

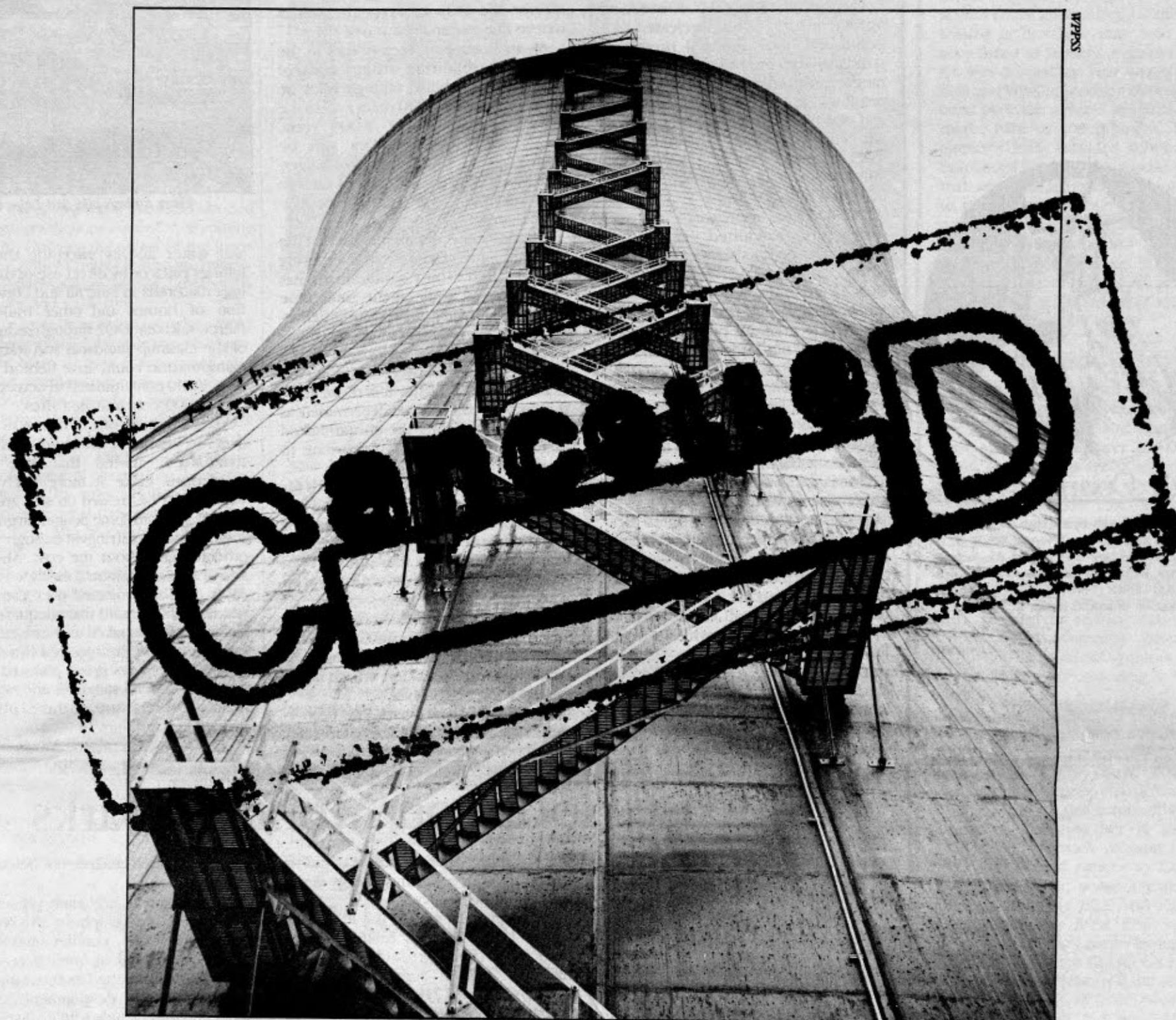
High Country

news

Friday, February 18, 1983

Vol. 15 No. 3

\$1.00



The electricity curve ball

Declining demand and increasing rates

by Don Snow

It's been blamed on the weather, on skyrocketing rates, on voluntary and involuntary conservation, on economic torpor and on something called "appliance saturation." But regardless of how one chooses to account for it, electricity demand in the United States dropped by two percent in 1982, leaving utilities with 39 percent excess generating capacity. The net decline was the first since the end of World War II, and it left utility officials scratching their heads over the problem of how to plan future generating capacity in a country that is gradually weaning itself away from the ever-growing need for more electricity.

Until 1974, electric power demand — or load growth — grew in the United States at a steady seven percent per year, causing a doubling of demand every 10 years. Load growth forecasting was thus a simple affair of applying linear equations to a given power demand area and building plants to meet demand, with a normal reserve margin of 15 to 20 percent excess capacity.

But all of that has changed.

Conservation, spurred by rising electricity rates and reduced industrial activity, has temporarily halted growth in demand, and most forecasters now agree that seven percent annual growth nationwide will not happen again

through the end of the century. Two to four percent is now the range of average annual growth predicted by most analysts, but some proponents of aggressive conservation programs predict growth of one percent or less annually.

As a result of slower than expected demand, dozens of proposed power facilities have been cancelled or their construction schedules deferred until demand rises.

The embattled Colstrip Units 3 and 4 in Montana currently under construction, are now two years behind schedule due to reduced load growth. A second power project proposed by Montana Power Company and dubbed

Resource 89 because of its expected on-line date has now been scuttled until the mid-1990s because of reduced demand. Alumax Aluminum, whose plans to build a smelter in either Montana or Oregon briefly resurrected Resource 89, now plans to build nothing.

Other regional facilities placed on hold because of reduced load growth include two units of the mammoth Intermountain Power Project at Delta, Utah, the Allen-Warner Valley plant in Nevada, and the Washington Public Power Supply System nuclear Units 4

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WESTERN ROUNDUP



High Country News

Published biweekly by the High Country Foundation, 331 Main, Lander, Wyoming 82520. Telephone (307) 332-6970. Printed by the *Jackson Hole News*, Jackson, Wyoming. Second class postage paid at Lander (USPS No. 087480). All rights to publication of articles herein are reserved.

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Subscriptions are \$18 per year for individuals, \$25 per year for institutions. Single copies \$1.00 plus \$1.25 postage and handling.

Final tailings cleanup standards raise questions

The Environmental Protection Agency in early January released final health and environmental protection standards for the cleanup and long range regulation of uranium ore tailings resulting from ore processed during and after World War II. The standards will be implemented by the U.S. Department of Energy as part of the Uranium Mill Tailings Remedial Action Program (UMTRAP).

The standards apply to 24 "inactive" sites where abandoned uranium mill tailings piles pose a threat to local population centers and waterways. Of those sites 23 are in the west and at least 16 are in Utah, Colorado, and Wyoming. Sites where uranium processing is still going on are not addressed by the rule changes.

Persons active in the nuclear waste disposal issue fear the new regulations are too weak and will not allow for adequate reclamation of wastes. They maintain the standards will encourage DOE to leave the wastes where they are rather than move them to more remote and presumably less hazardous locations. Among the sites slated for cleanup are the Vitro tailings pile in Salt Lake City, the Susquehanna site near Riverton, Wyoming and the AMAX (formerly Climax) uranium mill site adjacent to the Colorado River in downtown Grand Junction, Colorado.

Joe Pierce, a spokesman for the Two Rivers Citizens Association, a group monitoring the waste disposal program in Grand Junction, thinks several provisions in the new standards make it eas-

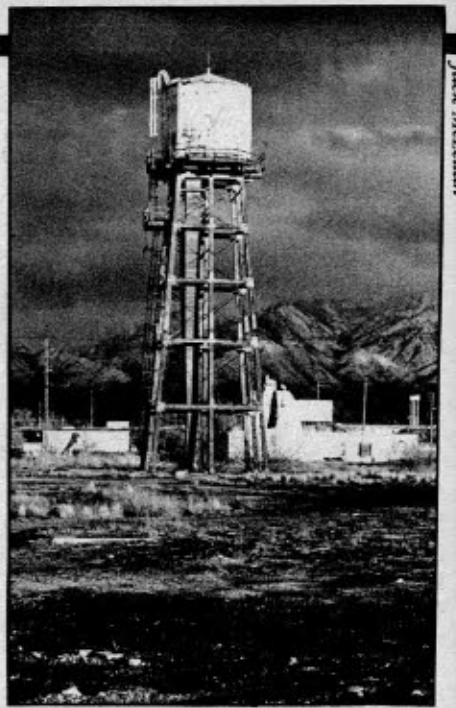
ier for the DOE to keep the wastes where they are and not move them.

As an example, Pierce points to the standard requiring that control methods to stabilize tailings piles be effective for at least 200 years and, to the extent practicable, for 1,000 years. Pierce maintains the piles will be radioactive for 100,000 years or longer. With such longevity it would be safer to move the piles away from the population centers.

Another concern for Pierce is that the standard of thickness for the covering material used to bury contaminants has been lowered, while at the same time the allowable limit for radon gas emissions has been increased to ten times what was originally proposed. If the thickness level is lower and the gas emission level is higher it is more likely that more sites can be determined as safe without moving the contaminated materials to a new site, according to Pierce.

Pierce said that specific standards for water contamination were deleted and replaced with recommendations for site-by-site use of relevant state and federal water standards, thus adding even more flexibility to the determination on whether to handle wastes on site or move them. There is also concern that some sites, like the one at Grand Junction, are on flood plains, making them susceptible to inundation which might sweep wastes downriver.

EPA figures show over 6,000 properties in the vicinity of the waste sites may have been contaminated either by wind



Vitro tailings pile, Salt Lake City

and water activity sweeping through tailings piles or by direct use of the tailings materials in land fill and construction of homes and other buildings. Pierce said that DOE through reduction of the cleanup standards and statistical manipulation could leave behind more than 3,000 contaminated structures and over 2,500 contaminated sites.

Mark Mathew, one of the DOE engineers in charge of the cleanup of inactive sites, agreed that the new regulations make it more likely that wastes will be treated on site and not moved. He said some persons argue the standards aren't stringent enough while others argue about the cost. Mathew said the cleanup could easily cost the \$475 million projected over the next seven years. He said that adequate precautions will be taken to assure careful, safe cleanup in the required time.

The Two Rivers group plans to challenge the federal standards and hope to make others aware of the problems involved.

— Jess Funk

Oil leases loom on Montana parks

Oil and gas leasing on lands owned or managed by Montana's Department of Fish, Wildlife and Parks (DFWP) is a mixed bag of wealth and woes, according to a report issued recently by the agency.

The report, a "programmatic" environmental impact statement on the effects of leasing department lands for energy exploration and development, was partly inspired by a controversial mineral lease application on the Sun River Wildlife Management Area, a state-owned wildlife reserve on Montana's Rocky Mountain Front. The 1981 application, which eventually was denied, increased pressure on other DFWP

lands and inspired the agency to put its house in order regarding energy development policies.

Problems with oil and gas leasing on DFWP lands are partly related to land ownership, the report said. Although it manages 321,071 acres in Montana, DFWP owns only 218,287 of them. The remaining lands are leased from other agencies or private landowners. Some of the lands owned by the DFWP were purchased with monetary assistance from federal sources or sport license revenues and carry with them requirements that they be managed in the interests of wildlife and recreation. In other cases, the mineral rights on DFWP-

owned or leased lands do not belong to the agency.

Environmental problems presented by oil and gas development also would exacerbate the conflict between DFWP's mandated or implicit responsibilities to wildlife and its accommodation of energy development. Such impacts could include wildlife displacement, stress on animals, food and habitat, increased hunting and fishing pressure due to new or improved access, and changes in wildlife composition and populations.

In contrast, the report addressed the significant benefits of energy development revenues that could be put to good use in some of DFWP's budget-tight programs. Those revenues, which could go as high as \$862,000 per year in 20 years, could be applied to new land purchases or to ongoing wildlife management programs. However, the agency has not yet outlined a process for weighing those benefits against environmental costs. It also would have to develop a plan for disbursing royalties from energy development leases.

"We found that constraints and procedures are needed when it comes to oil and gas development on department lands," said Jim Posewitz, chief of DFWP's Ecological Services Division. "The intent of the report is to bring those constraints to the surface, let everyone take a look at them, and then formulate more specific department policy."

The final decision on leasing on DFWP lands rests with the Montana Fish and Game Commission. The commission will take up the matter after the public has had an opportunity to comment on the report.

— Ellen Ditzler

Dear friends,

The *High Country News* offices are clean. This may not sound like such a big deal to you, but to our staff it is quite an accomplishment. We had become overloaded with files, old equipment, environmental impact statements from before the first World War and sundry rotting fruits and vegetables. Finally, we could stand it no more and last Friday held a house cleaning day. The results are little short of remarkable.

With computerization of our mailing list, we have been able to part with our Addressograph machine and the attendant equipment that was filling up the back room. These have been sold (we think), provided we can lift the beasts down the stairs to a truck bound for Salt Lake City. They weigh more than a politician's guilt.

We can now reliably report that the rugs in the editors' offices are brown and the floor in the production room is white, give or take a shade.

Tours of the revitalized facilities are available for a token fee on Thursday afternoons between 4:00 and 5:00 p.m.

Donations to the Research Fund continue to trickle in and earn our deep appreciation. Special thanks this issue go to Maurice Albertson, John Bartlit, Richard Beauheim, Lex Blood, Phillip Brady, Robert Chesley, Tom Cooper, Stephen Gerdes, Dian Grueneich, Nick Helburn, Matthew John Hirsch, Mr. and Mrs. Marxhausen, Genevieve Kelly, Neil Montgomery, Bradford B. Owen, Delmond Owens, Bruce Poundstone, Marie A. Rasch, Jack T. Rummel, William and Mary Scott, Carol Seidler/Rick Pallister, Allen and Marilyn Stokes (in memory of David Sumner), Kent and Meg Sundell, Charles and Dorothy Vaile, Vernon Wernecke, Robert Wigginton, Wildseed, Inc. and Pete Wyman.

— the staff

Salting away PP&L's water

Within the next few days, salty water from the cooling towers of the Jim Bridger power plant will begin flowing into Deadman Wash near Rock Springs, Wyoming. However, it probably will be months before anyone knows how much of that salt will reach the Green River and eventually, the already salt-laden Colorado River.

