

High Country

news

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Yellowstone's bears

A grizzly situation

by Joan Nice

Woming environmentalists like to brag that Yellowstone National Park and surrounding wild lands are the richest complex of wildlife and wilderness in the lower 48 states. "The greater Yellowstone area is the one chance we have in the lower 48 to have the scale of wildlife and habitat that we have in Alaska," said Philip Hocker, a Sierra Club board member who lives in Jackson, Wyoming.

But Yellowstone's image has been tarnished lately by disturbing facts emerging about one of the western wilderness' most critical ingredients: the grizzly bear. As few as 29 adult female grizzlies may be left in the area, with a total population of fewer than 200 bears, according to figures from the Interagency Grizzly Bear Study Team. That means the birth rate is declining, with no let-up in mortalities. No population can survive long under those conditions.

Is the silvertip bear on its way out in Yellowstone? Just how wild is the lower 48's premier wilderness?

The trend set by other states is clear. Grizzlies disappeared from Texas in 1890. The species was last reported in Utah in 1923, Oregon in 1931, New Mexico in 1933 and Arizona in 1935. While the grizzly still graces the California state flag, a live specimen hasn't been spotted there since 1922. A lone grizzly was killed by a bow hunter in the San Juan Mountains of Colorado in 1979, but none have been seen there since.

The picture is only slightly more encouraging in the Northwest. Small populations probably lurk in the Selkirk Mountains, the Yaak Range, the North Cascades and the Bitterroot Range. A "terrifyingly low" number of bears — perhaps only 10 or 12 — still lives in Montana's Cabinet Mountains, according to grizzly biologist Charles Jonkel.

The only good news about the bear in the lower 48 comes from Montana's Glacier National Park and its surrounding wild lands, where Jonkel said grizzlies are "quite secure — their density is as high as it has ever been." According to a guess from the U.S. Fish and Wildlife Service, that means 440 to 680 bears.

The problem, of course, is that grizzlies and people are basically incompatible. To have both requires a vast expanse of land where the grizzlies' needs come first. That could mean a place that humans haven't thoroughly penetrated yet, such as Alaska, where biologists believe some 10,000 bears still roam. Or it could mean a place such as Yellowstone or Glacier, where people back off more by design.

But in the Yellowstone area, for some reason, the plan isn't working. "Unless some change occurs to reduce the grizzly's mortality rate soon, the probability of retaining this wildland species in Yellowstone Park is minimal," according to Roland Wauer, the National Park Service's director of natural resources management.

The estimated 29 females can't produce enough cubs to offset the number of deaths the bear is suffering each year.



by N. Weiss

Biologists figure that mature females produce about two cubs once every three years. With 29 females breeding, that would mean no more than about 20 cubs a year. Biologists also guess that actual mortalities may be about double those of known mortalities. Seventeen deaths were recorded in 1982, for a total of perhaps 34. That could mean a net loss of roughly 14 bears last year.

It is these kinds of estimates that have bear managers sounding alarms. As Wauer put it, "We no longer have the luxury of time to research the remaining parts of the puzzle. It is imperative that highest priority be given to eliminating grizzly bear mortality."

Not everyone agrees with the Interagency Team's figures, however. Some experts suspect that the team may have counted some bears twice. Wyoming Game and Fish Department officials, hearing reports of increased bear incidents outside the park and perhaps feeling pressure for a renewed hunting season, say the opposite may be true: There may be a number of bears the team didn't find. But the state agrees that whatever the true figures, it is wise to try to cut down on unnecessary assaults on the bear.

This job has as many sides as the motivations for killing grizzlies.

Sometimes a hunter innocently mistakes a grizzly for a black bear. Sometimes the killer is an outfitter defending his camp or a shepherd protecting his flock. Occasionally it's a researcher or it's a poacher procuring grizzly pelts, claws and innards for sale on the black market.

In general, wherever *Homo sapiens* with guns roam in bear territory, the bears lose. They also lose, bit by bit, whenever humans shrink the size of their home with timber sales, roads, ski areas, energy and mineral development, second homes and sheep grazing allotments.

But most of these problems plague grizzlies everywhere they still manage to eke out an existence in the lower 48. Why have human threats driven the bears around Yellowstone closer to the brink of extinction than those around Glacier?

That appears to be partly a matter of habitat and possibly a matter of history.

For one thing, the Glacier bears aren't as isolated as the Yellowstone population. Where there is vacant habitat in northern Montana, bears move in from Canada. No such recruitment possibilities are available to the Yellowstone bears, which are stuck on an island of wilderness in a sea of civilization.

In addition, the Yellowstone area lacks both the diversity of topography and vegetation that the northern ecosystem provides. Dick Knight, leader of the Interagency Grizzly Bear Study Team, called the Yellowstone area "marginal habitat" for grizzlies.

"Most springs, after a normal winter, Yellowstone bears have it better than any others because there are a lot of dead elk," Knight said. "Then if you've got good moisture, they can go through the spring in pretty good shape."

But the thing that makes or breaks most years for grizzlies in Yellowstone, Knight said, is the food available before

(continued on page 10)

WESTERN ROUNDUP

For sale: National Forest land



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The U.S. Forest Service has finally let the word out on how many acres it would like Congress to allow it to study and possibly release for sale. The scheme is part of the Reagan administration's efforts to aid the ailing federal budget. The figures, released March 15, total six million nationwide. Many of those acres fall in the Rocky Mountain region.

The Forest Service now will ask Congress to grant it authority to study the acres it has named for possible sale and to give the agency the authority to go ahead if the acres are saleable. The Forest Service released the number of acres on a district by district basis, instead of from the Washington, D.C. office, on March 15, making it difficult to grasp the entire picture. Tom Robinson, Northwest regional representative of The Wilderness Society, said it was a move by the agency to decentralize the whole process and make it more difficult for the media to decipher. Also, maps of the forests with the selected acreages are not readily available, according to Mike Scott with the Denver office of The Wilderness Society.

In his first efforts to locate areas being considered in Idaho, Robinson found that much of the property seems to be lands of high real estate value — such as lakeshore fronts. Scott said he discovered some of the acres considered in Colorado include part of the Roosevelt National Forest land behind Boulder up to Indian Peaks Wilderness Area, and some of the land between Rocky Mountain National Park and the city of Ft. Collins.

In Montana, which has the most land on the potential sale list, a total of 872,053 acres are being considered for sale. The list includes: Beaverhead National Forest, 1,434 acres; Deerlodge, 52,257; Bitterroot, 9,883; Lewis and Clark, 79,067; Flathead, 104,187; Gallatin, 182,028; Helena, 45,398; Kootenai, 156,919; and Lolo, 225,956. The list totals five percent of all national forest land in Montana.

In Colorado a total of 640,000 acres are under consideration. Included: Arapaho National Forest, 47,202 acres; Grand Mesa, 7,745; Gunnison, 6,480; Pike, 21,809; Rio Grande, 7,836; Roose-

velt, 107,026; Routt, 7,536; San Isabel, 7,789; San Juan, 23,674; Uncompahgre, 20,730; White River, 14,003; Pawnee National Grassland, 94,209; and Comanche National Grassland 74,487.

In Wyoming, 334,295 acres were asked for study, including: Big Horn National Forest, 266 acres; Shoshone, 2,700; Medicine Bow, 39,583; Black Hills, 21,295; Bridger-Teton, 2,879; Targhee, 190; and Thunder Basin National Grassland, 267,060.

In Idaho a total of 186,712 acres are up for possible sale. Included: Boise National Forest, 25,497 acres; Sawtooth, 73; Targhee, 1,573; Caribou, 16,571; Challis, 66; Payette, 3,638; Salmon, 799; Clearwater, 27,517; Nez Perce, 8; and Panhandle, 110,966.

In Utah a total of 141,675 acres are being considered, including: Ashley National Forest, 8,989 acres; Dixie, 14,779; Fishlake, 9,315; Manti-LaSal, 43,662; Sawtooth, 10,684; Uinta, 5,182; and Wasatch, 49,061.

— Carol Jones

Dear friends,

In order to improve the regional coverage of *High Country News*, our board of directors has approved a plan to open permanent news bureaus in Colorado and Montana. It is a step that we at the paper have been hoping to take for a long time and we are all quite excited about the possibilities.

The Colorado bureau will be located in Denver and staffed by current Associate Editor Carol Jones. This bureau will open May 1. The precise location has not yet been determined.

In Montana, the new bureau will be headed by Don Snow, who is currently a freelance writer and a contributing editor to *HCN*. The Montana *HCN* office will be located at Don's home in Stevensville, and will officially open on April 1. Don may be reached at Route 2, Box 170B, Stevensville, Montana 59870. His phone is 406/777-5169.

We expect the new bureaus to accomplish a number of things for us. First, and most obvious, is an improvement in the news coverage of the states in which they are located. Second, we hope they will give us a higher public profile in those states, enabling us to sell more subscriptions and more advertising. The bureau chiefs are also going to serve a public relations function for us, so if any of you would like one of them to address your group or gathering, please let us know and we'll be happy to oblige.

Funds for the bureaus, which are budgeted at \$20,000 for the next year, will come from several sources. First, *High Country News* has received a \$5,000 grant from the Tides Foundation to be applied on a matching basis to the opening of the Colorado bureau. Our new Colorado board member, Robert Wigginton of Boulder, will be working with a steering committee of other Colorado subscribers — Jeff Fereday, Steve Andreas, Michael Ehlers and Zach Miller — to raise an additional \$5,000 in that state. In Montana, Don Snow and a yet-to-be-named Montana board member will be working to raise \$5,000 for that bureau. The final \$5,000 will be funded internally, through shifts in our regular *HCN* operating budget.

A mailing seeking support for the bureaus has been sent to all Colorado and Montana subscribers. Anyone else

interested in supporting this effort can send a donation to *HCN*, Box K, Lander, Wyoming 82820. Be sure to include a notation earmarking your donation for the Colorado or Montana bureau.

After a careful survey of the media, we can now reliably report that *HCN* was the only publication north of the Mexican border not to carry a long article about the final episode of M*A*S*H. (What was Margaret Houlihan's husband's name?)

It's hard to know where to begin on this next subject, but the last few weeks have certainly called to mind that old maxim "to err is human, but to really mess things up it takes a computer."

Unbeknownst to us, our problems apparently began in December, when an out-of-town computer installer (who, mercifully, is no longer employed) came to Lander to install some new equipment at our computer service center. The "heads" (whatever those are) were put in wrong and, as a result, failed to record our back-up records.

Naturally, since we were having no trouble with our primary records, this little glitch went unnoticed for quite a while. About two months, to be precise — that is, until the primary system started to falter and we actually needed the back-up. Mr. Murphy, it turns out, has adapted his famous laws to the computer age. Corollary #1274: The back-up to a computer system will always work fine until you need it, at which time it will fail miserably. And, furthermore, if there is one time of year that is less convenient than any other, that is the time when the failure will occur.

And so it was that we came to lose many of our December records: new subscribers, renewals, gift subscriptions — the works. We went back over earlier print-outs, scoured office wastebaskets for pre-processed renewals and did everything we could think of to find as many names as possible. We came up with quite a few.

But then we made our next mistake: We sent out a "Dear subscriber" letter that serves as our third renewal notice

to everybody on our expired list. This innocuous letter begins with "Something has gone awry" and then suggests that the reader must have misplaced his or her earlier renewal notices since it is impossible for us to imagine anyone knowingly failing to renew a *High Country News* subscription.

Many of you were good enough to write back that yes, indeed, something *had* gone awry — our bookkeeping! In fact, we received so many letters in this vein that we tried to figure out yet another way to check our records internally. We went back to our bank statements for the problem period, which had been narrowed to December 10-January 3, and found nearly a hundred renewals (yours may have been among them). We also found another 40 or so deposits that we haven't been able to figure out (and, unfortunately, yours may be one of those. Worse still, it may *not* be one of those, in which case, you — or at least our generic "you" — are probably not reading this discussion at all).

Anyway, at this point we think we have *most* of the problems squared away. (You can check your expiration date in the numbers below your address on your address label — year first, then month.) And if you're still having a problem with your subscription or you know someone who is having a subscription problem, or you gave someone a gift subscription and he or she is not receiving it, please give us a call or drop us a note.

Meanwhile, *"(%)&*&""%&e!!!! And thanks for your patience.

Finally, we continue to receive a handful of Research Fund donations almost every issue. Our thanks this time go to John and Mickey Allen, Martin Davenport, James Fristad, Marge and Dan Schlitt, K.T. Simendinger & Associates, Marcia Stephens and Mrs. R.C. Wellstood.

A number of faithful subscribers are making good on their monthly pledges. God bless 'em, and some, like Ingrid Hamann and Dick Stokes, are coming through with their pledges for the rest of the year. A reminder to those of you on quarterly pledge programs: Your second installment would be much appreciated.

— the staff

WPPSS default defies solution

As speculation about the effects of a default on \$7 billion of bonds by the Washington Public Power Supply System mounts, Northwest power officials and politicians are scrambling for alternatives.

