

... "Doctors estimate that within 40 days after a major nuclear exchange, 90 percent of Americans would be dead ... When you think about this, nothing else matters. It really doesn't matter whether we do well at work, wheter we look after our children and give them good food, or we love each other or we live a good life. By our passivity, we've

allowed this to happen."

- remarks by Dr. Helen Caldicott in a statewide flyer advertising the May 1 public meeting at St. John's Church in Charleston.

A proposal that the United States and the Soviet Union agree to halt the testing, production and deploy ment of nuclear weapons and of

(Please turn to page 5)



NUCLEAR WEAPONS FREEZE

HIGHLANDS VOICE

Published monthly by the W. Va. Highlands Conservancy

Vol. 14, No. 5 -- May, 1982

ELKINS

Watchdog Money

A citizen-based water monitoring program seeks funds to continue its work.

EDITOR'S NOTE: Rick Webb, certainly one of the Mountain State's most active environmentalists, wrote the following article detailing his organization's attempts to raise money for gathering data against which changes in the state's water quality can be measured. It is published here with minor editing.

By RICK WEBB

The Mountain Stream Monitors (MSM) Project has established an equipment fund to provide for the

acquisition and maintenance of water quality monitoring equipment.

A goal of \$25,000 has been established for this fund. This is the amount required to make the needed water testing and biological monitoring equipment available to volunteer monitors at 15 locations around the state.

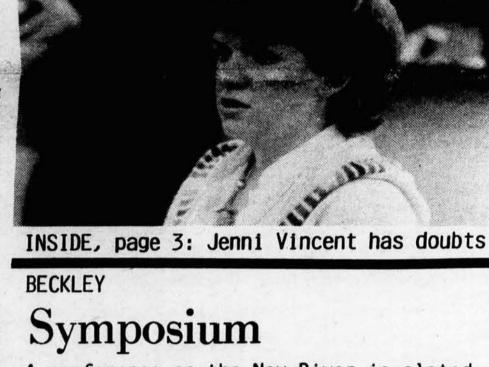
Donations are requested and can be sent to the MSM Equipment Fund at P.O. Box 1853, Elkins, WV 26241.

Most readers of the VOICE are

familiar with the work of the MSM Project. Our efforts to establish local environmental stewardship have attracted considerable publicity. Following three years of trials and successes, we can see that the kind of volunteerism which we promote offers hope for the future wellbeing of our state's water resources.

In West Virginia, we need that hope as much as ever now. Development of the state's energy resources is expanding rapidly. In many areas

(Please turn to page 5)



A conference on the New River is slated to shatter inter-disciplinary barriers.

River has been slated for May 6 through 8 at the Ramada Inn in Beckley. The three-day conference has already attracted economists, biologists, natural historians, architects, sociologists, historians, geologists, botanists, geographers and archaeologists, all of whom will present papers, according to coordinator Ken Sullivan of the W. Va. Department of Culture and History.

Dubbed the "New River Symposium," the conference is being sponsored by Culture and History in cooperation with the National Park Service.

"The speakers have enthusiastically endorsed the notion of a non-specialized working symposium, and will work to break down the barriers between disciplines through a fuller sharing of information," Sullivan commented.

As a major natural resource of the region it traverses, the New River

A multi-disciplinary conference has been an object of interest for open to all those with a professional centuries. Colonial explorers were or amateur interest in the New the first white Americans to search out its secrets, and scarcely more than a hundred years later. geologists were probing for the hidden treasures of the New River basin. Mining entrepreneurs and other industrialists put the findings of the latter group to practical use, and more recently, historians have pondered the implications of industrialization itself. The flora and fauna of the valley have been studied for at least a century, and archaeologists have catalogued New River prehistory.

"The New River in its various separate aspects, then, is well known," Sullivan points out. "Several fields of study have generated specialized bodies of literature. Unfortunately, such literature is known mainly within the individual fields of origin, and specialists have not gotten together

(Please turn to page 2)



"West Virginia is rich in high quality water resources. The Mountain State's many clean and rushing streams are natural symbols of environmental quality.

"Yet, too many have been degrad-

ed and polluted. They now serve only as symbols of human disrespect both for the natural creation, and for the generations of people who will follow.

"We believe that we have a clear responsibility to preserve our re-

maining unpolluted streams, and where possible, to restore those streams which were degraded in the past. ..."

- from the opening paragraphs of a Mountain Stream Monitors' brochure describing their programs and organization.

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SYMPOSIUM

(Continued from page 1) to compare notes — before now. The purpose of the New River Sym-

posium is to change that state of af-

fairs."

Thursday's presentations include "Recreation and the River: Uses and Implications;" "Projected Economic Impacts of the New River Gorge National River, 1981-1990;" "Recreational Use Survey of New River Below Bluestone Dam;" "Rafting in the New River Gorge;" "Seekers, Settlers and Slaves: Early History of New River;" "The Batts and Fallam Expedition;" "Early Settlers on the New River in Virginia;" "Slaveholding and Power in the New River Valley: Ashe County, North Carolina in 1860;" "The New River Gorge Na-tional River;" "Planning and Development of the National River;" "Inventorying the New

AFFORDABLE

(Continued from page 8) per year. Consideration of benefits not reflected in market transactions suggests that air pollution controls have had virtually no effect on inflation.

 Relaxing air quality requirements enough to reduce capital costs for air pollution control by 30 percent would change output, prices and employment imperceptibly, by less than 0.1 percent for each in-

- Labor productivity, as conventionally measured, has been essentially unaffected, with a reduction of less than one percent per year reported by the most adverse studies. Recent work incorporating the Act's non-market benefits into conventional measures of output, suggests that the Act has increased labor productivity.

- The Clean Air Act's benefits substantially exceed compliance costs. The most comprehensive survey to date estimates benefits of \$21.4 billion, and costs of \$17 billion.

 Compliance expenditures by the private sector have remained stable in real terms since 1975 - on average, less than three percent of gross private domestic investment. Total expenditures by business, consumers and government were 0.6 percent of GNP for the 1972-79 period.

 Abatement costs could be reduced further by continued use of emission offsets and other marketbased "controlled trading"

"The evidence will not support charges that the Clean Air Act is imposing severe costs on the U.S. economy. Net benefits have resulted, and macroeconomic measures have remained essentially unchanged. The Clean Air Act, is, on balance, sound environmental policy and is consistent with sound economic policy."