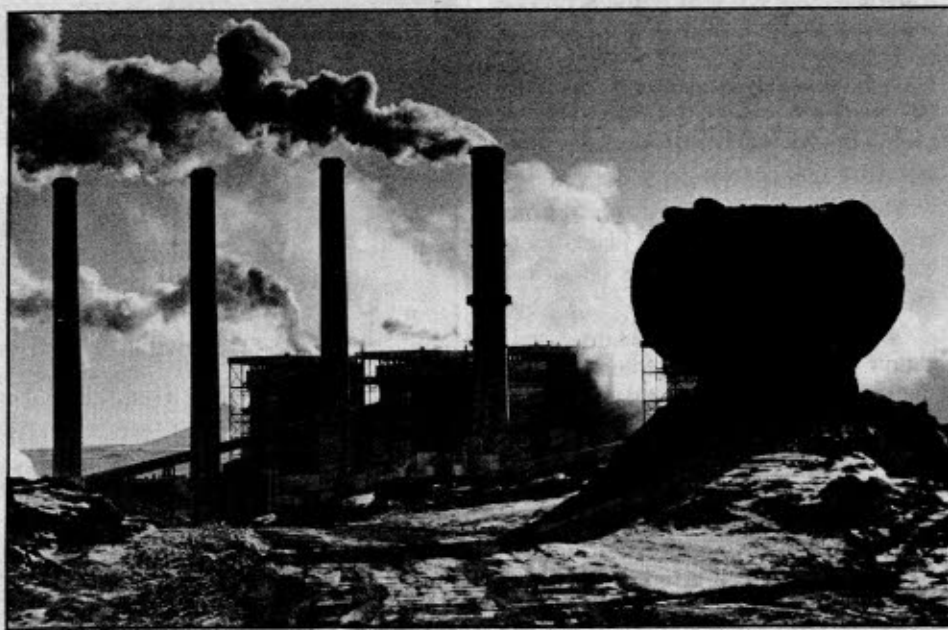
The discharge from Pacific Power & Light's power plant is allowed under a permit issued in December, 1982, by the Wyoming Department of Environmental Quality. The permit approval was based upon a private consultant's study that officials of DEQ and the U.S. Environmental Protection Agency both now say is suspect. If the PP&L-funded study's predictions are faulty, Wyoming will be violating the policy of the interstate Salinity Control Forum and alienating downstream states, especially Arizona and California.

The issue arose a year ago when PP&L suddenly notified the state that the wastewater from its four power plant units would overflow out of the evaporation ponds unless something were done by February, 1983. Because of the delicate question of increased salinity in the Colorado River, DEQ asked PP&L to consider several alternatives, including expanding its evaporation pond capacity, piping the salty water into another basin or selling the water to the trona industry.

Four environmental groups — the Wyoming Outdoor Council, Wyoming Wildlife Federation, Sweetwater County Wildlife Federation and Defenders of Wildlife — protested the permit and demanded a public hearing.

PP&L hired a consultant to study the alternatives, which ranged in cost from \$25 million to \$59 million. Meanwhile, PP&L contacted the governor and the environmentalists, reassuring them about the environmental consequences of the discharge and threatening to reduce power production if the permit were not granted.

The environmental groups withdrew



Jim Bridger Power Plant

their objections, meaning that no public hearing was required. The Wyoming Outdoor Council settled for a schedule that would guarantee that the discharges would stop in 1990 when PP&L had diverted the salty water for use in its air pollution control equipment.

Dick Randall of Defenders of Wildlife said he was convinced after several phone calls from PP&L and after talking with other wildlife group representatives that DEQ was taking several precautions to help wildlife in the area. However, when he attended an Industrial Siting Council meeting in January, he was alarmed by the testimony of a technician for PP&L. When asked what would happen to the 50 tons of salt and heavy metals that would be discharged each day into Deadman Wash, the man said they would "just go away," according to Randall. "If that's as far as their technology goes, I'm quite worried," Randall said.

John Wagner of DEQ's water division said, "We were somewhat skeptical of the (PP&L) study, but we had no data to say they were wrong." Gene Reetz of the EPA also said the consultants did not have enough information to decide that

the salt would not reach the Green River.

However, Wagner said the issue was not important enough for DEQ to conduct its own technical review. "I don't feel this discharge will be that significant," he said. Therefore, the agency decided to wait and see what happens. Because of a condition added to the permit, PP&L must prove by September, 1984, that less than one ton of salt each day from its discharge is reaching the Green. Otherwise the permit will be revoked.

PP&L has not yet convinced another state agency, the Industrial Siting Administration, that it should be allowed to discharge the water. The siting council will decide in late March whether to hold a public hearing on the permit, which it has approved during the interim.

The issue is less important for Wyoming than for states farther down the Colorado River. The Green River and other tributaries contribute salt, which is causing \$113 million a year in damage, according to estimates of the Bureau of Reclamation.

— Marjane Ambler

More Powder River leasing planned

Convinced that there will be a demand for increased coal production to meet future needs, the regional coal team recently recommended leasing levels of between 1.22 and 4.85 billion tons of coal from the Powder River Basin of Wyoming and Montana. If approved by the Interior Department, Montana's leasing level would fall between 450 million and 850 million tons. Wyoming's levels would be set between 820 million and four billion tons.

The leasing levels are "ridiculous," said John Huss of the Powder River Basin Resource Council in Sheridan, Wyoming. Huss said the demand for more coal is speculative and based on how much leasing is needed to fill reserves. "There is upward of 25 billion tons available already," he said.

Huss pointed to the failure of last April's Powder River Basin federal coal lease sale, which proved to be a financial loss to the government. Competition for the 1.6 billion tons of coal last year was low and two tracts received no bids (HCN, 5/14/82).

Both Warren White, coal team representative for Wyoming Gov. Ed Herschler (D), and Tim Gallagher, coal team representative for Montana Gov. Ted Schwinden (D), said industry has shown interest in the coal lease planned for 1984. White said there are several Wyoming tracts that two or more companies have expressed interest in, while on a few tracts, due to ownership patterns, only one company is interested.

Gallagher said the interest in the Montana tracts is similar. He said, how-

ever, that he shares the concern that demand may be speculative. "It's not needed in today's market," Gallagher said. "But these leases won't be in production until eight or 10 years later. We don't know if it will be needed then. It's a risky business at best, but we're passing the risks on to the industry."

White pointed out that he had proposed the ceiling level for Wyoming to be set at 2.5 billion tons. He said he favored the lower level because there could be a problem with air quality if the spacing of the tracts is too close.

White said the logic behind the federal decision to increase the level was the Interior Department's claim that 30 to 40 percent of the tracts won't be leased anyway due to surface owner consent problems.

Huss said it didn't seem to matter whether the level was 2.5 billion tons or four billion tons — that there probably won't be much competition anyway. "Sure, some companies will be willing to pay one-tenth of one cent per ton" if that is what it comes down to, Huss said. He said the real question lies in how the fair market value of the coal will be determined. "Will it be the entry bid, or will it be made up?" he questioned.

"As I understand, the BLM will have to establish a minimum entry bid," White said. "There will be no competitive oral bidding as it stands now."

The preliminary leasing levels now go to the Interior Department for consideration.

— Carol Jones

HOTLINE

Leasing won't bother grizzlies

Grizzlies shouldn't be bothered much by issuing oil and gas leases in their Kootenai National Forest (Montana) habitat, according to the U.S. Forest Service's environmental assessment. Regional Forester Tom Coston approved the procedures for oil and gas leasing in the more than two million acre forest in January. Approval of the EA was delayed last year when the U.S. Fish and Wildlife Service expressed concern over the adverse impacts leasing might have on the grizzlies. But the agency's fears subsided when it was convinced leaseholders would not disturb areas that are rated most important to grizzlies and that no activity would occur on critical spring and fall ranges. To get to those areas, the leaseholder must use slant drilling techniques, according to the *Missoulian*. About 1.5 million acres of the Kootenai are leased or under application.

BN, BLM swap lands

Citing big savings for both parties, Burlington Northern Timberlands and the federal Bureau of Land Management have agreed to swap over 10,000 acres in the Garnet Range east of Missoula. BN Timberlands exchanged 4,811 acres in Powell County, just east of the ghost town of Garnet with the BLM for 5,479 acres in parcels located between Bonner and Clinton. The new BLM land is in the Wales Creek area now under study as potential wilderness. The trade was intended to replace the original checkerboard ownership pattern by consolidating scattered sections of timberland into more manageable blocks.

EPA woes mounting

The Environmental Protection Agency just can't seem to avoid controversy. Administrator Anne Gorsuch's contempt of Congress charge has escalated to the point that some officials are suggesting arresting her if she isn't prosecuted. Gorsuch refused to turn over subpoenaed papers to Congress concerning toxic waste cleanup last year (HCN, 12/14/82). And President Reagan recently fired EPA assistant administrator Rita Lavelle because she would not resign at Gorsuch's request. Lavelle, who administered the release of funds for cleanup of toxic wastes, has been linked with the suspicion that those funds were disbursed more by political criteria than substantive ones. And to add to the woes, environmental groups are up in arms over Reagan's proposal to cut \$92 million from EPA's current \$1.04 billion budget in 1984. Critics say the agency cannot perform its environmental protection duties with such a dramatic cut.

Jackson Hole airport may get new lease

The Jackson Hole Airport Board and the U.S. Department of Interior have begun negotiations for an extension of the airport's controversial special use permit in Grand Teton National Park. Although former Interior Secretary Cecil Andrus had held that the permit should not be renewed when it expires in 1995, James Watt has been notably more sympathetic to the airport board's desires. The board asked Watt last November for a 99-year lease extension and Interior countered with a proposal for a 30-year lease with 10-year extensions beginning on the 20th year of the agreement. The board seems willing to go along with that approach if the extensions could be granted on the 10th anniversary of each agreement, insuring the 20-year life expectancy for the facility and thereby making it eligible for state and federal capital construction grants. There are no indications as to when a formal agreement might be concluded.

BARBS

First Toyota, then Shogun, now... The Edison Electric Institute and the U.S. Department of Energy are asking nine Japanese electric utilities for \$50 million to help with the clean-up from the Three Mile Island nuclear power plant accident in Pennsylvania, according to McGraw-Hill's *Nucleonics Week*.

...and pi is hereby equivalent to 4.0. Wyoming State Sen. Tom Stroock (R-Natrona) proposed an amendment to legislation raising the state's highway speed limit from 55 to 65 that would have redefined a mile as 6,240 feet. The amendment was defeated.

Better they should take up smoking. A gang of 36 Japanese boys, aged eight to 13, was arrested by Tokyo police for committing 30 burglaries over a four month period. The boys used the \$39,800 garnered from the heists to play video arcade games.

Built like a brick... A Beltsville, Maryland, firm is manufacturing bricks made of 30 percent sludge from a regional sewage treatment plant.

That'll be 300 Big Macs to go — and hurry. The *Deseret News* reported that the Salt Lake County Emergency Management Division is gradually removing water and food from civil defense shelters and is not replacing the stocks. In the event of nuclear attack, Salt Lake residents may have to brown bag it.

HOTLINE

Environmentalist takes office in New Mexico

Brant Calkin, former Southwest representative for the Sierra Club, has been appointed as the New Mexico Natural Resource Department's deputy director. Calkin, who was also president of the Sierra Club from 1976 to 1977, will oversee environment-related divisions. Environmental support was instrumental in the election of Toney Anaya (D) to the governor's seat. Despite his strong environmental background, Calkin sees no conflict of interest. "I can still be a member of the Sierra Club and advise, but I can't take a leadership role," he told *The New Mexican*. "And I can't compromise the state's opportunity to take positions."

Water projects get financial boost

Although President Reagan has called for major reductions in spending in virtually all government business except defense, his 1984 budget calls for major increases in spending for water projects and dams. Many of the projects slated to receive funding are in the West and need the money for completion or renovation. Only five new starts are included, according to United Press International. The Bureau of Reclamation is hoping for \$699 million to continue work on many projects that were installed during the Carter administration. Many of the projects were opposed by conservationists.

**Desert bighorns on the comeback**

Desert bighorn sheep are being reintroduced in the Whipple Mountains near Lake Havasu City, Arizona. A combination of biological and environmental factors forced the disappearance of the bighorns from the range over 30 years ago. Now the efforts of federal, state and municipal agencies and private conservation organizations assure the animals will be restored to the area in a way designed to enhance their chances of survival.

Alunite mining planned for Colorado

An open pit alunite mining operation with a 60-mile long pipeline has been proposed near Lake City in southwestern Colorado. Earth Sciences, Inc., of Golden, is proposing the operation on 1,667 acres of public land near Red Mountain within the Redcloud Peak wilderness study area. The area has been identified as having the world's largest known deposit of alunite, a mineral used in manufacturing aluminum. Ore from the mine would be transported for processing by the pipeline to a mill probably located near Montrose, Colorado. The deposit is reportedly large enough to last over 100 years. The Bureau of Land Management, which manages the Redcloud Peak area, has begun an environmental assessment of the project to determine whether a lease should be issued.

Subdivision threatens bighorns

Wildlife officials fear that a proposed subdivision just north of Ouray, Colorado, may be the last straw for a struggling herd of bighorn sheep that roam the area.

Ken Miller, district wildlife manager for the Colorado Division of Wildlife, wrote a letter to the *Ouray Plaindealer* last summer when he first heard about the plan to divide 27 acres on Jackass Flats into five lots.

"I just wanted people to know, and I didn't wait until the thing was all planned out. By then, it's usually too late," Miller said. "Besides, people in Ouray look at this herd as theirs."

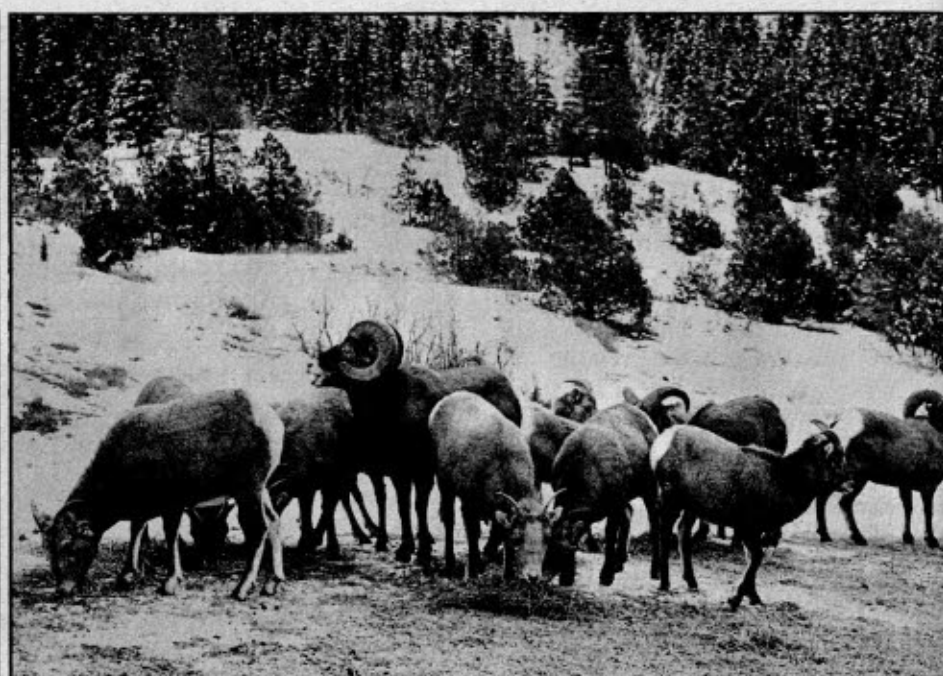
Miller has treated the bighorn herd for lungworm — a respiratory disease — for the past five years on Jackass Flats, and said it is the last good winter foraging ground for the Ouray bighorns. Jackass Flats is the last big bench in the steep redrock canyon north of town with plenty of grass and shrubs to feed the herd.

Within days, residents rallied behind Miller and the bighorns with responding letters, and landowner John Tanner temporarily backed down on his subdivision plan. But Tanner said he has \$150,000 invested in the property, borrowed at a high interest rate, and he "can't afford to donate Jackass Flats to the sheep."