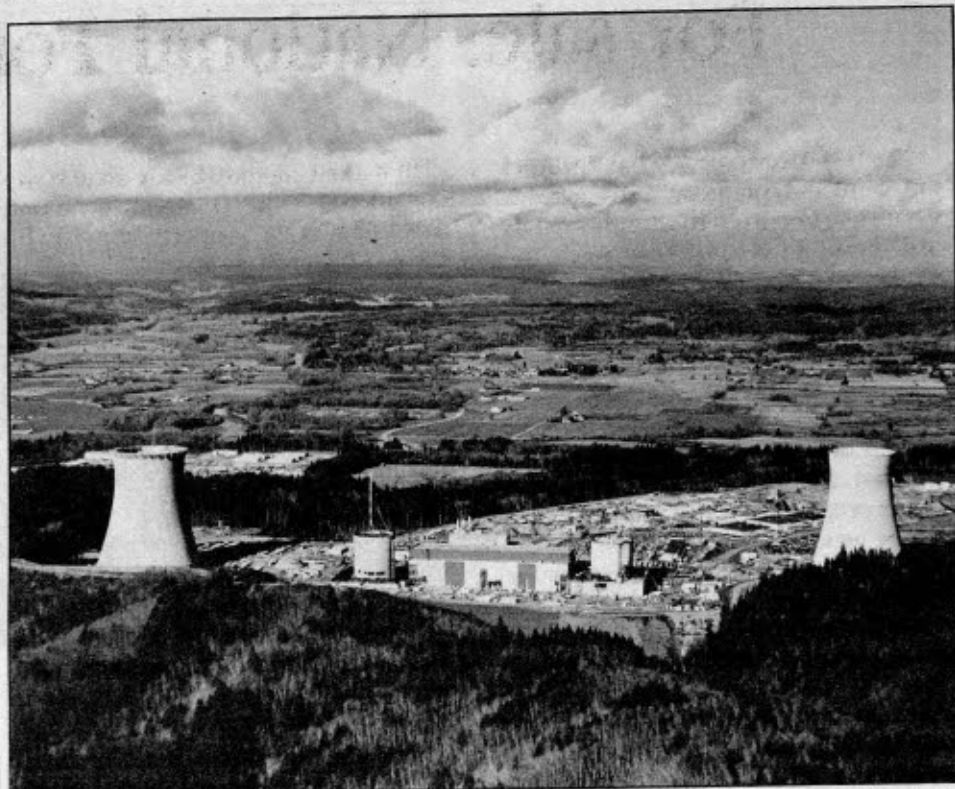
With all but a handful of the 88 member utilities of the WPPSS consortium in default to the system as of January 25, a "domino" theory has developed. That theory suggests that come July, when WPPSS will not have enough money to make interest payments on the outstanding bonds for its nuclear plants 4 and 5 and goes into technical default itself, public agencies throughout the Northwest — from the 88 utilities all the way to the state of Washington — will find it increasingly difficult to sell bonds to finance their operations. Construction of Plants 4 and 5 was terminated in January, 1982, when costs skyrocketed and demand for electricity dropped dramatically.

In addition, prices of most other Northwest municipal bonds could be expected to go up, bond experts say. And construction of WPPSS' three remaining plants would be endangered. A default on those plants would enormously increase the total WPPSS debt and threaten a financial disaster throughout the entire Northwest, with shock waves that would touch all parts of the country. Bond officials are calling it "a situation unprecedented in municipal finance."

At least two possible solutions are under study.

One would have WPPSS buy back the outstanding bonds on the two plants or exchange them for a new bond sale with greater security. Because the outstanding bonds are currently being traded on the secondary bond market at a reduced price, WPPSS could buy back the bonds for less than they presently owe. Previous refinancing proposals, however, have failed for lack of support.

Another plan would involve a federal bail-out on the order of that provided New York City several years ago. Members of the Northwest congressional delegation oppose such action, however.



WPPSS unit 3 (right) is 70 percent complete; WPPSS unit 5 (left) is 15 percent complete.

For a bail-out to occur, the issue would have to become national in scope — the future of the nuclear industry or the health of the tax-exempt bond market, for example. The problem has not yet reached that proportion.

A key player in the game is the Bonneville Power Administration, the federal agency which underwrites 100 percent of the cost of two of the remaining WPPSS plants and 70 percent of the third. One of those plants was moth-balled last year.

If the default on the debt for the two terminated plants seriously damages the bond market for the two remaining plants, the BPA could be forced to turn to Washington, D.C. for help. That could take the form of a government loan at market rates, some officials say.

Or the BPA could try to write contracts for the sale of "firm" power to be generated by the plants. The only problem is that the Northwest — and the BPA — is awash in a power surplus. Economic decline, conservation, and

excess production, have left the BPA, the regional power wholesaler, with more electricity than it can sell.

Possible new markets include California and the Southwest, but under existing federal law, the BPA can't sign firm contracts outside the region. It may only send electricity south when there's a surplus.

While talks continue in an effort to assemble a package that would save everyone's biscuit, time is running out on still another of the plants. A work slowdown was ordered for Plant 3 late in February. The plant, under construction at Satsop, Washington, is 70 percent complete and about two months ahead of schedule.

The work slowdown will reduce the work week at the plant from five to four days. That reduction will save the system about \$6 million monthly, stretching available funds through October. By that time, WPPSS officials hope, the current maze of legal and financial challenges to their system will be resolved.

— John Soisson

HOTLINE

Endrin spraying still pestering Montana

Montana farmers may be spraying the controversial pesticide endrin again this spring to control cutworms in wheat, according to the state Department of Agriculture. High levels of the highly toxic, chlorinated hydrocarbon showed up in wildlife two years ago. Endrin is the only registered chemical in Montana considered effective in controlling cutworms, but the agricultural department said it is actively looking for alternative, safer pesticides. In addition, the department has an improved system for reporting pesticide sales and use, and hopes to keep endrin spraying to a minimum. The state has suffered substantial revenue losses because thousands of hunters afraid of bagging contaminated game birds and waterfowl have not been buying bird hunting licenses.

Idaho state land sale possible

The state of Idaho will lose money on management of state rangelands in 1984 and may have to sell the lands. According to the *Idaho Statesman*, Idaho Gov. John Evans (D) is afraid the cost of the range management will exceed grazing fee revenues in 1984 because the State Land Board recently cut the fees by 20 percent. A large part of the revenues goes to Idaho public schools. Evans said many people think of state lands in the same way they do federal lands, but he said the state is required by law to manage the state lands to produce as much money as it can for public schools. The Land Board reduced the grazing fees in February after cattle and sheep ranchers complained of severe economic problems.

Herbicide use opposed at Ninepipe

A Montana weed control program that would allow sharecroppers to spray the herbicide 2,4-D amine on the lands bordering the Ninepipe National Wildlife Refuge in western Montana is gaining opposition. The Flathead Resource Organization, a Lake County conservation group, said they support weed control on the state lands at Ninepipe but they prefer use of mechanical and biological methods before employing herbicides. The group is afraid the pesticide may harm people and wildlife on the refuge. The group said it will oppose ratification of sharecropper contracts with the state until a weed control plan has been written for the Ninepipe lands. Most grain farmers use 2,4-D extensively, but some studies show it may break down into toxic substances harmful to fish and wildlife.

Colorado hydro project shrinks in size

The proposed \$800 million Azure hydroelectric project that would have stopped river rafting on one of the most popular white water areas of the Colorado River in Colorado has been reduced in size. The Northern Colorado Water Conservancy District had planned to build a 225-foot high dam on the river at the head of Little Gore Canyon about 10 miles southwest of Kremmling in north central Colorado (HCN, 2/4/83). The district now is proposing a 100-foot dam costing \$400 million and impounding some 23,000 acre-feet of water, less than a quarter of the original amount. The expense of building nearly two miles of railroad tunnel required by the project plus the opposition of river rafters were reasons cited for the reduced size of the project. The stretch of river in question attracted some 45,000 rafters last year making it the second most used area in the state.

Hatchery closings keep big ones away

Fishing tales may have to be stretched even further after plans to close several federal fish hatcheries in the next two years go into effect. Wyoming, Colorado, New Mexico and Utah will be severely affected by the hatchery closings, losing thousands of fish stocked each year into popular fishing holes. In response, the state of New Mexico has filed suit protesting the closures, claiming it is a violation of the Colorado River Storage Act of 1956.

As part of the Reagan administration's ongoing efforts to cut back on federal expense, 15 federal hatcheries are scheduled to close in October this year. More are slated for closure in October of next year. Affecting this region most directly is the Jones Hole hatchery in Utah.

The Jones Hole hatchery was constructed after passage of the Colorado River Storage Act of 1956. It was agreed that the U.S. Fish and Wildlife Service would produce fish as compensation for the loss of fish habitat along the Green and Colorado Rivers after Flaming Gorge, Fontenelle and other reservoirs were built. New Mexico's suit contends that the federal government has an obligation to provide those fish. According to Vic Hogsett, public information specialist with New Mexico's Department of Game and Fish, the state is also asking that the hatchery not be turned over to the state of Utah. If Utah receives the

transfer of ownership it will keep all the fish produced there within its borders, except for stocking Flaming Gorge Reservoir which crosses over the Wyoming border, said Don Andriano, chief of fisheries of Utah's Division of Wildlife Resources.

New Mexico uses the fish to stock Navajo and Heron Reservoirs, and Hogsett estimated the state would lose two-thirds of its fish for these reservoirs and \$8 million annually from the fishing industry. The state also gets fish from the Hotchkiss national hatchery in Colorado, but that hatchery will be hard pressed if the closures occur. New Mexico, like the other states, has no way to make up the loss.

When Jones Hole is closed and if the Saratoga hatchery in Wyoming closes in the fall of 1983 as is scheduled, the state of Wyoming stands to lose almost a half million fish annually, said Joe White, chief of fisheries for the Wyoming Game and Fish Department. That does not include the fish that the Wind River Indian Reservation will also lose. About three-quarters of the fish stocked around the reservation come from the Saratoga hatchery, said Dick Baldes, project leader with the FWS in Lander, Wyoming.

White said the state Game and Fish Department and Wyoming's Gov. Ed Herschler (D) have written to Interior Secretary James Watt stressing the seriousness of the closures. "Watt has

been completely unresponsive," White said. And although White said the state doesn't have the capacity to make up the fish at state hatcheries, he said they won't leave any of the fishing areas dry. "We will have to relocate the fish," he said. "No one will be completely wiped out, there just won't be many fish at any one place."

Colorado also will lose about a half million fish by the closing of Jones Hole, and will have to rely heavily on state hatcheries.

In Utah, where Jones Hole provides 18 percent of all fish stocked, efforts are being made by the state legislature to have the hatchery transferred to the state. Between \$250,000 and \$300,000 has already been authorized to pick up the costs of the hatchery, chief of fisheries Andriano said. But he pointed out that if the transfer occurs, the state can't provide fish to other states dependent upon Jones Hole. "We are concerned about the philosophy of the federal government in regards to funding our national hatcheries," Andriano said.

Fisheries in Montana and Idaho should not be affected as severely because the hatcheries those states rely on are not threatened by closures.

The states of Colorado, Wyoming, New Mexico and Utah are now faced with trying to fund increased production and capacity at state hatcheries at a time when budgets are already tight.

— Carol Jones

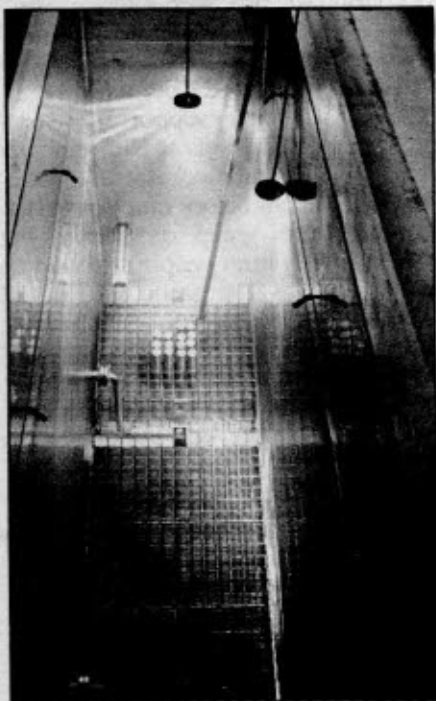
HOTLINE

Colorado waste safe at home

John Rold, Colorado's state geologist, has told a state Senate committee that about 25 of that state's 63 counties have locations safe for underground storage of hazardous waste materials. The committee is looking at legislation that would give county governments until mid-1984 to approve enough disposal sites to handle hazardous waste generated in Colorado. If the local governments do not decide by that time a state council appointed by the governor would decide where sites would be located. Citizen groups opposed to underground waste disposal said there are increasingly more effective and safer alternatives to underground disposal. Rold said such alternatives are 10 years away. He said his office has done a preliminary study report identifying the areas with the best potential for safe storage. Those areas are the Pierce shale formation on the eastern plains, the Mancos shale area in western Colorado, the San Jose shale formation in southwestern Colorado and the Lewis shale formation in the northwest corner of the state.

Reclamation lands released

The first reclamation bond release in Wyoming recently went to Energy Development Company for 1,561 acres of its mining activity near Hanna, Wyoming. The 271 acres that were actually disturbed by mining were regulated under laws prior to the 1977 federal Surface Mining Act. Gary Beach, supervisor of review and analysis for Wyoming's Department of Environmental Quality Cheyenne Office, said the area would not be ready for release if it were regulated under the current rules. One of the main differences in the rules is that the 1977 act calls for more diversity in vegetation. The Hanna site is planted primarily in one species, although some native vegetation has started to invade.



Hanford nuclear facility

Nuclear safety is not a high priority

The Reagan administration's efforts to help the ailing nuclear industry will get a big boost soon when the Department of Energy releases its proposals to restrict the Nuclear Regulatory Commission's authority to order safety changes at nuclear plants. The proposals are backed by the nuclear industry and are part of the administration's efforts to speed up licensing of plants and reduce regulation. The new regulations would require the NRC to consider cost-benefit ratios as they apply to safety changes and make it more difficult to order such changes.

Study: cows, wild horses can coexist

Wild horses and burros have long been the subject of much disagreement over whether they are a romantic symbol of the old West or range-ravaging pests.

In a recent study prepared for the Bureau of Land Management for release to Congress, the National Academy of Sciences found the herds of wild horses competed less with domestic livestock than is widely believed.

Coinciding with this new study is the introduction of a bill to amend the Wild Free-Roaming Horse and Burro Act of 1971. The amendments would allow for the sale of "excess animals" that are not adopted through the BLM's Adopt-a-Horse program.

