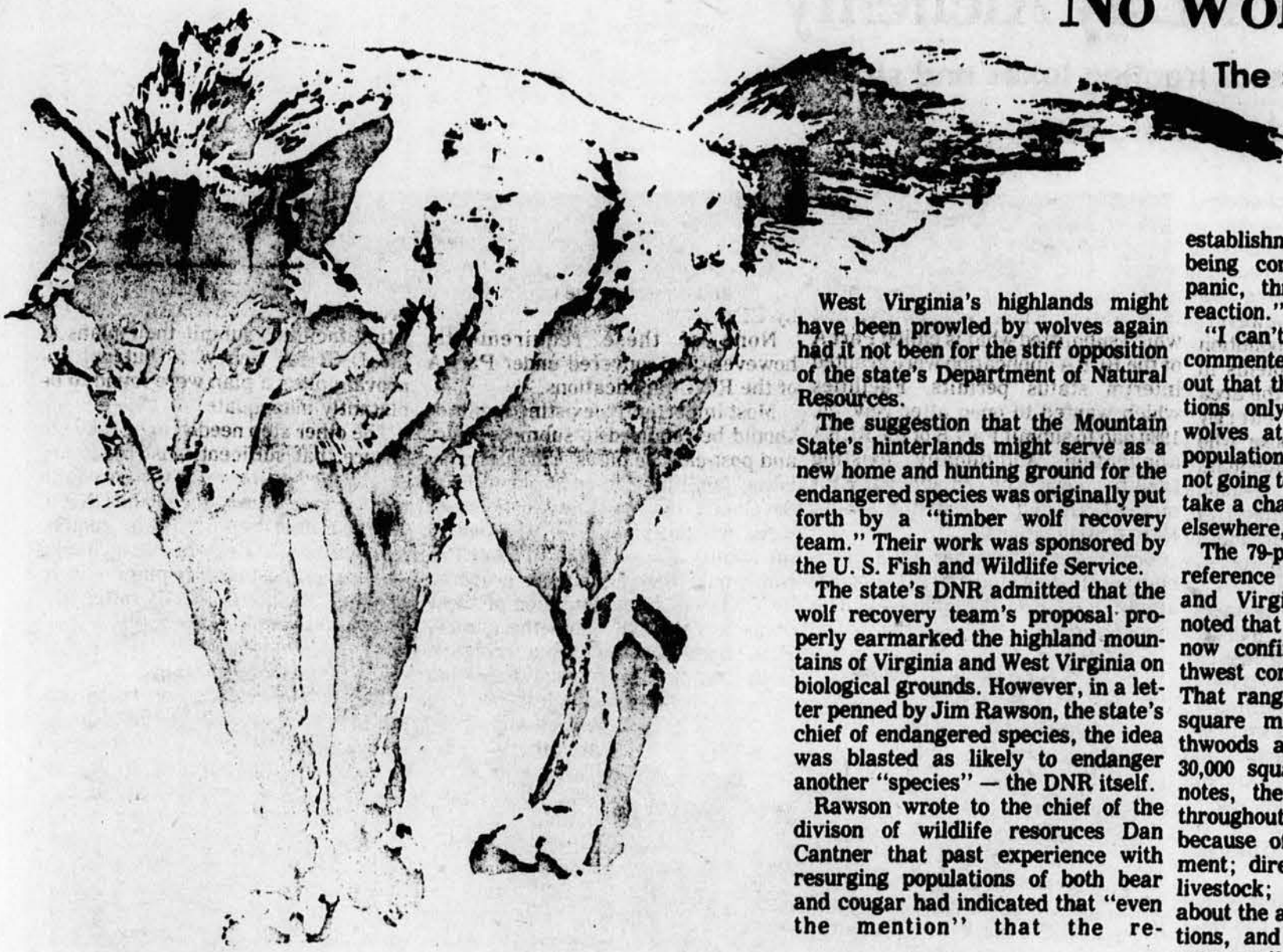
such says there are fears that the salmon and other fisheries could be decimated.