Tanner, a Daytona Beach, Florida, trial lawyer who summers in Ouray, bought the Jackass Flats property two years ago. He planned to divide it into five lots and sell four last summer so he could build himself a summer home on the fifth lot next year.

"I was aware that the bighorn came down onto Jackass, but I was told they come down all over. They're in people's back yards, on their decks, and they seem to tolerate human pressure," Tanner said.

Miller argues that the cumulative



Jackass Flats bighorns

impact of housing development on the sheep's winter habitat could doom the Ouray herd, one of four in southwestern Colorado with more than 100 animals.

Jim Olterman, a state wildlife biologist, agreed. "They flat won't tolerate any disturbances, and their backs are to the wall in that area. We could lose a majority of that sheep population if they build those houses. We've seen it happen in other places, like Waterton Canyon," he explained. Construction of the Strontia Springs Dam in Waterton Canyon, southwest of Denver, put too much pressure on the bighorn herd there, and many of the animals died, he added.

Miller explained that bighorn sheep return to the same feeding ground each season. Pressures created from overpopulation, people, dogs, machinery or weather extremes, increase the bighorn's susceptibility to lungworm, which

in turn breaks their resistance to pneumonia.

But Tanner maintained that five houses on Jackass Flats won't affect the sheep. "My plan is a lot better than building a 40-unit condo with parking lots and tennis courts. But Miller still says the only way I can make my plan better is to not build there. You know, I appreciate his vigor, but at the same time DOW won't buy the land, so what can I do? Sell it to some California developer?"

He said an unnamed group of Ouray landowners have proposed purchasing Jackass Flats, which butts up to the Uncompahgre National Forest, with intentions of negotiating a land trade with the Forest Service.

Tanner said he plans to meet the group in Ouray for discussions in January. If the sale is made, the group could expect to spend two to five years working out a land trade.

— Heather McGregor

★★★ LEGISLATIVE UPDATE ★★★

★★★ A death in Utah's House ★★★

The Utah House of Representatives has killed legislation that would have provided for instream flows to benefit fish and wildlife. However, the House Natural Resources Committee gave the bill some hope for the future by referring it to the legislative interim committee, which meets once a month between legislative sessions, for further consideration.

This is further than any in-stream flow bill has ever gotten in Utah, and it did so with the support of State Engineer Dee Hansen. However, as in most other western states, the farm lobby has staunchly opposed it.

The Senate has passed a \$50 million water bonding bill and sent it to the House. The bill provides \$20 million for water storage projects, \$20 million for sewers and \$10 million for drinking water supplies. The bill is a compromise

that has increased the amount for water storage to cover a proposed \$18 million storage project in southwestern Utah. This is only one of several storage proposals, but the increased authorization to \$20 million will at least leave it in the running.

Project BOLD, Utah's proposal to swap state lands for federal lands to create more manageable state-owned blocks is receiving favorable attention, at least in principle. The concurrent resolution is sitting atop the third reading calendar in the House, waiting for enabling legislation to catch up with it. That legislation, which requires the State Land Board to develop management policies consistent with school trust policies, has faced opposition from the Utah Mining Association.

The UMA's opposition is based on the definition of multiple use contained in the legislation. The author used the fed-

eral government's definition and the UMA is afraid that this would allow some lands to be dedicated to a single use, i.e., wilderness.

Finally, the severance tax on oil and gas is being eyed cautiously by legislators as a way to balance the state's budget. The tax, which is currently two percent, is being considered in a roundabout way in a bill dealing with the way it is collected. However, a simple amendment to that bill could increase the tax. Once the legislators realized that every one percent increase in the tax would mean an additional \$8 million to the state, they decided to hold approval of the bill in abeyance until the final tab for all the other legislation comes in. Then they may increase the tax to cover other programs.

— Brec Cooke

★★ Idaho guts environmental rules ★★

A proposal to put teeth into Idaho's environmental protection regulations was in trouble in the Senate Resources and Conservation Committee. Legislation submitted by the Department of Health and Welfare would allow that agency to seek court injunctions to stop "unauthorized activities creating conditions which are an imminent threat and will result in extreme damage to the environment."

Sen. David Little (R-Emmett), spearheaded the attack, rhetorically asking: "What is an imminent threat — a motor-

cycle going up a hill?" He went on to say that some activities which could be halted under the proposed legislation may actually be beneficial to the environment. "More salmon came back to spawn where they dredged than where they didn't," the Emmett rancher said, referring to an abandoned dredge mine operation on a central Idaho stream. (State fisheries biologist Will Reid, contacted later, said, "That's not factual at all. That's one of the biggest environmental disasters up there.")

The committee chairman, Sen. Laird

Noh (R-Kimberly), supported the legislation and went for his ace in the hole. "Mining companies are probably the ones most affected by this, and I see Jack Peterson from the Idaho Mining Association is here," Noh said, and called upon the mining group's executive director to testify. Noh and Water Quality Bureau Chief Al Murrey understood Peterson would support the legislation, and thus swing the borderline votes.

But Peterson surprised them both as he rose to criticize the proposal as a "five-edged sword" that was too broad

and could be unintentionally and intentionally abused by overzealous public employees.

Following Peterson's death-dealing testimony the committee voted 6-4 to return the proposal to the Department of Health and Welfare, effectively killing it for the 1983 legislative session.

Defeat of the measure struck an added blow to the control of non-point source water pollution resulting from logging, road building, mining and agriculture. In January, the Health and Welfare Board weakened the state regulations by removing a provision prohibiting injury to beneficial uses of

streams, and replacing it with a clause allowing injurious pollution as long as the pollution was "socially or economically justified." Conservationists had waged a difficult and unsuccessful battle against the changes which were submitted by the department. (HCN, 1/21/83).

The department defended its support of the weakened regulations by noting that the new regulation was backed by a directive to seek injunctions to prevent "serious injury." Unfortunately, while the Health and Welfare Board could weaken the regulations, it could not

give the department injunctive powers. And as the conservationists feared, the legislature squelched the idea.

To stop a polluter under present law, Murrey said the department must file a complaint with the Health and Welfare Board and wait for that citizen's body to meet (every two months) before an order to comply could be obtained. "By then you could have killed the whole fishery," Murrey noted. He said the department could ask the courts to seek compliance — outside of an injunction — but added, "Our experience with the courts is they don't pay a lot of attention to environmental damages anyway."

Despite charges from Peterson and Little that as many as five state and federal agencies have jurisdiction over water pollution, Murrey said no agency has the authority to seek injunctions to prevent non-point source water pollution. If the department decides against taking the lengthy route to halt a polluter, Murrey said, all the agency can do is "just throw our hands up."

Following the hearing Peterson defended his action, saying, "The crush of other events precluded an adequate dialogue" on the proposal.

— Glenn Oakley

★★★★ Wyoming tries to turn water into gold ★★★★★

Along with Montana, the Wyoming State Legislature has been looking at ways to turn water into gold. And slurry pipelines appear to be the most likely philosopher's stone. However, the state House of Representatives has put a hold on slurry water development for at least a year to give a legislative committee a chance to study the issue.

After considerable controversy, the House passed a compromise measure that required a one year feasibility study of three proposed coal slurry pipelines on two state rivers — the Big Sandy and Little Snake. The compromise was pushed by Rep. Peter Simpson (R-Sheridan) as an amendment to a bill by House Speaker Russ Donley (R-Natrona) that would have made slurry water available almost immediately.

The bill as approved by the House is seen by conservationists as a good compromise. It requires a payment of \$400

per acre-foot of water from the Little Snake and \$100 per acre-foot from the Big Sandy. The water in the latter river is very salty, hence the lower price.

The Big Sandy diversion will benefit primarily the W.R. Grace Company, which is planning an "Aquatrain." This is a proposal to ship coal mixed with the salty water to Southwest or West Coast markets. The plan is supposed to reduce the salinity of the water, making an estimated 100,000 acre-feet of cleaner water available to the state. The Big Sandy eventually flows into the Colorado River, which is heavily saline. Upper basin states are required to "flush" the lower river to reduce the salt content. In theory, at least, if Grace removes the salty water close to the point of origin, salinity downstream will be reduced and more water previously sent downstream to flush the river would become available for in-state use.

The Little Snake slurry project is less certain. The bill calls for the use only of sewage effluent in the line. However, if a slurry line used the typical 20,000 acre-feet annually, it would take a city of about 100,000 people to provide enough effluent. Casper, Wyoming's largest city, now has about 60,000 residents.

Another provision that placated environmentalists is a requirement that the governor sign any slurry water contract. The present governor, Democrat Ed Herschler, has been an outspoken opponent of slurry pipelines.

The big loser in the water debates has been the Little Horn Water Group, Sheridan-based water rights holders on the Little Bighorn River. The 1982 legislature authorized \$8 million for the group to develop their water rights (HCN, 6/25/82) but virtually all the money has been deleted during the cur-

rent session. The only amounts remaining are \$1.7 million for a water allocation suit with Montana and the Crow Indian tribes and some funds for stream gauging by the U.S. Geological Survey.

The Senate has approved legislation that would allow the state of Wyoming to take over the administration of hazardous and toxic wastes in the state. This jurisdiction is currently held by the Environmental Protection Agency. EPA administrator Anne Gorsuch visited Cheyenne recently and spoke in favor of the legislation, apparently swinging a lot of votes.

Two bills that are high environmental priorities — the wildlife trust fund legislation and the in-stream flow bill — have passed the state Senate and are awaiting House committee action.

— Dan Whipple

★★★ Colorado nongame tax checkoff renewed

A bill that would extend the voluntary non-game wildlife check-off on Colorado's tax forms sailed through the Senate February 7 and presently is in the Finance Committee of the House. The Non-Game Wildlife Program brought in \$692,000 in 1982 when 12 percent of the state's taxpayers donated an average of \$5.60 to support its work. The "Do Something Wild" check-off began in 1977 and quickly became the model for 19 other states which adopted similar legislation. Without the new law, sponsored by Al Meiklejohn (R-Arvida), however, the program was due to be terminated at the end of 1983. The bill ensures the protection of the 756 non-game species in Colorado — of which 27 are threatened or endangered — and allows for additional habitat preservation and continuing study.

According to Jim Scott of the Colorado Division of Wildlife, the goals of the program are to reverse the decline of threatened and endangered species, to prevent further additions to that list, and to encourage non-consumptive

uses of wildlife such as birding and photography. Among the programs financed by the check-off were restoration of river otters, peregrine falcons, and Colorado River cutthroat trout to native habitat. In addition, the program purchased 600 acres of important nesting shorebird habitat in the San Luis Valley and continues a number of research programs on non-game species.

While the non-game check-off proposal moves steadily ahead, air quality regulations suffered a defeat in the House recently. Ruth Wright's (D-Boulder) bill, "Air Quality Control Act Standards," would have allowed for enforcement of state regulations that were more stringent than present federal regulations. Defeated 6-4 along strict party lines in the Health, Environment, Welfare, and Institutions Committee, the bill was favored by the League of Women Voters and the Colorado Open Space Council. Opponents, including the Colorado Association of Commerce and Industry and Public Ser-

vice Company, argued that no appreciable environmental benefits would result and additional costs made enactment undesirable.

The Colorado Association of Commerce and Industry is lining up to side with environmentalists on another bill, however — this time in connection with the possible re-opening of Lowry Landfill. Fearing that renewed access to Lowry might jeopardize efforts to construct a new site in the state and would likely involve extensive court battles, the group opposes a bill that would exempt Lowry from the 1981 state siting act.

Several water-related bills are currently advancing in the legislature. A "Water Satellite Monitoring Program" would place 400 gauges in streams throughout the state. These would take digital readings of flows, shoot the information to an orbiting satellite, and beam the data back to the State Engineer's Office. At present, water commissioners gather data with paper and pen in the field and then send it along to the state



offices. Vigorously supported by Western Slope environmentalists, the new bill is sponsored by Sen. Harold McCormick (R-Canon City).

Another water bill passed out of the Senate Local Government Committee with only one vote against it. The "Domestic Wastewater and Potable Water Facilities" proposal would provide two funding mechanisms to allow small towns to build new facilities or upgrade existing water and sewage treatment projects. The proposal, initiated by Sen. Tilman Bishop (R-Grand Junction) and Rep. Walt Younglund (R-New Raymer), makes funding available through proceeds from the state lottery and through Severance Tax Trust Fund monies.

— Deldre Duncan

★★★★★ Montana deals in slurry water ★★★★★

Unlikely political coalitions are forming around the issue of how to relieve Montana's water laws of provisions that may be unconstitutional. Montana law bans the use of water in coal slurry pipelines and severely restricts the export of water out of state for all other purposes. Recent court decisions have called into question the constitutionality of these laws, which are typical of many Western states.

Teaming up to overturn both the slurry ban and the out-of-state export provisions are Democratic Gov. Ted Schwinden and House minority leader Bob Marks, a leading contender for the Republican gubernatorial nomination in 1984. Schwinden and Marks have agreed to put down their usual swords in an effort to help Montana achieve the kind of lucrative water leasing arrangement that the state of South Dakota

made last year with Energy Transportation Systems Inc., which plans to initiate a coal slurry pipeline in Wyoming. South Dakota sold ETSI water for the pipeline.

Rep. Ted Neuman (D-Vaughn), a farmer, is carrying the Schwinden-Marks bill despite state Democratic party planks against removing the coal slurry ban or even studying the issue through a legislative resolution. Lining up in opposition are the Democratic leaders of both the Senate and House, who have declared unified opposition to removing the slurry ban. The legislative leaders are generally considered more cautious than Schwinden in approaching large-scale industrial development. Said Schwinden of the leaders' opposition, "They seem to view economic growth in Montana as having only two speeds — slow and stop."

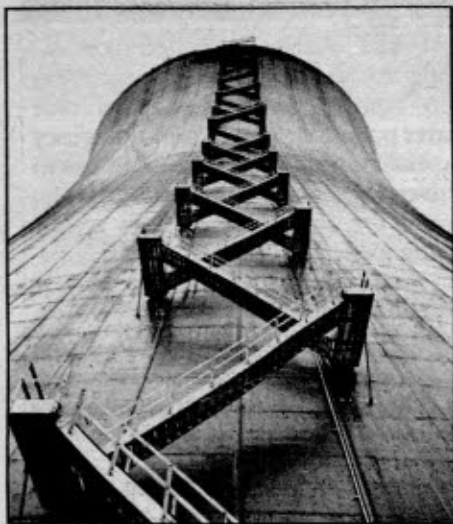
But legislative leaders say that a cautious approach is best, especially in light of lawsuits filed after the ETSI lease from South Dakota. Downstream Missouri River Basin states charged that South Dakota ignored its responsibilities to provide minimum flows for downstream navigation when it sold 50,000 acre-feet a year to ETSI. House speaker Dan Kemmis (D-Billings) fears "a renewed water war in the West," spurred by competing proposals to market water for out-of-state industrial use at the expense of downstream states.

Chet Blaylock (D-Laurel), Senate minority leader, said, "Our water is too important to us to make an irreversible commitment conceived in haste. There is a big difference between sound water policy and suddenly reversing our coal slurry ban."

Kemmis and Blaylock both want to improve the state's water export provisions, but leave the slurry ban intact. Schwinden and Marks, who see a way for the state to make millions in a quick coal slurry deal, fear that such an approach will scare away a ready source of revenues from the Powder River Pipeline Company. That slurry consortium has quietly approached state agencies for help in getting slurry transport water.