"The Highlands VOICE" (ISSN 0161-9896) is published monthly by the W. Va. Highlands Conservancy, P.O. Box, Fairmont, WV 26554. Distribution is to Conservancy members. Main editorial offices are located at No. 7 Kerens Hill, Elkins, WV 26241. A re-entry permit to mail at secondclass postage rates is pending at Elkins, WV. Main entry is at Fairmont, WV. POSTMASTERS should address Forms 3579 to P.O. Box 506, Fairmont, WV 26554.

River: An Architectural, Archaeological and Cultural History Survey;" and "An Qral History Survey of the New River Gorge."

Friday's presentations include "Fossil Plants of the New River Gorge and Their Use in Stratigraphic Correlation;" "Plants and Vegetation of the New River Gorge;" "New River Wildife;" "Black and Turkey Vulture Roosts on New River;" "The Turtle, Pseudemys concinna, in New River;" "People, Plants and Places;" "The People of the Gorge;" "Uses of New River Plants in Folk Medicine;" "Place Names as a Cultural Indicator in the New River Valley;" "The Impact of the Glen Lyn Power Plant on the Temperature of the New River;" "Defeat of the Blue Ridge Pump-Storage Project: The Great Dam Controversy;" "Mineral Geology of the Gorge;" "Geology of the New River Gorge;" "Coal Resources of

the New River Gorge," and "Potential Mineral Resources of the New River Gorge."

Saturday's presentations include "Industrial History of the Lower New River;" "Beehive Coke Making in the New River Gorge;" "Building the C&O Railroad Through the New River Region;" "Labor History of the New River Gorge;" "Archaeology of the Bluestone Lake Area;" "Archaeology of the Bluestone Region;" "Test Excava-tions at Three Late Prehistoric Village Sites at Bluestone Lake;" "Effects of Prolonged Innundation on the Physical and Chemical Properties of Faunal Remains;" "A Study of Molluscan Materials from a Bluestone Site;" and "Use of Freshwater Bivalves from New River Sites in Archaeological Analysis."

Registration at the Inn is \$15, beginning at 11 a.m. on May 6 and continuing to 2:30 p.m.

MOAINE; ATTACH OLD LABEL HERE New Address: _ W. Va. Highlands Conservancy P.O. Box 506 SEND TO:

Senior—\$8 from conservationists over 65 years of age.

Description of membership categories.

Individual membership:

Regular—\$10 from the rank and file who can give time and interest to the conservancy.

Fairmont, WV 26554

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 necesary to underwrite our programs.

Organizational membership:

Regular—\$20 from a small organization anxious to help the Conservancy score conservation gains in the Mountain Associate—\$30 from a larger organization whose member-

ship approves the efforts of the Conservancy. Sustaining-\$60 from a large national organization which appreciates the importance of a highlands area to the peo-

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Make checks payable to The West Virginia Highlands Conservancy.

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CANAAN VALLEY

Zoning As Disguise

An environmentalist suggests that a land use plan for Canaan Valley may simply legitimize its on-going destruction.

EDITOR'S NOTE: Jenni Vincent of Fairmont holds a masters degree in environmental law from the Vermont Baw School's environmental law center where she gained experience in reviewing and evaluating proposed land use and zoning plans. She is also the current president of the Canaaan Valley Alliance, an organization which is promoting the development of a national wildlife refuge in the Canaan Valley. Her article on the proposed land use plan for the Canaan Valley is reprinted here with minor editing.

By JENNI VINCENT

For those of us who have long feared for the future of Canaan Valley, it would seem no immediate end is in sight to the threats which continue to mount against its unspoiled beauty and integrity.

Hardly news, the Davis Power Project - first proposed in 1970 by the Allegheny Power System - continues to be the threat with which people are most familiar. While the Davis Power Project is still rumored to be alive, slowed rates of electric growth coupled with APS' plans to buy into VEPCO's partiallycompleted Bath County, Va. pumped storage facility have made vague, rhetorical threats of Davis' continuing need almost impossible to believe. In fact, a recent Fairmont Times-West Virginian article described a meeting with Monongahela Power Representatives in which plans for the DPP were described as "currently on hold."

However, given the present political climate and the Reagan administration's adversity to any additional federal land acquisition, plans for the Department of Interior's Fish and Wildlife Service to designate Canaan Valley a national wildlife refuge also currently seem to be at an impasse.

In the meantime, the Valley continues just as it has, except for one factor — Canaan is experiencing unprecedented growth which may be the most immediate threat to the Valley. With in-migration and tourism both on the rise, it is reported that the Valley's population has increased by 86 percent from 1970 to 1980 while the number of housing units has grown by 400 percent.

Aside from the sheer impacts such numbers may have on the area, most of the growth must be classified as uncontrolled development in that no land use plan or formal zoning presently exists to guide development in the Valley. As such, developers and entrepeneurs — in fact, practically anyone who can afford the sky-rocketing land prices — are free to do virtually as they please.

The need for formal land use controls and planning has not, however, gone totally unnoticed by governmental agencies. It is an idea which the state's attorney general's office has long been pushing. In fact, his office provided the primary impetus for the federal refuge plan in the beginning.

Whatever the reasons for its crea-



Paddling through the wilds of Canaan

tion, a "Comprehensive Plan for Canaan Valley-Canaan Heights" has been completed by the Region Seven Planning and Development Councilfor the Tucker County Planning Commission.

Lest you wonder of the proposal's protective powers, certainly any plan whose basic premise is that the Davis Power Project will be built is subject to suspicion. Although this was a public study being done through public agencies with presumably public funds, no other alternatives for the Valley other than the power project were even set forth. Certainly, consideration should have been given to the equally viable refuge alternative, yet it was not even mentioned as a possibility for the Valley.

In theory, the goals of the plan are fine. For instance, phrases such as "to protect Canaan Valley from uncontrolled, haphazard development ..." and "to protect the natural environment of Canaan Valley — insuring preservation of its unique qualities for future generations ..." are indeed the types of goals which need to become policy. Unfortunately it is doubtful whether this plan is the appropriate means to achieve such goals or even prevent further deterioration of the Valley. Rather, it seems this proposal may merely legitimize the potentially harmful growth which is already occurring.

The plan suggests that the Valley be divided into zones: conservation, special permit, commercial, high density and performance. Of particular concern is the fact that the conservation zone will consist of only 1,300 acres while the performance zone will comprise 7,891 acres—

roughly 79 percent of the land under study. If implemented, this will have enormous ramifications for the Valley

Initially defined by the plan primarily as an area where "several different types of development would be allowed ... either as a matter of right (typical subdivision) or as a conditional use (planned unit development) ...," the performance zone may well prove to be too large and too permissive.