While the Otter Creek system was originally designed for low-level kinds of acid, Dr. Genscoy's enhancement of the process may make it feasible for the more intense problems of acid mine drainage as well. The prototype already installed on Otter Creek is six times as effective as the old drums — and the year-long design project that Genscoy and his students are undertaking is expected to boost that figure even higher.

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No Wolves for West Virginia

The state's Department of Natural Resources nixes the idea of using the highlands as a new hunting ground for wolfpacks.



West Virginia's highlands might have been prowled by wolves again had it not been for the stiff opposition of the state's Department of Natural Resources.

The suggestion that the Mountain State's hinterlands might serve as a new home and hunting ground for the endangered species was originally put forth by a "timber wolf recovery team." Their work was sponsored by the U. S. Fish and Wildlife Service.

The state's DNR admitted that the wolf recovery team's proposal properly earmarked the highland mountains of Virginia and West Virginia on biological grounds. However, in a letter penned by Jim Rawson, the state's chief of endangered species, the idea was blasted as likely to endanger another "species" — the DNR itself.

Rawson wrote to the chief of the division of wildlife resources Dan Cantner that past experience with resurging populations of both bear and cougar had indicated that "even the mention" that the re-

establishment of the timber wolf was being considered "would generate panic, threats and adverse public reaction."

"I can't see us doing it," Rawson commented recently, and he pointed out that the recovery team's projections only called for transplanting wolves at such a time as surplus populations were available. "They're not going to drain a good population to take a chance" on establishing them elsewhere, Rawson noted.

The 79-page report which included reference to West Virginia's eastern and Virginia's western highlands noted that the eastern timber wolf is now confined to an extreme, northwest corner of its original range. That range centers on about 10,000 square miles of Minnesota's northwoods and extends across about 30,000 square miles. As the report notes, the animal was wiped out throughout the rest of the nation because of intensive human settlement; direct conflict with domestic livestock; a lack of understanding about the animal; fears and superstitions, and an "overzealous control program." The animal was afforded legal protection under the Endangered Species Act of 1973, and there are now thought to be no more than 1,200 animals surviving. "Human exploitation," the report notes, is believed to be the major

reason why their numbers have not increased.

In all, eight areas were to have been investigated as possible sites for the recovery of the species. They included, in addition to the northern section of the southern Appalachians (the West Virginia-Virginia forests), the southern section of the southern Appalachians in Tennessee, North and South Carolina and Georgia; small areas in northeastern and northwestern Maine; another in upper New York State's White Mountains area; and adjoining areas in Michigan and northern Wisconsin. The wolf originally ranged from northern Florida, northwest to Minnesota and northeast to Maine.

However, at least one member of the recovery team filed a so-called "minority report" in which he contended that the wolf was "neither threatened nor endangered" within the state. The assertion that it was endangered prompted the formation of the recovery team in the first place.

The recovery team's report concludes that because of "the amount of misunderstanding" about the wolf, a public education program should precede any attempt to reintroduce the creature into its former habitats.

"Without public support, based on accurate knowledge," the team concluded that the plan for the wolf's recovery "will remain only a paper document."

ELKINS AND ALONG THE GREENBRIER

Quiet Pondering on the Greenbrier

The Forest Service grinds its way toward a DEIS on the Greenbrier slated for release in the spring of 1982.

Foresters in Elkins are hard at work this fall assembling a draft environmental impact statement which is expected to be ready by the spring of 1982. It will outline all the possible alternatives concerning the inclusion of a 200-mile-long stretch of the Greenbrier River into the national system of "wild and scenic" rivers.

Chief among those foresters wrestling their way through the paperwork is John Hazel who confesses that, after the U. S. Forest Service held its hearings in Marlinton, White Sulphur Springs and Hinton, he was a little surprised at two things:

— that an active environmental group actually opposed the inclusion of the river under "wild and scenic" status;

— and that there was no official comment made by the nation's major environmental groups, including, but not limited to, such normally active groups as the Sierra Club, the Audubon Society and the Nature Conservancy.

"I guess they're waiting for the draft EIS to come out," Hazel surmised, but he also noted that meshing suggestions into an overall plan is easier early in the planning process than later.

The environmental group which opposed the Greenbrier's inclusion, W. Va. Hills and Streams, is to be invited to meet with Hazel and other foresters to discuss the reasons for their not wanting the river included.