Democratic legislators are getting mixed signals about the proposal. On the one hand, they want to support their governor. On the other, they are worried about the effect of an immediate lifting of the ban on railroad jobs, irrigation and agricultural rail rates.

— Don Snow



Electricity demand in the United States dropped by two percent in 1982 — the first net decline since World War II.

Utilities...

(continued from page 1)

and 5 (cancelled) and Unit 1 (mothballed).

The WPPSS debacle led to a fivefold increase in the construction costs for the five-reactor nuclear system, and will cost ratepayers extravagant sums for power that will never be produced. At fault was the inability of Northwest regional forecasters to predict accurately the region's load growth through the 1990s. Participating utilities have been left with about \$7 billion in debts.

The Northwest remains the nation's most electrified region, where the average ratepayer consumes more than three times the national average of electricity. Today, the Northwest Power Planning Act ensures cautious development of new power facilities in a region where cheap hydropower still produces over 90 percent of the electricity. The preliminary draft of the Northwest Power Planning Council's energy plan reports that through conservation 4,800 megawatts of new power will not be needed, saving ratepayers the cost of building new, expensive thermal electric facilities.

Nevertheless, ratepayers in the highly electrified Northwest can expect a doubling of their average bill by 1984 — to about \$1,000 annually — and a 12 percent annual average increase for 10 years thereafter. Nationally, rates have also risen to record levels as utility customers have begun paying for \$30 billion in annual power plant construction costs. Utility rate increases reached a record \$9.5 billion in 1981, following an increase of \$8 billion in 1980.

In the Northwest, these costs have been the primary reason for reduced load growth, according to Terry Morlan, head forecaster for the Northwest Power Planning Council. "For many years we were insulated from large rate increases because of cheap hydropower," Morlan said. "We had five to seven percent load growth, and we attracted the aluminum industry to the Northwest by virtue of our low rates."

Now, however, rate increases in the Northwest are rising faster than the national average, spurring conservation strategies for a commodity once taken for granted.

"The whole mentality of energy consumption has changed, not just regionally but nationally," Morlan said. He believes that some utilities have been slow to recognize a fundamental and perhaps permanent change in energy use. And he disagreed with those who say that conservation is really a function of a depressed economy and therefore subject to immediate reversal when economic conditions improve.

"The evidence is heavy against that argument," according to Morlan, who points to the years between 1975 and 1979 as a time of better economic growth. "You didn't see demand skyrocketing then," he said. Instead, load growth stood at roughly half of historic

levels despite economic recovery. Morlan believes that voluntary conservation has had a major effect on reduced load growth.

According to the Internal Revenue Service, over 11 million homeowners took advantage of renewable energy tax credits between 1977 and 1979. In one year, \$4.1 billion or \$700 per residence was spent for energy improvements that qualify for tax credits under the Energy Tax Act of 1978.

Morlan acknowledged that despite these figures, voluntary conservation is difficult to document precisely.

"The data are diffuse," he said. "There isn't any clean, neat number to show what percentage of reduced demand is attributable to voluntary conservation and what percentage is merely tied to the depression."

But the Energy Tax Act has had an effect, as have the federal energy efficiency standards for 13 household appliances that account for over 90 percent of residential energy consumption, and the Buildings Energy Performance Standards that apply to new commercial buildings.

Yet in spite of rapid efforts to achieve conservation, utilities in every power region of the country continue to construct new facilities ordered during the mid-1970s. Richard Morgan, an economist with the Washington-based Environmental Action Foundation, said that utilities have not responded appropriately to a future of reduced demand.

"Utilities say they're cutting facilities left and right, and we applaud that, but we say it's not enough," Morgan said. "They're still overbuilding almost everywhere."

Morgan is especially critical of utility officials for failing to predict the effects of massive rate increases on consumption patterns. He cited the approximately 175 plants that are either under construction or in the planning stages as evidence that utilities are not responding to conservation and reduced load growth.

Utilities are continuing to build new projects for many reasons. In some regions and localities, load growth remains high because of in-migration and local industrial growth. In western Montana, for example, utilities believe that recent load growth levels of nine percent annually will continue due to the influx of new residents. Other utilities continue to build simply because they have invested too much in new plants to abandon them in mid-course.

Western utilities also hope to market their power to other states when and if demand picks up. Said Charles Koma-

noff, "Don't think that electricity wheeling is a phenomenon of the West. States like Pennsylvania and Florida are wheeling power across state lines, too." Wheeling is a term applied to the practice of shipping energy by wire to power grids connected with areas far from the generation source. Western power plants in the 1970s were built primarily to service customers in distant states.

"Utilities are planning to spend \$300 billion in the next ten years in expansion," he said. "That means electricity customers will be in for billions of dollars in additional rate hikes to pay for unneeded power plants. By overbuilding, utilities are penalizing customers who try to conserve energy."

Charles Komanoff of Komanoff Energy Associates in New York said that while reduced load growth affects utilities in every region of the country, utilities with nuclear commitments — now totalling two-thirds of the nation's one hundred largest utilities — have been hit hardest.

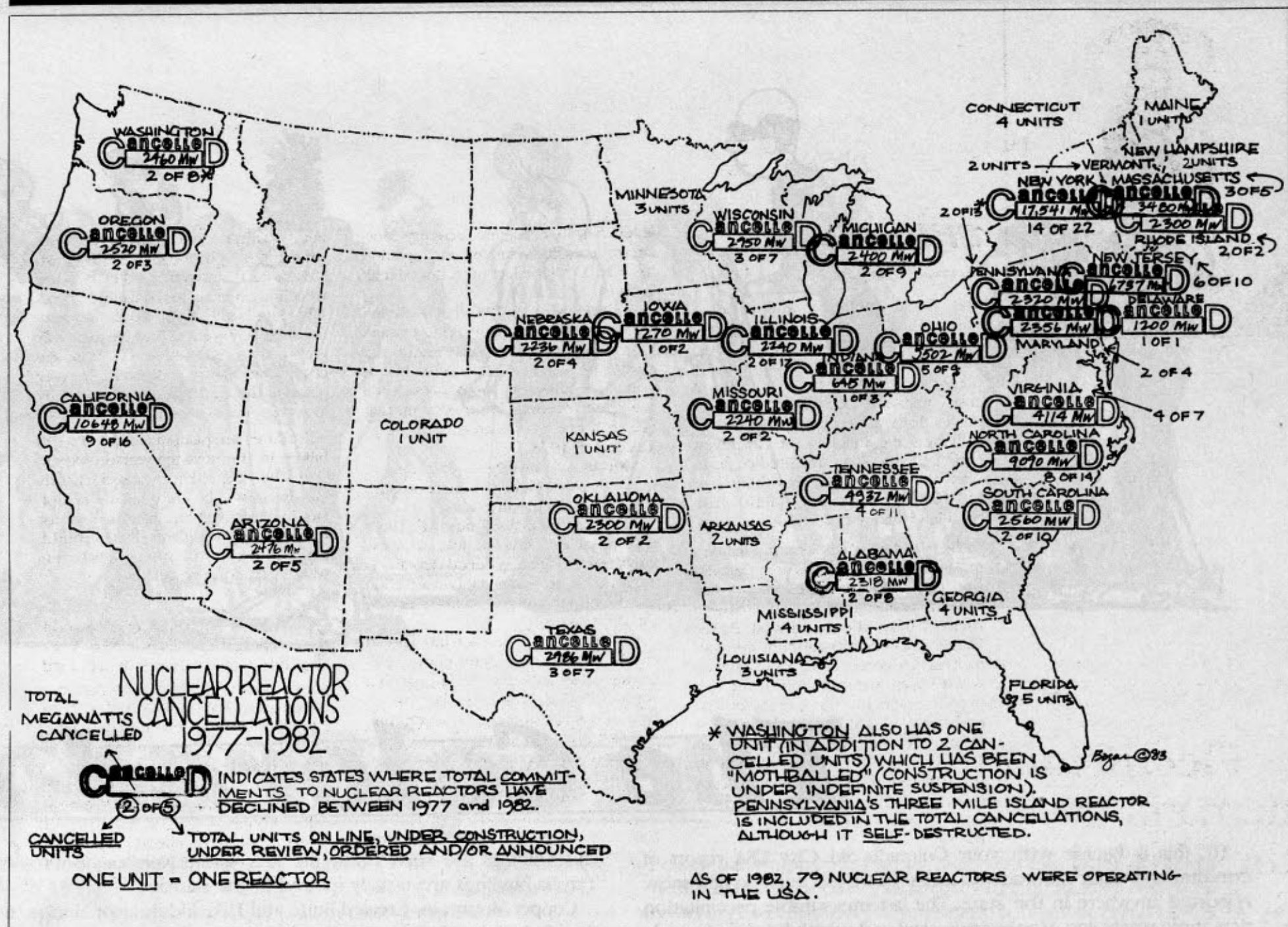
"1982 saw the biggest round of reactor cancellations yet, with 18 nationwide," Komanoff said. "Including the 50 or so that were cancelled through 1979, that brings the total to around 70 cancellations."

Komanoff suggests that the smaller average size of coal power units — 400 megawatts compared with 1,000 megawatt nuclear reactors — gives coal plants an advantage during periods of slow or unpredictable load growth since utilities can bring on-line the smaller, cheaper units gradually. Moreover, according to Komanoff, capital cost escalation for nuclear power plants increased more than twice as fast as coal capital costs between 1971 and 1978, a period of rapid facility construction.

"The real increases averaged 142 percent for nuclear plants and 68 percent for coal plants including the cost of scrubbers," Komanoff wrote in 1981. "The lifetime generating costs of new nuclear plants will exceed those of new coal plants by 20 to 25 percent on the average," according to Komanoff. Capital costs include all construction, planning and financing costs while total generating costs include capital costs plus fuel and other operating costs.

Komanoff said that the Southeast and Central industrial states were hit hardest by declining load growth. "After 1973, the Southeast girded up for nine percent growth," he said. "The utilities went way out to hell with construction projects. Now they have about three





percent growth." Meanwhile, the Central states planned facilities to meet six percent growth and are now facing zero growth.

In the Rockies, load growth has been a slightly different story. A 1982 coal demand study, published at the University of Montana, reveals that in the 21-state area that forms the market for Northern Great Plains coal, electricity demand was extremely variable through the 1970s.

While load growth in the Northwest remained low (less than four percent per year through the past decade), states with large, strippable coal deposits and other natural resources have watched demand skyrocket. Wyoming with its dozens of new energy and industrial facilities has seen almost 15 percent average annual growth through the 1970s. North Dakota's load growth averaged 8.5 percent and Colorado's exceeded seven percent during the same period.

The Rocky Mountain region was virtually the only region in the country that experienced rapid growth in energy intensive industries during the seventies, mostly related to energy produc-

tion. This growth, plus the attendant population increases, resulted in electricity load growth. Even a single coal mine uses the electricity equivalent of a small town, so this has a direct bearing on utility load.

However, the chief customers for Western coal are utilities in the very states that are experiencing declining demand. And, the slower load growth in the large Midwestern states that purchase the majority of Northern Great Plains coal has led to massive overcapacity at existing mines. This will almost certainly mean that in the next few years at least, the Western energy states will follow the trends of the rest of the country and watch their electricity demand curves flatten.

In the Powder River Basin in Wyoming and Montana, which accounts for 75 percent of Northern Great Plains coal production, current and expected capacity additions will create 348 million tons of mining capacity by 1990, more than double the expected demand. Current production in the basin stands at about 75 million tons per year.

Since 1970, about half of the national increase in coal production has occurred in the Northern Great Plains states, primarily in the Powder River Basin. But according to the National Coal Association, future Powder River production will follow national trends of slow growth through 1983 and beyond. NCA predicts two percent growth in national production in 1983.

The Montana University coal demand study concluded that growth in electricity demand is the most important variable in predicting coal production from the Northern Great Plains states. The research team, headed by resource analyst Arnold Silverman of the geology department, targeted two percent load growth as the likeliest scenario for the 21-state coal market. But the researchers also suggested that demand might be considerably lower if state and private incentives for energy conservation have been incorrectly estimated by energy forecasters.

The study noted that a recent report by DOE's Solar Energy Research Institute in Colorado placed the business-as-usual load growth estimate at 1.4 to two percent annual growth, and noted that

under an aggressive conservation scenario, load growth might actually be less than zero through the end of the century, as it was in 1982.

Such predictions are good news to environmentalists who have long argued that zero or even negative electricity growth will not necessarily come as the result of prolonged economic depression.

Said Richard Morgan of the Environmental Action Foundation, "When you see how much consumers have conserved without much help from their utilities, it makes you wonder how much energy we could save if utilities really tried to encourage efficiency improvements."

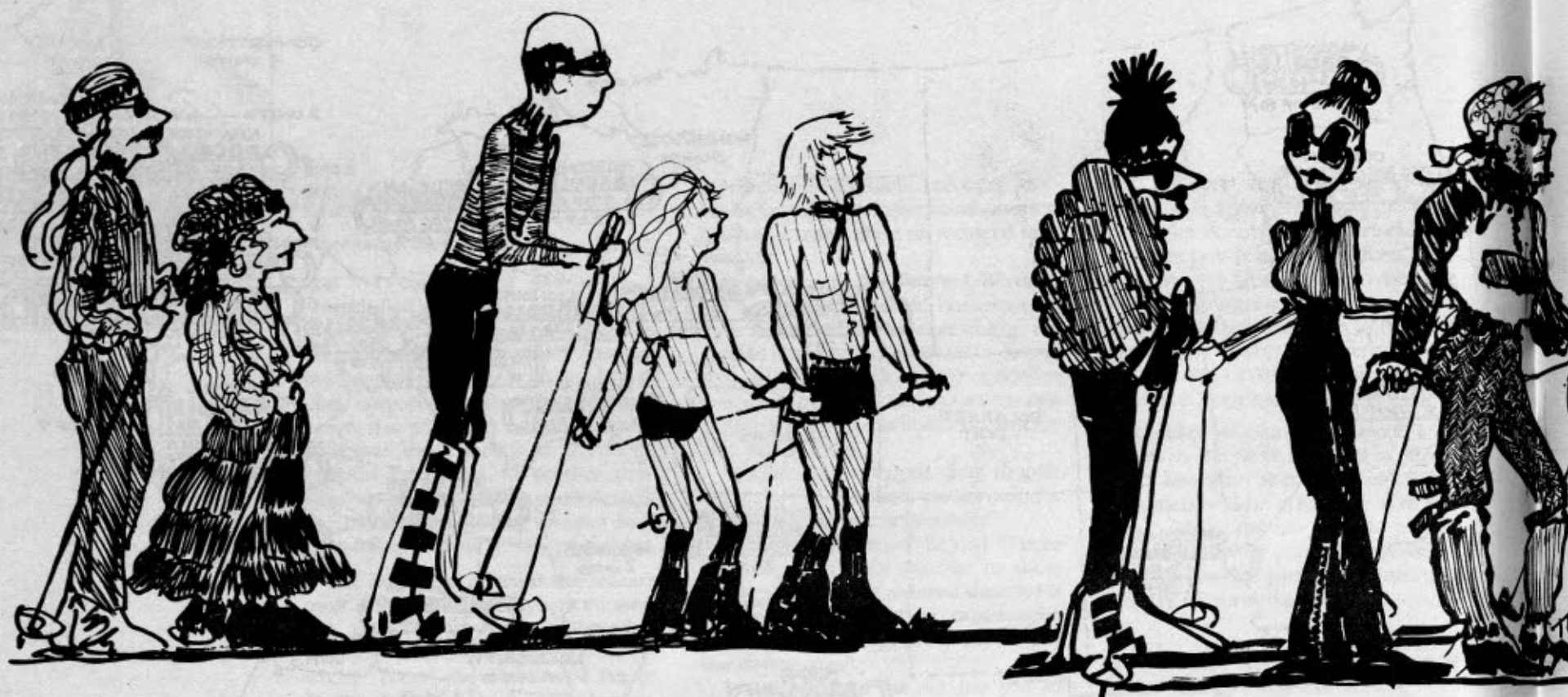
It is precisely that encouragement that the Northwest Power Planning Council is hoping to induce in the electricity-dependent Northwest. Yet while the council is predicting a total energy savings that equals the entire output of the ill-fated WPPSS nuclear system, the Reagan administration is about to issue a new study that warns of serious power shortages nationwide unless steps are taken immediately to promote construction of new power plants.