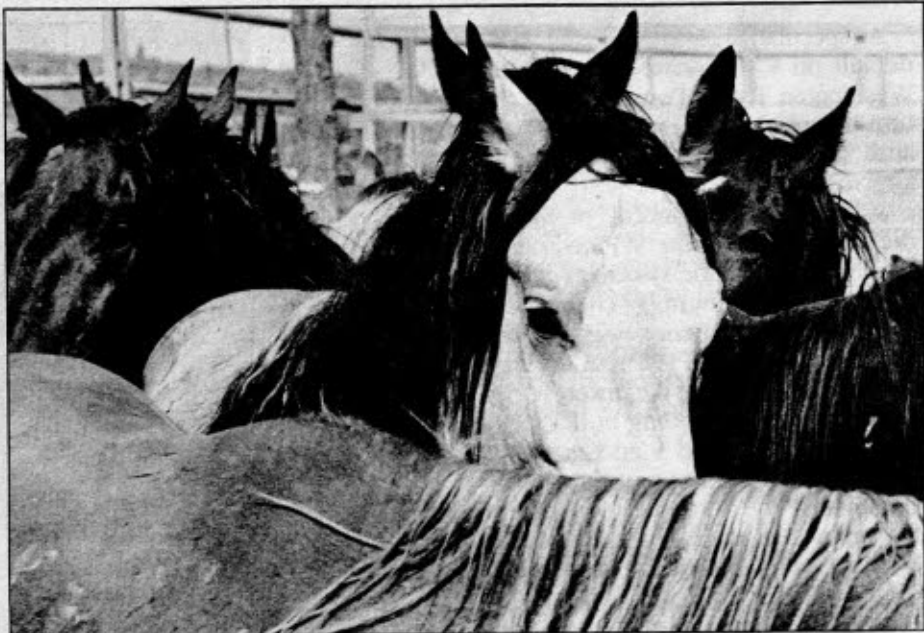
The new report also hinted that the animals' reproductive rates might be lower than now thought. According to Fred Wagner, chairman of the National Academy of Sciences' Committee on Wild and Free-Roaming Horses and Burros, the committee also determined that wild horses ate 14 percent more forage than cattle, but were less finicky than cattle in their eating habits.

Officials noted the report was a sequel to a massive 1980 study by the National Academy of Sciences summarizing all previously known information on wild horses and burros. The report is the only project of a program that originally called for up to 30 such projects.

The paper, however, makes no recommendations to the BLM on management techniques for the estimated 60,000 wild horses and burros in the nation.

Wagner, who is also dean of the College of Natural Resources at Utah State University in Logan, said the project was shortened due to budget cuts. The 14-member team was forced to concentrate only on horses and not burros.

Ranchers have complained for years that wild horses overgraze and ruin rangeland. To help reduce the herd size the BLM occasionally conducts roundups and sells the animals under its Adopt-a-Horse program.



Tom Treck

The program has not been as successful as the BLM had hoped. The fee, which has been \$200 per wild horse since last summer, was considered too high by many applicants. The BLM recently announced the fee will be lowered to \$125 per horse, while the fee for wild burros will remain at \$75 per animal. Adopters who paid the \$200 fee will get a \$75 refund.

However, the cost to feed and maintain the animals remains a burden to the BLM. The agency estimates it costs about \$400 per animal for feed and care.

In an effort to reduce the cost to the BLM, Sens. James McClure (R-Idaho) and Malcolm Wallop (R-Wyo.) have introduced legislation to amend the Wild Free-Roaming Horse and Burro Act to give the BLM the authority to sell horses not adopted to other markets, including slaughterhouses. A hearing to consider the amendments was held in Rock Springs, Wyoming, on March 19. The Rock Springs BLM District has nearly 4,000 wild horses and burros on its ranges.

Wagner said, however, the horses don't compete as heavily for range for-

age as originally thought. "The BLM determined there were 6.5 million private livestock on agency and Forest Service Land in 1980-81 compared with the 60,000 horses," he said. "So it isn't as though there are so many horses and burros out there competing so seriously with livestock," he noted.

Wagner said that because of their different digestive system, horses seek a more varied diet than cattle. "They do overlap to some degree so there is some potential conflict, but it's much less than on a one-to-one basis," Wagner explained. "There's an old saying in the West among stockmen that if you have one horse on (the range), it means one cow off. That's just too simplistic."

The report also disputes the accuracy of BLM wild horse estimates. A University of Minnesota team painstakingly counted all wild horses in the study areas of Nevada and Wyoming.

By contrast, Wagner said, BLM counts were done from aircraft and attain only a 93 percent accuracy in open terrain and the percentage drops to 40 percent in thicker vegetation.

— Layne Miller

★★★ LEGISLATIVE UPDATE ★★★

★★ IPC wrangles over water rights ★★

Idaho Power Company employees on March 9 rolled a rented Xerox machine into the Department of Water Resources office and began copying thousands of Snake River water permits. The utility's attorney said if the state tried to take away its recent windfall water right on the Snake River, then the utility would likely file suit to pull the plug on some of those irrigator permittees.

On the same day, across the street in the statehouse, Idaho Power Company Vice President Logan Lanham was telling the House Resources and Conservation Committee, "Anyone who's hooked up and pumping can continue to pump" — if the legislature passes the utility's proposed bill.

The controversy arises from a November, 1982 Idaho Supreme Court decision that gave IPC a windfall water right — amounting to all the unappropriated water in southern Idaho — on the Snake River. Until the decision, everyone involved — including the power company — had assumed it had given up its primary rights on the Snake River when it had signed an agreement with the state to build three dams in Hells Canyon. The giving up of the water rights — called "subordination" — was deemed necessary to protect the irrigation rights of ranchers and farmers below IPC's Swan Falls Dam. In November, the court ruled that IPC's rights at Swan Falls were still valid.

Now, however, the state legislature is trying to legislatively overturn the court

decision by subordinating the power company's water right with a new law — a law many believe to be patently unconstitutional.

IPC has countered with a proposal to remove the Public Utilities Commission from "jurisdiction over the water rights of an electric utility." The legislators are not satisfied with IPC's bill. At stake, say farmers, water users, cities and the water resources department, is the future economic development of the southern third of Idaho.

Since existing irrigation withdrawals already draw the Snake River down below the utility's 8,400 cubic feet per second water right, the utility essentially owns all the unallocated water in the Snake River upstream of Swan Falls, including perhaps, the tributaries and groundwater which feed the river.

In addition, the utility is threatening to sue the existing irrigators and other water users responsible for dropping the river below the supposedly guaranteed 8,400 cubic feet per second (cfs) flow. The Department of Water Resources estimates several thousand permittees could be affected. The utility says it will not sue the irrigators if the state leaves its water right alone.

But greatly alarmed by the prospect of IPC controlling the economic development of the agricultural belt of the state, the Idaho legislature seems on its way to passing a bill which will subordinate the utility's water right to all other "beneficial purposes." If passed, the bill

is expected to go immediately to court.

The bill, prepared by the Department of Water Resources, attempts to mollify IPC by adding the utility's own bill as a provision to the subordination.

But IPC officials say they will have no choice but to take the bill to court if it passes, even with the PUC removal provision. The main issue is the state's taking of property — in this case the utility's water — without compensation. Department of Water Resources Director Ken Dunn told the House Resources and Conservation Committee that an independent legal study showed it to be constitutionally sound, relying on the police powers of the state. But many others, including the IPC, disagree. "In all candor," IPC's Lanham told the committee, "I don't think it's going to stand the light of day."

The utility has said it will permit non-consumptive uses of water along the Snake River — including municipal, commercial and industrial uses — but consumptive users, primarily irrigators, would have to buy their water from IPC.

Indeed, the utility says it does not like the situation. Among other things, it has promoted the most unlikely alliances and opponents. IPC, which has for its entire history promoted agricultural development in the state, is now finding itself fighting the irrigators and squelching development. The only group siding with IPC against the subordination bill was the Idaho Conservation League. But ICL Director Pat Ford prefaced his tes-

timony with the qualification that "our opposition is by no means absolute." Ford said he fears that the larger issues of future development of the state and its water resources may be being set too quickly in a bill that is designed to handle a legal fluke.

The conservation group fears a subordination of the water right could give the Department of Water Resources a "semi-mandate to proceed with irrigation development." Ford said, "We are opposed to and very much fear agricultural development at this time." He explained that additional irrigation would lead to less water in the rivers for fish and hydropower, higher electric rates and lower farm prices for existing farmers.

In other action, despite federal classification of the wolf as an endangered species, the Idaho House passed a bill to place the wolf on the state's predator list. The bill, promoted by the livestock industry, now goes to the Senate.

The bill's proponents say predator designation would prevent the state Fish and Game Department from spending money on wolf recovery efforts spearheaded by the U.S. Fish and Wildlife Service. They acknowledge that the recovery program under the federal USFWS will not be affected, but say the designation will be sending a message to Washington.



Stan Boyd, executive secretary of the Idaho Woolgrowers Association, said his group fears plans by the federal government to designate wolf protec-

tion areas that would be "tighter than wilderness." He said, "We're not afraid of the wolf; that's not the problem. The real wolf is the federal government."

Boyd said he has heard no reports of wolf predation on livestock. About 20 wolves are believed to be living in Idaho.

USFWS endangered species biologist Jay Gore said putting the wolf on the predator list — along with coyotes, jackrabbits, skunks, weasels and starlings — could cause the state to lose cost-sharing funds. He said Idaho has an application with the USFWS for \$52,000 for the management of endangered species, including wolves. If the wolf were declared a predator, he said, then the application might be voided and the money spent elsewhere. He also said predator classification may lead people to the wrong assumption that wolves may be legally killed. Wyoming is the only state that presently lists the wolf as a predator.

An attempt by the Idaho Department of Fish and Game to establish a \$5 pheasant stamp for the management of habitat for the game bird was shot down for the second year in the Idaho legislature. The measure went down 23-12 in the Senate, where opponents charged the state's sportsmen were being bridled with too many special game fees in order to hunt.

— Glenn Oakley

★★★ Colorado considers Lowry reopening ★★★

Colorado environmentalists are concerned about an amendment to proposed hazardous waste legislation that would allow the reopening of Lowry landfill to treat and store hazardous waste. The amendment, proposed by Sen. Wayne Allard (R-Loveland), would not allow waste burial at the controversial dump site, but it faces a tough fight, nevertheless.

The Allard amendment is a rider to legislation proposed by Sen. Martha Ezzard (R-Cherry Hills). Ezzard's bill, supported by the conservation community, would trigger the establishment of a siting council for a period of six months if county commissioners fail to approve one or more sites sufficient to handle Colorado's hazardous waste problem by June 1, 1984.

Outgoing director of the Colorado Department of Health, Dr. Frank Taylor, said that he would recommend that

Gov. Richard Lamm (D) veto any bill allowing Lowry to reopen.

Avoiding "another Lowry landfill" — a hazardous waste site fraught with leaks, lawsuits, allegations of mismanagement, and citizen uproar — is a major objective for the legislature. Thus, there is widespread concern over a bill introduced in the Colorado House that would simply override Arapahoe County, where the landfill is located, and public objections to Lowry. That proposal would exempt the site from the county approval needed for its reopening as presently required under Colorado law and a court order.

Another bill of concern to the environmental community, introduced by Rep. Chris Paulson (R-Englewood), would give authority to local governments for control of water flowing within their boundaries. After a lengthy court battle, Colorado's minimum

stream flow law was ruled constitutional by the state supreme court, but this bill is an attempt to weaken its effect.

Terry Sullivan, legislative intern for the Colorado Open Space Council, cited three reasons why Paulson's bill would severely undermine the integrity of the current law. "The Colorado Water Conservation Board has authority over minimum stream flow in the state and they must review recommendations made by the Division of Wildlife before decisions can be made," he said. "But under Paulson's bill, no such recommendations need be used." He added that municipalities or county governments, once given control of streams, could sell off water rights to industry or other municipalities. Sullivan said, "Small governmental units may not have the financial abilities or techni-

cal expertise available in order to make stream flow decisions in the best interests of the state as a whole." Paulson's bill was recently removed from committee after much criticism, possibly in order to make changes in its direction.

Finally, Rep. Ruth Wright (D-Boulder) wants to add lightweight trucks to the emissions inspection program operating along the Front Range. By inspecting an additional 175,000 trucks under 10,000 pounds empty weight, the amount of carbon dioxide in Denver's brown cloud could be reduced by 25 tons a day, according to the Colorado Department of Health. Wright's bill has passed through two committees already and should succeed, especially since it could generate dollars rather than cost the revenue-poor state additional money.

— Deidre Duncan

★★★ Utah passes Project BOLD ★★★

Project BOLD, Utah Gov. Scott Matheson's (D) two-year campaign to consolidate Utah's 3.6 million acres of scattered state school trust lands into larger, more manageable blocks through a comprehensive land exchange with the federal government, won unanimous approval in the state Senate during the last week of the state's 45th legislative session. The governor can now take his proposal to the U.S. Congress.

The two-part legislative package — a concurrent resolution and a bill — was designed by the governor to present Congress with "a unified state commitment to a successful exchange." The resolution provides state legislative approval of the exchange concept, petitions Congress to implement the exchange and establishes guidelines to protect existing rights during the process.

The companion bill puts in place a new state land management framework for handling the larger land blocks. It includes a definition of multiple use and sustained yield and provides that the State Land Board develop land management policies based on multiple use principles, that existing rights be protected, and that the board may sell state lands for less than appraised value to subdivisions of the state for public purposes.

There was surprisingly little opposi-

tion, despite significant reservations about the proposals from the Utah Mining Association and some Utah counties. Conservationists were generally pleased with the outcome. "I'm pleased but also surprised that the legislature passed project BOLD," said Dick Carter of the Utah Wilderness Association. "BOLD is the only positive thing we've seen during the session from the point of view of conservationists and recreationists. The fact that they considered state land for multiple use and attempted to resolve the previous dogmatic approach to state land management is a good sign conservationists can work with the legislature."

