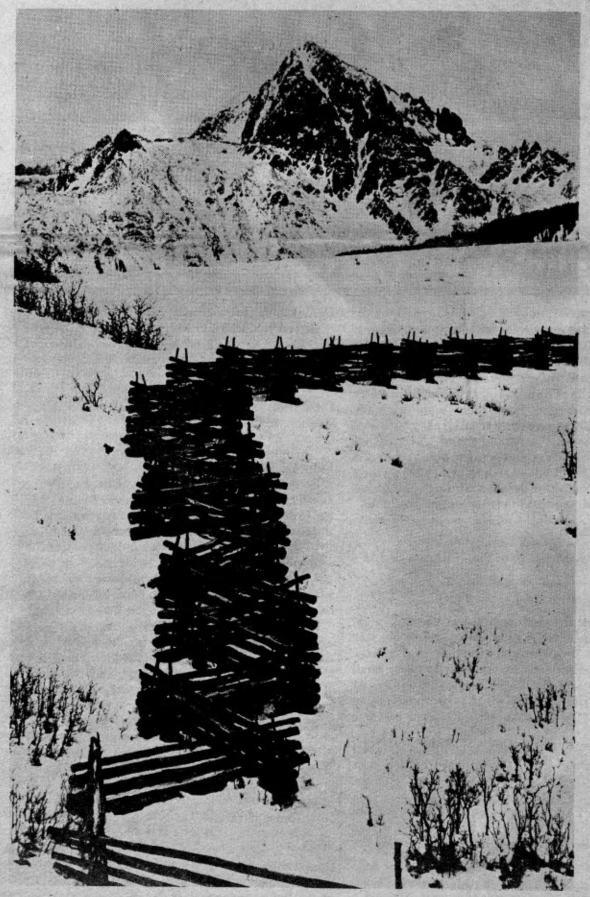




Friday, December 20, 1974

WERRY CHRISTWAS HAPPY NEW YEAR



Mt. Sneffels in southwestern Colorado — one of 37 areas proposed for wilderness classification by the President (see story page 12). Photo by David Sumner.



We all strive for safety, prosperity, comfort, long life, and duliness. The deer strives with his supple legs, the cowman with trap and poison, the statesman with pen, the most of us with machines, votes, and dollars, but it all comes to the same thing: peace in our time. A measure of success in this is all well enough, and perhaps is a requisite to objective thinking, but too much safety seems to yield only danger in the long run. Perhaps this is behind Thoreau's dictum: In wildness is the salvation of the world. Perhaps this is the hidden meaning in the howl of the wolf, long known among mountains, but seldom perceived among men.

Aldo Leopold from "Thinking Like a Mountain" in A SAND COUNTY ALMANAC



HIGH COUNTRY JONE BUR

Christmas has come to this veritable fairyland in eastern Oregon. How different from the raw, rugged winters of Wyoming. Here, weather rests gently upon the landscape even though our valley is noted for deep snow and periods of cold.

How different in so many aspects will this Christmas be for my family and I. Far from the land that we once called home, we have already come to love this setting, this fruitful land, and the friendly people who are our neighbors.

Once used to the spaciousness of a traditional house, it is difficult to get used to the cramped quarters of a mobile home. God willing, next Christmas should see us back in our own home in a site already chosen. Big ponderosa pine are the backdrop to the west. Cottonwoods and alder line the little creek to the south, but far enough away not to block any of the winter sun. Between the house and the creek to the south, we hope to have a small pond — a haven for fish, ducks, and kids bent on a summer swim or winter skating party.

We have already discovered our backyard is a haven for birds. The brush-lined creek and big pine naturally attract them. Now that snow has come we shovel open clearings around the bases of the pines. Yesterday, while it was softly snowing, there was a covey of about 15 valley quail, four flickers, a pair of mourning doves, and dozens of juncos at our feeding

We live no further from the center of town here than we did in Lander. But how different in aspect, granted that Halfway has a population of only 360 while Lander is around 7,500. You would never know the town was so close because of the screen of woods between. Now that leaves have fallen, some lights are visible, but sounds are almost completely muffled. The most noticeable sounds at night are those of owls hooting.

We cannot help but be grateful for our many blessings. As the world moves closer to even more crisis situations, we will be able to withstand much more here on the land. And though we have deliberately deprived ourselves of much that most Americans have come to claim as their rightful standard of living, our own lives seem to be blighted not in the least.

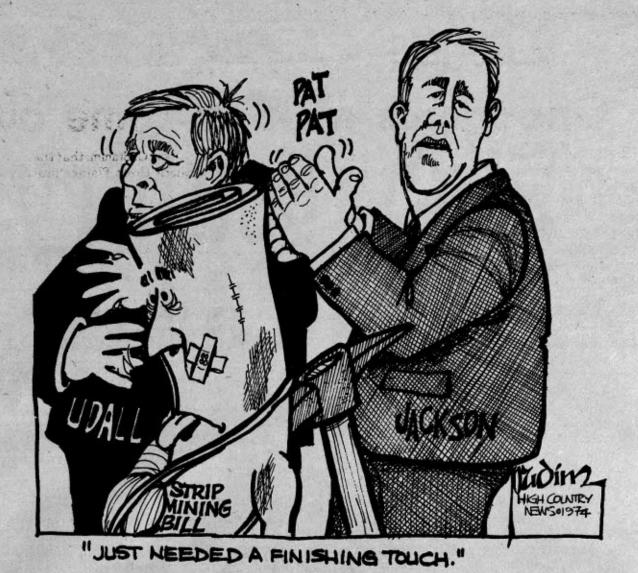
I look upon this as a time of testing. Ahead lie greater privations as the improvidence and wastefulness of our American way of life catches up with us. I am sorry to say it, but I believe there is no other way but down for most Americans. All of the predictions that conservationists, or environmentalists if you will, have made about shortages of natural resources are beginning to come true. The shortages are coming in the face of increasing demands which means higher prices. Energy is only the first of many critical shortages which face us in the years ahead. All of these will make life more difficult for the average family.

So we are fortunate here on this little piece of land. It is fruitful and productive enough to supply many of our needs. A small and close-knit community will draw together to help its members.

We are more fortunate than most and thank God for that. Our native land may be far away, along with family and friends, but we have much for which to be thankful.

Our greetings and best wishes go out across the miles to all those friends of High Country News and those we have come to know through its pages. Our prayers go out to you that you and yours may be blessed as richly as we are at this joyous Christmas season and throughout the new year.





Letters

Dear Editors:

We tallgrass prairie flat-landers were pleased to see Gary Nabhan's interesting article on the 'Prairie Revival' in your Nov. 8th issue. With regard to the proposed Tallgrass Prairie National Park in the Flint Hills of Kansas, two typographical errors should be corrected. First, there were originally about 400,000 square miles of tallgrass prairie (not 40,000). Second, the recommended minimum acreage for a viable Tallgrass Prairie National Park is 60,000 acres (not 6,000) and, in fact, 600,000 acres would be even better though that much contiguous, undisturbed, true prairie is no longer available.

Sincerely, Tom Milne

Kansas City, Kans. Save the Tallgrass Prairie

Dear Editors:

I have just finished reading the account in the Nov. 22 issue of HCN about Meeteetse by Marjane Ambler and consider it an excellent expose of the threat the mining companies pose to many small communities in the Rocky Mountain states. At stake is the quality of life which is too rapidly being abandoned for the sake of short-term resource gains.

The quality of life is worth fighting for, and I feel strongly enough about this to send on a modest donation to the Meeteetse Preservation Organiza-

Although I am in Bend, Ore. for the winter, my heart (and vote) are still in Wyoming. Best wishes for your superior performance in helping to save the environment.

Sincerely, Louise G. Murie (Mrs. Adolph Murie) Resident of Wyoming Dear HCN,

David Sumner's article in the Oct. 25 HCN was excellent. I haven't read such a convincing work of eco-journalism since Walt Whitman's Specimen Days.

Canada 6

Dick Huffstodt Salmon, Idaho

Dear HCN:

Peter Wild's review of "How to Challenge Your Local Electric Utility" in the November 8 issue ironically demonstrates less than objective reporting. In the first column he allows that "there is no comfort in knowing that...(industries) are charged less the more they use, though this is a time of growing power shortage." He concludes his review by noting without comment that the book is available at "1-9 copies, \$1.50 each... 100 or more, 75 cents each."

Is there comfort in knowing that big book buyers are charged less the more they buy, though this is a time of growing paper shortage? It is not necessary to portray as ogres those who have taken advantage of a historically valid price structure, or those who have administered it, just because the time may have come to revise the structure. The criticism should begin upon unreasoned resistance to gradual revisions. There will be enough of that without coloring the discussion in advance.

Doug Long New Concord, Ohio

Dear Editor:

There appears to be a great deal of opposition, in Wyoming, to the repeal of the oil depletion allowance. I have long wondered why the proponents of the oil depletion allowance have failed to point out

Editorials



High Country News-3 Friday, Dec. 20, 1974

pponents need to come out of isolation

Too often, it seems, decisions and attitudes are formed in careful isolation from contradictory evidence. We're more likely to recognize this fault when it appears in those on the "other side" - a pro-development newspaper which seems to emphasize the cost of sulfur scrubbers rather than their benefits, a government official appointing an energy czar who leans toward their own biases, or a water users conference where the only speakers invited are those who will tell the participants what the sponsors want them to learn.

However, "our side," too, can be guilty. We tend to read the newspapers which seem to lean toward our bias; we attend meetings where we talk together to firm each other's convictions.

We can justify this, of course, in many ways, including the feeling that we are members of a much abused minority who need to bolster our egos to gain strength for "the struggle."

Yet the hazards can be illustrated by the example of the Upper Missouri Water Users Association (UMWUA) conference. The meeting was held in Billings, Mont., a few blocks from the meeting sponsored by the Rocky Mountain Center on Environment(ROMCOE). After the ROMCOE meeting, a handful of "environmentalists" joined the group of primarily ranchers and farmers at the UMWUA meeting. There they were told:

1) by Dr. Morton May of the University of Wyoming that land in the region can be reclaimed "to satisfaction" after strip mining and that it's "basically the same as reclaiming a field or a roadside."

2) by the national head of the Bureau of Reclama-

tion, Commissioner Gilbert G. Stamm, that the coal reserves of the Northern Great Plains "must be developed." He said, "I am convinced that those resources can be developed without great damage to the environment and without interfering with the development of water resources for other uses. . . . "

3) by a vice president of Burlington Northern, E.E. Thurlow, that land taken from agricultural use and temporarily devoted to mining "will be traded off for increased agricultural yields since Burlington Northern plans to convert the coal it strip mines to fertilizer.