Said John Duffield, economist with the Montana University coal demand study, "It's ironic that the federally-funded Northwest Power Council is engaged right now in a progressive energy planning effort while the administration is pushing old-guard energy solutions everywhere else."

Don Snow, a Stevensville, Montana, freelance writer, is a contributing editor of *High Country News*. This article was paid for by the HCN Research Fund.

Over the next ten years, "electricity consumers will be in for billions of dollars in additional rate hikes to pay for unneeded power plants...Utilities are penalizing customers who try to conserve energy."

— Environmental Action's Richard Morgan



The Colorado

Hi, this is Bunnie with your Colorado Ski City USA report of conditions at major Colorado ski areas. There has been no new snow reported anywhere in the state. The last measurable precipitation was three weeks ago. Slopes are icy and rocky with hordes of people paying outrageous sums to ski. Parking is impossible and out-of-state skiers are like a plague of winter locusts. Conditions for ski resort owners are good to excellent.

Arapahoe Basin, Aspen Highlands and Aspen Mountain report Dynastar skis at midway, Fischer and K2 near the top of the runs.

Snowmass, Beaver Creek and Berthoud report Rossignol, Kastle and Yamaha skis from beginners through expert, while Olin, Head and Dynamic are frequently seen strapped on roofs of small imported cars.

Breckenridge, Conquistador and Ski Cooper report Saloman boots

and bindings are seen riding the lifts, while Nordica boots with Tyrolia bindings are usually spotted in the ski haus.

Copper Mountain, Crested Butte and Lake Eldora favor Hanson or Dynafit boots with Besser or Burt bindings as long as they are 1983 models.

Colorado Ski City reminds you if any of your equipment is more than two years old, you should be skiing in Utah.

Geneva Basin, Hidden Valley and Ski Idlewild report a quilted chartreuse parka with full collar and shoulder pleats is *de rigueur*.

Keystone, Loveland Basin and Loveland Valley report maroon stretch bibs with raspberry accents by Tyen of Paris, matching Angora cap and scarf by Christin Dior, and rose-colored ski goggles by Oscar de la Renta.

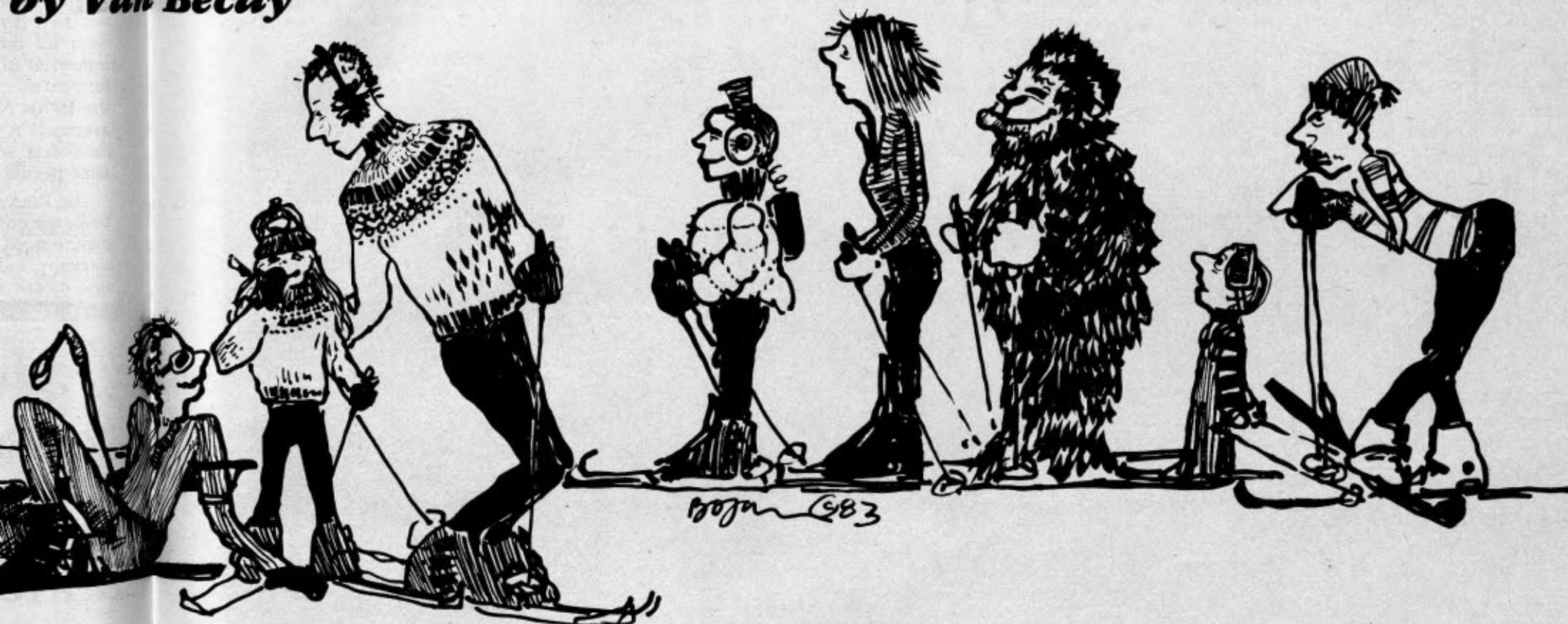
Monarch, Pikes Peak and Powderhorn advise skiers who spend the day in the lounge to wear skintight stretch pants (\$122.50) with a

by Van I





by Van Becay



Politics in the air in Denver —

A Colorado air quality official said EPA's disapproval portrays the Clean Air Act as "mighty

On January 31, 1983, Steve Durham, regional Environmental Protection Agency administrator, announced that the agency would disapprove Denver's plan for achieving compliance with federal carbon monoxide (CO) standards by 1987. A *Denver Post* editorial called EPA's action "a cynical example of its willingness to play politics with people's health." Durham, a former Colorado legislator and admitted critic of the existing federal Clean Air Act, argued that the law's inflexibility forced him to veto the Denver plan.

The formal EPA action had been expected since October, when Durham first announced his recommendation that EPA's headquarters office disapprove the Denver plan. "If the law had allowed any other course of action, I would have taken it," Durham said at the time, "but the law doesn't give me that discretion." In the January 31 press conference, Durham took the opportunity to once again call for support of the Reagan administration's efforts to amend the Clean Air Act.

For the last several months, there have been allegations that the Denver plan veto is based more on political strategy than strict application of the law. The *Post* called Durham's recommendation "incongruous unless he intends to apply the absolute letter of the law in an effort to make local and state officials scream in agony to Congress that the federal Clean Air Act is too onerous and should be weakened."

Durham's latest announcement coincides with EPA's publication of the proposed decision in the *Federal Register*. That action triggers a 45-day comment period during which, in the words of

one EPA staffer, state officials have an "opportunity for changing EPA's mind." Should the plan be finally disapproved, the state faces the potential loss of federal sewer, highway and air pollution control grants.

The Denver plan is part of Colorado's 1982 state implementation plan (SIP) required by the Clean Air Act for states with areas that have received five-year extensions (until 1987) of the deadline for meeting CO standards. Since motor vehicles account for about 94 percent of total CO emissions in the Denver area, much of the plan deals with transportation-related control measures.

EPA's objections center on one of a dozen strategies for reducing CO levels, called "episodic share-a-ride." According to Durham, EPA's technical review of the Denver plan found it to be "seriously flawed in its dependence on the episodic share-a-ride program." Durham calls the strategy "gimmickry," questioning its validity on both technical and legal grounds.

Under the strategy, segments of Denver's driving population would be asked to leave their vehicles at home on specified winter days when high levels of carbon monoxide — episodes — are predicted. EPA said the voluntary nature of the strategy makes it unenforceable, that the necessary capability to predict CO episodes does not exist now and will not exist in the foreseeable future, and that the measure may be illegal under an interpretation of federal law which is itself highly controversial.

It seems, however, that the kinds of issues EPA identified with respect to episodic share-a-ride were not

considered equally problematic for other strategies contained in the Denver plan. The big problem with episodic share-a-ride, according to Durham, is that the measure would be voluntary. On high pollution days, designated segments of the driving population would be asked — rather than required — to refrain from driving. Durham said that he does not think the necessary number of motorists will voluntarily comply. Yet, among the other strategies in the Denver plan approved by EPA are "park-and-ride" lots which enable motorists to drive to a location outside the downtown area, park and take mass transit into town. Also, display signs on commercial drive-through facilities will ask motorists to turn off their engines while waiting in line. Each of these strategies relies on the voluntary participation of motorists, and each was approved in EPA's technical review of the Colorado SIP.

In fact, pollution control measures requiring voluntary citizen compliance to be effective are commonplace nationwide with respect to controlling emissions from motor vehicles.

John Leary, a planner with the Colorado Air Pollution Control Division (APCD), noted that "most of the transportation-related measures contained in Section 108(f) (of the Clean Air Act) are voluntary." However, Leary said that while citizen participation is optional, the actions required of state and local control agencies to implement the strategies, including public awareness and education programs to increase participation, are mandatory.

Whether or not a sufficient number of motorists will in fact comply is, of course, a critical issue facing share-a-ride. The Denver plan acknowledges

that the strategy may not work and establishes a schedule under which the effectiveness of the program would be assessed. The state's assessment would be presented in a report to EPA in December 1985, evaluating the necessity of making the program mandatory by state legislative action if necessary to achieve compliance by 1987. The contingency plan prompted EPA to raise questions about whether the plan is "enforceable" since it relies on legislative action in the future. Durham has said that "it seems highly unlikely the legislature would take such an action." EPA's technical review of the plan noted that state agencies responsible for implementing the SIP "have no control over actions" by the legislature.

Despite this criticism, EPA's own rules governing review and approval of SIPs authorize the use of schedules that call for legislative action in the future. Furthermore, other control strategies in the SIP that rely on future legislative action were nonetheless approved by EPA. For example, a strategy in the Denver plan called "warranty enforcement" requires the state to develop an emissions test for new cars and to aid motorists in enforcing federally-required manufacturer warranties on emission control devices. Key to the warranty enforcement strategy is securing legislative authority to begin implementation of the program. Despite this requirement of legislative action in the future, the warranty enforcement strategy was approved by EPA for the full emission reduction credit claimed in the SIP.

Further inconsistencies in EPA's treatment of share-a-ride and the warranty enforcement strategy



EPA vetoes clean air plan

by Hal Winslow

inflexible" providing "powerful ammunition to those who would weaken the act."

have added fuel to the claims of Durham's critics that his actions were politically motivated. Both strategies, for example, provide for a two-year period in which to develop needed technical skills.

With warranty enforcement, the technical need is to develop an accurate emission test for new cars that cannot be evaded by their computer-assisted carburetion systems. The state must find a way to increase the reliability of the test, while reducing its cost from the current \$1,200 per car to around \$20 per car. Where the tests will be conducted, how they will be scheduled, and how motorists will be assisted in enforcing their warranties are also issues yet to be resolved.

Episodic share-a-ride raises technical issues of the same magnitude, particularly as to the ability of the Colorado Air Pollution Control Division to develop the necessary technical capability to predict high CO days. One regional EPA engineer said that predicting high CO days is "about like predicting the weather," a feat yet to be mastered by Denver area meteorologists. In addition, Durham has questioned whether Denver area motorists would be able to line up alternative transportation with less than 24-hours' notice that high pollution was expected.

Nonetheless, APCD officials said that air quality data for the past five years indicate that all high CO days occur within a 37-day period in the winter. Leary said that APCD "can already predict the high CO days to some extent. It's reasonable to assume that can be improved."

The state argues that motorists could be told to expect their designated days to be no-drive and then listen to the radio for word of a reprieve from the driving restriction if weather permits. This approach would be similar to present restrictions on water use in Denver, where citizens are allowed to water their lawns only on designated days during the summer months. An EPA staffer

said that the state did not put this refinement of episodic share-a-ride into the SIP, so it could not be considered in EPA's review.

Such talk makes APCD's Leary bristle. "Of course we need time to work out the problems and issues, but that's provided for in the plan," he said.

Then there are EPA's legal arguments against episodic share-a-ride. In particular, Durham has stated that "episodic control measures of the type recommended in the Denver SIP as an attainment strategy are prohibited by Section 123 of the federal Clean Air Act." An attorney for the Colorado Air Quality Control Commission has concluded that this section does not apply to vehicles. In fact, a review of the legislative history of the section and the case law, indicates that there is virtually no precedent for Durham's interpretation of the section's scope.

Section 123 is commonly known as the "tall stacks" provision. It was added in 1977 to settle a controversy over whether industrial plants could use tall smokestacks and "intermittent control strategies" to disperse, rather than control, pollutant emissions. Congress' solution was to prohibit intermittent controls, and require instead specific emission limitations, on each source, be it an industrial plant or a car's exhaust pipe. However, the legislative history of the section does not refer at all to mobile sources, but exclusively to stationary ones. In addition, the "tall stacks" provision has never before been interpreted to refer to automobile controls.

EPA's own technical review of the Denver plan treats this legal issue with considerable caution and qualification. The legal arguments seem at least as strong for an interpretation of the section that would authorize episodic share-a-ride as for the one chosen by Durham to support his decision to disapprove the Denver plan.

Emotions are running high in the Denver clean air controversy, and at present there is little in the way of formal or informal negotiation underway to resolve the issues. EPA technical staff were involved in the SIP development process from the initial stages of preparation of Denver's plan. Just prior to Durham's October announcement, however, communication between EPA and the state became less frequent and more ominous. According to Leary, "initially EPA said there was no problem and actually cancelled a meeting we had scheduled to discuss technical issues. Then we got an inkling there might be a problem." State officials actually did not know that Durham had decided to disapprove the plan until he held a press

conference to announce the decision.

The National Wildlife Federation, an organization that sued the state and EPA over inadequacies in the previous SIP, has gone on record supporting the current Denver plan, including episodic share-a-ride. NWF attorney Robert Wigginton said in a letter to Colorado's Air Quality Control Commission, "We think the strategies contained in the presently proposed plan are workable... While we do have concerns about the enforceability of those strategies, we do not want or intend to scuttle all the work that has been done to date." The Environmental Defense Fund also supports the Denver plan.