As this zone constitutes such a large percentage of the Valley, it is vital that decisions made within this area be guided by adequate standards, lest the decisions which result in permitted uses be termed arbitrary and judgmental — exactly that which the planners have indicated they wished to avoid.

It is difficult to tell from the pro-

posal exactly how the conservation zone will be preserved, as no real standards or enticements are given to insure that this remains an area of "conservation." The plan merely states it "should be maintained in its natural state or devoted to recreational uses which require that only insignificant changes will take place on the land." However, no sanctions or standards are included for this section, merely an optimistic statement of what the planners hope will occur.

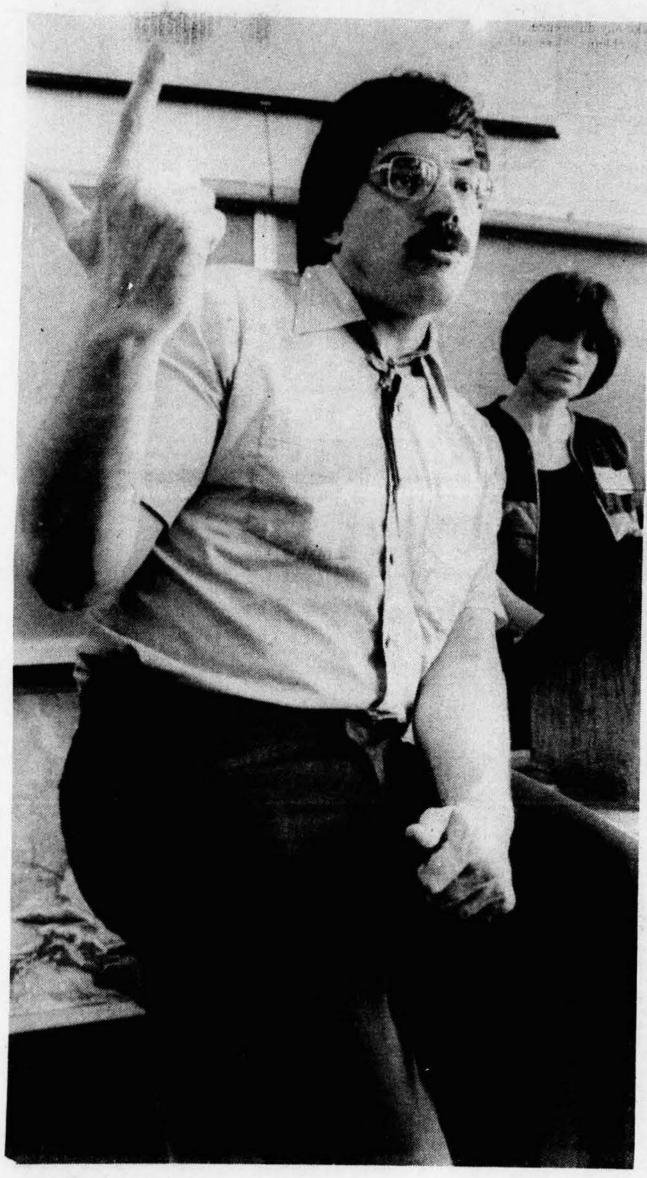
Additionally, the conservation zone borders the following proposed land uses: commercial, special permit area, performance zone and the Davis Power Project. Certainly it is reasonable to expect these adjoining zones in which more intensive development activities are permit-

(Please turn to page 6)

ELKINS

Endless Pressure, Endlessly Applied

One of the nation's leading environmentalists predicts a victory in the battle for Cranberry.



Brock Evans (foreground) with Cranberry coordinator Leslee McCarty

A re-assertion of West Virginia's importance to major, national environmental issues may be in the offing as designation of the Cranberry as a wilderness area assumes the same importance as was once accorded the Monongahela National Forest's aging timberlands.

That controversy — a dispute over the clear-cutting of timber that forever changed the way in which America's national forests are managed - is being echoed in the current battle over "hard" versus "soft" release. That message of the Mountain State's national importance was brought to Elkins in mid-April by Brock Evans, a vicepresident of the National Audubon Society who served as the keynote speaker for a leadership training conference held at Davis and Elkins College.

The day-long session attracted a sprinkling of people from all across West Virginia as well as surrounding states. In all, some 25 environmental leaders heard Evans' opening remarks, a number that grew to twice that many before the afternoon's and day's sessions were concluded.

Evans currently serves as the Audubon's vice-president for wilderness issues, a post he assumed in the summer of 1981 following a decade of work with the Wilderness Society. A native of Ohio, he emerged from the University of Michigan's law school to start his environmental career at the opening of America's decade of environmental achievements that spanned the 1970s.

But, as Evans pointed out, the gains made during that decade are being "systematically undermined" by the Reagan administration's top command, people such as Interior Secretary James Watt.

"No wilderness, no how, no way," was the way Evans described the attitude of the Reagan administration when confronted with any choices which pit industrial development against the softer uses of the environment.

It is against that background that the battle between "soft" and "hard" release is being played out, Evans explained.

Basically, as outlined in a late-March memorandum issued by the Wilderness Society, the issue of "hard" versus "soft" release revolves around whether wilderness bills currently under consideration by the U.S. Congress should be the end of all wilderness consideration - forever - or whether the Forest Service and other federal agencies should routinely re-examine the nation's roadless areas to determine whether or not they should become wilderness.

If, after the current batch of wilderness bills are passed, more consideration can still be given to wilderness in the next cycle of national planning - that's "soft" release. If the current spate of



"The clearest way into the universe is through a forest wilderness." - gohn Muir

wilderness bills mark the end of wilderness consideration forever that's "hard" release.

The difference is significant, the Wilderness Society memo and Evans pointed out, because "hard" release is contrary to current law which requires that the nation's forests and other wild areas be managed for many uses - and that consideration should be given to all uses, including wilderness.

The problem with the proposed Cranberry wilderness, Evans and other national environmentalists believe, is that it has been chosen as the stage upon which the issue of "hard" versus "soft" release will be

In fact, as Evans admitted and as was expanded upon by one of West Virginia's chief lobbyists for the Cranberry, the Cranberry wilderness bill very nearly passed out of a House subcommittee during March - but was pulled out of consideration because national environmental leaders felt that the tento-14 vote split (in the Cranberry's favor) was not sufficient to bring the "hard" versus "soft" issue to a close.