The few people from the ROMCOE meeting knew that these subjects are not so clear-cut. They had learned at their meeting that reclamation has yet to be proven in the region. That many experts doubt if it will be possible in the semi-arid West, especially in range land. That individual agriculturists will have to compete with industry for water, at an economic disadvantage. And they knew that, in the broader sense, there might be other alternatives for meeting the nation's energy demands, including reducing the demands.

However, the UMWUA audience also included many farmers and ranchers who had never had the opportunity to study the coal question before and so could only accept what they were being told.

The point? What would have been gained if the two groups had met together? Or, more practically, if more ROMCOE participants had been able to attend the UMWUA meeting? Why should we try to mix more?

The obvious advantages, in terms of campaign

tactics, would be learning more about their selling points so we could argue more effectively. And, through our questions, pointing out before the audience the weak points of their arguments, thus introducing more information for those who had not yet formed their opinions.

There would be other less obvious advantages. By engaging in dialog with spokesmen for opposing viewpoints, we may get to know them as individuals so, perhaps, we won't refer to them as simply "the enemy." Considering their information, and weighing it against our own, we might occasionally discard an unsubstantiated belief or add a new one, and, through the process, deepen our own under-

It's not an easy thing to engage in such interaction, to, as F. Scott Fitzgerald said, "hold two opposing ideas in the mind at the same time while retaining the ability to function."

Yet for the growth - and the inner strength - of "the movement" it seems to us to be necessary.



Hearings marred by devious Ph.D.

At sulfur dioxide regulation hearings in Wyoming this month, what seemed to be an orderly presentation of both sides was marred by the somewhat devious tactics of a man with impressive expertise, but also - he felt - with something to hide. The man was Dr. Don Grey, a native Wyoming ite with a Ph.D. in atmospheric sciences and geochemistry, who is presently a scientific consultant based in Salt Lake City.

"My father came here in a covered wagon and settled in Sundance," Grey began. He then proceeded to explain that natural sources of sulfur dioxide exceed "by a factor of two perhaps" those emitted by man's inventions. He also said that on a global scale, levels of sulfur dioxide in the atmosphere had been decreasing since the mid-1960s. "Except in those areas close to sources, the natural processes are going to be dominant," Grey said.

The Environmental Quality Council asked him a number of questions about information he presented. Then, for the record, council member Don White asked him whom he represented.

"I am representing myself in this comment. I am self-employed," Grey said.

After other council members pursued factual questions, White rephrased his query. He asked if Grey had been retained by any group to attend the

Only in the face of White's tenacity did Grey admit that, yes, "Utah Power and Light Company asked me to prepare a supplementary document which may or may not be submitted as an addendum to the written testimony."

Why the attempt to hoodwink the council and the audience? The performance did much greater damage to his credibility than a straightforward admission of his link to industry would have done. -JN

the injustice of repealing the depletion allowance only on oil, since there is a similar tax-free depletion allowance on coal and uranium.

Personally, I would also support the oil depletion allowance, except for two reasons: Some of the proponents of this allowance, such as Senator Cliff Hansen, are adamantly opposed to giving comparable tax incentives to encourage the production of energy from renewable and non-polluting sources such as solar, wind, and waste conversion. Also, with few exceptions, those oil depletion proponents who do not actively oppose such a tax incentive, are certainly doing absolutely nothing to promote such an incentive. For these two reasons I sincerely hope that Congress repeals the depletion allowance on oil, and on coal and uranium as well.

In 1941, a single windpowered generator was erected near Rutland, Vermont. It generated enough electricity to supply a town of 1,000 people. It was actually tied into the transmission system of the Central Vermont Public Service Corporation. It proved to be a practical way to generate electricity on a commercial scale. In 1945 one of the propeller blades broke off in a high wind. The project was then abandoned because of the competition from cheap oil — oil that was made cheap by the 271/2% taxfree depletion allowance.

If the proponents of the oil depletion allowance are really serious about trying to solve the energy shortage, instead of just lining their pockets, why don't they actively support a tax incentive to effectively encourage the production of energy from renewable and non-polluting sources?

True enough, there has been a small (compared to coal and nuclear) amount of money grudgingly appropriated by Congress for research in the alternate energy fields, but no effective tax incentives are being seriously considered. You don't hear the oil producers asking for research grants. They want

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tax incentives. Because tax incentives are all that really mean anything.

Sincerely, Stephen Tarver Gillette, Wvo.







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Unexpected esthetic and social impacts

Jim Bridger builders break promises

by Gowen Green

Promises. You hear many when a big industry locates nearby. They are a necessity — government approval and public acceptance of the development proposal must be won. The fate of the industry rests on its ability to invoke favorable opinions. But the promise maker is not always honest. Industry is sometimes tempted to make promises it cannot or may not honor.

This is a case history of the Jim Bridger Power Plant — a history of promises broken at public expense. Bridger is being built by Pacific Power & Light Co. and Idaho Power Co. near Rock Springs, Wyo. One 500 megawatt (MW) unit is operating, two more are under construction, and permits for a fourth are being obtained.

At 2,000 MW, Bridger will be nearly as big as the infamous Four Corners Power Plant near Fruitland, N.M. Bridger is fired with coal from a nearby strip mine which is operated by a subsidiary company. All water used by the plant is pumped



In places, the aluminum towers can be seen from over 20 miles away. Wooden towers could have been used instead, or the aluminum could have been treated to reduce its shine.

through a 40 mile pipeline from the Green River. The plant is equipped with electrostatic precipitators, but there are no sulfur controls. The primary market for the power is the Pacific Northwest. Since very little of Bridger's power will be used in Wyoming, three 345 kilovolt (KV) transmission lines will extend over 200 miles to feed the grid at substations in Idaho.

MANPOWER PROMISES BROKEN

Newspapers across the country carry stories about Rock Springs—boomtown of the century (see HCN, June 7, 1974). They give a generally true, and not very pretty, description. Public schools and the sewage system are overloaded. There is an acute shortage of housing and doctors, increased crime, mental disorders, and traffic problems.

But the newspaper stories have all failed to uncover one very important point. Each of these social impacts was either created or intensified by a self-serving decision made by the power companies — a decision contrary to a promise made before construction began.

In 1970 the companies held a pre-construction public meeting in Rock Springs. They stated at this meeting that construction man power would peak at 1,200-1,250 workers. The city planned accordingly. Promises! In the summer of 1973 employment at the plant peaked at n arly 3,000 workers. According to Mayor Paul Wataha, the city government hadn't even been forewarned that 140% as many workers would show up as had been planned for. The extra workers arrived unannounced.

In 1970 the city contracted Midwest Planning and Research to prepare a comprehensive land use plan covering housing, sewage, transportation, and other factors. The unexpected deluge of workers rendered the plan obsolete in a matter of months. This fall, employment still exceeded 2,000. The power companies do not expect it to drop to below 1,250 until late 1976.

Apparently the extra workers were hired because construction was already three months behind

schedule by early 1973. But boosting manpower was not the only possible remedy for scheduling problems. Employment could have been maintained at 1,250 if the power companies had chosen to pay employees overtime pay.

EXPEDIENCE BEFORE PROMISES

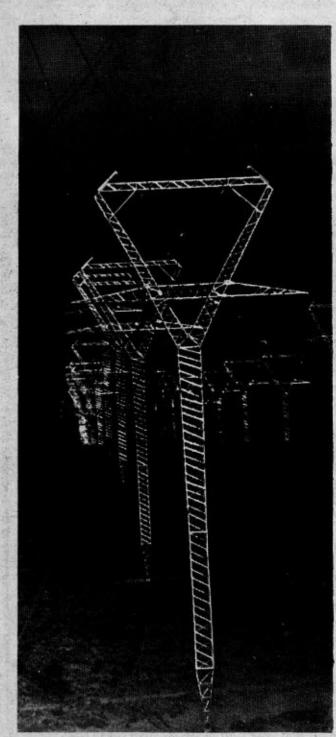
Man hours per employee can be increased 65% by working six 11-hour shifts per week. Such work schedules are not uncommon in heavy construction. For the industry, the only big disadvantage of working overtime is increased labor costs.

It would appear that the schedule for Unit 1 could have been allowed to slip to early May 1975. Unit 1 went into service this November, just in time for the low demand winter months. It was five months behind schedule. By delaying completion an additional six months, the unit would still have been ready for the peak-demand summer months, and the extra time would have permitted use of a smaller work force.

This May 1975 completion would have been possible, according to calculations using Bridger employment records. Schedules for Units 2 and 3 would not have been affected. If the men had worked overtime and the schedule altered slightly, the plant could have been finished in reasonable time without increasing impacts on Rock Springs. It seems it was more expedient and profitable for the companies to break their manpower promise and let the city take the hard knocks for the companies' errors.

SMALL PROMISES BROKEN VISUAL IMPACT

Construction of Bridger has resulted in several visual impacts which are in violation of promises made by the companies. Most of these promises are in the Final Environmental Impact Statement (EIS), which was prepared by the BLM. The companies were consulted in the preparation of the EIS, and they had ample opportunity to correct any errors during the public review process, if they wished



The 345 KV transmission lines are suspended between aluminum towers, despite the fact that the companies promised to minimize the visual impact. A third line will be added to the two shown. The three lines will extend over 200 miles to feed the grid at substations in Idaho.

"These impacts represent a corporate con-game perpetrated on the public. They portend unannounced impacts of future industrialization which may be of much greater significance." The plant site is easy to spot from Interstate-80. The EIS states "The top of the plant's smoke stacks, a 230 KV tap line, the railroad spur, and access road will to some degree be visible" from I-80. "While the semi-remote location and undulating topography will shield a major part of the complex from view along Interstate 80, the smoke stacks and particulate emissions from them may be visible to interstate traffic." Although vague, the statements indicate that only emissions, the top of the chimneys, and certain service facilities will be visible.

But a photograph taken from I-80 shows that "a major part of the complex" is **not** shielded from view. In fact, the **entire** complex is visible.

Promises . . .

TOWER IMPACT UNMITIGATED

The corridor for the 345 KV transmission lines is over 200 miles long, crossing vast stretches of plains where the towers are easily seen from the distance. The companies gave this problem some consideration. According to the EIS, "The companies are attempting to minimize adverse visual impacts of the transmission towers." And from the Casper Star-Tribune, "Both the line's route and design were selected with 'great care' to minimize its visual impact, the superintendent (J. F. Servis, Idaho Power Construction Superintendent) said." The best of intentions are claimed in both cases, but the companies haven't even come close to minimizing the impact.

The towers are aluminum with an unmitigated, eye dazzling finish. Photographs can't convey their brilliance. In places they can be seen from over 20 miles away, the only visible scar in the distant land-scape, marching across the plain or over a mountain.