In addition to the proposed conference with W. Va. Hills and

Streams, Hazel has also been engaged in correspondence with some 80 landowners along the riverbanks who wrote to ask specifically what effect wild and scenic designation might have on their own property. Hazel responded to each with individual comments, he said.

Among the conclusions which have already been reached has been that along the entire length of the river (if it were to be designated) there would only have to be some 30 access points — and half those would be on land now owned by the Forest Service. Total acreage of the access points would likely be under 100 acres in all — and all those, Hazel says, would be acquired on a "willing-seller" basis. That is, if the landowner said no firmly, the government would probably start looking elsewhere.

Even this early in the project, however, there are indications that finding access points is not going to be difficult. Preliminary discussions with the W. Va. Department of Natural Resources, the state agency developing the Greenbrier River Hike-and-Bike Trail, indicated that many proposed federal and state access points may be coincident. Additionally, at least two private landowners who had plans to develop campgrounds along the riverbank have expressed an interest in cooperating with the Forest Service to make their proposed campgrounds into the access points. In turn, the owner might grant the Forest Service an "easement" to confine his develop-

ment to harmonize with the preponderant characteristics of the river — no McDonalds plunked into the middle of a picturesque, tree-shrouded riverbend.

Hazel said flatly that he has found the public meetings — even in advance of the preparation of the draft EIS — helpful. One new idea which had not been considered, for instance, had been the impact that designation might have on endangered species in the area, particularly the bald eagle, the Indiana bat, the peregrine falcon and the eastern cougar. "If the river gets the designation," Hazel said one commenter pointed out, "it may be detrimental to those species."

THE MEETINGS

By Perry Bryant, Skip Deegans and Jim McNeely

The Corps of Engineers revealed some of the details for a dry dam on the Greenbrier River above Marlinton during three meetings on the possible inclusion of the Greenbrier River under the Wild and Scenic Rivers Act. The Corps requested that two exceptions for inclusion under the Wild and Scenic Rivers be made for the Greenbrier River. The first exception would be for a 13-mile section approximately four miles upstream from Marlinton. The second would allow for a local flood protection project.

At the first site, the Corps plans to purchase (through eminent domain, if necessary) 20 acres in order to build the dry dam. The dam would be 1,000

feet wide and 124 feet high. During a 75-year-flood (the worst flood likely to occur during any 75-year period), the dry dam would flood the entire 13-mile stretch above the dam.

One reason the Corps wants to build the dry dam is to enable them to build a hydroelectric power plant on the Bluestone Reservoir. Their reasoning is that in order to build the hydroelectric power plant on the Bluestone, they would have to raise the pool of the reservoir. This would result in decreased flood protection for the cities along the New River which are downstream of the Bluestone Dam. It should also be noted that a dam will inundate the Greenbrier River Hike and Bike Trail — a fact pointed out at the White Sulphur hearing.

At the Marlinton meeting, there was unanimous opposition to the dry dam. If anyone at the meeting supported the dry dam, they sure didn't say anything. By far the biggest applause came when someone who opposed the inclusion of the Greenbrier River under the Wild and Scenic protection suggested that instead of "spending all this money studying the river, we ought to buy the Corps a hearing aid, because we've been telling them for 40 years that we don't want any dam."

John Hazel, the U. S. Forest Service officer in charge of the current study for the river's inclusion into the national act, explained the preliminary conclusions of the study. He also explained what the different classifications meant (see box) and how they would affect the land use along the

river.

The Forest Service is interested in managing an average of 1,000 feet on either side of the river. Under the scenic designation, property owners would not be allowed to build within the 1,000-foot area unless they could screen the building from view from the river. Under the recreational designation, building along the river would be permitted. Under either scenic or recreational designation, a wide range of agricultural activities could take place, including timber harvesting, but not clear-cutting.

If the entire river were protected under the various designations, 69 per cent of the 48,000 acres of affected land is under private ownership. Conversely, about 30 per cent is state or federal government. If the river were only protected from the headwaters to Anthony Creek, 52 per cent of the land is private ownership. Currently, the river is protected by state law from Anthony Creek to its confluence with the New River.