(continued on page 12)



Salt Lake City

Utah, Montana air plans nixed; three states OK'ed

Besides Colorado, regional administrator Steve Durham also announced the Environmental Protection Agency's decisions on clean air plans submitted by the other five states in EPA's Region VIII.

Plans in three other states — North Dakota, South Dakota and Wyoming — were approved.

Other areas in the six-state region did not fare so well. EPA rejected several portions of Utah's state implementation plan. Salt Lake City, Ogden and Provo had requested extensions beyond 1982 of the carbon monoxide standard, while extensions of the ozone standard were granted for Salt Lake and Davis counties and Salt Lake City. EPA's disapproval of plans for cleaning up these areas was based on the lack of "an enforceable vehicle inspection and maintenance program," as well as a finding that the plan does "not meet other provisions of the Act." Davis County (carbon monoxide), Iron County (sulphur dioxide) and Utah and Weber Counties (particulates and carbon monoxide) had previously been out of compliance, but EPA determined that those counties now have acceptable plans.

Further inadequacies in Utah's SIP were cited, including the plan to clean up sulphur dioxide in Salt Lake County and portions of Tooele County, and efforts to attain the federal standard for particulates in portions of Salt Lake County. EPA noted, however, that subsequent revisions to the Utah plan for controlling sulphur dioxide and partic-

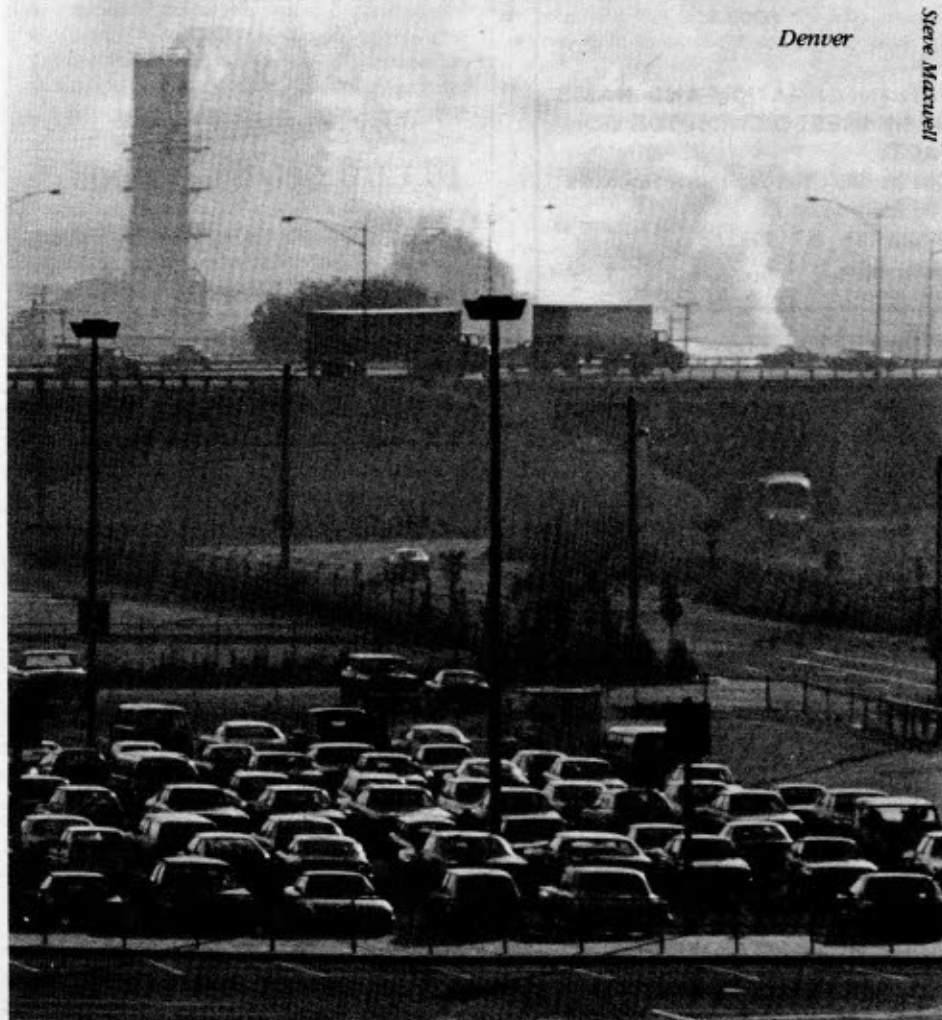
ulate emissions from a Kennecott Copper smelter near Salt Lake City may be sufficient to correct these problems.

Meanwhile, in Helena, Ken Alkema, acting director of EPA's Montana operations office, announced that EPA had found inadequacies in the clean air plans for four areas in Montana. Alkema said that the problems in Billings, Butte and Great Falls "are primarily those of time and paperwork." Billings and Great Falls need to submit additional air quality data to clarify their status, while Butte is awaiting EPA's approval of a revision to its plan to provide for continuing efforts to maintain compliance. In Missoula, a plan for showing compliance with particulates has been approved, but EPA says an implementation plan for carbon monoxide is "still lacking".

Besides disapproving the Denver plan for controlling carbon monoxide, EPA also announced disapproval for controlling particulates in Pueblo County, Denver County and portions of Arapahoe and Adams Counties in Colorado.

All of the areas with plans rejected by EPA now face a variety of sanctions, should the actions be finally adopted following a 45-day comment period. A ban on construction of new pollution sources would go into effect, and EPA would have to decide on the imposition of other sanctions including withholding federal funds for highways, sewers and air pollution control activities.

— Hal Winslow



Denver

Steve Maxwell

12-High Country News — Feb. 18, 1983



Clean Air Act...

EPA administrator Steve Durham called the voluntary share-a-ride program "gimmickry," questioning its validity on both technical and legal grounds.

(continued from page 11)

EPA assistant administrator Kathleen Bennett pledged in a letter to Colorado Governor Richard Lamm that the agency would be "appropriately flexible, insofar as the law will allow," in evaluating air quality plans. Following EPA's formal announcement, Bennett said that EPA "is not at liberty to look the other way" and not enforce sanctions while Congress is considering amendments to the clean air law.

Carol Edmonds Sullivan of the Colorado Air Quality Control Commission said that, should the Denver plan be declared unacceptable, the Clean Air Act "can be portrayed as mighty inflexible" thus providing "powerful ammunition to those who would weaken the act." Officials of the state's Air Pollution Control Division admit there is a lot more work to be done before the strategies are fully developed, but note that the SIP includes specific tasks and deadlines for solving the problems.

The state's plan to make episodic

share-a-ride mandatory, if necessary, satisfies EPA's requirement that SIPs include a "process" for developing contingency plans should a control strategy prove to be ineffective. The contingency plan requirement "allows for a little innovation," said Leary. "You don't have to have ironclad strategies." Furthermore, both the law and EPA's rules recognize that flexibility is important to areas such as Denver, facing both a five-year deadline for compliance with clean air goals, and a seemingly intractable motor vehicle emissions problem.

It is ironic, if Durham's critics are right, that an administration ostensibly committed to strengthening the role of states and localities in efforts to achieve clean air, would resort to SIP disapprovals and the attendant spectre of sanctions as a way of garnering support for its legislative agenda.

+++

Hal Winslow operates Winslow & Associates, an independent research and consulting firm in Denver. This article was paid for by the HCN Research Fund.

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APPLICATIONS FOR the spring *High Country News* internship will be accepted through February 28. This non-paid position will begin April 1 and last at least three months. Interns have both editorial and production responsibilities. Interest in natural resources is a plus (so is a sense of humor). Send expressions of interest, resume and clips to HCN, Internship, Box K, Lander, WY 82520.

BEFORE THE WYOMING INDUSTRIAL SITING COUNCIL
NOTICE OF PACIFIC POWER & LIGHT COMPANY AND
IDAHO POWER COMPANY APPLICATION
FOR AMENDMENT OF PERMIT NO. ISC-00-01-76
for
JIM BRIDGER GENERATING UNIT FOUR
DOCKET NO. WISA-83-2

Pursuant to provisions of the Wyoming Industrial Development Information and Siting Act (W.S. 35-12-101 through 35-12-121; Wyo. Stat. Anno., 1977), NOTICE IS HEREBY GIVEN THAT PACIFIC POWER & LIGHT COMPANY AND IDAHO POWER COMPANY HAVE FILED AN APPLICATION WITH THE INDUSTRIAL SITING COUNCIL FOR AN AMENDMENT OF THE PERMIT FOR THE JIM BRIDGER GENERATING UNIT 4 NEAR POINT OF ROCKS, SWEETWATER COUNTY, WYOMING. The applicants request that the permit be amended by the Industrial Siting Council to conform to the NPDES Permit issued by the Wyoming Department of Environmental Quality in December, 1982. The NPDES Permit authorizes the applicants to discharge wastewater from the Jim Bridger Power Plant through an outfall line and discharge structure into Deadman Wash at the rate of 1,850 gallons per minute, subject to the terms and conditions contained in the NPDES Permit.

Condition 3.B. of the ISC Permit authorized the applicants to construct the facility described in the application and the hearing record, in accordance with the principal architectural and engineering criteria and environmental protection commitments set forth therein. The application described the facility as a nondischarging facility utilizing total containment of produced wastewater. The application further presented plans to prevent the possibility of discharge of wastewater through implementation of an irrigation system or, in the alternative, construction of additional evaporation ponds. The requested permit amendment would eliminate the requirement to construct additional irrigation systems or an evaporation pond, and would allow discharge of wastewater. The Industrial Siting Council, at a meeting in Rock Springs on January 14, 1983, determined that the proposed amendment would materially increase any proposed environmental, social, or economic impact of the facility, thus requiring a hearing on the amendment pursuant to Section 12 of the Rules and Regulations. The Council authorized a temporary discharge not to exceed a period of 90 days to allow the company operational flexibility during the period when the amendment is being processed.

Copies of the amendment application materials are available upon request from the Office of the Industrial Siting Administration. Persons desiring to become parties to the permit amendment proceeding may do so pursuant to W.S. 35-12-112, by notifying the Office of Industrial Siting Administration in writing of their intent to become a party.

Limited appearance statements will be received in the matter in accordance with provisions at W.S. 35-12-112(c). These should be mailed to the Director, Office of Industrial Siting Administration.

Dated this 9th day of February, 1983.
Office of Industrial Siting Administration
Suite 500, Boyd Building
Cheyenne, WY 82002
(307) 777-7368

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NOTECARDS

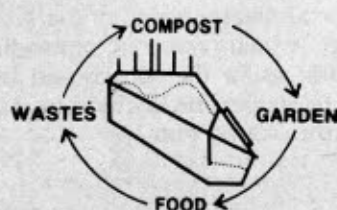


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BOOKS

Western poems without cheap thrills

New Poetry of the American West

Edited by Peter Wild and Frank Graziano. Logbridge-Rhodes, Inc. 1982; Durango, Colorado. 104 pages. \$5.50 paperback, \$14.00 clothbound.

Review by C.L. Rawlins

Whatever the "West" is, we are still chasing it, whether through specifics of longitude and rainfall or through claims about the effect of open spaces and silence upon the human heart. Much writing claiming Western origin has been about rather than of the West, suffering from a shallow fascination with awesome landscapes and gaudy human stereotypes. That the "Western" is emblematic of cheap thrills is due as

much to public taste as to the failure of writers to confront its problems in depth.

In a thoughtful introduction, the editors deal with this and related questions in historical and artistic contexts and arrive at the conclusion that Western poetry is coming of age, becoming more of the West and less about it. The poetry supports this with an honest approach. Beauty and integrity coexist in these poems. There are real people in real landscapes.

We are given John Haines' quiet, vivid, bedrock imagery and Richard Hugo's colloquial elegance; William Matthews' self-examination and Reg Saner's tactile, thoughtful explorations.

Richard Shelton's work has understated mystery and Gary Soto's a photographic irony. William Stafford contributes poems full of human texture and compassion, while David Wagoner's figures inhabit a landscape rich in portent.

The limiting of the anthology to eight poets gives it depth. There are evocative contrasts here to accompany parallel fascinations with the West. Taken as a whole, it is a powerful collection from poets of considerable talent and heart.

My one reservation has little to do with the poetry itself. All of the poets represented here are male and present or former university professors. The poetry is excellent, but I wonder what kind of work is being done by Western



women or by poets outside the havens provided by colleges. Perhaps further collections from this gifted pair of editors will give us a wider spectrum in human terms and a fuller grasp of the state of poetry in the West.

BULLETIN BOARD

WYOMING NONRESIDENT HUNTING

Nonresidents planning to hunt antelope and deer in Wyoming in 1983 must apply before March 15. Big game application booklets are available from the Wyo. Game and Fish Dept., Info. Section, Cheyenne, Wyo. 82002.

WYOMING WILDERNESS EIS

The Bureau of Land Management has prepared a draft environmental impact statement covering 200,000 acres of public lands in 13 wilderness study areas in southwestern Wyoming. There will be a public hearing on the EIS in Rock Springs, March 16, and the comment period will close April 15. Copies of the EIS are available from the Rock Springs BLM District Office, Hwy. 187 No., Rock Springs, Wyo. 82901; phone (307) 382-5350. Review copies are available at BLM offices in Wyo., Boise, Ida., Billings, Mont., Denver and Salt Lake City. Comments should be sent to Team Leader Wilderness DEIS, Rock Springs BLM, Box 1869, Rock Springs, Wyo. 82901.

VOLUNTEER FOR UTAH WILDERNESS

The Utah Wilderness Assoc. is looking for volunteers to serve on a variety of committees including committees on the Bureau of Land Management, the Forest Service, public lands, office administration, media, publication, education and fundraising. Volunteers will form their own committee structure and be expected to commit between three to 10 hours monthly. If interested contact Utah Wilderness Assoc., 325 Judge Bldg., Salt Lake City, Utah 84111.

INDIAN WOMEN RESOURCES

The Ohayo Resource Center has developed the first national communication and networking system among American Indian women by providing them with information, products and services for, about, and by Indian women. Currently the center is offering three publications — a resource guide for American Indian-Alaska Native women, a bibliography of culture-based curriculum materials and a conference volume of women's oratory — free of charge to persons willing to participate in a simple field-test evaluation of the products. For more information write Ohayo Resource Center, 2301 Midwestern Parkway, Suite 214, Wichita Falls, Tex. 76308.

SOLAR PAPER CALL

The American Solar Energy Society has issued a call for papers to be presented at the eighth National Passive Solar Conference to be held Sept. 5-10, 1983, at the Glorieta Conference Center near Santa Fe, N.M. The Society is soliciting papers describing current work in the field of hybrid and passive solar energy, and will address major solar topics. Abstracts of the papers must be submitted by March 14. For abstract guidelines or other conference information contact Karen George, ASES, 1230 Grandview Ave., Boulder, Colo. 80302, or phone (303) 492-6017.

OUTDOOR EXPLORATION SEMINARS

Rocky Mountain National Park is offering 15 seminars this summer. Starting in June and running until mid-Sept. nine summer sessions and six weekend sessions will emphasize outdoor exploration of the Rocky Mountain environment with arduous field activities complemented by occasional indoor sessions. University credit is offered for several of the sessions. For further information contact Seminar Coordinator, Rocky Mountain National Park, Estes Park, Colo. 80517, or phone (303) 586-2371.