Despite the ongoing battle, Evans said he is hopeful that the Cranberry - he called it, at one point, "a jewel" - will be designated as wilderness.

That designation will come, however, through the political process. "Politics is everything, and everything is politics," he remarked at one point. He noted that the typical time lapse for the designation of the nation's northwestern wilderness areas had been ten years

- and some will take a quartercentury.

He urged those attending the leadership conference to return to their home areas and enlist five friends in the effort to save the Cranberry - as well as attempt to involve at least one "nonenvironmental" group in the battle for the area's wilderness designa-

Victory, he suggested, will come only with "endless pressure, endlessly applied."





Backcountry Universe

hn Muir

ill take a quarter-

ose attending the rence to return to as and enlist five effort to save the well as attempt to east one "non-group in the battle vilderness designa-

ggested, will come idless pressure, **ELKINS**

Watchdog Money

(Continued from page 1)

of the state, coal is being mined on an unprecedented scale, and more oil and gas wells are being drilled than ever before.

Citizens around the state are seeing stream after stream suffer from heavy siltation resulting from mine and drilling site construction and from all the related road building and other earth distrubance. At the same time, mining continues to to expand in the state's most severe acid mine drainage problem areas.

The record shows that government alone cannot be relied upon to insure that all of this activity is conducted in a responsible manner. The federal agencies, EPA and OSM, have been greatly reduced in effectiveness. And meanwhile, the state of West Virginia backs away from effective enforcement of pollution laws, while the governor calls for less "nitpicking."

It is all too obvious that the squandering of our state's wealth of high quality water resources is not just a matter of past history.

So much of this waste is simply unnecessary. In most cases the technology is there to prevent polluion if we are willing to use it, and to demand it, and to expect it.

Eventually we will. But it may not be until very few of our clean mountain streams remain, and water supplies have become a critical problem — as they already are in much of the world. It's the old story: we

won't really know what we had until we ain't got it anymore.

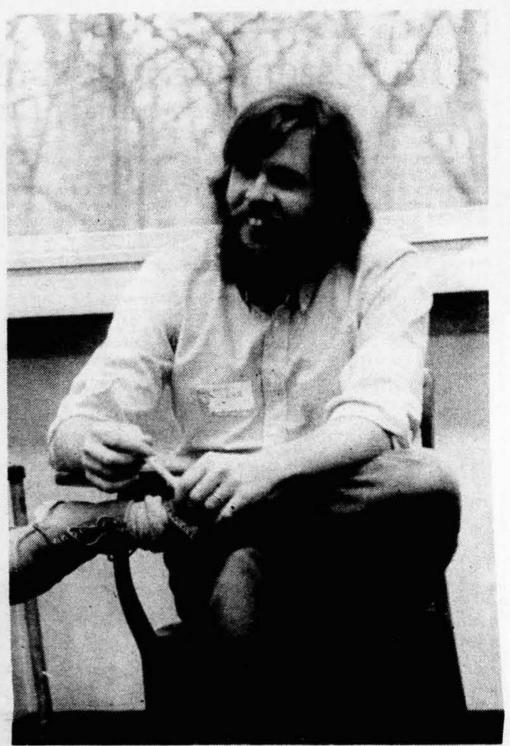
Although many people are very concerned about the on-going loss, the citizen really has very few effective options for acting on this concern. Most of us watch helplessly, unable to make any difference.

This is the problem addressed by the MSM Project.

Through our workshop program, we are providing people with the skills they need to assess and "watchdog" the condition of their local streams. Thereby, the MSM workshop participants have access to basic information they need to work on a knowledgeable basis for the protection of their local streams and environment. They are able to inform the public, to communicate meaningfully with the companies involved in potentially pollutioncausing activities, and to make worthwhile input into governments' regulatory processes.

The principal limitation on the growth of the MSM Project, however, continues to be a lack of money for the purchase of water quality monitoring equipment. The continued involvement of workshop participants depends upon practical access to the necessary equipment.

The creation of the MSM Equipment Fund, therefore, offers a uniquely practical opportunity to support environmental protection in West Virginia. Your donation and help in achieving our goal will make a difference.



Rick Webb of Mountain Stream Monitors

ROMNEY

Bird Foray

The Brooks Bird Club slates its annual foray in the highlands of Mineral and Hampshire counties.



The Brooks Bird Club has slated its annual 1982 "foray" for the Peterkin Conference Center at Romney, a return to the same site the Club used back in 1967.

The program for ten-day event is broad and will include "all phases of nature study, along with our population studies, birding surveys and bird banding. There will be daily field trips, discussions, reports, slide and movie programs and evening sing-a-longs," according to a flyer produced by the Club and mailed to is members.

Instructors, the flyer notes, "are all experienced field biologists, some professionals, some amateurs, but all 'specialists' in some phase of nature study."

The conference site is near Romney, about three miles south of Rt. 50 on the River Road toward Moorefield, straddling the Hampshire-Mineral county line. Elevation ranges from 1,800 feet at the camp itself up to 3,100 feet atop Nathanial Mountain.

Total cost of the foray, per person, is \$165 which includes lodging, meals, snacks, pool and camp fees as well as taxes.

NOTHING ELSE MATTERS

(Continued from page 1)

missiles and aircraft designed to deliver nuclear weapons got its first state-wide backing early in May when about 100 people from the Mountain State's major communities converged on Charleston's St. John's Church for a noontime rally and rest-of-the-day meeting.

"It's important to realize that changing the nuclear arms-race is not going to come from within the institutions of our government," asserted Dr. Andrew Rowles, a Fayette County physician who spoke to the crowd. "Therefore, the change has got to come from ordinary people."

The call for a bilateral nuclear weapons freeze has already been endorsed by half a dozen state legislatures, two dozen city councils and approved by voters in nearly 300 town meetings and referendums. The effort in West Virginia was stalled by inaction from the state's lawmakers when such a resolution was introduced by seven state senators during the last session of the legislature.

MORGANTOWN

The Fessenden Syndrome

A University study suggests putting the Davis Power Project underground.