Other tower designs could have presented less objectionable visual impact. Around Rock Springs there are 230 KV lines for construction power made of two wodden poles with an X-brace at the top. In California, Pacific Gas and Electric has in some instances treated steel towers with acid. The result is a dull, medium gray finish which greatly reduces the visibility of the towers, except when on the skyline.

SCAR ON WHITE MOUNTAIN

The buried water pipeline that services Bridger crosses White Mountain northwest of Rock Springs. The pipeline descends the east scarp of the mountain. Its scar is visible for several miles on I-80 and from most parts of Rock Springs and outlying areas. It is stated several places in the EIS that the pipeline right-of-way would be "approximately 50 feet wide." The scar actually measures 115 feet across. The EIS says, "The scenic quality of White Mountain will unavoidably be impaired by a scar approximately 50 feet wide and two miles long. . . exposure of different colored subsoils may make the disturbance a relatively permanent feature of the landscape. Because the scar would degrade this area within view of a large general public, the impact is rated high in importance." Despite this heavy emphasis on the impact, the width of the scar was more than doubled with no public announcement. Once again, the companies have broken a promise at public expense.

CORPORATE CON-GAME

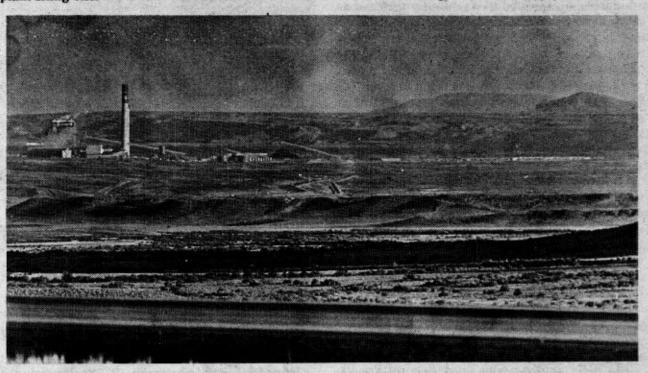
To some people, it must seem inane to fret over a transmission tower shining in the distance or a 100-foot swath of bare dirt on a mountainside. But these impacts represent a corporate con-game perpetrated on the public. They portend unannounced impacts of future industrialization, which may be of much greater significance.

These impacts and breached promises raise a critical question. If industry decides it must deviate

from its publicly announced plans, particularly those which have been subject to public hearings, who should decide whether or not the change in impact is inconsequential, and whether or not that deviation should be permitted? Should industry decide?

That hardly seems wise, but industry is allowed to do it (by default). Perhaps the best way to protect the public would be to add a "good faith" provision to plant siting bills which will be considered in 1975 High Country News-5 Friday, Dec. 20, 1974

state legislatures. A state agency could be required to conduct a point-by-point follow-up of all promises made for each project. Breach of promise, intentional or accidental, could result in high fines and a requirement for the company to correct the infraction, if possible. Strong plant siting legislation would insure this protection of the public interest.



The entire Jim Bridger complex is visible from the highway. From left to right: the boiler and cooling tower, precipitator, three stacks (almost in line), coal conveyors and storage yard (not full yet), and trailers in the construction camp. The switchyard is also visible from I-80 but is off the left side of the picture.

Radioactive gas not salable

Radioactive natural gas released with nuclear explosives in Colorado's Project Rulison won't ever reach the consumer's pipeline.

The decision was made this month by industrial sponsors of the Atomic Energy Commission's plan to shake gas out of a marginal field.

The Rulison blast in 1969 near Grand Valley was followed by the Project Rio Blanco shot near Meeker, Colo. last year. Neither of these experiments have produced any marketable gas.

Spokesmen for Project Rulison blamed the lack of production on technical troubles at the Rio Blanco well and public sentiment against further nuclear explosions in Colorado. Amendent 10 to the Colorado constitution forbids underground nuclear explosions without voter approval. The amendment was passed in the last Colorado election.

Idaho Power victim of whisper campaign

A group of Boise, Idahoans, have begun an environmental "whisper campaign," sources say.

The group, the Boise Coalition of Citizens, has placed short ads in the personal columns of newspaper classified sections. One ad which appeared in the Idaho Statesman announced: "If you are interested in stopping pollution from spreading in Treasure Valley, call 343-5262." At that number, the following recorded message lay in wait: "Idaho Power is going to build a coal-powered plant with emissions that threaten to make our air like that of Los Angeles. Protest to Gov. Andrus and Boise Mayor Eardley."

Another classified ad asked readers to "Protect the health of the unborn! If you are concerned, please call this Boise telephone number: 343-5262." The message at the end of the line: "Preserve Treasure Valley for future generations. Call Idaho Power, 345-7210, and order them to halt their power plant plans." A Colorado firm has paid \$2.5 million for purchase rights to any gas that might emerge from the well and the 56,000 acre Rulison field. But before marketing can take place, a new AEC rule must be made to cover products containing artificial radioactivity. A spokesman for the firm, Colorado Interstate Corp., says, "Rulison by itself—just that one well—would not be economic. And we would not want to take all the flak we know we would get in setting up a rule-making procedure if that's all the gas we have to sell."

Farmers Union takes strip mining stand

The Montana Farmer's Union has taken a stand opposing strip mining without adequate tax returns and strong reclamation measures. They also oppose coal-fired generating plants in Montana, "because these belong near the place where the power will be consumed."

The group's president, Clyde Jarvis, explained the group's position at Federal Energy Administration hearings held in Billings.

"We can't in good faith buy such glossy phrases as Project Independence, because we know the ultimate results for Montana," Jarvis said. "It sounds very patriotic to speak of Project Independence. But to concerned Montanans, who really care about our land, water, air, and people, that high sounding phrase has the ring of a counterfeit coin."

"We Montanans don't like lead coins, even when they're dangled before our faces with promises of sudden wealth, and wrapped in the American flag, so we might be shamed into accepting false priorities," Jarvis said.

"We are concerned with the energy needs of the rest of the nation, but we don't believe we should be exploited and our land, water and air ruined forever," he said.

Wyoming holds hearings on sulfur dioxide regs

Utilities and air advocates clash

by Joan Nice

Industries interested in Wyoming confronted an outspoken assortment of Wyoming people at hearings on the state's proposed sulfur dioxide regulations in Chevenne this month.

One witness called the sulfur dioxide question "one of the most important" ever faced in his career. That man was Robert Moench, Wyoming division manager and vice president of Pacific Power and Light Co. Many of the more than 50 other speakers who marched up to the podium seemed to feel the same way — for a variety of reasons.

The proposed regulations would mean expensive sulfur abatement equipment, would yield questionable benefits, and would possibly cause environmental harm, industry witnesses claimed. Non-industry speakers contended that if strict regulations were not approved, health, agricultural production, and the Wyoming way of life would deteriorate.

Each individual, group, or company was limited to 10 minutes at the podium. About twice as many people spoke in support of the proposed regulations as spoke against them.

The strict sulfur dioxide rules were proposed by the state's Department of Environmental Quality (DEQ). The Wyoming Environmental Quality Council, a body of laymen apointed by the governor, will make the final decision. On the hearing days, Dec. 9 and 10, the council endured 10 hours of heated, contradictory debate. They are scheduled to act on the regulations by Jan. 7.

HEAD-ON COLLISIONS

Head-on collisions of the facts occurred on a number of points:

—The cost of scrubbers? Estimates ranged from 10% to 30% of the construction costs of a plant.

—The cost to consumers? The consumers bill would rise anywhere from 3% to 16%, depending upon which speaker you listened to.

The risk to human health and vegetation if we don't pass these proposed regulations? Some speakers cited evidence to indicate the risk was non-existent, some to show it was real.

PIONEER BLOOD AT THE PODIUM

The intensity of the battle was reflected in many of the speakers' introductory remarks. Speakers supporting the proposed regulations boasted of their long lineage of Wyoming ancestors and of the fact that they hadn't been paid to testify.

Industry witnesses emphasized credentials, corporate neighborliness, and their duty to protect the consumer from shortages and high costs of power. A number of them praised the weaker U.S. Environmental Protection Agency's air standards as "entirely adequate."

Industry witnesses also claimed to be watchdogs of the environment. "If the federal EPA were considering the adoption of regulations such as you

Donald Lamb, chairman of the Wyoming's Environmental Quality Council, led and listened to over 10 hours of public debate on the state's proposed sulfur dioxide regulations this month. The proposal would severely limit emissions from the smokestacks of coal and oil fired equipment. It would require sulfur dioxide removal on a sliding scale, growing with the size of the plants. Large plants would be required to remove up to 88% of their sulfur dioxide emissions. Members of the council will act on the matter by Jan. 7.

have before you today, it would prepare a complete environmental impact statement before going forward," said Richard Bach of Pacific Power and Light Co.

INDUSTRY PATERNALISM

A number of speakers decried the paternalism of industry representatives who wanted to protect consumers from high-priced power. "Have you heard one consumer here who wasn't willing to pay higher prices for their power to get clean air?" asked University of Wyoming student Joanne Dunnebecke. (No consumers testified against higher rates.)

Willard Weber, a Wheatland farmer and member of the board of directors of the Wheatland Rural Electric Association predicted that, if clean air were at stake, people in his area would be "more than happy to pay their share."

With one exception, only people representing or retained by affected industries testified for weaker regulations than were proposed. (The exception was a speaker from the Colorado School of Mines.)

Among the firms represented were Utah Power and Light Co. (UP&L), Pacific Power and Light Co.

(PP&L), Panhandle Eastern Pipeline Co., FMC Corporation, Texasgulf, Inc., Tri-State Generating and Transmission, Basin Electric, Black Hills Power and Light Co., and Stauffer Chemical Co. of Wyoming.

Groups and firms who presented testimony in support of the proposed regulations included: League of Women Voters, Wilderness Society, Laramie Chamber of Commerce Environmental Quality Committee, Davy Powergas Inc. (a sulfur scrubber manufacturer), American Lung Association, Sierra Club, Powder River Basin Resource Council, and Wyoming Outdoor Council.

The citizenry of Platte County, the site of a proposed 1,500 megawatt coal-fired generating plant, was well-represented at the hearing. Seven farmers and ranchers from the area, including the president of the Wheatland Farm Bureau, made statements in favor of the proposed regulations.

STRONG STATE BACKING

Randolph Wood, administrator of air quality in the department which proposed the regulations, made a strong appeal for adoption. "We do not need to re-invent the wheel," he said. "I believe that the technology is advanced to the state where reliable and efficient systems can be purchased."