COMMENT ON ALUNITE MINING

The Bureau of Land Management is seeking public comment on an open pit alunite mining operation and pipeline proposed by Earth Sciences, Inc. for construction on 1,667 acres of public land near Red Mountain within the Redcloud Peak Wilderness study area in southeastern Colorado. The BLM is preparing an environmental assessment of the project to determine whether a lease should be issued. For more information contact Ben Sprouse, BLM Gunnison Basin Resource Area, P.O. Box 1269, Montrose, Colo. 81402, phone (303) 249-6624.

BRIDGER-TETON 1983 PROJECTS LIST

The U.S. Forest Service has released a list of projects, studies and planning activities being considered for the Bridger-Teton National Forest in Wyoming during 1983. The list includes all known projects and activities that require preparation of an environmental assessment or preliminary statements. Copies are available from district ranger offices in Jackson, Afton, Moran, Pinedale, Kemmerer and Big Piney or from the Supervisor's Office, Bridger-Teton National Forest, P.O. Box 1888, Jackson, Wyo. 83001.

GRAND CANYON RIVER TRIP BENEFIT

Friends of the River is organizing two special Grand Canyon trips via our-powered raft, paddle boat and kayak to be run in September and October, 1983. Proceeds from these specially priced, environmentally oriented trips will support efforts to protect the Colorado River and Grand Canyon from energy development impacts. Other trips, including a special "last chance" trip on the Dolores River, high water Cataract Canyon trips and row-your-own sportyak trips on the Green and San Juan Rivers are also available. Write: FOR-Southwest, Box 1115, Flagstaff, Ariz. 86002, or phone (602) 774-0130.

ARIZONA ANTI-VANDALISM CAMPAIGN

A major campaign to combat outdoor vandalism is under way in Arizona. Citizens are asked to report suspected vandalism to campgrounds, road signs, stock watering tanks and other public and private land by calling the toll free number: (800) 352-0700. The line is currently used by the Arizona Game and Fish Dept. for receiving calls about poaching and other game law violations.

COMMENTS DUE ON PHOSPHATE PROJECT

Written comments on the draft environmental impact statement for a phosphate fertilizer plant complex proposed by Chevron Chemical Company will be accepted by the Bureau of Land Management until March 15. As proposed, the complex would be built some 4.5 miles southeast of Rock Springs in Sweetwater County, Wyo. In addition to the fertilizer complex the project would include a phosphate slurry pipeline from an existing mine north of Vernal, Ut., a water intake structure and pipeline from the Green River south of Green River, Wyo., a railroad spur from Union Pacific's main line and a county road relocation. Contact Richard E. Taylor, Chevron EIS project leader, BLM, Div. of EIS Services, 555 Zang St., First Floor East, Denver, Colo. 80228, or phone (303) 234-6737 for a description of the project. Written comments should be sent to the same address.

ARAMBEL GRAZING MANAGEMENT PLAN

The U.S. Forest Service is soliciting written comments by March 1, 1983 on the preliminary scoping statement for the Arambel sheep and goat allotment management plan. The plan seeks to



establish a management system coordinating livestock grazing with other activities, especially recreational use, on allotments located on the Pinedale Ranger District in Bridger-Teton National Forest and on the Lander Ranger District in Shoshone National Forest in Western Wyoming. For further information contact Sam E. Warren, Pinedale Ranger District, Box 220, Pinedale, Wyo. 82941, or telephone (307) 367-4326.

RIVERS CONFERENCE

The eighth annual National Conference on Rivers, Dams and National Water Policy will be held April 8-10 in Washington, D.C. This year's conference will address alternatives for river protection and is sponsored by the River Conservation Fund, American Rivers Conservation Council and the Environmental Policy Institute. For more information write RCF, 323 Pennsylvania Ave., S.E., Washington, D.C. 20003, or phone (202) 547-0010.

VOLUNTEER FOR THE FOREST SERVICE

The Shoshone National Forest bordering on Yellowstone National Park in northwest Wyoming is looking for summer volunteers to help with a broad variety of projects. Campground host, wilderness ranger, trail maintenance, timber markers, and range and wilderness studies are among the types of work available. Services can be offered one-time, a few hours per week or for the whole summer season. For more information contact Mark Hight, Shoshone National Forest Headquarters, W. Yellowstone Hwy., Box 2140, Cody, Wyo. 82414, or phone (307) 587-2274.

AVALANCHE PHONE

Snowmobilers, cross-country skiers, and winter travelers in the Jackson Hole area are being urged by the U.S. Forest Service to call (307) 833-2664 for the latest weather and avalanche information before heading out for a day in the national forests or parks. Recent snowstorms have increased the risk of avalanches in the backcountry and winter recreationists are being urged to use caution and to avoid steep canyons, gullies, and windblown corniced areas. The free avalanche phone service operates 24 hours per day and is updated by 7 a.m. daily.

RECLAMATION INTERIM GUIDELINES

Interim guidelines for the Reclamation Reform Act of 1982 have been issued by the U.S. Bureau of Reclamation. The new guidelines address provisions of the new law regarding increased acreage entitlements, new and amended repayment and water service contracts, individual elections, recordable contracts, a section explaining the application of the prior reclamation law and another section covering exemptions from the new law. The BuRec expects to issue proposed rules by March 31. Public comments on both the rules and the guidelines will be sought at that time. Copies of the interim guidelines are available at BuRec offices in Denver, Salt Lake City, Billings and Boise.

ART AUCTION BENEFIT

The Jackson Hole Alliance for Responsible Planning is sponsoring a silent art auction Sunday, Feb. 20 from 4 to 7 p.m. at the Peacock Gallery. Western artists from all over the Rockies will be represented. Proxy bidding is possible by calling (307) 733-9417.

BIGGEST TREE IN THE NEIGHBORHOOD

The National Register of Big Trees is a list of the largest reported specimens of 650 tree species found in the U.S. today. The list has been maintained by the American Forestry Association since 1940. The group has a 36 page pamphlet which lists the champions and gives details on how the program is run and how to nominate trees. Available for \$2 from AFA, Big Tree Program, 1319 Elizabeth St. N.W., Washington, D.C. 20036.

ACID RAIN KIT

The Natural Resources Council of Maine has developed an acid rain test kit for those interested in measuring the pH or acidity of rain or snow. The kit contains all the required items, including enough pH paper for 50 tests, a color chart to determine acidity, an explanation of acidity measurements and cards to report findings to National Wildlife Federation affiliates. The test package costs \$3 and can be obtained by writing to the Natural Resource Council of Maine, Acid Rain Test Kit, 271 State Street, Augusta, ME 04330.

WILDLIFE REFUGE GUIDE

The new "Visitors Guide to the National Wildlife Refuges," depicting most of the nation's 413 wildlife refuges on a pocket size map of the United States and giving a complete run-down of major public use activities on each refuge, is now available for \$2.25 (or \$31 per 100 copies) from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Specify stock #024-010-00529-7.

WOMYN EARTHING

Womyn Earthing, a free gathering of women to be held somewhere in the northwestern region in early summer is in the planning stages. Any woman interested in learning and teaching any aspect of food, shelter, energy, healing, education, golden years, clothing, animals, birth, children, politics, crafts or whatever is invited to send a SASE to Dharmika, Caretakers of the Earth, Rt. 4 Box 252AA, St. Maries, Ida. 83861, or phone (208) 245-4776 for further communication.

GRASSLAND STUDY

The ninth annual Grassland Institute sponsored by the Denver Audubon Society will be held the week of June 12-19 in northern Colorado at the Crow Creek Campground on the Pawnee National Grasslands. The institute program familiarizes participants with the short-grass prairie ecosystem. The institute blends the arts, sciences, and humanities to form the basis for viewing the prairie. If interested contact Ed Butterfield, 17410 E. Nichols Place, Parker, Colo. 80134, or phone (303) 690-5019.

COMPETITION

The fifth annual National Intercollegiate Mining Competition will be hosted by the Colorado School of Mines March 11-12 in Golden, Colo. The competition is held to develop basic mining skills, foster camaraderie among mining engineering students and to preserve some of the historical skills of the mining industry. Jack leg drilling, hand mucking, Swede sawing, hand steeling, rail standing and brunton surveying are some of the events scheduled. The tie breaker, a traditional beer-chugging contest, completes the competition. For more information contact Brodie Farquhar CSM Public Info Officer, Golden, Colo. 80401, or phone (303) 273-3300.

14-High Country News — Feb. 18, 1983

OPINION

Putting a GRIMP in our style

by Sherman Stein

When our large-scale creations perform as planned, they provide us wonderful benefits. However, some do not

GUEST EDITORIAL

perform as planned. When they fail, they may generate a loss so great that it exceeds all the accumulated benefits.

This type of creation I call the GRIMP, a Gigantic Risk with Incredibly Minute Probability of occurrence. A dam a nuclear reactor or the nuclear arms race are GRIMPs.

Decision-makers have wrestled with GRIMPs for decades. To estimate the total cost of a proposed GRIMP, they must figure in the possible loss if the GRIMP fails — an event that carries a slight, non-zero chance of occurring. How is this to be done? It is reasonable to multiply the dollar value of the hypothetical loss by its probability.

One trouble with this approach is that no one has any acceptable way of discovering just how small that probability is. The other is that a large number times a small number can be just about anything: small, medium or large. A billion, which is large, times a thousandth, which is small, is a million, which is large. A billion times a millionth is a thousand, which is medium; a billion times a trillionth is one thousandth, which is small.

What happens in practice? "Experts" are called in to assure everyone that the odds of failure are so small that we can disregard the risk. (An "expert" in this context is someone who does not have to reveal how he reaches his conclusions.) The ritual of expert testimony plays the same role in our society that the shaman's dance plays in more primitive tribes. It reassures us that the evil spirits are under control.

The evolution of a typical GRIMP from beginning to end runs through three stages, as illustrated, say, in the cases of the Teton Dam or the Three Mile Island reactor.

At its inception, there are the GRIMP's advocates — full time professionals — and its opponents — typically lay persons with perhaps a sprinkling of professional advisers. The advocates, though their very livelihood may depend on pushing the project through, manage to appear objective and calm. The opponents, though they have no conflict of interest, appear overemotional.

After ritual public hearings the GRIMP is authorized. With each year that the GRIMP works as planned its advocates look more astute and its detractors more foolish.

Finally the gigantic disaster that the critics had foretold takes place. An official inquiry determines the cause of the catastrophe and confirms the critics' analysis. The flaws and bias in the experts' original testimony are exposed. The media reveal that some employees within the very agency that had pushed the GRIMP had from the outset expressed the same fears as the outsiders.

But there is an important twist given to the plot of the GRIMP by an accident less severe than the dreaded disaster. When it occurs the proponents point out that their project survived: The larger the accident, the more it challenged the project, the more secure their enterprise must be.

The opponents draw the very opposite conclusion: The accident shows that the odds for the final catastrophe are greater than the proponents had estimated, and we should shut down the whole thing while we are still ahead. After the proponents make some slight change in the project, the scenario unrolls again from scratch, but at a

higher level of confidence on one side and of trepidation on the other.

A lay person can afford to disregard some GRIMPs. After all, when a dam bursts or a reactor core melts down, the casualties will be measured only in the thousands or hundreds of thousands of lives, and the cost in a few billions of dollars. But the nuclear arms race is a GRIMP designed on a much larger scale, as anyone can testify who has read the first part of Jonathan Schell's *The Fate of the Earth* or seen the Physicians for Social Responsibility film, *The Last Epidemic*.

Whatever holds for the typical GRIMP holds for the ultimate GRIMP, nuclear armaments. As far back as 1945 there were those who feared that nuclear armaments would lead us to disaster. Supporters of nuclear arms won and can now point to 37 years of peace, which they often credit completely to nuclear deterrence. Critics point to the hundreds of false alarms in the early warning system as indications of one

way the ultimate catastrophe could occur.

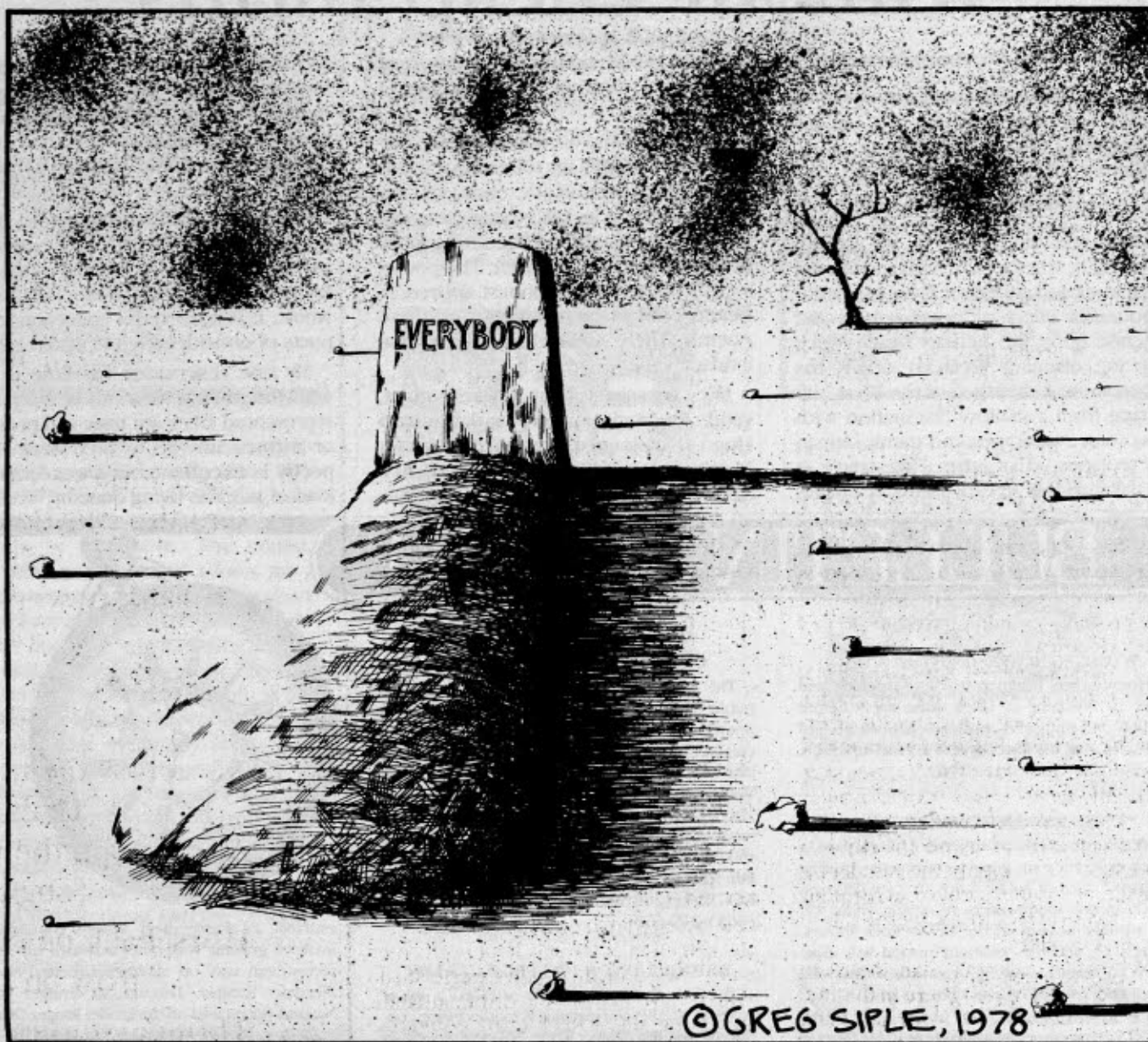
Supporters argue that these accidents show that the fail-safe mechanisms are working. The critics cite the Cuban missile crisis of 1962 as the greatest threat to peace since World War II, and an illustration of one of the many ways a nuclear war could be triggered.