Now may be the time to bring into underground reservoirs of energy by storing water in abandoned coal order to have an effective

ONE OF EVERY TWO

(Continued from page 8)

hunters. In 1980, the survey showed 51.2 million fishermen and 19.3 million huntes in the same age bracket, an apparent drop.) However, the earlier survey was based on a 37 percent response rates among people who were polled by mailed questionnaires. The 1980 survey achieved a 95 percent response rate and its data were gathered through detailed personal interviews.

reality a 70-year-old idea to create the topic of a scientific paper prepared by three WVU engineer professors. Under the plan, water stored mines, W. Va. University researchers in abandoned coal mines would be pumped to drive turbines to produce electricity for use during peak demand periods.

William Squire, a professor of aerospace engineering, says that the report "investigated the idea of a power bank that was developed by R.A. Fessenden 70 years ago.'

"'Fessenden's power bank system would be a natural for the Appalachain region," Squire said.

The report on Fessenden's idea was prepared by Squire, Ernest J. Sandy, a professor of mining engineering, and Herman H. Rieke, a professor of petroleum engineering.

The underground reservoirs would sidered at an abandoned limestone

vironmentalists than other pumped storage systems, Squire said.

The most common type of pumped storage facility is a dam. Water is backed up behind a dam during periods of slack power demand, then released to drive turbines during peak periods of demand. Such a system has been proposed for the Canaan Valley in Tucker County, he said.

However, he has also noted there is "generally strong environmental and sociological opposition to such reservoirs because desirable sites are either scenic areas or valuable farmland," Squire said.

By using underground reservoirs, he said, that opposition would be reduced. "It is reported that such an underground reservoir is being con-

is some 750 feet deep and its use would construction costs."

Underground "power banks" are be subject to less opposition from en- mine in Finland," he said. "The mine represent a considerable saving in

ZONING AS DISGUISE

(Continued from page 3)

ted will impinge and threaten those resources under conservation. Such surrounding areas may well result in the conservation zone's being placed under mounting pressures such as development encroachment, creeping groundwater contamination and pollution, wildlife displacement and eventual habitat destruc-

As such a small amount of the total Valley would be officially designated for conservation, it seems obvious that absolutely none of the 1,300 acres can afford to be jeopardized, let alone actually sacrificed. Yet, this plan seemingly comes with no guarantees.

One of the objectives of the plan states that "commercial development which is appropriate and respects the character of the Valley, while providing needed services for residents and tourist" should be encouraged. However, under this plan, a list of the activities which may be judged to be appropriate for development in the Valley is stag-

gering. Consider the comments given by Linda Elkinton at a recent public hearing on the proposal: "In this plan as presently constituted, if a developer or whoever can show that the land will 'perk' according to state standards, or the sewage can otherwide be accomodated, and that he or she can integrate a land use into a unit plan, any of the following are possible on this 8,000 acres: hotels, motels, lodges, cluster townhouses, multi-family apartments, your typical subdivision-type developments, cluster housing developments in planned units, planned commercial units, mobile home parks in wooded areas, 7,000-to-10,000-square-foot lots for homes, half-acre lots for homes, golf course, ski areas, restaurants, antique stores, barber shops, beauty shops, bars, business offices, coffee shops, specialty food stores, florists, grocery stores, gift shops, radio and tv repair shops, sporting good stores, gas stations and variety stores."

In addition, the following are also mentioned by Elkinton as being acceptable under the proposal: "liquor stores, jewelry stores, leather goods stores, music and record stores, toy stores, theaters, financial institutions, furniture stores, craft shops, bakeries, china and glassware stores, art galleries, apparel stores and drug stores." It almost seems as if all activities are potentially accep-

In fact, it is easier to name those few activites which would not be permitted: automobile race tracks, appliance sales, building supply houses, funeral homes, junk yards, amusement parks, warehouses and supermarkets. While the plan is probably correct in its assumption that most people do not feel Canaan is the appropriate location for an amusement park, probably many of the other conditional uses are equally

their hazardous we aldanoitseque

A more reasonable suggestion for providing necessary services would be to locate such facilties in the nearby towns of Thomas and Davis. Not only would Canaan be spared, the services would be made available in such a way as to enhance the economic base of the municipalities in which they were located. Although this idea is tentatively set forth under the section entitled "commercial zone," additional information is needed. Perhaps it would be appropriate to include these two towns in the study area - as well as calculating potential economic benefits which could be expected from such a move.

It remains to be seen what will ultimately be done with this proposed plan. A public meeting to receive comments and questions on the proposal was held March 11 at Canaan Valley State Park. The next several phases of the plan's ultimate acceptance or rejection now lie with the planning commission and the Tucker County commission.

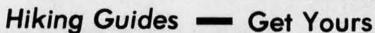
As the plan's implementation sec-tion states, "If the County Commis-sion adopts the ordinance, the State Code provides for a petition action which will bring the zoning regula-tion to a vote." However, only registered voters of the affected area will vote on the regulation. Ultimately, "A simply majority of those voting must vote 'yes' for the regulations to be valid:" In conclusion, the implementation section states that "Once Land Use Regulations for the Valley are adopted by the County Commission and approved by the voters, procedures for administering these regulations will have to be established."

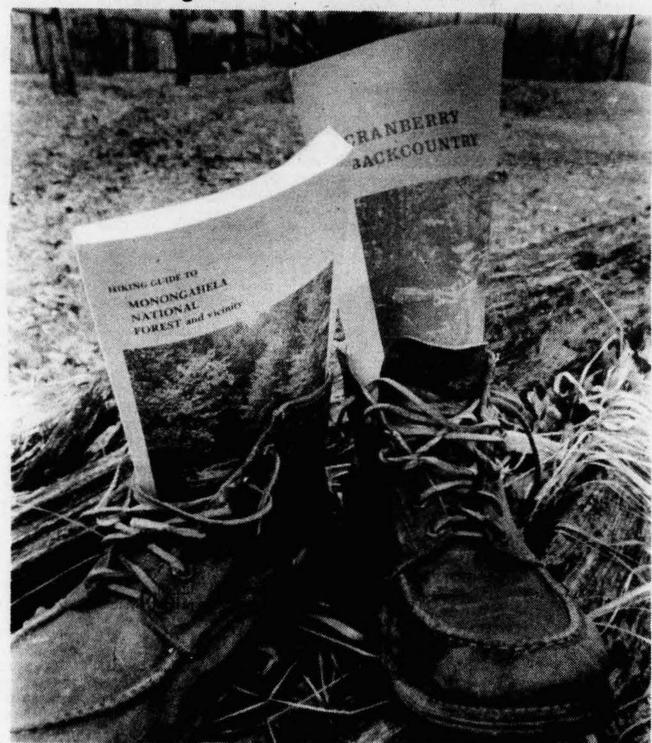
It is difficult to know whether any type of zoning or land use plan, let alone the present proposal, will ever be accepted for the Valley. However, what is becoming widely known is that Canaan Valley is growing at an alarming rate. Developers' visions of additional ski areas, condominiums and tourist accomodations are well on the way to becoming an unfortunate reality.