Wood said that the Council had a legislative mandate to prevent unabated pollution and to protect and enhance the air quality in the state. "We interpret this to mean that the people of this state deserve all possible protection from the addition of air pollutants generated in power production," Wood said.

Wood was backed up by a chemical engineer who teaches air pollution control at Southern Illinois University. The engineer, Dr. Howard E. Hesketh, spoke at the request of the U.S. Environmental Protection Agency. He called air pollution control equipment one of today's best investments. When the costs of repairing air pollution damages are assessed, Hespeth said, preventing the damage by buying air pollution control equipment yields 15% on every dollar invested.

THE CHALLENGE OF SLUDGE

He called sulfur sludge, the substance which results from some types of scrubbing processes, "a challenge, a by-product." Scrubbing low sulfur coal produces calcium sulfate which after processing is gypsum, an important material for the construction industry, he said.

Hespeth's ideas for utilizing sludge were countered by Dr. J. Louis York, chief environmental scientist for Sterns-Roger, who spoke on behalf of a group of utilities which included UP&L and PP&L. He called the scrubbing product "a huge stockpile of impure gypsum." During the total life of a 100 megawatt power plant unit, a minimum of 100 acre feet of sludge would be produced, York said.

In his testimony York also mentioned other environmental effects of the installation of scrubbers.



Other members of Wyoming's Environmental Quality Council pondering sulfur dioxide regulations are (left to right) Keith Becker, Don Thorson, Earl Ferguson, Bob Godfrey, Lee Keith, and Don White.

For a 100 megawatt plant, 400 tons of structural material would be needed, he said. In addition, the scrubbers would require 6,500 tons of lime per 100 megawatt unit per year. Demand for water could be as high as 20% of the total water needed for the plant and the additional energy requirement could be as high as 10% of the energy delivered to the transmission system, York said.

ECONOMIC DISASTER

Industry speakers also emphasized the capital and operating costs of the scrubbers which would be required by the new rules. The devices would be "not so much an environmental asset as an economic disaster," said Robert Moench of PP&L. "They may cripple the Wyoming utility industry financially." Although he made no estimate of exactly how much rates might raise, he said "our customers can't afford it."

Randolph Wood estimated that the power consumer's bill might rise somewhere between 9% and 16% as a result of the regulations. Howard Hesketh figured the rise would only be 3%.

The cost might be more than 3% if consumers were charged for the cost of power from an individual system, but "power companies don't charge that way," said Ruth Weiner, a member of the EPA advisory council who gave expert testimony for the Wyoming Outdoor Council. Higher costs for a plant with scrubbers would be spread out over the costs of producing power for every plant in a utility's system. Weiner, who lives in Bellingham, Wash., said she was enjoying "very cheap power in the Northwest," the region which will be the market for some of the power produced in Wyoming.

"It seems to me that the users certainly ought to pay," she said.

PLANTS AND SULFUR

The question of health and vegetation effects of sulfur oxide pollution were painted differently by the industry and the non-industry factions.

Dr. Clyde Hill, a biologist from the University of Utah who testified for the utility group which included PP&L and UP&L, said that federal secondary standards were "adequate to protect vegetation." He also said that in the West "relatively small amounts" of the sulfur dioxide emitted were converted to highly toxic sulfate particulates, or acid rain. "The conversion of SO2 to sulfates (SO4) in remote areas is very low. The rate is not high enough to have adverse effects on vegetation or public welfare," Hill said.

To the contrary, Dr. Michael Williams, an air pollution specialist, said that Hill's own studies reported that a flowering plant called globe mallow was damaged at a level within the limits set by federal standards. Williams testified for himself, the Sierra Club, and the Powder River Basin Resource Council.

Williams also warned that chamber studies, which Hill had cited, might not parallel effects in an uncontrolled situation. "When you do gas chamber studies you usually just apply the same concentration (of SO2) throughout, which gives you a very misleading picture of what kind of effects might occur."

SMOG FACTORY IN THE SKY

Williams also contested the Utah biologist's reassuring remarks about a low level of sulfate conversion. "Normally you assume that natural sources convert very slowly to sulfates," Williams said. "However in studies where you have things with the sulfur dioxide, such as nitrogen dioxide and high levels of particulates, you get a much different situation."

Add sunlight and humidity, which averages 50% in the "dry" Farmington, N.M. region, and you have "a perfect photochemical (smog) factory," Williams said.

An industry environmental analysis of the proposed Kaiparowits coal-fired power plant in southern

Utah states that a 23% conversion rate of sulfur dioxides to sulfates is to be expected, Williams said.

Tyler Dodge, a farmer from Platte County, questioned industry witnesses' claims of "good ventilation" in the West. "We are subject to temperature inversions even though we have our West winds," Dodge said. "People in agriculture who watch the weather know this."

HEALTH EFFECTS

A doctor who testified for the utility group, told the council that "no health benefits can accrue from stricter standards."

"The health effects of SO2 and SO4 have in certain quarters been grossly exaggerated," the doctor said. He based his conclusions on studies which showed that exposures to high levels of sulfur dioxide in industry (in the absense of particulates and nitrogen oxides) does not seem to impair the health of workers. "Sulfur dioxides are not the chief cul-

High Country News-7 Friday, Dec. 10, 1974

prit," he said. He cited no evidence on the effects of sulfates (SO4), however.

In earlier testimony Randolph Wood had claimed, "At the present time there is much concern within EPA and the health community that sulfate acids and aerosols which can be correlated with SO2 emissions constitute a health hazard that is not addressed in the current (federal) ambient stan-

"I disagree with the concept of delaying action until the final absolute answers are available," Wood said.



Kennecott says tall stacks will clean Utah's air

Kennecott Copper's solution to Salt Lake City air pollution is a construction program and a 1,200 foot smokestack.

Those efforts are costing Kennecott \$175 million. But the U.S. Environmental Protection Agency says they aren't good enough to meet the requirements of the Clean Air Act.

The controls might make Kennecott's Magna smelter just barely meet national ambient air standards, which will go into effect in mid-1975. But, while doing so, the smelter might continue to degrade clean air for miles around, the EPA contends.

In August of 1973 the smelter unveiled a major construction program designed to meet EPA air standards. As well as a new, tall stack, the plan outlined changes in the smelting process and gas handling equipment and initiated computerized backup controls. The backup, a "Supplemental Control System" (SCS), was designed to monitor atmospheric conditions and slow down or stop the smelting process when the situation was dangerous—during a bad air inversion for example.

These devices, combined with a tall stack, might allow Kennecott to meet federal standards, the EPA admits. But the agency says the Clean Air Act specifically states that standards must be met by limiting emissions — not by dispersing them.

With a tall stack the same amount of pollution is released into the atmosphere as with a short one, but the chemicals are spread out over a much greater volume of air. Pollution close to the plant may be decreased, but over the wider area "that doesn't mean it isn't there," says EPA air pollution expert Marius Gedgandas.

Kennecott officials claim that it doesn't matter how standards are met, as long as they are met. On the EPA's side in the dispute is a 1974 Fifth

On the EPA's side in the dispute is a 1974 Fifth Circuit Court of Appeals decision which stated that tall stack dispersion and SCS are only acceptable if all other known pollution controls are not adequate.

Complicating the controversy is the fact that Kennecott had already formulated its approach to pollution control before the courts crystallized this portion of the law.

The EPA's proposed emission regulations for the smelter were the subject of a public hearing held Dec. 11 and 12 in Salt Lake City.

At the hearings Kennecott claimed that the agency was "dilatory" in not promulgating its regulations in 1972 before the smelter developed its new program. James Lehr of EPA said that the accusation was unjustified. EPA has been making "every effort to reach agreement with Kennecott," he said.

The general manager of Kennecott's Copper Division, B. B. Smith, was dissatisfied with meetings

held with his technical people and EPA over the past year.

"Everyone over there (in Denver) is trying to design our smelter for us," Smith said. "(The EPA) can design that smelter until hell freezes over, but we're going to design that smelter to meet engineering standards and that's all."



WHAT WE KNOW ABOUT OXIDES OF SULFUR

Major source: fuel combustion

Minor sources: chemical plants, metal processing, trash burning

Nature: Sulfur is a nonmetallic element found in coal and fuel oil. When these fuels are burned, sulfur joins with oxygen in the air to form gaseous oxides of sulfur, including dioxide (SO2) and sulfur trioxide (SO3).

Effects: Sulfur oxides, in combination with moisture and oxygen, can yellow the leaves of plants, dissolve marble, and eat away iron and steel. They can limit visibility and cut down the light from the sun. They can affect man's breathing: at sufficiently high concentrations, sulfur dioxide irritates the upper respiratory tract; at even lower concentrations, when carried on particulates, it appears able to do still greater harm by injuring lung tissue.

Conclusions found in the federal criteria document: The criteria Resume for sulfur oxides reports that increased mortality occurred when the annual geometric mean was as high as 115 micrograms per cubic meter. Adverse effects can be detected when SOx pollution exceeds certain levels for short periods of time. These effects are especially evident in the case of sulfur dioxide. Levels of 300 micrograms per cubic meter of SO2 for three or four days have been associated with a variety of adverse health effects.

Reprinted from A CITIZEN'S GUIDE TO CLEAN AIR, available free from The Conservation Foundation, 1717 Massachusetts Ave., N.W. Washington, D.C. 20036.



The state of the s

Reckoning from Washington

by Lee Catterall

Bullish behavior by Sen. Henry Jackson (D-Wash.) and an inept courier of the Pennsylvania congressional delegation allowed the strip mining bill to be killed by a veto by President Ford.

Those two factors allowed Ford to either pocket veto the bill — that is, allow it to rest on his desk for 10 days so an adjourned Congress could not override it — or give it a regular veto without fear of it being overriden.

As the close of this congressional session appreached, the bill became increasingly fragile. It finally needed only a few nudges to be shattered.

The bill looked destined to become law when Congress returned from its Thanksgiving recess.

A joint conference of senators and congressmen working out differences in versions of the bill that had passed the Senate and House appeared ready to agree on the bill's most controversial issue — whether landowners should be allowed to forbid strip mining on their land for federal coal and, if so, under what circumstances.

In stepped Jackson, who had attended previous conference sessions only rarely. Jackson complained about the agreement on that issue, and his complaints resurrected the split.

Two weeks were to pass before the effect of Jackson's instep could be overcome. Ironically, it was Jackson himself who finally proposed the final agreement, which ran counter to his complaints even more than the one he opposed a fortnight earlies.

Those two weeks were crucial, for their passing threw the bill's time schedule into the 10-day period allowing a pocket veto.