Matheson will now refine the exchange package into a concrete proposal for introduction into the Congress by the Utah delegation. The state will identify those areas it wants and those it wishes to give up. State officials will also draw up language to address key policy issues, such as the protection of existing rights. They must also convince Congress that the areas offered by the state are of equal value to the ones desired by the state.

Ralph Becker, Matheson's policy coordinator for the process, said, "The value issue will be the number one political issue during congressional consideration. Both sides must feel comfortable with the values traded."

During the early consideration of the

proposal, the concept came under heavy fire from national environmental organizations. But Becker feels BOLD has gone a long way toward meeting those early concerns by prescribing in state statutes a broadened management philosophy for state lands to include a variety of uses rather than just maximizing economic returns. "These changes reflect our concern for ecological values," he said.

A number of other important pieces of legislation were also passed. The State Public Service Commission was reorganized and its ties to the Department of Business Regulation were severed. The commission was also given an independent staff to investigate utility rate issues. However, a number of other proposals to provide utility rate relief did not even make it out of committee.

The state energy office was permanently moved administratively from the State Planning Coordinator's Office to the Department of Natural Resources. A \$50 million water project bonding bill was also passed. The state oil and gas leasing code was rewritten to provide better record-keeping and improved collection of royalties. The state also agreed to pick up the operation of the Jones Hole fish hatchery on the Green River if it is closed down by the federal government (see story on page 3).

However, the nuclear freeze resolu-

tion died in committee after a brief visit to the Senate floor early in the session. In-stream flow legislation, the wildlife heritage trust fund proposal and a measure for lifetime hunting and fishing licenses were all defeated and sent to the legislature's interim study committee. All of these, particularly the in-stream flow package, will probably reappear for consideration in future sessions.

And, finally, after an all-out effort, including full-page newspaper advertisements, radio spots and heavier than usual wining and dining, the oil industry once again managed to kill the proposed increase in the oil severance tax. A bill to add four percent to the existing two percent tax went down in defeat.

— Brec Cooke

BARBS

Everybody knows they've been staying out all night drinking and carousing with somebody else's beifer. The environmental impact statement for the Bonneville Power Administration's proposed power line across western Montana said that one of the health effects of the line would be the "consequent damage to the reputation of ranchers' cattle."

A talk with Senator James

James McClure is the senior U.S. senator from Idaho. A Republican, McClure chairs the Senate Energy and Natural Resources Committee, which handles much important environmental legislation.

First elected in 1972, McClure has been a thorn in the side of environmentalists because of his opposition to wilderness, his attempts to release federal lands not designated wilderness for development and his support of federal water projects for irrigation and hydroelectric power. He is also a strong supporter of nuclear power. His pro-environmental record in 1982 was only 19 percent according to the League of Conservation Voters.

Nevertheless, McClure is respected by his colleagues as an effective legislator, with the legislative savvy to push his positions through the Senate. His position as committee chairman of an important environmental committee makes him a force to be reckoned with. McClure is up for re-election in 1984. One likely opponent is former Democratic Idaho Governor and Interior Secretary Cecil Andrus.

McClure was interviewed by *High Country News* contributor Glenn Oakley on February 10, 1983.



Question: Do you expect a third Roadless Area Review and Evaluation (RARE III)?

McClure: Well, we have a kind of RARE III. Remember that the roadless area review and evaluation was being folded into the Forest Management Plan for each individual forest. (Former Agriculture Assistant) Secretary Rupert Cutler said we can speed that process up by taking the wilderness out of the forest planning process and do it separately. And RARE II was born as a result of that decision. Now that the Circuit Court of Appeals in California has said that that process was defective, (the Forest Service), in essence, has to make the wilderness decisions as though they had never studied it in RARE I or RARE II. So (current Agriculture Assistant Secretary John) Crowell, looking at that, said, "We'll fold it into the forest management planning as had been intended in the first place." But that does mean that while we have a lot of the information that has been gathered, it has to go through the process as though it had never started through the process in RARE I or RARE II.

My understanding of the California court decision was that the court was critical of the non-wilderness decisions, but that the wilderness decisions were adequate.

I'm not sure that that's a correct reading of it. Part of the criticism was: You haven't adequately contrasted the choices between wilderness and nonwilderness across the board; you didn't look broadly enough. The secretary, looking at that, said that the court decision in effect says every non-wilderness decision that was made, that will be made, every management decision that will be made on any of the national forests anywhere is subject to the same question. Therefore, the forest manager is under the threat of anybody who doesn't like any of the management decisions raising the issues which were decided by the court. And I don't think any land manager could live under that kind of a prescriptive veto. And they're going to start over and put that back into the Forest Management Plan. Now, he (Crowell) says that can be done in six to 24 months. I think that in candor and fairness you have to say that... I think it's a very uncertain length of time it might take. And that's something I don't think we can live with. We simple have to resolve it.

Last December, you tried to pass language declaring RARE II "sufficient." Do you intend to pursue that again?

That's one of the options. I think we might have had a better chance of get-

ting it passed had the issue been a little more mature, if it had been around and people had a chance to discuss it a little more, look at the alternatives and understand why it was there. I am still hopeful that we can get a RARE II bill, if each of the RARE II statewide bills have both sufficiency language and release language. Every one that has passed has had that. If we can get those for the remaining states then the question is largely solved.

Would you prefer to do this with a state package bill for each state?

I would like to see us package all of the states. New Mexico and Colorado are done. The Senate in the past has passed an Oregon bill and they're developing another Oregon bill. The Washington delegation is very close to proposing a Washington bill. Senator Melcher has a Montana bill that he believes is satisfactory, although Montana is a unique case with all of the study areas that were mandated under the Metcalf bill. That leaves Idaho. Most of the decisions in Idaho with respect to RARE II were made in the central Idaho wilderness review and the legislation we had there (River of No Return Wilderness). But there's still some other decisions that have to be made. And then we've got Utah, Nevada and Arizona. The California questions are multiple and big and contentious and tough, but they need to be resolved. If we could get Washington, Oregon, California, Idaho, Montana and Wyoming to add to the Colorado and New Mexico decisions we'd have most of the problems in the western public lands states solved.

How soon would you want that to take place?

I've been working on it for two years and I haven't gotten there yet. But I think there's a sense now that we can move a little more rapidly.

You have mentioned an "action forcing mechanism" to spur wilderness decisions. Would you explain that?

As an alternative it would simply set a certain time by which a decision had to be made. And Congress would be forced into a period of time to make whatever decisions they wished to make, and in the absence of Congress acting, the recommendations which were made by the Forest Service at the end of the RARE II process would be those which would go into effect.

Would this be the Forest Service's RARE II decisions or the final?

It would be the RARE II as completed by the Forest Service, not after it had gone through the political reviews in the (Carter) administration level.

In Idaho, for example, would you support wilderness for all areas recommended for wilderness under RARE II?

I'm going to duck that issue for a minute if I can, by indicating that I hope we can work out a bill for Idaho. Until I've had a chance to try to work that out with the other members of the Idaho delegation I'd rather not indicate which specific areas I favor or don't favor. But I would say if we can't get our heads together and come to agreement on it I would still urge the action-forcing mechanism that says if we can't agree among ourselves and can't pass a bill, the Forest Service recommendations would go into effect at some fixed date in the future.

Would you be seeking mandatory release language in conjunction?

Absolutely. I think we need to resolve just that one issue. You know, a lot of people looking at release language have not correctly understood that release language does not settle the wilderness issue forever. It just says we have made the initial wilderness decision — now manage all the public lands for multiple use under the various restrictions that go into the forest management planning process. Anytime anybody wishes to raise the issue of a further wilderness, they're perfectly free to do that, whether it's outside the government or in the Forest Service or within the Congress. You can still raise those issues. But until they're raised the decision would be made.

That would be presuming nothing happened to it in the interim?

Not just presuming that. We've put into wilderness a lot of areas that have had activity in them. So that decision is never totally foreclosed.

Who should be involved in mapping out the state wilderness packages?

First you have to see whether there is some essential agreement among those of us who represent Idaho in the Congress. If there is, then we can move from that area towards the development of a bill which is then subjected to an awful lot of public input. Most of these issues have been discussed over the last several years, and I'm certain in determining how to put the bill together we would contact certain individuals who we know are representatives of the various interests in Idaho. I have no notion that that's going to be a unanimous decision. The decision is going to affect all Idahoans, and they're going to get involved in that dialogue whether we ask for it or not.

Do you have any idea how soon this will occur?

No, I don't, except to say I hope we can get it resolved within the next two years.

How do you think the BLM wilderness studies should be handled?

I think we have to wait and see how that process goes.

The recommendation for the Great Rift Wilderness in Idaho was forwarded to the secretary of the interior in 1980, yet no action has been taken on it. That is probably as uncontroversial an area as there is going to be, since it is 99 percent lava. Why has nothing happened?

A variety of reasons. I think they're trying to hold back on some of the initial decisions until they can see how the whole package looks. I don't think there is any prejudice, but an attempt to get a better composite look at it rather than simply doing ad hoc decisions one by one. But to suggest that the Great Rift Wilderness is without impact on resource use isn't quite accurate. You know, the Great Rift extends across a great distance, and while that's largely lava fields, there are a number of trails and crossings. And there's some concern as to what it does to access. And I think there's one other thing we ought to look at too — not everything that's pretty, not everything that's unique needs to be put into wilderness in order to protect its values.

The Idaho Legislature is considering a memorial opposing the sale of surplus federal land by the Property Review Board. You've become increasingly more critical of the sale. What is your reaction to the memorial, and where do you see the lands sale headed?

I'll leave it to the legislature to look at that and determine whether the language does what they (memorial proponents) say it does. But I have no objection to the principal that's involved in saying Idahoans, as all Americans, are very much concerned how our public lands are used... That's what I've been trying to tell the administration for some weeks and months now, that the American public is sufficiently confused about what their objectives are; that they want to see what the ultimate result will be before they say, yes, I agree. On the other side of that, I don't think we should be so hasty to say: hey, wait a minute, you're terribly wrong. Because we don't really know what it is they have in mind. I think that it's a limited sale program, a management tool, but it's gotten confused in the rhetoric that's surrounded it — both on the

McClure



Photos by Glenn Oakley (3)

part of the administration and on the part of the opponents of the administration. I've said to the secretary of agriculture: You're not going to get more authority until we've had a look at what you intend to do. We want to see in detail what you intend to do. And then we may approve. But we're not going to give you a blank check.

Do you support the idea of selling the public lands in order to help pay the national debt?

Certainly not. And that's part of what has been confusing in the rhetoric.

Is that, in your understanding, what the administration is pursuing?

No, not at all, although there was some early conversation about that. And they still persist in throwing that into the dialogue every once in a while. If you put it against the context of what they've got — a large budget deficit and a mounting budget deficit — they're having to cut back on social welfare programs that are extremely sensitive, important to the people that are affected by them and politically difficult to handle. And they say: Wouldn't it be better if we looked at properties that are surplus to our needs, that we can't manage properly, that we really ought to — over the long term — get rid of anyway? Doesn't it make sense for us to inventory them right now, sell them right now, so that we've reduced that budgetary impact? That's really where they're coming from. Now there are some individuals who have at various times in the past been involved in that discussion from the administration side who have thrown out wild figures.

That includes the Interior Secretary James Watt.

Yes, he has picked up on some of those figures that were given to him by someone else. I don't know where the original \$17 billion figure came from. Nobody can tell me what the \$4 billion figure meant, nor last year's \$2 billion figure, nor this year's \$1.2 billion figure. Those are just figures picked out of the air that don't have any relationship to any concrete plan. But I don't think privatization is the goal of this administration, and if it were it wouldn't get anywhere.

Following the financial disaster at Washington Public Power Supply System, what do you see for the future of nuclear energy in the Northwest?

Let me separate the two, and I think a lot of people haven't done that. They've assumed nuclear and WPPSS, and WPPSS and financial, and therefore nuclear and financial. There have been revisions of energy requirement projec-

tions all across the country. And power plants of all kinds have been cancelled because of that downturn of future demand. One thing we can say on WPPSS is that, just as we found on Three Mile Island, the financial requirements of large power plants of that kind are greater than small entities can bear. I think that's true of a large coal-fired plant or a nuclear plant. But the nuclear plant shows it more because it is more capital intensive; it has more money spent up front and less money spent on fuel. Therefore, the initial financial commitment is greater and therefore a little harder for a small entity to handle. The Washington Public Power Supply System simply got over-enthusiastic, and they overbid on the future. And they also found they did not have the internal management strength to manage construction projects of that size. Now, that's been tightened up a great deal and if they'd had the same kind of management at the outset that they've had more recently, I think they wouldn't have gotten into the trouble that they got. Four and five really got away for both of those reasons: an overprojection of future need and the economic conditions changing in the middle of that... The thing that really kills them is the tremendous change in interest rates. They started out at about five percent interest rate. When they got into the middle of it they were finding they had to pay 18 percent interest. That, in addition to other problems they had, simply broke their back.

Do you foresee any additional nuclear plants in the Northwest?

Certainly not immediately. We've got three that are underway now: WPPSS 1, 2 and 3. Those will be completed, I believe. There are no other immediate plans for construction of nuclear plants... Big plants of any kind have been deferred to the future when they can be used against future demand that says energy will be needed. But sometime within the next 10 years in my judgment, we will also see a change in the forecast demand for energy — up from where we are now. The forecast demand now is very low. Economic activity is down, people are unemployed, businesses are not expanding. Under those circumstances you don't use much energy. I believe that the forecasts are abnormally low now. And I think when the economic activity resumes, as I think it will in this country, then load forecasts for the future will increase. In that process there will be a mix of different kinds of plants, some of which will be nuclear. I don't anticipate we'll ever get back to the kinds of forecasts about nuclear power plants we had 10 or 15 years ago.