Consider the following quote: "If the population rises at the same rate as the past decade (87 percent), it will reach 280 by 1990. However, this is a very conservative projection. An increase more on the order of 150 percent by 1990 can be expected." Even now it is estimated that " ... during peak seasonal weekends and holiday weekends, over 4,000 people are in the Valley at any given time." Should this growth continue in an uncontrolled manner, the Valley's integrity and natural resources will most certainly be threatened.

Equally destructive may be rapid expansion which is sanctioned under the guise of "zoning." Surely there exists a middle ground, one which would not only protect the Valley and its unique assets but would also be economically acceptable.

For the sake of the Canaan which we all know and love, let's hope such a compromise is reached in time.





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CHARLESTON

Only Time

The state's leading citizen action group finds the proposed hazardous waste regulations less than ideal -- but potentially workable.

The following article is reprinted from a "hazardous waste bulletin" recently published by the W. Va. Citizens Action Group.

When the Department of Natural Resources (DNR) first proposed their hazardous waste regulations, they incorporated by reference EPA's regulations governing the financial requirements for hazardous waste treatment, storage, and disposal facilities.

The proposal to incorporate the state's regulations by reference to EPA's regulations drew a storm of protest. Industry filed a protest stating that they were unsure of what the regulations were, since EPA had made two major changes in the regulations and were contemplating making additional changes. Other people wondered what effect changes made by EPA would have on the state's regulations, since the state had adopted EPA's regulations by reference. If EPA changed their regulations, would that mean an automatic change in the state's regulations? As a result of these protests, DNR has re-proposed their regulations

CHARLESTON

Awkward

But working.

The following article is reprinted from a "hazardous waste bulletin" recently published by the W. Va. Citizens Action Group.

The Water Quality Advisory Committee (WQAC) was formed in 1978 to advise the Chief of the Division of Water Resources on water quality issues in West Virginia. During the August 1981 WQAC meeting, they formed a subcommittee to examine the development of the state's hazardous waste management program.

As a result, the 16 member hazardous waste advisory committee (which has six agency representatives) makes recommendations to the WQAC. The WQAC considers these recommendadions and then basses the recommendations on to the relevant agency or refuses to make the recommendation.

"The structure of the hazardous waste subcommittee is somewhat awkward," explained Perry Bryant, the only person to serve on both the hazardous waste subcommittee and the WQAC.

Despite this awkward arrangement, the hazardous waste subcommittee has played an imporant role in shaping the regulations governing hazardous waste. To date, they have made detailed recommendations on the Water Resources Board's regulations governing the treatment, storage, and disposal of hazardous waste; the Air Pollution Control Commission's regulations concerning the thermal treatment of hazardous waste; the Department of Highways regulations governing the transportaiton of hazardous waste on the state's roads; the Public Ser-

each in the contract was better sixty.

governing the financial requirements for hazardous waste treatment, storage, and disposal facilities and spelled out in detail what those requirements would be.

Under previous regulations hazardous waste treatment and storage facilities are required to develop a plan of how and when they are going to close their facility. For each step involved in closing a facility the owner or operator had to provide an estiomate of the money needed to perform each task. For example, the owner of a treatment facility would specify that he was going to dismantle the pinpes involved in treating hazardous waste at a cost of \$5,000 and then dispose of those pipes at a permitted landfill at a cost of \$1,000, etc.

Under the proposed regulations, after the closure plan is completed and the cost for each task is totaled, a trust fund or some other financial arrangement would be established. which would equal the projected cost of closing the facility. The trust fund would ensure that even if a facility went bankrupt there would be sufficient monies available to the state to close the treatment or storage facili-

Hazardous waste disposal facilities will be required to develop both closure plans (how they are going to close their facility) and postclosure plans (how they are going to monitor and maintain the facility for years after it has been closed).

For each step identified under the closure plan and the post-closure plan, cost estimates would be developed. Under the proposed regulations, the cost associated with each task would be totaled and a trust fund or other financial mechanism would be established equal to the amount needed to close and monitor the facility. Again, this trust fund should ensure that even if the disposal facility loses money and goes bankrupt, the state will have

access to sufficient monies to close the facility and monitor it after closure.

In addition to the financial assurance sections of the new reproposed regulations, there are proposed insurance requirements. Owners or operators of treatment or storage facilities must obtain in-surance for sudden accidents. An example of a sudden accident would be fire or a chemical spill. The proposed regulations would require the owner or operator to obtain an insurance policy that would guarantee \$1 million for one claim against a treatment or storage facility for a sudden accident. The insurance policy also has to provide for \$2 million worth of insurance for aggregate claims. Aggregate claims refers to a situation where two or more claims are made based on the

same accident. For example, a fire might damage five houses around a facility and all five property owners would file separate claims.

Disposal facilities will be required under the proposed regulations to obtain insurance not only for sudden accidents but also for non-sudden accidents. An example of a nonsudden accident would be a disposal facility leaking toxic chemicals into the groundwater. The insurance requirements for sudden accidents would be the same, i.e., \$1 million for a single claim and \$2 million for aggregate claims. However, the insurance requirements for a nonsudden accident are higher, i.e., \$3 million for a single claim and \$6 million for aggregate claims.

"The requirements for non-sudden insurance are perhaps the most important regulations proposed under

the state's Hazardous Waste Management Act," according to Perry Bryant of the West Virginia Citizen Action Group (CAG).

'The salary scale at the Division of Water Resource's Hazardous Waste-Ground Water section are, and will continue to be, unrealistic. In order to have an effective hazardous waste management program the state needs to hire well qualified, experienced personnel. The state needs good hydrologists, chemical engineers, etc.