Rep. Morris Udall (D-Ariz.), the bill's House sponsor, attempted a short cut. A parliamentary challenge to the bill had been created by the conference's adoption of proposals contained in neither the House nor Senate bills. That violates House rules, and, unless a two-thirds vote in the House decides otherwise, the challenge must be heard by the House Rules Committee. Udall attempted the two-thirds floor vote as a time-saver.

But one of those new parts of the bill had upset many congressmen. It would have taxed coal companies 35 cents a ton for strip mined coal and 25 cents for deep mined coal. The money would be used for restoring strip mined land from past years and relieving the predicted social impact on western coal areas.

When the conference earlier had adopted a 35 cent tax for both strip mined and deep mined coal, the Pennsylvania delegation, through its man on the conference — Rep. Joseph P. Vigorito — threatened to vote as a bloc against the bill if the tax were allowed to stay in.

The conference then reduced it to 25 cents, and Vigorito said that was okay. For him it was, but only half the Pennsylvanians agreed.

Consequently, 30 congressmen from deep mine areas switched their favorable votes cast in July, and voted against allowing the House rule to be broken. That was the precise number by which the Udall short cut attempt failed.

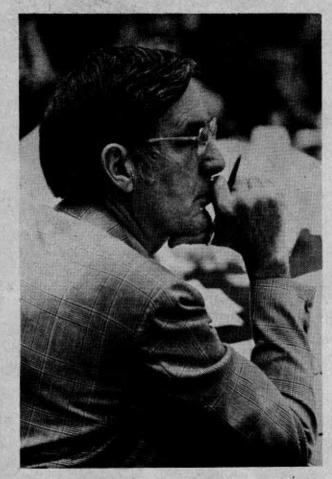
A successful vote on that would have beaten a pocket veto to the punch, and probably given enough votes for an override of a regular veto.

Udall then had to face the parliamentary challenge in the Rules Committee, which consumed most of last week to hear it.



Strip mine bill supported by new voices before veto announcement

President Ford's high handed announcement that he would veto the federal strip mining bill came at a



Rep. Morris Udall (D-Ariz.) chaired the proceedings of the conference committee on the federal strip mining bill. When told that President Ford planned to veto the bill, he accused Ford of "selling out" to the coal and utility interests.

Photo by James Benfield

time when some of the most unexpected voices have been urging stronger strip mining controls.

In Washington, Interior Secretary Rogers Morton discouraged the veto because the new Congress might enact "an even more restrictive bill" next year, according to the Rocky Mountain News.

In the West, two traditionally growth-orientated newspapers both urged strip mining controls during the past weeks. The **Casper Star-Tribune**, of Wyoming, which brags of being in the "energy capital of the world," said, "We do not buy the coal industry position that passage of the bill will boost electrical bills 55% to consumers. . . . The reclamation cost is 'peanuts' by comparison to the value of the product."

The second paper, the **Deseret News** of Utah, called for a state strip mining law to supplement the federal law which, when the editorial was written, looked as if it was going to be enacted. Utah and Arizona are the only Western coal bearing states which have no state controls. The **Deseret News** called for control of oil shale strip mining as well.

In the Midwest, where the awareness of food production needs is perhaps the most intense, governors have been speaking out recently for controls to protect agricultural land.

The only favorable reaction reported to the veto announcement was Carl Bagge, president of the National Coal Association, who said he was "gratified that President Ford had the courage to take a stand which may be unpopular." He said the veto will "avoid a crippling and inflationary reduction in the supply of coal this nation must have."

Rep. Morris Udall (D-Ariz.), who had chaired the proceedings of the conference committee on the bill, accused Ford of "selling out" to the coal and utility interests, which he labeled as "some of the most greedy, backward forces at work in this country today."

EPA may regulate radioactivity

The Environmental Protection Agency will reluctantly move into the business of regulating the discharge of radioactive materials into U.S. waterways—if an appeals court decision is affirmed by the Supreme Court.

The U.S. 10th Circuit Court of Appeals struck down an earlier decision by Denver U.S. District Judge Fred Winner who ruled that the EPA had no duty to regulate radioactive discharges from nuclear installations licensed by the U.S. Atomic Energy Commission (AEC).

The appeals court thought the agency's mandate in the 1972 amendments to the Federal Water Pollution Control Act was clear. The amendments charge EPA with regulating pollutants discharged into "navigable waters." "Radioactive materials" are specifically included among the pollutants to be regulated.

But the EPA and the AEC had made an agreement which put natural radiation in the domain of EPA and radiation from man-made processes in the hands of the AEC.

"No exceptions having been set forth in the statute as concerns radioactive materials, it would follow that the term 'radioactive materials' means all radioactive materials, and so we hold," the appeals court said.

The decision was a victory for the Colorado Public Interest Research Group and Colorado Environmental Legal Services, which joined with residents living near two nuclear facilities in Colorado to bring a lawsuit against EPA in Oct. 1973. A spokesman for the research group called the court decision a "fantastic step for the environment."

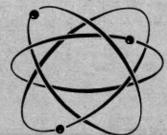
MHD to offer more electricity

Magnetohydrodynamics (MHD), a yet-to-beproven method of electrical power production, has been boosted by recent experiments in General Electric's Space Sciences Laboratory. In MHD, an inert gas is heated to 2,500 to 3,000 degrees F. The hot gas is then passed at high velocity between the poles of a magnet to directly generate an electrical current.

The GE method of heating the gas, by compressing it with shock waves in a 60-foot tunnel, achieved an impressive 20% efficiency. Other attempts have obtained only a three to eight per cent efficiency, according to Solar Energy Digest.

After the MHD process, conventional steam turbines can utilize MHD exhaust gases to generate additional electricity. Thus, MHD in combination with steam facilities may offer more electricity for the same amount of fuel. It also offers the advantages of less thermal pollution and sulfur doixide and nitrogen oxide emissions.

For now, however, technical problems related to the endurance of the equipment remain to be solved.



Emphasis ENERGY

in the Rockies and Great Plains

The focus of oil shale development could move from Colorado to Utah, according to the president of Skyline Oil Co., Rulon K. Nielson. Part of the reason for this shift is Colony Development Operation's decision to mothball its Colorado oil shale project. Another is the Utah political climate, which Skyline says is "more favorable to shale development than is Colorado's." To make conditions even more favorable, the shale companies would like the federal government to guarantee the price of oil from shale to protect them against a possible price drop, the executive says. Meanwhile, a \$10 million government-industry research effort to perfect underground oil shale processing has been proposed for Utah by a private Denver-based synthetic fuels consulting firm. The federal government and industry would each put up half of the cost of the project. Results of the research on in situ processing would become public property.

A Bull Mountain rancher, Boyd Charter, has started up his own advertising campaign to counter Montana Power Co. ads which boost the company's proposal to build two new power plants at Colstrip, Mont. Charter said he is "digging deep in his jeans" to get money for his ads, but he hopes to get support from other ranchers and residents. He resents Montana Power using his money, as a consumer, for its \$100,000 multi-media advertising blitz.

Gillette, Wyo. can't boom yet. It doesn't have any place for newcomers seeking plentiful jobs in the energy industry to live. "There is still an extreme shortage of jobseekers and many projects continue to operate shorthanded," says the Employment Security Commission. "Most of the wages are good, but it is hard to encourage jobseekers to come to the area where there is such a housing shortage."

Montana and its local governments tax the production of coal, oil and natural gas at a level higher than any other state. The percentage of gross value paid as taxes last year was 12.4% on coal production, 12.5% on oil production, and 13% on natural gas production. The nation's next highest state was Wyoming with 6.8% of gross value on coal, 9.1% on oil, and 9.4% on natural gas.

In the last two years cattle have added more to the Rosebud County, Mont. tax coffers than coal development, according to Colstrip rancher Bill Gillin. Coal development has added \$976,334 to the taxable valuation and cattle have added \$1,525,532, Gillin says. "Those same cattle are not causing any impact on our roads, schools or law enforcement, but are having to help pay for the coal companies impact," he says.

Pacific Power and Light Co. has announced plans for construction of electrostatic precipitators at the Dave Johnston plant near Glenrock, Wyo. Bob Moench, vice president and Wyoming division manager for Pacific Power, said the precipitators would be used because a scrubber on generating unit No. 4 "had not demonstrated the degree of operational reliability necessary for public utility use." Moench said that with low sulfur coal and the electrostatic precipitators, the plant will be well within both state and federal emission control standards. However, A Sierra Club research team has found that "low sulfur" coal in eastern Wyoming is not low enough to pass U.S. Environmental Protection Agency standards because of the number of pounds of coal that must be burned to produce equal heat value. (See HCN, Nov. 22, 1974)



Marilyn S. Kite, attorney for the Wyoming Department of Environmental Quality, has filed the department's first suit seeking monetary damages. Filed in district court at Gillette this month, the suit claims that the Kerr-McGee Corp. has begun mining operations south of Gillette without valid permits. The state is seeking an injunction and \$10,000 per day in damages for the alleged violations.

Cattle pastured east of the Rocky Flats nuclear weapons plant near Golden, Colo., have more plutonium in their lungs than test cattle which graze on the U.S. Atomic Energy Commission's Nevada test site, according to a recently published report by the U.S. Environmental Protection Agency (EPA). Sen. Floyd Haskell (D-Colo.) said he will request a study to determine plutonium levels in humans living near the plant. An AEC area manager told the Denver Post that the amounts were below any value that could be expected to cause health effects in animals or humans. Plutonium is one of the most toxic substances known, particularly when inhaled. One thirty-millionth of an ounce can cause lung cancer.

Shell Oil Co. promised Sheridan County, Wyo., that it would contribute up to \$13,000 to help with meeting the impact expected when the company opens its strip mine operation on the nearby Crow reservation. Shell is the first company in the Sheridan area to offer financial assistance to meet industrial impact. Shell said it would give approximately \$8,000 to help with a joint city-county effort to hire a planner. In addition, after seeing the budget for planning, Shell may give up to \$5,000 for the first year.

Michigan-Wisconsin Pipeline Co. has delayed plans to seek authorization to build a huge coal gasification plant near Beulah, N.D., and the utility is reportedly wavering on whether it wants to build the plant at all, according to Energy Resources Report. The company said the total cost could be more than double the \$500 million the company was estimating last year. It had planned four such plants during the 1980s.

Water users in Wyoming's Johnson County are asking the District Court to overturn a state engineer ruling which allowed Exxon to transfer storage rights of two reservoirs from one drainage to another. The Buffalo City Council also is worried and supports the appeal. The water users contend Exxon has no legal right to all the water in its petition since, by prior agreement, 2,500 acre feet of water was to be stored and diverted to certain ranchers. They also question the engineer's decision to permit Exxon to keep its 1933 filing date if the transfer is approved. Exxon has not announced what "beneficial use" will be made of the water.