In lesser GRIMPs it can be useful to put our trust in our shamans and leave the balancing of risk and gain to them. But in the GRIMP of the nuclear arms race we are foolish to sit by and watch it unfold as though we were spectators at a soccer game.

In the match between the superpowers the ball may explode and destroy the stadium and everyone in it. The odds are both incalculable and unacceptable.

†††

Sherman Stein is a professor of mathematics at the University of California at Davis. This article was originally published in the *Sacramento Bee*.



NUCLEAR WAR IS NEVER HAVING TO SAY YOU'RE SORRY



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High Country News

The paper for people who care about the West.

LETTERS

GOD'S DESIGN

Dear HCN,

Absolutely the number one issue is that all is designed and controlled by God. The number one issue for mankind is in knowing this, to strive for divine wisdom (i.e. knowledge based on perfect balance) to direct in judging the effects on the universe of different actions that we are involved with. As then, we, as humans, would be at the heavenly stage, if we also contained a little divine compassion.

This place that we live in is not just on the road or purgatory. It is the one and the same of Adam and Eve, only is being abused to a greater degree. Furthermore, few people have tried or desired the knowledge of the awareness of just the possibility of a higher existence here.

All of us are into one kind of business or another. If we are involved in electricity we work on establishing a profitable business based on an endless resource. Of course there will be some unpleasant side effects but if we were in the business to protect the environment we probably wouldn't have time to fool with electricity.

In the meantime, we fail to notice that time is flashing by and we are graying and dying. Beyond our domestic affairs are the failing falling foreign countries, the Middle East, etc. The human problem of destruction continuously becomes more and more grandiose.

No one cares to spend the day in a rocking chair observing the wonders of the direct creation and live in harmony with it, and to seek to appreciate this to the fullest degree.

Why indeed doesn't man desire to become universal right here in this life? To find in being, to strive for and attain all answers sought, and maintain a channel of harmony to and for the heavenly creator for eternity.

Ladies and Gentlemen, the theme for this direction is "The coming of Man-King."

Spiritual seeking and desire, positive response and the guiding light now and forever.

It must start with *you* and *I*.

Steven L. Hanna
Pueblo, Colorado

LAUGHING GAS

Dear HCN,

The article, "Brownish-yellow is beautiful," (HCN, 1/21/83) implies nitrous oxide and nitrogen dioxide are harmless. This is absolutely incorrect. The latter is one of Los Angeles' biggest smog problems and it is a toxic gas. Are you sure the nitrous oxide is not nitric oxide? The former is laughing gas, but the nitric oxide converts to nitrogen dioxide on contact with air. I think someone is trying to pull a fast one.

Bob Kvass
Goleta, Calif.

(Ed. note: The Idaho Air Quality Bureau said it is nitric oxide produced at the Idaho National Engineering Laboratory, which converts to nitrogen dioxide on contact with oxygen. The Bureau's chief, Ken Brooks, said levels of NO₂ are "far below" the standards set by the Environmental Protection Agency, and are therefore considered harmless.)

WILD HUMOR

Dear HCN,

I found Peter Wild's essay (HCN, 12/24/82) and "notions of what living in the Southwest is all about" entertaining, and, from what I remember about living in Tucson as a child, accurately descriptive of the area. It is subtle, tongue-in-cheek humor at its best.

Seems I recall the notion — expressed by some professor-type folk

— that vegetation types are a result of, adapted to and sustained by a number of different factors, the most important of which might be precipitation (or the lack thereof), available to plants. In my ignorance, I have a problem with the assertion that arid regions (HCN, 12/24/82) — the Great Basin, Mojave Desert, etc. — are strictly a result of cattle and sheep, but to deny their periodic effect is also ignorance. Oh, well, some of us "natives" out here where "men are men and sheep are nervous," (bad joke!) can still laugh at ourselves, and learn something, too.

C.D. Harms
Laramie, Wyoming

NICE ISSUE

Dear HCN,

I finally had a chance to read your 12/24/82 issue, and want to say that it really was excellent. Chip Rawlins held my attention all the way through his piece; he's a particularly gifted writer, and I always like his work. Also, I thought your centerspread, "A Rocky Mountain Primer," was superb, both the text and the drawings.

Congratulations on a nice issue, and good luck in '83.

Kate Democoeur
Denver, Colorado

WIPP POLITICS

Dear HCN,

I was disappointed that your article on WIPP (HCN, 2/4/83) concentrated on politics. The political battle over WIPP has long raged, with little attention being paid to the scientific basis for the selection of the site. If more people were aware of the studies performed which have demonstrated the suitability of the site, I think many concerns would fade away.

Rick Beauheim
Assistant Project Hydrogeologist
D'Appolonia Consulting Engineers
Denver, Colorado

BOARD AND PROUD

Dear HCN,

A small correction to the excellent article by Ellen Ditzler (HCN, 1/21/83) on the Northern Lights Institute. Mary Lou Reed and I not only helped to start Northern Lights, but we are still on the board of directors along with the others you list — still on board and proud to be there!

Med Bennett
Wilson, Wyoming

FULL SUPPORT

Dear HCN,

If I'd been editor of the February 4, 1983, issue of HCN I think I'd have turned the makeup routine topsy-turvy and smashed the David Freeman guest editorial all across page one under a 72-point headline.

Even as far back as my newshound years the word "scoop" had become trite and we who were with it spoke instead of news "beats." HCN has scored the nuke beat of the decade with this calm, dispassionate, and reasoned editorial from the desk of the man in charge of the nation's largest aggregation of producers of electricity from nuclear sources.

Freeman's frank declaration that today's nuke plants fall short is not the speculative conclusion of a member of an environmental fringe element trying to shout a message over the din of heavy machinery at the site of a new plant. This was the considered opinion of a man who for some years has had to live with the responsibility of the light-water shortcomings built by his predecessors in the directorate of the Tennessee Valley Authority. He is talk-



Del Owens

Indian Paintbrush Divide

High interior of the continent
Granite canyons

fall away to the east.

Dark powers
roll in the rivers.

Trees
filled with light

All across the mountains,
Thunder.

All through the mountains,
Songs.

Horseback on cold gray mornings,
frost on the hat brim.

Thunderstorms,
Stacked up miles away
over hot yellow plains.

Thunderstorms
breaking on the next ridge over;
Big hot blue bolts of lightening
walking down the ridges.

Stars riding low
Cold at dawn
Watching moose browse
mosquitos
They say

it just goes on . . .

like "That"
that "Way"
Always.

— Zac Reisner
Cora, Wyoming

ing from personal and probably anguished experience.

Freeman is pointing to alternate directions to go in the energy-short years stretching out in front of us (despite today's temporary glut), and we of the conservation community should listen and give what he suggests our most thoughtful consideration.

Only one thing deters me from pledging Freeman full support. I remember his peculiar action in connection with Tellico Dam in the late 1970s. First, in testimony before a congressional committee, he disclosed that Tellico would inundate 16,000 acres of arable land, of which 14,000 were among the most fer-

tile in east Tennessee. Then Tellico became entangled in the presidential aspirations of what's-his-name, that senator who had to answer to all those generous political action committees organized by contractors and suppliers and others who'd profit from the construction. Suddenly "snail darter" became virtually a dirty word, and in those critical hours Freeman didn't speak out as plainly as he did in the editorial. Nevertheless, I'm inclined to give Freeman's suggestions the benefit of the doubt until they're proved wrong.

William Voigt, Jr.
Blackshear, Georgia

16-High Country News — Feb. 18, 1983

Opposition builds to federal land sale

by Ellen Marks



The Reagan administration's unprecedented plan to sell 2.7 million acres of public lands as a revenue-raising venture is striking fear in the hearts of many Westerners worried that "No Trespassing" signs may soon pop up at their favorite recreation spots.

The reaction has been great in Idaho, where the issue became central to several statewide and congressional campaigns waged for the November general election.

Nearly a year after the plan was announced, the controversy has failed to diminish among a number of groups — from hunters and hikers who fear the sale of pristine wilderness to ranchers who base their livelihood on relatively cheap grazing rights on federal property (HCN, 7/23/82).

"America has had a policy since its beginning of having adequate land to take care of its unsatisfied people," said Lee Sharp, University of Idaho professor of range resources.

However, according to Clair Whitlock, U.S. Bureau of Land Management director for Idaho, "It's caused a lot more concern and interest than it really needs to."

"Any time you make a drastic change in policy, that always causes concern. Our role, then, is to handle the situation with as much full disclosure as possible."

In some states with large amounts of public lands, such as Utah and Nevada, many residents have adopted a wait-and-see attitude before raising serious objections to the program.

Others say the government's plan to sell land to raise an estimated \$17 billion — which would be applied against the national debt — should not be taken seriously because a lack of demand for the properties will make any massive sales unfeasible.

The reaction to possible sales was clearly unfavorable in Idaho — where the program was denounced from the start — as well as in Hawaii, where a federal judge temporarily halted a 53-acre transfer, saying the move merited close scrutiny.

The program gained attention last winter when President Ronald Reagan established a Property Review Board to identify public possessions that might be sold.

The board, made up of White House aides, was told to investigate the possibility of selling off "surplus" federal properties — to help balance an ever-growing federal budget.

BLM undertook the property inventory almost immediately, and state offices began drawing up lists of parcels that might be sold after further study by federal officials.

In the 11 western states, 2.7 million acres out of a total of 175 million controlled by BLM have been targeted for

"Private industry's land management has not been good for wildlife or the environment."

— University of Idaho's Ernie Ables

sale or transfer over the next five years, said Richard Atwater, director of the Interior Department's Asset Management Coordination Office.

The land, mostly in scattered parcels or near townsites, is valued at \$2 billion to \$3 billion under the fair market price of about \$500 an acre, he said.

Forty million BLM acres were declared unsuitable for disposal, and the remaining 132 million acres will undergo further review for possible sale in the future, he said.

Nevada has the largest amount of possible sales or transfers, with 700,000 acres targeted out of a total 48 million acres of BLM land in the state, Atwater said.

Behind Nevada is Arizona, with 580,000 acres recommended for possible disposal and 13,000 expected to be sold next year.

Wyoming follows with 260,000 acres, and 240,000 acres have been targeted in both California and New Mexico, officials said. About 70,000 acres may be sold in Utah.

Existing law allows the agency to sell parcels of 2,500 acres or smaller without congressional approval — a loophole that applies to most of the 398,000 acres being considered for sale in Idaho, BLM spokesman Fred Cook said.

Meanwhile, the U.S. Forest Service began a similar study of its 191 million acres across the country. That agency's efforts lag behind the BLM's, with federal officials still awaiting state tallies on which lands may be suitable for sale.

The Forest Service, under the Department of Agriculture, may sell lands only under limited conditions, so Secretary John Block is planning to propose legislation giving the agency authorization to sell property it deems surplus, said Pat Sheehan, spokesman for the agency's Intermountain region in Ogden, Utah.

The Bureau of Reclamation also got into the act last fall by asking Northwest water users if they would be interested in buying federal dams built years ago. Although districts said they wanted to buy "lock, stock and barrel" the Grand Coulee Dam in Washington, overall response was minimal and little effort is currently being made to push the program, agency officials said.

Sen. James McClure (R-Idaho) has repeatedly tried to assure Westerners the land sales will not be accomplished

in secrecy, particularly when the issue began to boomerang against some of Idaho's Republican candidates this fall.

During the 1982 lame duck session McClure, chairman of the Senate Energy and Natural Resources Committee, inserted into the appropriations bill the requirement that agencies provide proper congressional committees with a month's notice before selling any "substantial" amounts of land.

However, the provision did not specify a specific acreage and the question of whether it would apply to BLM tracts that are below 2,500 acres remains "open to interpretation," McClure's aide, Todd Neuenschwander, said.

McClure has also told Block the Senate committee will not consider charges in the Forest Service's landselling abilities until the secretary submits full inventory of the lands so the committee can "act on every one."

But those assurances have done little to calm vociferous opposition in Idaho, where conservation groups vowed to accept nothing less than abolition of the entire program. Opposition was sparked in Idaho last spring after efforts to obtain a list of lands the state's BLM office had recommended for possible sale were unsuccessful.

The Idaho Conservation League, a statewide environmental group, invoking the Freedom of Information Act, attempted to force disclosure of the studies.

The list finally was released a few months later, but not before the issue of government secrecy took hold in a number of campaign races, including that of incumbent Democratic Gov. John Evans.

Evans — who later retained his seat after a tough race against the GOP lieutenant governor — led a group of Western chief executives in passing a resolution demanding federal officials provide the states with more information about their land-sales activities.

"I'm outraged to think they'd take it upon themselves to identify land without consulting us," Evans said.

"The whole program is riddled with ignorance and inefficiency and wrong-headedness," ICL director Pat Ford said. "If indeed you accept the premise some public lands should be sold, this program is not the way to go about doing it."

The outrage which ripples across Idaho has not been echoed as strongly in other areas — a fact that officials say is ironic because at least five Western states face larger land sales than Idaho.

"I think it is a uniquely Idaho issue," Neuenschwander said. "It's incredible, but it's because of politics. We think it's a phony issue. The law won't allow any massive land sales."

However, in Nevada the state cattlemen's association is on record opposing large-scale sales, while several legislative committees have said the lands should be offered to the state or local governments.

Utah officials have said they do not expect much opposition to the program because it involves mainly surplus lands that have little recreational or commercial value.

Ranchers in Idaho are keeping a wary eye on the government's actions, ready to leap into outright opposition if the sales are not limited to small tracts that are unsuitable for grazing, Idaho Cattlemen's Association Vice President Dave Bivens said.

Although those same ranchers several years ago backed the Sagebrush Rebellion — a move to increase local control over management of public lands — their intention was not to provoke something like the current land sales program, said Ernie Ables, who heads the University of Idaho's Fish and Wildlife Department.

The BLM requires successful bidders to post an immediate 20 percent down payment, followed by payment in full within a month, she said. Such stringent conditions make it likely that only the very wealthy or large corporations will be able to afford the parcels — entities likely to exploit the land without regard to proper management techniques, Ables said.

"You'd be foolish to buy these lands and invest millions of dollars unless you develop them for grazing or mineral exploration or development," he said. "The track record of private industry on land management has not been good for wildlife or the environment. That doesn't mean industries are bad. It means if they own land, they have to make a profit."

He said it would be more prudent for the government to retain the lands, but manage them for energy, mineral and timber production in an efficient manner.

"It's a one-shot thing," he said. "We'd get rid of the lands, and still have the national debt. The lands are a real valuable resource that the responsible agencies haven't even tried to manage from a revenue point of view."

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Ellen Marks is a reporter for United Press International in Boise. This article was paid for by the HCN Research Fund.