'The salary scale presently being offered by the regulatory agencies isn't sufficient to attract and keep experienced people. In many cases their salaries are only a few thousand dollars above what an hourly worker will make at one of the chemical plants. But the insurance industry is different. They can afford to pay the salaries to get and keep well qualified individuals,"

Bryant explained. By requiring insurance policies be carried by disposal facilities -particularly the non-sudden policies the state will be making the insurance industry, in effect, a surrogate enforcement agency. Before an insurance company issues a

policy, they're going to do a very thorough inspection of a facility to ensure that it is designed properly and is well managed and maintain-

"Additionally, they will be in a better position to offer technical assistance to the disposal facility. The state, if they find a deficiency, will simply say 'Fix it or we'll shut you down.' An insurance company will be able to say 'You have a pro-blem here and this is the best way to correct that problem,' " continued

Bryant. Others, including Earl Ubell, have also agreed that the insurance industry should play an important role as surrogate enforcement agency. Mr. Ubell wrote recently, "The company being inspected would pay for the inspection. . . and the cost of inspection, now borne by taxes, would ultimately be paid by the users of the product. . .a(manufacturing) company could threaten to fire its private inspection agency if it does not look the other way. True enough, but the inspecting company would have financial liability and, should something go wrong, would pay a price for its myopia. Given reality, I do not think we can eliminate all collusion, but I feel confident that the private system would be far more honest than governmental ones. After all, a government inspector who takes a bribe does not make his agency responsible for his bribe; a corrupt private inspector puts his company at risk. That company will

23, 1981) It is unclear whether the proposed financial requirements will be adopted by the DNR. Several sources have indicated that EPA may drop the requirement that treatment, storage and disposal facilities carry sudden insurance and that disposal facilities carry non-sudden insurance. At this point only time will tell if the DNR adopts these regulations.

take important steps to ensure

against that risk." (Newsweek.Nov.

HOTLINE

The Department of Water Resources has established a toll free number so that chemical spills and other emergencies can be reported easily. The number is 1-800-642-3074.

During working hours the toll free number will be staffed by Division of Water Resources personnel. During non-working hours (weekends and from 5 p.m. through 8 a.m. weekdays) messages will be recorded by an answering service. The answering service in turn will "beep" a Division of Water Resources person who is on-call. Within minutes the on-call person will be at the Division of Water Resources office to review the taped call.

Information recorded on tape should include the name of the caller; a call-back number; the location of the incident; the type, amount and toxicity of the spilled material; and if it has been directly discharged into a stream.

The Division of Water Resources has also developed a manual to assist the person who takes the call in notifying other agencies and-or personnel responsible for responding to the emergency spill, such as the Department of Highways or the Health Department. The manual also addresses clean-up resources, what should be done with certain spilled material, and safety and monitoring equipment that should be used with certain chemicals.

Finally, a list of public water supplies is kept close to the phone so that operators of these public water supplies can be notified immediate-

While this toll free number was established primarily in response to the state's increased role in responding to chemical spills, it can be used to report fish kills and other reports of pollution unrelated to chemical spills.

vice Commission's regulations governing the transportation of hazardous waste by railroads; and the Health Department's regulations governing the treatment, storage and disposal of infectious

Citizens who have complaints concerning the state's hazardous waste management program should contact one of the public interest group representatives or one of the private citizen representatives. They are your representative on this public participation advisory committee and should represent your interest. Their names and addresses are:

waste.

PUBLIC INTEREST GROUP REPRESENTATIVES

Sandra Kerbow League of Women Voters 1200 55th Street Vienna, WV 26105

Perry Bryant WV-Citizen Action Group 1324 Virginia St., East Charleston, WV 25301

PRIVATE CITIZEN REPRESENTATIVES

Jenni Vincent Fairmont, WV 26554

J. Michael Koon WV Northern Community College Weirton, WV 26062

Other members of the hazardous waste subcommittee are as follows:

GOVERNMENT

John C. Ailes, Jr. **Assistant Chief** WV Department of **Natural Resources** Division of Reclamation

Carl G. Beard II, Director WV Air Pollution **Control Commission**

J. J. Dwyer, Director WV Public Service Commission Division of Railroad Safety

Thomas E. Huzzey, Director WV Department of Mines Division of Oil and Gas

Dale Parsons, Director WV Department of Health Division of Solid Waste

Robert M. SanJulian **Assistant Director** WV Department of Highways **Roadside Services Division**

> Henry M. Snyder, Jr. Commissioner **Jefferson County**

James Wedge, Mayor **Point Pleasant**

BUSINESS

Charles Olson Chemical Leaman **Tank Lines**

Edwin E. Slover **Union Carbide** Engineering and **Hydrocarbons Division** PORTLAND, OREGON

One of Every Two

The U. S. Fish and Wildlife Service documents a 'tremendous hunger' for outdoor activities related to wildlife.

One of every two adult Americans articipated in some form of outdoor activity involving fish and wildlife in 1980, a national survey by the Interior Department's U. S. Fish and Wildlife Service has revealed.

Nearly 100 million people engaged in one or more forms of wildliferelated recreation, and spent almost \$40 billion to pursue their favorite sports or enjoy their other outdoor hobbies, making fish and wildlife truly "big business" in American today.

Included in this total are more than 42 million Americans age 16 and older who fished in 1980 and 17 million adults hwo hunted that same year. Eighty-three million Americans observed or photographed wildlife during outings or attracted birds and other wildlife to their homes — over 30 million of whom also fish and hunt.

The typical adult American sportsman who fishes or hunts is likely to be male (71 percent), white (92 percent), under age 35 (52 percent), earn under \$30,000 (71 percent), and live in a rural area or town under 50,000 population (76 percent).

These preliminary results from the 1980 National Survey of Fishing, Hunting and Wildlife-Associated Recreation were announced by the Fish and Wildlife Service during the 47th annual North American Wildlife and Natural Resources Conference held in Portland, Ore. The 1980 survey is the sixth in the series of national surveys conducted by the Service every five years since 1955.

This survey is one of the major tools by which natural resources managers and planners better understand the characterisities and preferences of people who use fish and wildlife resources. Through a national report, as well as state-bystate breakdowns that are provided to individual fish and game agencies, managers are provided information that helps them in meeting the demand for increased fish and wildlife recreational opportunities. The recreational equipment industry also uses the survey data as part of its national marketing studies to understand trends in outdoor recreation.

Although final survey results will not be available to the press and public until late May, when the national report will be published, the Service released highlights from its preliminary data during a meeting in late March, a meeting attended by representaives of many of the major federal, state and private natural resource organizations in North America.