High Country News-11 Friday, Dec. 20, 1974



energy news from across the country

The American public is largely unaware of where electricity comes from, according to a survey conducted by the General Electric Co. Results showed: a) One of every three people questioned cannot name a single fuel used to generate electricity. b) Six of every ten people questioned failed to mention coal as a fuel even though it is the most common fuel used for electric generation. c) Less than two out of ten mentioned nuclear fuel. d) Three out of ten mentioned oil.

Researchers at the Stanford Research Institute have been growing plants just so they can burn them. The scientists have been experimenting with fast growing, high heat content plants like sunflowers, sugarcane, eucalyptus, and sycamores. Plant tissue (sometimes called "young coal") has lower sulfur content than most Eastern coal. However, to cultivate plant tissue as a competitive fuel source would require hundreds of square miles of land and billions of gallons of water.

Plutonium, which would fuel the breeder reactor and is among the most toxic radioactive substances on earth, is easily picked up by plant roots and may be taken into food crops, according to new research from the Battelle Pacific Northwest Laboratories. Although scientists previously thought that only small amounts of plutonium were taken into plant crops, it now appears that the percentage of uptake is highest when soil contains only minute amounts of plutonium.

The Department of Commerce has sent to the White House Office of Management and Budget proposed amendments to the Clean Air Act of 1970 which the Environmental Protection Agency regards as deliberately designed to make the act ineffective. In some ways, the proposed revisions go beyond what affected industries have been lobbying for. Commerce contends that "nondeterioration" of air impedes industrial development in clean air regions.

Regulations to prevent speculative holding of federal coal leases have been proposed by the Interior Department. The regulations would require "diligent development." "Diligent development" could include environmental studies; geological studies; mining methods research; contracts for equipment; and development and construction work necessary for production. "Continuous operation" would be required, which means uninterrupted commercial coal mining operations for more than six months each calendar year.

A system for cleaning sulfur from smokestack gases and producing a useful chemical in the process was announced by Superior Oil Co. of Houston and Stearns-Roger, Inc. of Denver. The "scrubber" would use nahcolite, a natural form of sodium bicarbonate found in large quantities in the Piceance Basin oil shale deposits in northwest Colorado. The granulated nahcolite reacts with sulfur dioxide to form sodium sulfate, a chemical used in the paper and glass industries. The chemical reaction removes about 80% of the sulfur dioxide, according to the Rocky Mountain News story.

L. Manning Muntzing, former director of regulation for the Atomic Energy Commission, says that the U.S. demand for electrical power has increased only .2% in 1974. The industry is geared to regular annual increases of seven per cent.

President Ford reveals wilderness proposal



"Gov. Cecil D. Andrus reacted like an angry bear when President Ford announced his scale-down wilderness plan for Central Idaho," reports Rod Sandeen in the IDAHO STATESMAN. "And like a bear whose territory is encroached on, he intends to fight."

The picture above shows some of the Idaho land which the Forest Service considered to be of wilderness quality. The Ford proposal trimmed 400,000 acres from the Forest Service recommendation, and 700,000 acres from a proposal supported by the governor, the state Fish and Game department, and a number of citizen groups. "It's obvious the timber people have gotten to them," says Ernest E. Day of Boise, who is vicepresident of the River of No Return Wilderness Council. "What used to be in the Idaho Primitive Area is now proposed as the BBC plan - Butz and Boise Cascade." Wilderness advocates throughout the Rockies were disappointed by what they considered to be other minimal additions to the Wilderness Preservation System recommended by the President early this month. Photo by Ernie Day

On Dec. 4, President Gerald R. Ford sent Congress the Tenth Annual Report on the status of the National Wilderness Preservation System. Included in the report were recommendations for 37 additions to the National Wilderness Preservation Systems covering nine million acres. The report was of great interest to conservationists across the country, but, as with the Watergate tapes, the deletions attracted just as much attention as the recommen-

In very few cases did the President's proposed wilderness additions agree with the acreages proposed by conservationists at field hearings. In fact, in many cases the President recommended less acreage than the federal agency which conducted the field hearings.

Three areas - Kofa Game Range, Ariz., Charles Sheldon Antelope Range, Nev. and Ore.; and Charles M. Russell National Wildlife Range, Mont. contained suitable wilderness but were not included "because the areas are open to mining and may contain minerals vital to the national interest.

." In addition, suitable wilderness in Lake Mead National Recreation Area was excluded because "virtually the entire area is subject to withdrawals for power purposes." The Deer Flat National Wildlife Refuge in Oregon and Idaho was one of the areas found unsuitable for wilderness classification.

Release of the President's proposed additions marked the end of a decade-long review of potential wilderness areas as prescribed by the Wilderness Act of 1964. The next step is for Congress to act on the President's proposal. During Congressional debate, conservationists will attempt to expand the wilderness proposals.

The chart on this page lists a few of the western wilderness areas proposed by the President, including an acreage comparison with the agency and conservationist proposals.

Alaska pipeline oil may go to Japan

Trans-Alaska Pipeline oil may be exported to Japan and other foreign countries. A report on the future market role of crude oil produced from Alaska's North Slope reveals that the Interior Department and two of the three principal companies with North Slope interests expect production there to exceed the needs of the West Coast market as early as 1980. This raises the possibility that North Slope oil could be available for export at that time.

The report was prepared by Dr. Arlon R. Tussing, Chief Economist of the Senate Interior Committee, at Senator Henry Jackson's (D-Wash.) request, in response to concern expressed by some Senators that North Slope oil might be exported to escape domestic price controls on crude oil.

The report describes existing uncertainties about West Coast supply and demand, relative prices in various markets, and transportation costs between the West Coast and the Midwest or between Alaska and Japan. It concludes that in light of these uncertainties, "the North Slope owner companies are evidently truthful in their assertions that they presently have no plans to export or exchange West Coast crude oil to Japan. Neither have they categorically ruled out exports, however, and there are wholly plausible circumstances in which Japan would be a more attractive market to the companies than the United States Midwest or East."

Single copies of the report — The Trans-Alaska Pipeline and West Coast Petroleum Supply, 1977-1982 — are available by writing the Senate Interior Committee, Suite 3106 Dirksen Senate Office Building, Washington, D.C. 20510.

A com	parative	look
at the P	resident's	s plan

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Western Roundup

Montanans give farmland top priority

Boards of Montana local officials agree that "preservation of the economic base represented by prime agricultural and forest lands" is the most pressing land management issue in the state today, according to a recent study done by the Montana Environmental Quality Council. The survey polled all 56 boards of county commissioners, 59 boards of conservation district supervisors, and 69 city, city-county, county and area-wide planning boards. Of the 184 boards contacted, 40% responded. Many of the officials commented that too many laws and regulations, especially pertaining to subdivisions, are not supported by officers of local government because they are sick of red tape. "The law is no better than the enforcement," one official said. "If the local government does not support and acknowledge these laws, there is no point making more." Others said more laws are needed to give the state ultimate decision-making authority because local officials seldom can muster the courage to say "no" when their friends and neighbors ask for land-use changes, even harmful ones.

Air pollution may stop I-470

"Denver has reached a crisis point in its air quality situation," John A. Green, regional administrator of the Environmental Protection Agency (EPA), told the Department of Transportation (DOT). Because of this critical situation, the controversial Interstate 470 six-lane freeway southwest of Denver may not be built. I-470 — a 26 mile link between I-25 and I-70 has been backed by the State Highway Department, the Denver Regional Council of Governments, and the Regional Transportation District. Congress authorized the freeway in 1968, but the preparation of an environmental impact statement and environmentalist concern over increased air pollution has delayed construction. Now the EPA is requesting further study of alternatives "that maximize land use control in this area through zoning, since this area has been identified as ecologically less suited to additional growth than other parts of the Denver urban area." Green suggested that the DOT look into scrapping the freeway plan and relying on mass transit. It has been suggested that Colorado Gov.-elect Dick Lamm, who has expressed opposition to I-470 in the past, may kill the proposal when he takes office.

Wyo. DEQ can't keep their staff

Wyoming's newly-formed Department of Environmental Quality has trouble retaining adequate, qualified staff, according to the agency's annual report. The Air Quality Division has lost seven engineers during the past 15 months to other institutions or to private industry. The Land Quality Division, in charge of mining regulation and reclamation, is also "under staffed," according to the report. "Monetary reward has usually been the common denominator" leading to staff losses. The Wyoming Citizens' Lobby says it will work in the upcoming session to increase the DEQ's appropriation and salary levels to rectify this situation.

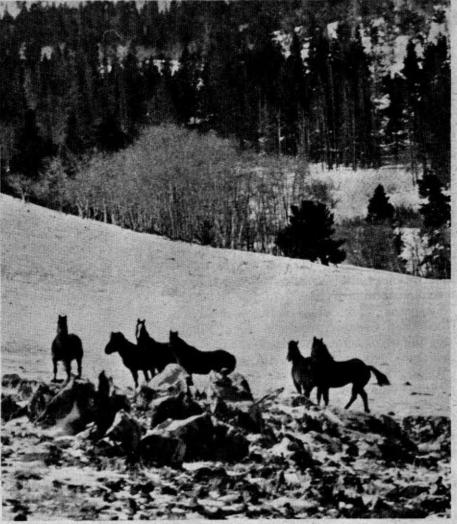
Phosphate boom in eastern Idaho

The world-wide shortage of phosphate for fertilizer lies behind the recent flood of applications for open-cut phosphate mines in eastern Idaho, according to John Strobell of the U.S. Geological Survey. Between 10 and 20 private companies have already requested permits. Strobell is cochairman of a task force preparing an environmental impact statement on phosphate mining in the region. Two of the key areas being studied are south of Palisades Dam on the Caribou National Forest and at Taylor Mountain. Preliminary results indicate that major social impacts will hit Pocatello — whose population could double — and the Soda Springs-Montpelier region. Another problem is that phosphate plants require huge amounts of electricity for the processing involved. Idaho now produces about 10% of the nation's phosphate from mines in the Soda Springs area.

Starkweather watershed in danger

Just a little over a year ago, the Department of Agriculture withdrew its support for the Starkweather watershed drainage project in North Dakota. The project would have drained 55,000 acres of prairie pothole wetlands valuable for waterfowl production. Now the Ramsey County Water Management Board is asking the state to construct "Channel A" — a huge ditch that would drain three large watersheds including the Starkweather. "The news that the Starkweather project is go' again certainly is no Christmas present for conservationists nationwide, who see the effort to revive the project, this time with state funding, as a very real threat to some of the most important remaining migratory waterfowl habitat in the U.S." says Chuck Griffith, National Wildlife Federation Regional Executive. The Starkweather Basin produces up to 100,000 waterfowl each year.