What sort of future do you see for alternative, renewable sources of energy? And what is this administration doing to further those?

Any form of energy is going to have to be economically viable. It's going to have to be able to compete in the marketplace. We can do a certain amount of things from the standpoint of government policy that affects its ability to compete. I hope we'll continue to look at those and review those from time to time, and do the best to change the margins a little here and there so that we at least remove disincentives to their use. Because I think alternative sources of energy are important for us to use, particularly renewables. For instance,



"Not everything that's pretty, not everything that's unique needs to be put into wilderness to protect its values."

alcohol fuels. Alcohol is right at the margins today. I was pleased that when the gas tax increase went in we were able to increase the tax incentives for the use of gasohol... In the meantime we're going to see things like (wood waste cogeneration plants). But when we start massive use of wood waste, then you begin to see a competition with an awful lot of ordinary citizens who go out and cut firewood for their fireplaces and stoves.

What about solar, which is generally considered benign?

Generally is, but I think we have to be a little careful about that judgment. There is a visual impact on acres of land that might be utilized for the solar collectors. But I think there's much solar that is benign, much solar that really ought to be utilized, such as space heating, water heating in homes and the design in passive systems that really we ought to be concentrating on. And architects and builders are, more and more. That type of solar is certainly very benign. But there are other types of solar that do have an environmental impact. That Barstow (California) plant is a ground array of reflectors, but it's

got a tower upon which those rays are focused. There's a visual impact to having that kind of tower in your community. Same thing is true of wind power. A lot of people think that wind power is benign. It is not. You get a lot of wind generators up there and run into television interference. You could indeed run into some questions about its impact on wildlife. You get a large wind tower up, the vibration in that tower that's transmitted to the ground — you get some people who say: well, what does that do to the wildlife in the immediate vicinity?

How does the funding for the conventional energy sources, nuclear and coal, compare with the renewable alternatives?

Certainly if you just look in terms of gross budgetary impact, nuclear has the predominance of funding... We do not have as many subsidies in some areas as might be justified. And I've been pushing to get some of those research and development programs expanded. I've also been pushing to make sure we don't lose the Synthetic Fuels Corporation's activities in building commercial

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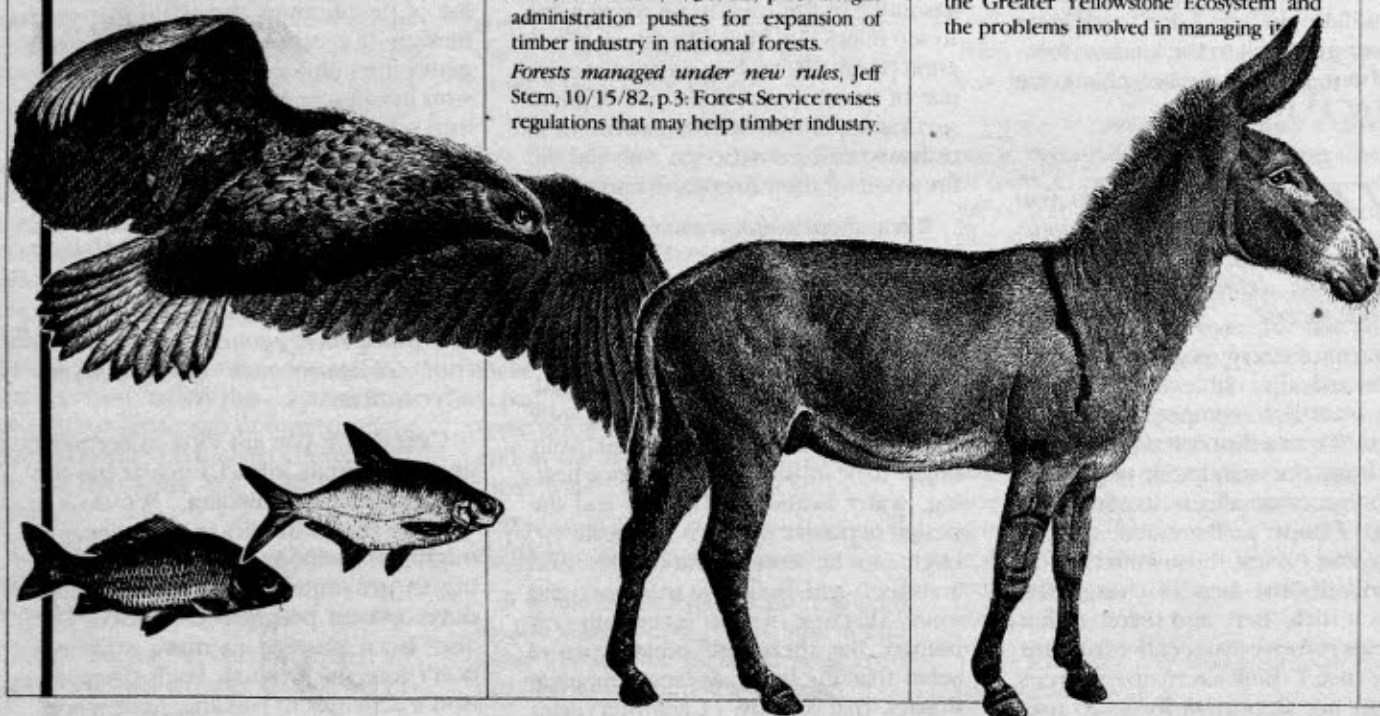
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The estimated 29 female grizzlies in Yellowstone cannot produce enough cubs to offset the number of deaths the bear is suffering each year.



Grizzlies...

(continued from page 1)

the bears den up for the winter. Berries are never plentiful in the park, so the bears' fall staples are roots and pine nuts — and sometimes the pine nut crop is poor.

Up in the Glacier Park area the berry picking is better — some 30 species supplement the root and nut crop. And because the northern area gets more moisture in the fall, some of the grizzly's other favorite foods stay green longer, too.

But the differences between the two populations go beyond the carrying capacities of the land. Fourteen years ago the Yellowstone grizzlies were forced to make a radical change in their diets, when the Park Service decided to close down its garbage dumps — for aesthetic reasons, for the good of the bear and for the safety of park visitors. The transition was agonizing for both the park and the grizzlies, who lumbered into campgrounds and had to be killed or removed from the park. Known grizzly mortalities during the six years following the dump closures soared from an average of 16 to an average of 31.5 deaths a year. A total of 189 known deaths occurred during the period, probably making a deep cut in the numbers of what had been a stable population.

The park's major critics at the time were the twin brother biologists Frank and John Craighead, who had begun a 13-year study of the Yellowstone grizzlies in 1959. They contended that the dump closures required more careful study and more gradual action.

"The dumps didn't spoil the bears," said John Craighead. "They simply provided them with one more stable source of food — what we call an eco-center. It's an eco-center whether it's a salmon stream, or whales that wash up on the coast or garbage.

"When these were closed, virtually overnight, it was tremendously disrupt-

tive to the population. It also made the bears more prone to make contact with human beings. It resulted in a very high mortality rate and a reduction in the rate at which the bears could reproduce."

On the other hand, the Park Service had its reasons for closing the dumps. The dumps helped train bears to associate people with food, agency biologists said. They made bears into beggars and made the park, where nature is supposedly allowed to take its course, into a quasi-zoo. While the weaning process was difficult, bear incidents in the park are now rare. Of the 17 known grizzly mortalities in the Yellowstone area last year, only one was within park boundaries.

But now old problems have emerged in new places. Since the dumps were closed, more bears seem to be showing up where garbage is available outside the park — in places such as Cooke City, Gardiner, and West Yellowstone in Montana and in Turpin Meadows in Wyoming.

"The biological center of their range is not the park anymore," says Larry Roop, a grizzly researcher who works for the Wyoming Game and Fish Department. Seven mauilings — an unusually high number — were reported near Yellowstone in 1981.

The solutions proposed for these problems vary, depending upon whether their sources prefer to try to control people or manipulate bears. Some biologists, notably the Craigheads, advocate trying to do both. Others, such as those employed by the Park Service, would prefer to leave the bears alone while forcing some discipline on their own kind. Montana writer Alston Chase, in an article in the current issue of the *Atlantic*, takes the opposite tack: mankind is hopeless, he implies — better work on the bears.

Nevertheless, most recent agency actions have been aimed at controlling people. For instance, this fall the Wyoming Game and Fish Department banned all black bear hunting in part of the Teton Wilderness south of Yellowstone Park. This should mean fewer grizzlies killed by hunters who can't make the sometimes difficult decision between black bears and grizzlies. For the same reason, the agency also has banned the practice of setting out bait in pursuit of black bears in an area just east of the park. Similarly, in January Idaho banned the use of either dogs or bait to hunt black bears in grizzly country.

Both the Park Service and the Forest Service have similar rules aimed at camping without conflict in grizzly

country, but until recently the Forest Service has been lax about enforcement. Since the news about the Yellowstone bears' peril, Rocky Mountain Regional Forester Craig Rupp has dispatched a new law enforcement agent to Cody, Wyoming, largely to crack down on poachers and sloppy campers.

Better state and federal cooperation in the last few months has made it possible to try grizzly poaching cases in federal courts, according to Cody, Wyoming, District Game and Fish Supervisor Terry Killough. The change could be significant for the bear. In state courts poachers nearly always got away with a fine well under \$2000, which could scarcely serve as a deterrent when a single set of grizzly parts can fetch \$10,000 to \$15,000 on the black market. Under federal law, however, the maximum sentence for killing a grizzly is \$20,000 and a year in jail.

Park biologist Gary Brown believes that better management of people, camps and garbage in areas where bears cause problems is the key to the animal's survival. If Gardiner, Montana, were as bear-proof as the park campgrounds now are, he suggests, bears wouldn't be there, facing off with humans.

Another suggestion that has been made is transplanting grizzlies from the secure populations up north to the Yellowstone area. But the biologists balk at that one. "That makes me cringe a little bit," said Wyoming's Roop. "We don't know enough about their genetics and population dynamics. Some of those northern bears might die standing and waiting along our streams for a salmon run. This is a totally different type of range."

At the same time, biologists are studying the idea of feeding the bears again, both to give them a protein boost and to keep them away from trouble spots. The idea, originally proposed by the Craigheads, would involve not garbage dumps this time, but "the strategic placement of animal carcasses" in remote areas of the park, probably via helicopter. The proposal raises a number of both scientific and philosophical questions.

The first, and most basic, is: Would these helicopter handouts really help the bear? Would they bolster the bear's ability to reproduce and survive? Would they also prevent conflicts with humans on the grizzly's range? Nobody knows for sure.

Feeding sites could be a mixed blessing for the bear. During the dump era, the Yellowstone silvertips suffered higher cub mortalities than they do now, because aggressive males killed the young as they concentrated at feeding sites. On the other hand, it appears that reproductive rates were higher during the dump period, presumably because the bears had more to eat. No one knows if these gains and losses would balance out at the feeding sites

"Feed the bears? That's a cop-out. It assumes we can't do the right thing."

— Steve Mealey, USFS



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now being considered, or whether the sites could be a net loss to the bear.

Other questions have been raised. How would human scent be removed from the handouts, as it must be if the bears are to be kept from imprinting on humans again? Where would the money for the program come from? What would feeding sites do to other species in the area?

"It would take several years of investigation to figure out how to do it right," said Dick Knight, who has been leading field studies on the Yellowstone grizzlies since 1973.

Brown said the Park Service is studying supplementary feeding "just in case it is ever determined necessary to save the grizzly bear." But it is not necessary now, he added emphatically.

Resistance to the idea of feeding bears in the park emerges as much from philosophical concerns as from scientific ones. Alston Chase said in the *Atlantic* article. He said that the Park Service is so worried about the "unnatural" aspects of feeding bears, that it has forgotten that people are and must be a part of the mix of uses in the Yellowstone area. "There is no place on earth that man has not touched, not changed," Chase wrote. "Betting the future of the grizzly on our ability to control human behavior in this region is not fair to the animal."

Indeed, the agencies' past record of managing people in grizzly country is not encouraging, despite proclamations of recent new beginnings. "Not very long ago it was not unusual at all for the lead agency, which was supposed to be taking care of bears, to blow away huge numbers of bears every year for little more reason than maybe a request by a rancher somewhere," said Montana's Charles Jonkel.

In 1975, the grizzly was declared a threatened species in the lower 48 under the Endangered Species Act. A year later, the agencies drew up management guidelines designed to protect the bear. Despite this mandate, some managers have tried to accommodate a little bit of everything, even within national park and wilderness borders, and have ended up creating a limbo that neither benefits bears nor industry barons. Even now, where there are conflicts with developers, agency decisions tend to go against the bear, said Hank Fischer of Defenders of Wildlife.

Chris Servheen, the U.S. Fish and Wildlife Service's grizzly bear recovery coordinator, says the agencies need a year or two to prove themselves. "We're in the process now of implementing a long series of actions for the grizzly bear. We haven't had enough time to see what the response is going to be."

Bear expert Steve Mealey of the Forest Service is incensed when he thinks about taking the giant manipulative leap represented by supplemental feeding. "Feed the bears? That's a cop-out. It assumes we can't do the right thing," he said. "We've all heard the horror stories; we know we've failed at times in the past. But there is a sense of urgency, of commitment now that didn't exist before. We haven't given enlightened management a chance."

Whatever their stance on these issues, few people concerned about the bear's welfare deny that 1982 and 1983 are proving to be watershed years for grizzly stewards. These are the years the Interagency Team's figures have shattered the nation's feelings of security about its first and perhaps favorite national park. Hardly by coincidence, these are also the years when government officials have grown more serious than ever before about protecting the remaining grizzlies within their domain. Whether they are serious enough remains to be seen.

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Joan Nice, former managing editor of *High Country News*, is a Lander, Wyoming, freelance writer. This article was paid for by the HCN Research Fund.