Among the 42 million fishermen 16 years and older, freshwater anglers outnumbered saltwater sportsmen by a three-to-one margin (36 million v. 12 millon), although a substantial number enjoy both forms of fishing. Fishermen spent over \$10 billion on equipment, transportation, food and lodging, and licenses and fees and devoted 858 million days to their fishing trips. The survey also showed that there are an additional 12 million young fishermen between the ages of six and 15 years.

The most popular sport among the 17 million hunters 16 years and older was small game hunting (12.4 million people), followed closely by big game hunting (11.8 million), migratory bird hunting (5.3 million), and other types of hunting (2.6 million). Hunters spent \$5.5 billion and reported 330 million days afield in 1980. The survey revealed that an additional two million young people under the age of 16 are hunters.

In addition to the major expenditures they made to pursue fishing and hunting, sportsmen also spent near \$9 billion for related items used in conjunction with their sport, such as boats, trailers and cabins.

Eighty-three million Americans (30 million sportsmen and 53 million people who neither fish nor hunt) reported taking trips to observe or photograph wildlife or engage in such activities around their homes. (Not included in this total are an additional ten million adults who were not active wildlife enthusiasts yet,

nevertheless, indicated that the presence of wildlife added enjoyment ot their lives.) These Americans spent \$14.8 billion on travel and equipment and supplies ranging from binoculars and cameras to birdseed.

Survey data shows that a majority of sportsmen also pursue wildlife activities other than traditional fishing and hunting. Fully 65 percent of all fishermen and hunters engage in forms of "non-consumptive" wildlife recreation, such as photography and wildlife observation

"This survey continues to show that fish, hunting, and other wildlife related activities appeal to many types of Americans," says Robert A. Jantzen, director of the Fish and Wildlife Service. "In addition, it shows how broad an appeal fish and wildlife have for many different

groups in our society.

"There is a tremendous hunger out there for these activities, as the 1980 survey data will document when it is released to the public later this year. This is a challenge that fish and wildlife managers in the federal and state governments must meet, and tools such as this survey are one of the ways we have to predict and understand such trends," Jantzen said.

The 1980 survey cost \$7 million and was performed for the Service by the U. S. Bureau of Census. It was financed with proceeds from excise taxes on hunting and fishing equipment that sportsmen and other outdoor recreation enthusiasts buy. Under federal sport fishing and hunting programs, tax revenues are returned to the states to finance fish and wildlife restoration projects, as well as to fund efforts such as the national survey and its state-by-state

talles.

In the first phase of the 1980 survey, 116,000 households in the Untied States were surveyed by telephone for general information on participation in fishing, hunting and nonconsumptive activities related to wildlife. A second phase, involving personal interviews of 35,000 people, gathered detailed information on participation and expenditures.

The 1980 figures appear to show a slight decrease in the total numbers of fishermen and hunters in the national since the 1975 survey. Fish and Wildlife Service analysts caution, however, that the dip reflects a refinement in survey techniques rather than a national downward trend. (In 1975, when statistics were compiled for sportsmen aged nine years or older, there were 53.9 million fisherman and 20.6 million

(Please turn to page 6)

WASHINGTON, D.C.

Affordable

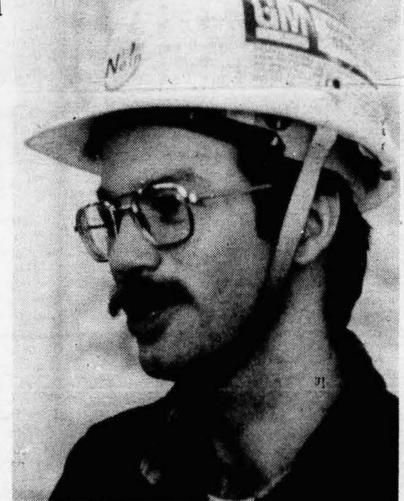
A study for the Natural Resources Defense Council shows that clean air creates jobs.

The Clean Air Act has improved the American economy as well as the health of the American people, according to an economic analysis prepared for the Natural Resources Defense Council.

"The Economic Effects of Clean Air" was prepared for NRDC by the Public Interest Economics Foundation in response to claims by some industry groups that weaker clean air standards would lead to a better economy. The analysis synthesizes the major independent studies in the field

"As the analysis demonstrates, clean air creates jobs. Clean air does not stifle growth or reduce productivity, create a huge capital drain or cause massive price inflation. Clean air is affordable. Direct health benefits exceed costs by a wide margin," Ayres said in a statement.

"Perhaps most telling of all in this time of national anxiety about our ability to meet the challenge of foreign technology, we invest substantially less than one per cent (0.6 percent) of our gross national



W. Va. Clean Air Coordinator Charlie Garlow

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It concludes that economic benefits from clean air far exceed costs. Spending for clean air has added as many as 200,000 jobs to the economy. And even a massive 30 percent reduction in capital spending for air pollution control would have virtually no impact on jobs, prices or output.

"The Clean Air Act is under intense pressure from polluting industries that often claim we cannot afford clean air," said Richard E. Ayres, senior attorney for the NRDC. "That argument did not make sense when it was first advanced in the 1960s. It was proved wrong in the 1970s. It is no more right in the 1980s."

product on pollution control. And that includes private, governmental and consumer expenditures," he added.

"Major changes in the Clean Air Act cannot be justified by a bogus claim that the economy cannot bear the cost of clean air," Ayres said. "That claim has been proved wrong in private, academic and governmental studies. It is time to put the argument to rest for good."

The report's authors are Robert Wolcott, director of the Public Interest Economics Foundation, and Adam Rose, a professor of economics at the University of California at Riverside.

An executive summary of their

report states that:

"The aggregate impacts of the Clean Air Act on the U.S. economy are extremely small and, on balance, positive. Conventional measures of the health of the economy (such as gross national product, unemployment, prices and labor productivity) show very small gains or losses due to the Clean Air Act. Moreover, when these measures are adjusted to take into account health, environmental and economic impacts that are not reflected in conventional market transactions, the economic effects of the Clean Air Act are shown to be clearly beneficial.

"Our review and synthesis of the

literature yields the following conclusions regarding the Act's impact to date:

Output has remained essentially unchanged, with only a modest reduction of approximately 0.1 percent per year. When adjusted to take into account benefits not reflected in market transactions (such as the value of improved health), real welfare has increased.

 Unemployment was 0.1 to 0.2 percent lower per year than it would have been without clean air legislation

 Prices (measurered by the Consumer Price Index) increased very slightly, from 0.1 to 0.2 percent

(Please turn to page 2)