This becomes a significant factor when you consider the federal Wild and Scenic Rivers Act. The Act prohibits the managing agency from condemning private lands which are being developed once the government owns 50 per cent of the affected land. Thus, if someone advocated protecting the river from its headwaters to Anthony Creek (assuming that the rest of the river were already protected), it would have the impact of severely restricting the managing

(Please turn to page 6)

OTTER CREEK

Rocks to Fish: Modern-Day Alchemy

Promising new techniques offer the hope of treating lakes and streams being destroyed by acid rainfall and acid mine drainage.

In ancient times, alchemists tried to turn lead into gold.

Nowadays, they're turning rocks into fish.

Tomorrow, they hope to do it even better.

This summer marked the completion of a six-month project in the middle of West Virginia's highlands that might do everything from treat acid mine drainage to save the Atlantic's salmon fisheries.

For those reasons and others, the work of Peter Zurbuch of Elkins and Dr. Tahson Genscoy of Morgantown is being watched around the world.

Nestled deep in the Alleghenies at Otter Creek, just on the border of one of the Mountain State's two wilderness areas, Zurbuch and Genscoy, modern-day alchemists in the fields of biology and mechanical engineering, ran the final tests on a prototype machine that automatically feeds limestone rock into Condon Run, a tributary of Otter Creek.

The tributary is so acid that it kills fish for ten miles downstream and had apparently been doing so for eons. Otter Creek's condition was first reported by an expedition from the Smithsonian Institution in the late '30's, and by the 1950's — when Zurbuch first became involved with the stream — it was still dead.

His project studies began in 1958. A dam on Condon Run and sluiceway with rotating limestone drums were built in 1964, then run for six years, treating the acid in the little river until the project ended. Despite the end of the project, however, Zurbuch and other employees of the W. Va. Department of Natural Resources as well as the U. S. Forest Service kept it going and have now amassed mounds of data.

Their project was four, water-powered drums filled with limestone which dissolved into the stream as the water washed through. The heavily-dozed water neutralized the natural acid in the stream and allowed fish to be stocked and even reproduce.

The problem, however, had been keeping the drums filled. The stream is so acid it can gobble up 100 pounds of limestone an hour, around-the-clock, day in, day out — and the drums had to be filled by hand. That was an expensive proposition.

Enter Dr. Genscoy of the W. Va. University's mechanical engineering department. In mid-March of this year, he was hired to devise a way to feed the limestone into the drums automatically — not an easy task, he notes, considering that the whole contraption had to work rain or shine, summer or winter, without jamming or freezing up, unattended for a week — with nothing more than water power to keep the whole thing going.

But by late summer, it was operating smoothly, feeding enough limestone into the acid waters of Condon Run to turn the water chalky white — and safe for life.

Still to come is a full-scale working model, one that will include a ten-ton hopper some five feet in diameter by seven feet high. Limestone loaded into the hopper will be fed through a hollow shaft with a screw-like device in a system that automatically adjusts itself for the amount of water flowing through the system.

Clinkety-clinkety-clink-a-clinkety . . . rumble-a-doo — rumble-a-doo — rumble-a-doo . . . the limestone rocks are dropped, one two or three at a time into the rumbling, rotating drum as the power of Condon Run whirls the drum around ten times a minutes with about three horsepower.

To be included in Dr. Genscoy's coming year's contract is a re-design of the drum itself, a project he views as yet another challenge. Helping him will be 22-year-old Greg Clites, a graduate assistant from Cumberland, Md. who also helped with the design of the prototype, as well as 29-year-old Jim Pappajohn of Morgantown, a Ph.D. candidate in mechanical engineering. His job will be to design a more efficient drum. Dr. Genscoy hopes to boost its energy from three to six horsepower. That, according to Zurbuch, will enable the entire treatment station to be moved farther and farther into the headwaters so more of the stream can be treated and a smaller impoundment will be required to provide the power to turn the limestone-filled drums.

What it all means, Zurbuch and Genscoy point out, is that it will soon be mechanically — as well as financially — feasible to provide acid treatment for many streams, not only those that are naturally acid but those that are being severely damaged or even destroyed by acid rainfall or acid mine drainage.