BOOKS

Hiking Utah

The Hikers' Guide to Utah

Dave Hall. Falcon Press, P.O. Box 279, Billings, Montana 59103. 1982. \$6.95, paperback.

Review by Bruce Barrus

As a professional outdoorsman, I have mixed feelings about all guidebooks. They contribute to some extent to the rapidly growing mass popularity of the wilderness, perhaps endangering some beautiful wild areas by encouraging people to go there. Then, too, there is a certain sense of discovery and adventure that is blunted by reading about a place before visiting it.

Nevertheless, in reading *The Hiker's Guide to Utah*, another side of myself quickly asserted itself — that of the educator. It has been said that the preservation of mankind lies in wilderness. The question then becomes, "How do we preserve it?" The answer is, I believe, education — and education about wilderness is the great strength of this book.

It is a relatively simple matter to provide accurate information on trails, difficulty, length, maps, etc., as well as a sketch showing roads and trails. Throughout, hikers are told what to expect of the flora, fauna, archaeology and history of the area.

At the same time, the guide provides enough information to keep the hiker on the right trail without providing too much. This leaves the traveler his or her own sense of discovery.

Practically every class of hiker can benefit from the book. Novices can learn much from a careful reading of the introductory chapters for researching both easier and safer trails and learning ecologically sound outdoor practices. The experienced hiker can learn of new areas to explore and read the impressions of other experienced hikers, roadheads and scenery. This guidebook goes well beyond these fundamentals into the realm of educator. Especially impressive are the first two chapters which deal clearly and concisely with the hiker's safety and comfort and with the preservation of the land. The ideal way to travel through any wilderness is to do so leaving no trace of one's passing. This guidebook addresses that issue. There are hints about how to build fires without leaving a sign and how to dispose of human waste — the two biggest eyesores in wilderness areas. Throughout the book is the plea to "touch the land lightly."

There is also sound advice on both desert and mountain travel safety. It includes the lamentable admonition, "Don't drink the water," because of giardia, a disease undoubtedly introduced by those whose touch on the land was not so light. Other sections cover hiking with kids, buying a good pair of boots and notes on archaeology and wildlife.

The heart of the guide — the route descriptions — continue the educational theme. Each route has an adequate introduction of general location,

More leaves, a stronger tree

Brittle Power

Amory Lovins and L. Hunter Lovins. Brick House Publishing Company, Andover, Massachusetts. 1982. 486 pages. \$17.95, hardcover.

Review by Peter Wild

Thousands of leaves cover a tree. In the event of a hurricane or a plague of grasshoppers, many of the leaves will be blown off or eaten. But not all of them. More than likely, enough will survive to keep the tree functioning until it can grow back its usual number.

Now picture a tree with just one leaf, a single, giant spade of food-producing foliage. Here comes the wind or a horde of locusts. Off blows the heavy leaf, or insects sever its main vein. There goes the whole tree. In contrast, a normal tree protects its critical life functions; it is diversified, interconnected, flexible, what the Lovinses call resilient. With similar attention to survival, nature provides the human body with two kidneys, two lungs, and spare capacity in the liver and heart. If the spleen fails, the liver can adjust, taking over its essential work.

Not so with the ways in which the United States traditionally applies modern technology. Lucky for the reputation of the whizbang kids in the Pentagon that the country didn't have a nuclear war in the 1960s. Due to an error in reentry calculations fed into the computers of rockets, all of their missiles would have fallen off target. In World War II, a battleship had several independent electrical systems to keep the vessel operating despite numerous hits. In the interest of so-called efficiency, the more recent trend is toward eliminating the redundancy.

Because of such thinking, on July 13, 1977, when lightning burned out a sin-

gle transformer, Consolidated Edison's vast system supplying power to New York City went haywire, throwing the entire metropolitan area into a dither. Besides millions of dollars in lost work, the outage created unforgettable memories for people stuck in elevators and for drivers trying to fight their way through New York's normally abominable traffic without the benefit of traffic lights.

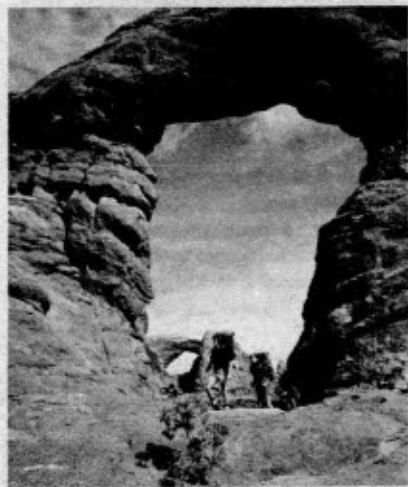
What happened in New York is a paradigm for much of our current energy setup. In chapters discussing oil, natural gas, coal and nuclear power, the Lovinses claim that, "The United States has for decades been undermining the foundations of its own strength. It has gradually built up an energy system prone to sudden, massive failures with catastrophic consequences."

As with nuclear power, fuels tend to be harmful enough in themselves, but the organization of their generating and delivery systems add to the dangers. With blind faith that bigger is better, that technology can solve all problems, the nation's masterminds have built energy projects so huge and vulnerable that, like the tree with one leaf or the ship with one electrical grid, the country is at the mercy of earthquakes, chinkoos, the moods of sultans, gangs of boys throwing stones, and phone freaks who could break a telephone code and scramble the Humpty Dumpty of an oil refinery.

The risks can be avoided. Fortunately, systems engineers are beginning to realize that the angel whispering into their ears that success comes from ever greater size and complexity is full of hogwash. Instead, they're concentrating on KISS: "Keep it simple, stupid." The idea is to build systems that will work when the unpredictable happens. That confirms what E.F. Schumacher said years ago, that "small is beautiful." It

Dave Hall

The Hiker's Guide to Utah



Your introduction to Utah's backcountry—from the rugged northern ranges south to the spectacular canyon country.

Finally, the cynical loner can find out where others are going and avoid those areas.

The Utah book is the fourth in a series of Falcon Press guide books. The previous three deal with hiking, floating and Nordic skiing in Montana. They have a similar format and their route descriptions are as good. However, the skier's and floater's guides in particular are much less committed to education and preservation of the wilderness. This may be due to the individual authors or may indicate a gradual evolution of the education philosophy of the publishers. In any case, the change is noticeable and a step in the right direction.

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Bruce Barrus is an instructor with the National Outdoor Leadership School in Lander, Wyoming.

BRITTLE POWER

Energy Strategy for National Security

Amory B. Lovins
L. Hunter Lovins

"...fascinating, disturbing, and — in its own way — hopeful..."

From the Foreword by Admiral Thomas H. Moorer
Former Chairman of the Joint Chiefs of Staff, and
R. James Woolsey, former Undersecretary of the Navy

translates into flexible rather than "brittle" approaches: simplified designs, dispersed and varied generating facilities, wind and solar power, and lesser-known alternatives presented in the Lovinses' latest book.

The current administration is resisting the change because, like a vulnerable energy system, it hasn't the flexibility to handle the situation in other than the old terms. That doesn't particularly trouble the authors of *Brittle Power*. The change already is taking place from the bottom up, on the individual, city, and state levels. Who needs the gargantuan federal government anyway? — so huge and unwieldy that it's likely to mess up a good idea when it comes along. *Brittle Power* offers any number of amusing, if painfully expensive, examples of federal fumbling in the area.

With over 2,000 footnotes and 1,200 bibliographic entries, this weighty book at first seems formidable. Yet despite a potentially complicated and debilitating subject, the Lovinses offer *Brittle Power* as something of a marvel: an intelligent, entertaining, well-documented, even a cheerful, book. It is available from Brick House Publishing Company, 34 Essex Street, Andover, Massachusetts 01810.

BULLETIN BOARD

BRUSH CREEK VOLUNTEERS

The Brush Creek Ranger District of the Medicine Bow National Forest in Wyoming is seeking volunteers to assist them in fire and recreation management. The Forest Service will provide free trailer space for campground hosts, whose responsibilities would include minor maintenance and cleanup, assisting the public and general management of the site. There is also one fire lookout position available at Kennaday Peak, for which the Forest Service will pay per diem and mileage. If interested contact the Brush Creek Ranger Station District, P.O. Box 249, Saratoga, Wyo. 82331.

CRITICAL MASS '83

The Union of Concerned Scientists and over two dozen other national organizations are co-sponsoring the Third Critical Mass Conference March 25-27 at Howard University, Washington, D.C. Marking the fourth anniversary of the Three Mile Island accident, the conference will highlight ways local groups and individuals can influence energy policy at the national, state, and local levels. A National Intervenor Conference focusing on strategies and skills necessary to cope with the NRC licensing process is tentatively scheduled March 23-25 in conjunction with the Critical Mass meeting. For information on these conferences contact the Union of Concerned Scientists, Suite 1101, 1346 Connecticut Ave. N.W., Washington, D.C., 20036, or phone (202) 296-5600.

POPULATION PROJECTIONS

The U.S. Bureau of the Census recently released new population projections for the nation giving three sets of estimates calculated under low, medium and high growth assumptions. The medium series projects the population increasing by about one-third, peaking at 309 million in the year 2050. A fact sheet on the new projections is available from Campaign Desk, Sierra Club, 530 Bush St., San Francisco, Calif. 94108.

NORTH AMERICAN FURBEARER REFERENCE

North American Furbearers, A Contemporary Reference is a new book published by the International Association of Fish and Wildlife Agencies in cooperation with the Maryland Wildlife Administration. The volume is an encyclopedia of 30 major furbearing animals and is available for \$14. Orders should be made payable to Worldwide Furbearer Conference, 1111 E. Cold Spring Lane, Baltimore, Md. 21239.

NEW ENVIRONMENTAL LEGAL SERVICES

Community Environmental Legal Services is a new national public interest law program asking for and giving help to grassroots environmental groups. CELS offers legal assistance to independent environmental groups and citizens on issues of local importance. CELS's sponsoring organization, the Environmental Task Force, is setting up a network of environmental professionals, experts, attorneys, groups, law schools, etc. with either specific or general experience in environmental issues. ETF is looking for suggestions to establish the network or for persons or resources to be included in it. For further information contact Community Environmental Legal Services, 1346 Connecticut Ave., N.W., Suite 918, Washington, D.C. 20036, or phone (202) 296-0798.

The Wyoming Water Development Commission will be conducting an open public meeting in the Banquet Room of the Cross Roads Inn, April 13, 1983 from 5:00 p.m. to 7:30 p.m. on a Development Plan for the Powder River Basin. WWDC staff, the State Engineer and Harza Engineering Company and subconsultants will be present to explain the results of the study to date and to receive public comment.

For further information contact:

Wyoming Water Development Commission
Barrett Building
Cheyenne, Wyoming 82002
777-7626

SELLING THE FEDERAL FORESTS

A symposium titled "Selling the Federal Forests" will be held April 21-23 in Seattle, Wash. The meeting will offer arguments for and against the sale of federal forest lands. For more information contact Continuing Education, College of Forest Resources, Anderson Hall, AR-10, Univ. of Washington, Seattle, Wash. 98195, or phone (206) 545-1373.

WESTERN COLORADO WILDERNESS TRIPS

The Colorado Wilderness Network is coordinating fourteen trips into western Colorado areas now under review by the Bureau of Land Management for wilderness designation. The trips are designed to acquaint people with the plants, wildlife, and rugged beauty of these remote areas. Some of the trips planned and their leaders are: March 26-27, Westwater Canyon - Utah, Dick Guadagno, 241-6489; April 2-3, Little Bookcliffs, Jo Pigott, 487-3812; April 9-10, Demaree Canyon, Dave Purcell, 243-8965; April 16-17, Sewemup Mesa, Dave Purcell, 243-8965. All numbers are area code 303. For information on trips later in the spring contact Rosalind McClelland, 483 Marine Street, Boulder, Colo.; phone (303) 449-1346.

SCHOOL FOR FIELD STUDIES

The non-profit School for Field Studies is conducting a series of environmental education courses in the United States and abroad. Of special interest are courses scheduled to document the effects of "acid rain" on Adirondack lakes, plant and animal recolonization at Mount St. Helens National Monument and examination of ecosystem management issues at Glacier Bay, Alaska, and Canyonlands National Park, Utah. For more information write the School for Field Studies, 50 Western Ave., Room 201, Cambridge, Mass. 02139, or phone (617) 497-9000, ext. 213.

AUDUBON SOCIETY NATURE FILMS

The National Audubon Society has two nature films available for use by its chapters at discount prices. One is "Last Stronghold of the Eagles", a 30-minute film about the spectacular gatherings of bald eagles in Alaska's Chilkat River Valley. The other is "Project Puffin", a 13-minute film about the society's successful efforts to restore the Atlantic puffin breeding colony on an island off the coast of Maine. The society also publishes a "Filmography" of nature and environmental films suitable for showing at chapter meetings. For more information contact Carol Lee Taylor, National Audubon Society, 950 Third Ave., New York, NY 10022; phone (212) 832-3200.

MINERALS YEARBOOK PUBLISHED

Volume I of the Bureau of Mines "Minerals Yearbook," a publication providing comprehensive final statistics on the production and consumption of nonfuel mineral commodities in 1981, is available. The yearbook includes data on some 90 mineral commodities and commodity groups covering domestic production, consumption, uses, stocks, trade, world production and the like. Copies of the "Minerals Yearbook — Centennial Edition 1981, Vol. I, Metals and Minerals," can be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, for \$17. Orders should specify the title and GPO stock number 024-004-02107-1.

WILDERNESS HELP WANTED

The Kamas Ranger District of the Wasatch National Forest in Utah needs volunteers to serve as wilderness guides and trail crew members in the High Uintas Primitive Area and Lakes Roadless Area from mid-June to mid-September. The Forest Service provides housing, subsistence pay, a uniform allowance and some camping equipment. Volunteers work a regular schedule, full or part-time, and are expected to perform as regular Forest Service employees. For information and applications contact Frank Erickson, Kamas Ranger District, Box 68, Kamas, Utah 84036.