High Country News-13 Friday, Dec. 20, 1974



A federal judge has dismissed a suit seeking \$10 million in damages in connection with a bloody Idaho horse roundup. U.S. District Judge Thomas Flannery ruled that the controversial February 1973 roundup in the Lemhi Mountains was ruthless and inhumane, but legal. Robert McCandless, lawyer for the American Horse Protective Association and the Humane Society, argued that the federal law does not allow ranchers on federally-owned land to herd horses to a "bloody demise" with snowmobiles and helicopters. The plaintiffs said the horses were wild and that it was a federal, not a state responsibility, to determine ownership. An Idaho state brand inspector said the horses in the roundup belonged to local ranchers and weren't wild. Flannery said the strict legal issue was whether the state had authority under federal law to determine ownership of the horses. He ruled there is "clear support" for the federal agencies' defense "that Congress intended state agencies to continue to play a key role in determining claims to horses found on federal lands." The plaintiffs are preparing an appeal. Meanwhile, the surviving horses are scheduled to be put up for sale at a public auction. Photo by Bill Sniffin

Briefly noted . . .

The Forest Service wants to bulldoze 800 miles of new logging roads into Colorado's Routt National Forest to open up new timber harvest areas. The new roads would allow cutting in or bordering 15 roadless areas, according to Jerry Mallett of the Wilderness Society. A draft environmental impact statement on the timber harvest plan states that the only unavoidable environmental impact is the loss of wilderness.

Colorado, one of the fastest growing states in the country, may slow its growth rate in 1975, according to David Monarchi, assistant director of business research at the University of Colorado, In 1972 and 1973 the state gained 80,000-plus people per year. Monarchi predicts only 40,000 will come in 1975. Economic uncertainty seems to be the main reason for the slowdown. Colorado's unemployment rate will hit 4.2% in early 1975 "making potential Colorado newcomers wonder if they can afford to move here and if they can find a job if they do," says Monarchi.

The American Smelting and Refining Corp. (ASRCO) has decided not to go ahead with plans for a copper mining complex near Spar Lake in northwestern Montana, according to the **Borrowed Times**.

Channel catfish lost weight and declined in condition after being stocked in the South Platte in metropolitan Denver. A Colorado State University graduate student, Dale K. Hepworth, found that even though the river had made substantial recovery from a severely polluted situation prior to 1971, conditions are still unsuitable for the fish.



There's something delightful and refreshing about a child's naive belief in the powers of Santa Claus. I remember a Christmas some 20-odd years ago, when both of our children were at that stage of utter conviction. Financially, the year, for us, had been a difficult one; prudence demanded that our gifts be chosen with an eye toward both need and affordability.

And then, one day, the mailman delivered the "Wish Book." You probably know it as the Christmas catalog from the mail-order house, but we always called it the wish book.

The children thumbed through the pages, "oo-ing" and "ah-ing" over the bright colored illustrations. Life-sized dolls. . electric trains. . mechanical dump trucks . . . child-sized ovens . . . toboggans . . . the whole catalog seemed to be filled with exciting, expensive toys. Finally, giggling with excitement, they found paper and pencil and ran upstairs to write their list.

Later, they handed me the sheet of paper, saying, "This is everything we'd like to get for Christmas!"

I glanced down the lengthy list and thought, with wry amusement, that they may have missed a few items in the catalog — but not many!

Aloud, I said, "Well, that's a pretty long list, and you must remember that we can't always have all the things we'd like to have, even at Christmas."

"Don't worry, Mom," Martha answered solemnly, "We don't expect you and Daddy to buy all those expensive things — those are for Santa to bring us!"

Such faith! I hoped they wouldn't be too disappointed on Christmas morning.

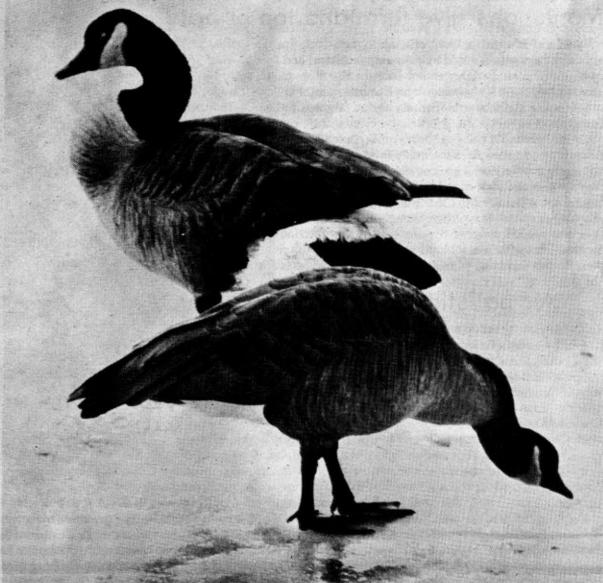
Time passed, and the big day finally arrived. The children eagerly opened their packages, "oo-ing" and "ah-ing" over such necessities as bedroom slippers, bathrobes, and bright warm sweaters. Martha was especially pleased with the tiny trunk full of doll clothes which I had custom-made to fit all her old and favorite dolls. She seemed unmindful of the fact that there was no new, life-sized doll. And John played contentedly with his small cars and trucks in spite of the fact that they were neither electric nor mechanical. Later, all four of us sat on the floo for a rousing game of Tiddley Winks. But the real hit of the day was a 15-cent flying saucer which, by means of a tube and a rubber band, went sailing gloriously (occasionally ingloriously!) overhead. All in all, it was a beautiful Christmas.

Looking back on it, one wonders about that naive belief in Santa Claus. Did they really expect Santa to fulfill those impossible wishes? Or was it just wishful thinking?

Yes, naivete in a child can be delightful and refreshing. But that same quality in a supposedly intelligent adult can be something quite different. According to Webster, the word means "artless; childlike; simple; showing lack of worldly experience."

Isn't that what we're doing when we demand that our "Santa Claus" furnish us unlimited amounts of cheap energy — without, of course, depleting our natural resources? When we want bigger cars and more paved highways — without, of course, disrupting the scenery! Or strip mines and power plants — without dirtying up the quality of our air and our water! We want Progress with a capital P, but we expect Santa Claus to pay the price.

Are we really that naive? Or is it another case of wishful thinking? I do hope our Santa is prudent enough to consider both need and affordability.



On Christmas Day 75 years ago 26 birdwatchers started what has become, in the words of its sponsor, "the longest-running, farthest-ranging, most popular, least-understood sporting event of the year." It's the National Audubon Society's annual Christmas Bird Count. This year more than 25,000 qualified birdwatchers will take part in all 50 states of the Union, all 11 provinces of Canada and more than a dozen U.S. territories and Latin American nations south of the border as far as Venezuela. On foot and by snowshoe, bike, boat and car, they'll search for birds in tundra, swamp, forest, beach, and backyard bird-feeder stations and record the numbers of each different species they see. The first Christmas Count, in 1900, was organized by Frank M. Chapman. Chapman suggested hunting with pad and pencil as an alternative to an earlier Christmas custom in which sportsmen used to choose sides, and then "hie them to the fields and woods on the cheerful mission of killing practically everything in furs and feathers that crossed their path." These Canada Geese were photographed on a winter day in Nevada by Thomas Baugh.

BULLETIN BOARD

SOLID WASTE ENCYCLOPEDIA

The Massachusetts Institute of Technology (M.I.T.) has compiled a directory of listings for major research projects on local solid waste management problems. The directory could be useful to people at the local level to learn from. And it's free! Request Research Report R74-56 from: Massachusetts Institute of Technology, Room 1-163, Cambridge, Mass. 02139.

CONSERVATION DIRECTORY

The 20th Edition of the National Wildlife Federation's Conservation Directory is now available. The directory includes listings for national and international organizations, federal and state agencies, and citizens' organizations concerned with natural resource use and management. The Canadian section includes federal and provincial government agencies and citizens' groups. Also included are universities offering training in environment and conservation, foreign government conservation environment departments, Canadian and U.S. Fish and Wildlife administrators, audiovisual materials, periodicals, and other directories related to the conservation field, Compiled by the

Federation as an educational service, the directory is the key to reaching over 1,400 organizations and 8,000 individuals in the conservation field. Send \$2.50 to: Conservation Directory, National Wildlife Federation, 1412 16th Street, N.W., Washington, D.C. 20036.

White Beard

In a meadow, miles from here, Snow drifts across a cabin floor And sticks in cracks and corners.

Gifts are arranged on a plank table; Spruce boughs, a family photograph, Pine cones and flower seeds for Spring.

A fire hunches emaciated in stone, Too weak to leap the evening wind, And softly crumbles into itself.

White Beard sits at the open door, disappearing.

— Dick Huffstodt

Book Review

The Best About Backpacking

Edited by Denise Van Lear, Sierra Club, San Francisco, 1974. \$6.95, paperback.

by Peter Wild

"We can't be light in wilderness and heavy in every other aspect of our lives." With the idea that backpacking is a state of mind as well as a skill, the Sierra Club recently added The Best About Backpacking to its famed "Totebook" offerings. On winter nights when only the most hardy will be found out in the woods in a down bag, this book can help the novice and the expert both with handy and essential tips on wilderness adventure and with reflection on the meaning of backpacking. The two go together, need to be lived together, as the nine contributing authors, including a past journalist for Time, a former Swedish champion in orienteering, and a medical doctor, maintain.

Yet this is not a didactic book. The authors are aware of the variety of wilderness conditions and individual differences. No set rules can apply to all situations. Rather, they offer suggestions drawn from experience, give alternatives others might like to try, and discuss their personal preferences.

For a starter, Colin Fletcher, author of The Thousand-Mile Summer, devotes nearly 20 pages to the item that even a streaking backpacker would not leave behind, a pair of boots. This is where The Best About Backpacking can pay off. Fletcher evaluates the pros and cons of the different types of construction, styles and brands of boots, and tells how they perform under various conditions. He explains the crucial process of getting properly fitted, how to break the new boots in, and how to care for them. The section is a veritable consumer's guide to selecting footwear. However, despite his recommendations, he admits that for 10 years he's had a near love affair with his favorite Italian Pivettas.

"Good Eats" is Robert Wood's condensation of 25 years of eating his way through the Sierra Nevada. No doubt the gourmet will look down his nose at recipes such as "Judy's Mountain Bars," and "Gary's Walnut Sticks" (wheat flour, brown sugar, butter, honey, and whatever else is handy to throw in), and the new twist for that old standby, "Gorp." Yet this chapter tells how to keep your stomach happy with balanced and satisfying meals. It also gives valuable hints on packaging food and planning meals in advance. As he says, "Food can make or break a trip," a cliche easily scoffed at until you've run out of all but a small bag of beans 80 miles from the nearest store.