Zurbuch sees the new process as far more than merely a "band-aid" approach to the problem.

"It provides a good, workable interim solution until the problems of acid rain can be addressed," he says, but in addition, the system can be a management tool, one which can increase the productivity of streams.

Already, looking beyond Otter Creek, Zurbuch has proposed a million-dollar installation on the Cranberry River, one of the state's major fisheries which is being destroyed by acid rainfall. While the proposal was rejected for funding by the W. Va. legislature last year, Zurbuch has submitted the idea to the U. S. Environmental Protection Agency. "They've not said 'no,'" he notes, but adds that the outlook for funding appears bleak.

Elsewhere, however, Zurbuch and Genscoy's work is being eyeballed closely. In Pennsylvania, where similar acid stream treatment is already underway, interest in the Otter Creek project is high because it costs only one-seventh as much as the techniques that are now being used there.

Farther north, in New England and Canada, Zurbuch believes the technique might be useful in saving thousands of lakes which are dying from acid precipitation wafted up from the lower United States. There, the problems have become so acute that helicopters are being used to sprinkle lakes with hydrated lime — an extremely expensive proposition.

Near the Atlantic coast, the Otter Creek techniques could be used to raise the water quality of fresh-water streams and rivers used by Atlantic salmon to spawn their young. Without such treatment — and with the ever-increasing tide of acid rainfall — Zur-

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Considering the operation of a new device that could save thousands of miles of streams and millions of acres of lakes from extinction is Greg Clites, a 22-year-old graduate student at W. Va. University who, as an assistant to Dr. Tahson Genscoy (second from left), helped design the prototype device. He will also be involved in its improvement during the coming year.

Standing on the grate is Peter Zurbuch of the Department of Natural Resources' operations center at Elkins, a man who has spent a quarter century working on Otter Creek and developing a promising new acid water treatment system.

The prototype limestone feeder will now be upgraded into a full-scale working model which may make treatment of major rivers and streams feasible — both practically and financially.

CANAAN VALLEY

Reagan v. Canaan

A media pitch is planned during the Democrats' 'Tidewater Conference' at Canaan Valley State Park

A senior vice president and a regional representative of the National Audubon Society will conduct a press conference — as well as a minibus tour — during the nation's Democrat Senators' retreat in Canaan Valley set for Friday, Saturday and Sunday, Oct. 2 through 4.

Appearing on behalf of the Society will be Dr. M. Rupert Cutler, a senior vice president of the NAS, as well as the Society's regional representative, Linda Elkinton. Mrs. Elkinton is a fourth-generation resident of Canaan, while Dr. Cutler is a former assistant secretary of agriculture for environment and natural resources.

The press conference, set for 10 a.m. Saturday, Oct. 3, will be held at Canaan Valley State Park's Lodge near Davis in Tucker County.

The Audubon pair is expected to discuss the problems of and solutions to "the threats posed by the Reagan administration to the Canaan Valley and other significant natural areas vital to the protection of the nation's wildlife and scenic resources.

"Much of this 35,000 acre ecosystem — at 3,500 feet the highest valley of its size east of the Mississippi — was to

have become a national wildlife refuge when Ronald Reagan became president," according to Cutler and Elkinton. "With the new administration's aversion to federal land acquisition and the direct role that Interior Secretary James Watt previously played in the licensing of a huge, 1,000-megawatt pumped-storage power plant in the Canaan

Valley, the future of this unique wetland complex is in jeopardy."

The two assert that the valley, "along with dozens of other prospective national wildlife refuges that support many species of birds and other animals, may be lost forever to incompatible development due to shortsighted, false economizing by the Reagan Administration."

MORGANTOWN

Snobberies of Energy

A university study pinpoints who is likely to favor and oppose energy-related developments.

A study conducted by three W. Va. University professors has concluded that people with blue-collar and service industry jobs, as well as those who are proud of the area in which they live, are more likely to perceive energy-related developments — a new coal mine, a synfuels plant, etc. — as beneficial.

The study was conducted by Nancy Stout-Wiegand and Dennis K. Smith of the University's division of resource management, and Robert G. Trent of the University's department of sociology.

"As part of a long-term study of the impacts of energy-related

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