INTERNATIONAL ENERGY DIRECTORY

The "International Directory of New and Renewable Energy Information Sources and Research Centers," a UNESCO/SERI publication, provides a comprehensive listing of governmental organizations, research centers, information resources, professional and trade associations and publications covering the full range of energy technology in 138 countries. The directory (SERI/SPI-751-1258) is available for \$20 from Solar Energy Research Institute, Document Distribution Service, 1617 Cole Blvd., Golden, Colo. 80401.

BLM WILDERNESS STUDY GUIDE

A new Sierra Club publication, "Saving the Solitude: A Guide to the BLM Wilderness Study Process," is available for persons interested in influencing BLM decisions on wilderness designations. Written by the Sierra Club Utah Chapter Conservation Chairman Jim Catlin, the guide describes the bureaucratic processes and how to overcome them. The handbook is available for \$3 plus 25 cents handling from: Sierra Club Information Services, 530 Bush Street, San Francisco, Calif. 94108.

FULL-COLOR WYOMING PHOTOMOSAIC

A full-color composite photograph of the state of Wyoming is now available from the Geological Survey of Wyoming. The photomosaic was taken by the LANDSAT satellite from an altitude of approximately 565 miles and clearly shows the mountain ranges, basins, lakes, rivers, dunes, and other topographic features of the state. It can be purchased as Map Series (MS-11) from the Geological Survey of Wyoming, Box 3008, University Station, Laramie, Wyo. 82071; phone (307) 766-2286. Price is \$9.00 including first class postage, or \$5 at the Geological Survey in Laramie.

SOLAR THERMAL COLLECTOR WORKSHOP

A solar thermal collector workshop, sponsored by SOLERAS, the joint U.S./Saudi Arabian Program for cooperation in the field of solar energy, will be held April 14 at the Sheraton Inn in Lakewood, Colo. For more information contact Dr. Alfred F. Meiners, Midwest Research Institute, 425 Volker Blvd., Kansas City, Mo. 64110; phone (816) 753-7600.

BY THE GRACE OF MAN

A new film, "By the Grace of Man," is available to conservation, sports and civic groups in Colorado. The film concerns the state's nongame wildlife program and discusses river otter and peregrine falcon reintroductions, the big river fishes survey and recovery efforts, and an urban wildlife education program near Denver which emphasizes non-consumptive uses of wildlife, such as bird watching, nature study and wildlife photography. For more information, contact Colo. Div. of Wildlife, Southwest Regional Office, Montrose, Colo. 81401, phone (303) 249-3431.



UTAH WILDERNESS RECOMMENDATIONS

The Bureau of Land Management's Moab district has recommended almost 780,000 acres out of a possible 900,000 as suitable for wilderness designation. The areas studied are located in Carbon, Emery, Grand and San Juan Counties in southwest Utah. Copies of the recommendations are available for public review at all BLM offices and at county courthouses in Utah. The public comment period lasts until May 2, and comments should be sent to the BLM, Moab District, Box 970, Moab, Utah 84052, or phone (801) 259-6111.

MONTANA GEOTHERMAL WORKSHOP

The Montana Department of Natural Resources is sponsoring a workshop on geothermal energy. Geothermal resource owners, potential developers, horticulturists, state and local government officials and others interested in geothermal energy utilization in Montana are invited to attend. The workshop will be held March 25-26 at the Ramada Inn, 1325 No. 7th Ave., Bozeman, Mont. For more information contact Jeff Birkby at (406) 449-3941. Registration is \$10.

ENERGY ASSISTANCE GUIDE

The American Association of Retired Persons and the American Petroleum Institute have released an information directory entitled, "A Guide to State Energy Assistance Offices 1982-83." The guide contains a state-by-state listing of local, state and federal offices and agencies that can provide information on programs available to low-income families to help pay for heating and cooling bills and weatherization. Copies are available from the Publications and Distribution Section, American Petroleum Institute, 2101 I. St., N.W., Washington, D.C. 20037; phone (202) 457-7160.

AUDUBON EAGLE POSTER

Copies of a four-color reproduction of an oil painting of a bald eagle soaring over an Alaskan valley are available from the National Audubon Society for \$5 each. Send orders to Eagle Poster, Science Division, National Audubon Society, 950 Third Ave., New York, NY 10022.

WYOMING TOAD DISAPPEARING

The Wyoming toad has been proposed for addition to the endangered and threatened species list. The amphibian has apparently disappeared from its range in an area of Albany County in southeastern Wyoming. The U.S. Fish and Wildlife Service asks that any available information on the species (*Bufo hemiophrys baxteri*), be sent to Olin Bray, U.S. Fish and Wildlife Service, P.O. Box 25486, DFC, Denver, Colo., or telephone (303) 234-2496. The proposal to list the toad as endangered was published in the *Federal Register* on January 28, 1983. There is a 60-day period for public comment.

The U.S. Department of Agriculture, Forest Service, has prepared a list of Environmental Analyses which the Forest Service plans to do in the near future. This list is available from Darrell Frogness, U.S. Department of Agriculture, Forest Service, Supervisor's Office, 1201 Ironwood Drive, Coeur d'Alene, ID 83814.

BEFORE THE WYOMING INDUSTRIAL SITING COUNCIL

IN THE MATTER OF:)
PACIFIC POWER & LIGHT COMPANY)
AND)
IDAHO POWER COMPANY) DOCKET NO. WISA-83-2
THE)
APPLICANTS)
APPLICATION FOR THE AMENDMENT OF)
THE PERMIT FOR THE JIM BRIDGER)
GENERATING UNIT FOUR)

NOTICE OF PUBLIC HEARING

Pursuant to Wyoming Statute 35-12-109 and Wyoming Statute 9-4-107(b) of the Wyoming Administrative Procedure Act, NOTICE IS HEREBY GIVEN THAT THE WYOMING INDUSTRIAL SITING COUNCIL WILL CONDUCT A PUBLIC HEARING ON THE PACIFIC POWER & LIGHT COMPANY AND IDAHO POWER COMPANY APPLICATION FOR AN AMENDMENT OF THE PERMIT FOR THE JIM BRIDGER GENERATING UNIT 4 NEAR POINT OF ROCKS, SWEETWATER COUNTY, WYOMING. The Council will convene at the Outlaw Inn, Rock Springs, Wyoming on April 7, 1983. The amendment hearing will commence after the conclusion of a hearing on proposed rules and regulations changes which is scheduled for 9:00 a.m. The Council will consider the application pursuant to the provisions of the Wyoming Industrial Development Information and Siting Act (Wyoming Statute 35-12-101 to 35-12-121), and Rules and Regulations adopted thereunder. The Council and its presiding officer will conduct the hearing in accordance with Section 13-15 of the Rules of Practice and Procedure of the Industrial Siting Council. The presiding officer will conduct the hearing and will make all procedural rulings. Persons desiring to make a limited appearance statement shall do so in writing as provided by Wyoming Statute 35-12-11(c). Limited appearance statements will be received in the Office of Industrial Siting Administration, Cheyenne, not later than April 12, 1983, or may be submitted to the presiding officer at the hearing. Dated this 4th day of March, 1983.
Office of Industrial Siting Administration
Suite 500, Boyd Building
Cheyenne, WY 82002
(307) 777-7368

BEFORE THE WYOMING INDUSTRIAL SITING COUNCIL

IN THE MATTER OF)
SHELL OIL COMPANY)
the)
APPLICANT) DOCKET NO. WISA-82-1
PERMIT APPLICATION TO CONSTRUCT)
THE NORTH ROCHELLE MINE,)
CAMPBELL COUNTY, WYOMING)

NOTICE OF PUBLIC HEARING

Pursuant to Wyoming Statute 35-12-109 and Wyoming Statute 9-4-107(b) of the Wyoming Administrative Procedure Act, NOTICE IS HEREBY GIVEN THAT THE WYOMING INDUSTRIAL SITING COUNCIL WILL CONDUCT A PUBLIC HEARING ON THE SHELL OIL COMPANY APPLICATION FOR AN INDUSTRIAL SITING PERMIT TO CONSTRUCT THE NORTH ROCHELLE MINE IN CAMPBELL COUNTY, WYOMING. The Council will convene on March 25, 1983 at the Tower West Lodge Best Western in Gillette, Wyoming. The North Rochelle hearing will commence immediately after the conclusion of a hearing on proposed rules and regulations changes which is scheduled to begin at 9:00 a.m. The Council will consider the application pursuant to the provisions of the Wyoming Industrial Development Information and Siting Act (Wyoming Statute 35-12-101 to 35-12-121), and Rules and Regulations adopted thereunder. The Council and its presiding officer will conduct the hearing in accordance with Sections 13-15 of the Rules of Practice and Procedure of the Industrial Siting Council. The presiding officer will conduct the hearing and will make all procedural rulings. Persons desiring to make a limited appearance statement shall do so in writing as provided by Wyoming Statute 35-12-11(c). Limited appearance statements will be received in the Office of Industrial Siting Administration, Cheyenne, not later than March 30, 1983, or may be submitted to the presiding officer at the hearing. Dated this 4th day of March, 1983.
Office of Industrial Siting Administration
500 Boyd Building
Cheyenne, WY 82002
(307) 777-7368

CLASSIFIED

ADVENTURE

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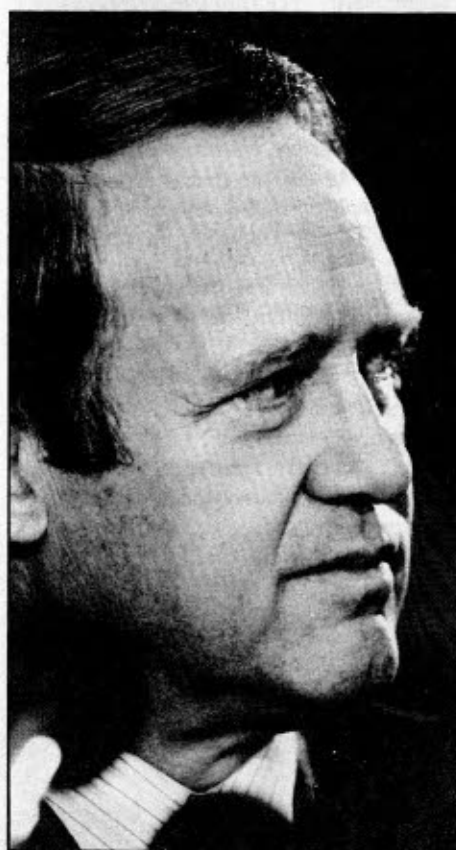
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McClure...

(continued from page 7)

activity which proves in the marketplace what these technologies can do. I've been disappointed with the pace of the SFC getting projects on line. But I think a very critical decision was made in the administration just two weeks ago

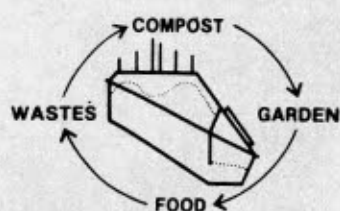
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Contact Vernon J. Scharp, Century 21 Roundup Realty, P.O. Box 2161, Jackson Hole, Wyoming 83001; (307) 733-2900 (Office); (307) 733-5008.

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"I don't think that privatization (of public lands) is the goal of this administration, and if it were, it wouldn't go anywhere."

in which Ed Noble, the chairman of the SFC, argued very strongly that the SFC be given the green light to go ahead. After a full review of all of that the administration said to the SFC: "You go ahead, complete the commitments of all the money that's in there." But there was that critical review and evaluation in this administration and this administration did decide to go ahead with the synthetic fuels program. And I think that's a very important part of looking at alternatives, such as heavy tar sands, the liquification of coal, producing gases from coal, oil shale recovery — programs of that nature.

Are you satisfied with the technology available for storage of radioactive wastes?

I am satisfied that we know enough about it that I can confidently predict that the application of technology, when it is applied, will be adequate to the task. We know how to handle it and we'll know more about how to handle it

by the time we get the facilities built. A lot of people talk about the tremendous amount of heat that will come from spent fuel core rods from civilian reactors. Do you know what really is the amount of heat that comes from a spent fuel core after it's been in the pool at the reactor? The heat that's generated in the core is equal to six 100 watt bulbs... It is cumulative, but it's not a tremendous heat burden.

But the stuff remains dangerous for a very long time.

The hotter elements, the ones that really have potential for danger to the biosphere, are those that have very much shorter half-lives. Nearly all of the materials that come out of the civilian program will have decayed to a level of radioactivity equal to the level of natural uranium occurring in nature in about 600 years. That's not the megathousands people talk about. And when you get it down to those levels it's no greater a hazard than it is going out walking

through Idaho and running past a uranium deposit or a thorium deposit.

Despite the fact that it would be concentrated?

Not necessarily concentrated. But even there if you happen to run into a rich ore, you have a concentration. As a matter of fact, one of the worst things you can do is climb Mount Borah (the tallest peak in Idaho). Not because of the radiation in the ground, but because as you go higher you begin to get natural radiation from the sun.

Should a state be forced to accept nuclear waste if it doesn't want it?

That's one of the toughest issues you could raise. I am a states' righter. I don't like the federal government telling me or my state what we have to do. But I know one thing: In this process, if you give the state an absolute veto, the political pressures in that state are almost inevitably going to force them to exercise it. In defense of the local government, you can't impose that burden on them because they'd be forced to say, "No, you can't do it here." States and local governments must be involved in a very real way, at every stage of that process, right up to the point of a final veto.

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Glenn Oakley is a Boise, Idaho, freelance writer and a frequent contributor to High Country News. This article was paid for by the HCN Research Fund.

14-High Country News — March 18, 1983

OPINION

Bates Wilson, father of Canyonlands

by Jess Funk

Bates Wilson, "father of Canyonlands National Park," died February 25. He was 70.