Other chapters abound with careful suggestions on choosing a pack, essential articles to put in it, buying a sleeping bag to suit your needs, hints on packing in winter (know how to make a snow shelter?), selecting and pitching a tent, navigation, meteorology, and clues by a doctor on how to keep body and soul united in extremes of heat and cold. Along the way you learn how to discourage bears from camp and what to do about cirrocumulus clouds. The only thing lacking is a chapter of first aid, not included, reasonably enough, because the information is readily available elsewhere.

All in all, this is the most authoritative and entertaining guide of its size that I've seen, crammed with essentials and tingling not-so-essentials, well worth the price.



Eavesdropper

environmental news from around the world

LOONEY LIMERICKS

by Zane E. Cology

Our state we tried to extoll,
Gifts from "Santa" (or someone) our goal.
But we must have been bad,
'Cause all that we had,
On our doorstep was a huge hunk of coal.

Environmental impact statements prepared by the U.S. Department of Housing and Urban Development may now be required before interstate sale of privately-owned land for recreational "second home" development.

Previously, federal courts had exempted private land transactions from the requirements of the National Environmental Policy Act.

The precedent-setting court ruling involved homesites on the Illinois River in east-central Oklahoma.

Funds for thinning and reforestation measures in the national forests have been frozen by President Ford, according to a U.S. Forest Service official quoted in The Missoulian, a Montana paper. The money was part of the amount that Ford ordered held in mid-November as part of the current drive to reduce the size of the federal budget. Critics fear that without adequate thinning and reforestation the national forests cannot sustain present cutting rates. The decision could also affect future timber production since it would make foresters delay doing the proper culture.

A suit to require the preparation of an environmental impact statement on migratory game bird hunting has been settled out of court. The Interior Department has agreed to prepare the statement, as required by the National Environmental Policy Act, for the 1974-75 hunting seasons. Plaintiffs who filed the suit are the Fund for Animals, Inc.; the Humane Society of the United States, New Jersey Branch; Wildlife Preserves, Inc.; and Deer Ecology Environment and Resources, Inc.

Oregon bottle bill is working, OSU says

According to a survey conducted by Oregon State University, the Oregon Bottle Bill is working. Litter and solid waste have been reduced at a cost that is lower than was expected.

Income for all industries affected by the bill has increased, according to the OSU survey, while the cost of beer and soft drinks to the consumer is not "significantly different."

The bill has also resulted in an 88% reduction in the number of beverage containers in solid waste and a 92% reduction in beverage containers littered along roads. The savings in solid waste disposal costs is \$656,832 per year. The savings on litter pick-up amounts to about \$366,000 per year.

Total employment in the beverage industry has increased by 365 workers, according to the study.

The Oregon bill provides for:

1. a minimum deposit of two cents on refillable containers which can be used by more than one beverage manufacturer.

2. a minimum deposit of five cents on all other containers.

a ban on pull-tab containers.

Oregon Gov. Tom McCall says Oregon's ban on non-returnable bottles and cans has brought an over-all increase in jobs (jobs were lost in canning but added in bottling). The new jobs, plus the energy savings and other benefits, have brought his state a net gain of \$1 million a year, says McCall. He advocates a national bottle law based on Oregon's legislation.

There are only 65 known active nests of the peregrine falcon in the lower 48 states and southern Canada. A few hundred more breed in Alaska and northwestern Canada. In 1973 only three young hatched from 14 active nests in the Rocky Mountains. Four eggs which did not hatch were analysed and found to contain high levels of pesticides. The peregrine is on the rare and endangered species list.

Some brewers seem to be shortening the price savings on returnables in order to destroy the consumer cost savings factor in the debate on bottle bill legislation, according to information in a Wall Street Journal article. In 1974, the article says, the cost of a can exceeded the cost of a returnable bottle (6.5 to 6.0 cents). However, Pabst, Carlings, and National prices were raised on returnables at a higher percentage rate than the cans.

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EDF's Kathy Fletcher

Water suit vital to coal and agriculture

Environmental Defense Fund (EDF) staff member Kathy Fletcher doesn't hide the fact that her group is upset about the rush to develop the coal resources of the Northern Great Plains. That's why EDF is in court right now. Ever since the energy companies and the federal government exposed their development plans, EDF has been searching for a way to get a handle on the situation. Now the EDF staff thinks they've found the Achilles' heel—water.

While EDF is using the water issue to get at the coal situation, the group is aiding irrigators in the region. The agriculturalists are worried that, when the coal industry moves in, they won't have enough water for their crops. So they are in court, too. Other plaintiffs include the Natural Resources Defense Council and the Montana Wildlife Federation.

On the other side of the courtroom are the government sponsors of coal development — men like Interior Secretary Rogers Morton, Bureau of Reclamation Commissioner Gilbert Stamm, and Army Secretary Howard Callaway. This summer, 11 major energy companies including Exxon, AMAX, Gulf, Shell, Mobil, and Texaco intervened in the suit on the side of the government. The intervening companies all hold water options from the government which are being contested by the plaintiffs.

"One of the first things that EDF discovered was that the Bureau of Reclamation since 1967 had been selling on an option basis hundreds of thousands of acre-feet of water to major coal and oil companies," Fletcher told the High Country News. "Further investigation led us to conclude that the water that was being optioned came from storage projects that were authorized for irrigation purposes, and the Bureau was turning its back on irrigation as a use for that water."

"The biggest legal thing is that the Bureau is not authorized to use the water in the reservoirs under question for industrial purposes without going back to Congress," explains Fletcher. She says the Bureau originally sold Congress on the idea of the reservoirs by citing irrigation and hydroelectric power benefits. But now it is allegedly jeopardizing irrigation by initiating an illegal industrial water marketing program in total disregard of the expressed intent of Congress, the EDF believes.

"The two reservoirs that are basically involved in the case are Boysen Reservoir on the Wind River above the confluence with the Bighorn River (in northwestern Wyoming) and Yellowtail Reservoir on the Bighorn River just above the confluence with the Yellowstone River (on the Montana-Wyoming border).

"Boysen has for a long time, since the '50s when it was built, been helping agriculture in the Bighorn Basin. However, the allocation of any further agricultural water from Boysen has ceased. It seems that there are irrigators interested in more water, and they aren't getting it," says Fletcher.

She claims the same is true for Yellowtail. "In the case of Yellowtail the Bureau just never followed through on the irrigation projects. . . . The Bureau maintains that it's still planning irrigation projects associated with the dam, but the water has already been sold to the energy companies."

A bigger problem than the possible loss of expanded irrigation potential is the fact that existing irrigators are threatened by the industrial water sales, according to Fletcher. "The Bureau is jeopardizing existing irrigators — irrigators that weren't dependent on the reservoir water. It's actually sold so much water that the potential for decreasing the stream flow of the Yellowstone River is great. Downstream irrigators are our co-plaintiffs in this case. In a normal drought year they have trouble getting river water into their irrigation systems. If



Kathy Fletcher

the water that has been sold to the energy companies is diverted in drought years, then there is no way that they can get the water entitled to them by their state rights."

If these irrigators are damaged, the government will be in direct violation of the law, according to Fletcher. The pertinent part of the law (43 U.S.C. 485h(c)) reads, "No contract relating to municipal water supply or miscellaneous purposes or to electric power or power privileges shall be made unless, in the judgement of the Secretary, it will not impair the efficiency of the project for irrigation purposes." (Emphasis added.)

"The Bureau has optioned off over 650,000 acrefeet per year to over a dozen energy companies in huge quantities," says Fletcher. "Diversions of that magnitude would easily erase any benefit the reservoirs might have for downstream irrigators and probably create a worse situation than before the reservoirs were built."

Fletcher emphasizes that while the Bureau has optioned water from Yellowtail and Boysen, the energy companies have not yet exercised their options and diverted the water. "The buying up of water from these reservoirs, just like the buying up of agricultural water rights, is very speculative right now," she says. "Some of the companies that have options from the Bureau in existing reservoirs are looking at the Platte River, looking at the Green River, and looking at groundwater. You can't as-

sume that if you let them have the reservoir water, they'll relax on another front.

"The way the companies proceed is to cover all bases, get as many rights as they can, and then do what is most economical. Our lawsuit clearly doesn't attack other ways a company can get water. Our case revolves around two reservoirs, but there are applications with the Bureau for over one million acre-feet of water on reservoirs — some of which aren't even built."

Fletcher feels that even though the "first in time, first in right" principle of water law prevails in the West, senior-dated agricultural water rights will not be safe from junior-dated energy company water rights. "First of all, the Bureau isn't taking just spring runoff — it's taking water year round. Although a lot of the water is stored up behind the dam during the spring, not all of it is. Now, if a dry year comes along, or (as happens) several dry years come in succession, then irrigators often cut back and make do, but a power plant can't cut back and still operate.

"So if a power plant is dependent on a stream, I* really can't see someone telling it to shut down.

"An irrigator who was forced to give up his water to a power plant with junior water rights would likely have to be compensated for the loss of his crop. But that's saying that being compensated monetarily is enough. It may be enough for the individual family's livelihood, but if you place a high value on agriculture and on food, then the money paid to the farmer doesn't really replace the food that isn't grown."

In our rush to solve the energy crisis, we may be spawning something far more serious — a food crisis. Congress needs to deal with this issue and not leave the decisions up to a promotional agency like the Bureau, according to Fletcher.

"The Bureau never told Congress that it was thinking about using the water for coal development. It never went back to Congress to ask for permission. It just sold the water to industry — and now so much is sold that there is no choice really. If the companies choose to exercise their options, that's all the water there is, maybe a little more than all the water there is," says Fletcher.

"This one lawsuit is not the magic answer. But I don't want to down play its significance. The Bureau has control over a lot of the available water left in the region. If it doesn't get the green light for industrial water marketing and if the existing industrial water options are ruled illegal, then I think there's going to be a real reassessment of priorities in the Northern Great Plains."

—BH

Dear Friends

Christmas. This past year was one of major transitions for the High Country News, with Tom moving to Oregon, Marge moving into semi-retirement, and Marjane coming onto our staff. But we seem to have smoothed over the rough times — with a lot of help from outside. Throughout the year we receive help, contributions, and letters of encouragement from all of you. Now it is our turn to offer our thanks, our sincere appreciation, and our encouragement to you to keep active, alert, and informed. Your continued interest in the paper and environmental affairs is one of the most gratifying gifts we could hope to receive this holiday season. Thank you all, and Merry Christmas.

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