As he did hundreds of others, Bates introduced me to Canyonlands by

GUEST EDITORIAL

means of a much practiced four-wheel drive tour complete with sandy red roads, warm water pot holes and fantastic dutch oven cooking, all in a country too large and too beautiful to grasp consciously.

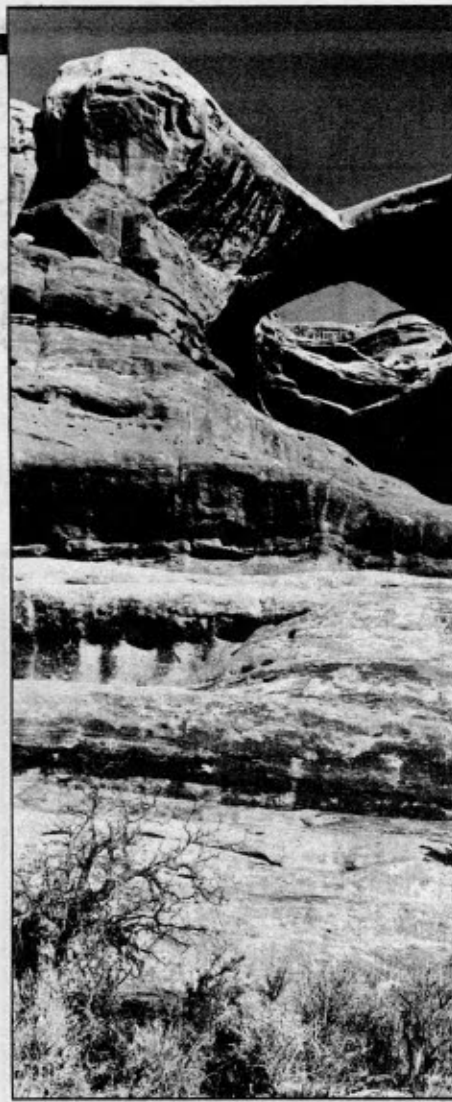
Bates loved the canyon country and worked to save it. As superintendent of

Arches and Natural Bridges National Monuments since 1949 he explored the area and then lobbied the Park Service and the Kennedy administration until Canyonlands was declared a national park in 1964. Bates was appointed the first park superintendent and served in that job until he retired in 1972. Since then, he had been ranching near Moab Utah.

There is no place I know like Canyonlands. Some ancient spirit always seems to be there with you. Bates Wilson knew that spirit. He will be remembered as part of it.

+++

Jess Funk is the current HCN intern.



Paul Bunyan's Potty, Horse Canyon, Canyonlands National Park

"Peaceful atom" a bad deal

by Steven Paulson

Former Interior Secretary Stewart Udall once referred to nuclear power as "the supreme conservation achievement of the century," a sentiment that

GUEST EDITORIAL

was echoed by many other conservation leaders at the time.

We know now that their faith was misplaced. We know that the unbridled promises of the nuclear power industry were nothing more than that. And, still, I would like to be able to share that faith. I would like to have faith in something — almost anything — that would abate the steady intensification of coal strip mines, acid rain, the greenhouse effect and thirsty slurry lines.

In his guest editorial (HCN, 2/4/83), Tennessee Valley Authority Director S. David Freeman recalls the broken promises of the nuclear industry, its efforts to assign blame for the public failure of its program, and its unwillingness to own up to the flaws in its product. He acknowledges that we are still experimenting with this energy form, but urges that we not let the "nuclear option" die. Freeman calls for federal support of research into new reactor designs which, he says, will be safer and more efficient. The environmental advantage is that expanded coal burning in the next several decades could be mitigated significantly. That's no small potatoes.

But there are more factors in this equation which Freeman and the rest of us will have to consider before we recover that faith in the nuclear dream.

First is the question of whether there really is a trade-off between nuclear and coal power. The expansion of nuclear power in this country did not cause a corresponding decrease in the use of coal. Coal's expansion, in fact, took place at a time when the nuclear industry was healthy and expanding itself. The life is gone out of Freeman's proposal if an expanded nuclear program such as he suggests does not result in decreased use of coal.

The more likely trade-off, the one that has actually taken place for the past three decades, is that the coal-or-nuclear equation will continue to delay our nation's weaning from non-

renewable energy supplies. The same pro-nuclear administration to which Freeman appeals is the regime which has gutted solar research and development programs. While most admit nuclear power to be merely a stopgap energy source, and many consider it only as a "last resort" supply, the national government's commitment to nuclear energy since the early 1950s has come at the expense of progress toward long-term renewable energy and conservation. It has thus delayed energy independence for the United States.

The role of the "peaceful atom" in the proliferation of nuclear weapons is, of course, a major concern the world over. Access to nuclear materials with military potential increases as these materials become more widespread.

There are yet other elements to this nuclear bargain which need to be weighed.

One of these is the mining of uranium. Aside from the general environmental effects of mine operations, uranium development has its own characteristics. One is that uranium is frequently mined from aquifers. Areas around uranium operations often suffer loss of water quality and quantity — this, in an era when water is becoming a more rare and valuable resource. Another characteristic is the shorter life of uranium operations. This trait aggravates the boom/bust cycle which has devastated so many western towns.

Then comes the question of plant construction. Even with the superior plant designs which Freeman proposes, can those plants be properly built? The litany of construction deficiencies in the nuclear industry is a long one, and seems unable to correct itself.

And what of our nuclear waste? Is it part of the bargain that American treasures such as Canyonlands National Park will have to be sacrificed? If so, then this has to be included in the cost-benefit evaluation. It also has to be remembered that such waste disposal will be a direct taxpayer cost.

Another component is the problem of jobs. Study after study has shown that capital-intensive energy projects such as nuclear power plants are job-poor, producing fewer jobs for the money than conservation and renewable energy efforts. As the solar transition is delayed,

so are a good number of jobs for Americans.

A further property of a highly centralized energy grid is that it makes the nation more vulnerable to foreign attack and sabotage. The Federal Emergency Management Administration pointed this out two years ago and it is discussed at length in the 1982 book, *Brittle Power*, by Amory and Hunter Lovins.

Of course, a continued emphasis on costly, high-tech energy facilities will concentrate more and more wealth into fewer and fewer hands. As control is thus tightened over America's energy regime, we will see solar power develop in the hands of those few. As is beginning to be the case in southern California, energy from the sun will be owned by the power companies.

Perhaps the nuclear equation will ultimately balance out in favor of Freeman's proposed new generation of reactors. Any advancement that could diminish the increased burning of coal deserves to be examined seriously. This exchange of coal for nuclear is, to me, the essence of the nuclear sales pitch. But Freeman and other proponents will have to demonstrate that this exchange is real, not imagined. They will also have to recognize that other factors enter into the transaction, some of which may be of greater concern than simply the safety of reactors.

After gaining the public trust, after gaining three decades of government promotion and tens of billions of taxpayer dollars, the nuclear industry still has a lot of selling to do. It has fallen far short of its early promises and, in the process, has stalled our country's transition to renewable energy. The early faith of conservation leaders was so thoroughly shattered that suggestions for renewed investment in nuclear power will meet with considerable skepticism these days. I have no doubt that Freeman is sincere in his proposals, but there are many facets of this nuclear bargain besides reactor design. The reckoning will be difficult and faith, once lost, is difficult to regain.

+++

Steven Paulson, former chair of the Black Hills Energy Coalition, is presently a graduate student at Utah State University.

LETTERS

FREEMAN'S CREDIBILITY

Dear HCN,

S. David Freeman's editorial (HCN, 2/4/83) contains some worthwhile information, and starts out in a fashion designed to please the most ardent "environmentalist" (whatever that may be!). But I could only groan in disillusionment when I read, "We at the TVA are second to none in our commitment to conservation and alternative energy sources."

As if that didn't do enough damage to Mr. Freeman's credibility, he follows it up with the tired old argument about nuclear power plants being needed to replace oil and coal.

Never mind that nuclear plants generate only electricity (Only?? Well, not quite, but I'll go along with Freeman and ignore radioactive wastes and other nuisances) and that, for the most part, electricity cannot be substituted for the lion's share of our energy needs. And that the United States already uses huge quantities of electricity in grossly inappropriate and wasteful ways. And that, in spite of this, electricity supplies only about 12 percent of our total energy needs and that a ridiculously large excess capacity (above and beyond peak demands) of 43 percent already exists! And that at recent rates of electricity use growth we can easily go without building *any* kind of electricity-generating facility well into the next century and still have more-than-adequate excess capacity.

The views of TVA and other producers (of energy, minerals or whatever) are occasionally welcome in HCN, but must they dilute their valid arguments with statements which insult an informed person's intelligence (not to mention misinforming the uninformed)?

John A. Connors
Alpine, Texas

BAMPPLEBURG

Dear HCN,

Have been meaning for some time to write you concerning "A Rocky Mountain Primer" (HCN, 12/24/82).

Generally enjoyed the daffinitions, but I took exception to the downright unpleasant references to cowboys, Western lifestyles and lack of culture in our area (cf. "boots", "country music" and "void, cultural").

I would like to coin a new term to add to your glossary, which could be used to describe transplanted Easterners, West (Coast)erners, and other recovering cosmopolites (including myself):

"Bamppleburg": noun, usu. perjorative. Someone who moves out West to get away from 'it all', then complains because 'it all' ain't out here."

Myself, whenever I feel a fit of citified uppityness coming on, I try and remind myself of a pithy apothegm I once overheard during a barroom farewell: "Whatever you do, wherever you go, that's where you'll be."

Ciao, baby (er, I mean, Adios, amigos)

Will Murphy
Riverton, Wyoming

WILD-EYED AND IRRESPONSIBLE

Dear HCN,

I am writing just a few minutes after the Wyoming Senate's final approval of the coal slurry bill you mention in your 2/18/83 issue. I wish to correct a misimpression your article gives. The Wyoming Outdoor Council is unequivocally opposed to water export, and we are similarly opposed to transbasin diversions like the Stage III Project that is so unfortunately tied to this bill. On the other hand, we do support the part of the bill that provides for use of the water from the Big Sandy River, since this is saline water which contributes

heavily to the salinity problems of the Colorado River system.

Our support for the Big Sandy project is contingent on two things:

1) A study would have to show us that the salinity increment once removed would be permanently removed — not just an excuse for developing new salinity sources in western Wyoming.

2) A study would have to show us that the slurry line would actually use Wyoming coal and "create" Wyoming jobs — not just move jobs horizontally from the railroad industry to the slurry industry.

As of today, the slurry bill is sheer speculation of the most wild-eyed and irresponsible kind. No Wyoming minerals producer or CO2 producer has yet expressed any interest in a slurry line. Schemes like this one are the worst possible examples of supply side economics, since they flood markets where no demand for the commodity exists, thus driving down prices for all. We are urging Gov. Ed Herschler (D) to veto this dangerous and foolish brainchild of House Speaker Russ Donley (R-Natrona), and we urge your readers to support the governor's development of some backbone on this crucial issue.

Tom Wolf
Director, Wyoming Outdoor Council
Cheyenne, Wyoming

HENRY MOUNTAINS BUFFALO

Dear HCN,

How are you wintering? Well I hope. I'd like to point out an error in your December 24, 1982, issue. You said the 2,000-head bison herd in Yellowstone is the only wild one in the country.

You are mistaken. There is a completely wild unfenced herd of buffalo in the Henry Mountains in Utah. They were transplanted to Utah in the 1940's from Yellowstone. About 200 live there. The herd is threatened by cattle ranchers and coal development.

Clifford C. Mitchell
Challis, Idaho

CREATIVE JOURNALISM

Dear HCN,

I especially enjoyed your issue, "Discovering The Rockies" (HCN, 12/24/82), a bit of creative journalism which is so rare these days. It was reminiscent of the past when Tom Bell was writing so beautifully, before matters got so complicated in covering environmental affairs.

"Draining the Rivers Dry" by Ellen Ditzler was a shocking account of how the destruction of natural systems is occurring in the west. I think that the Arkansas River has suffered a similar fate as it flows through Kansas.

The problem is that the rivers know more than man. Until he realizes this, there is not much hope of getting him to leave them alone so that they can perform their age-old function of keeping the environment healthy for life upon earth.

Van Shipp
Versailles, Kentucky



Coal slurry...

(continued from page 16)

the biggest problems slurry pipelines have had so far is getting rights-of-way across railroad lands. By cleaning up the salinity in the river, BuRec gets involved and may be able to use federal powers of eminent domain to clear a right-of-way for the public interest part of the project." McKeever would not comment on this theory. Cathy Loveless with BuRec said the agency is not sure whether it would have eminent domain under these circumstances.

Meanwhile, McKeever said that he would seek a meeting with Herschler over the veto. He said, "The bill was a mixed bag of tricks and it may be that we were caught in the middle."

In Montana, the Billings-based Powder River Pipeline, Inc., is the sole bidder for suplus water to use in a coal slurry pipeline. Owned principally by Mustang Energy Corporation, a pipeline oil and gas company in Oklahoma City, PRP opened its Montana offices in 1981. According to Mustang Energy spokesman Ralph Morrison, PRP plans to build a 1,300 mile long slurry line "from coal fields in Montana or Wyoming to the Great Lakes area." PRP has not yet determined where it will get the 15,000 acre-feet needed annually for a large slurry line or how it will work around the state's current moratorium against granting water rights for coal slurry.

But officials in the administration of Gov. Ted Schwinden (D) have been working hard to provide some of these answers to Montana's lone slurry company. Directors of the Department of Natural Resources and Conservation last January told a legislative forum that a 300,000 annual acre-foot surplus already exists in three large reservoirs, Fort Peck, Yellowstone and Tongue River. Gary Fritz, administrator of the DNRC's water division told the legislators, "This surplus could be delivered from existing reservoirs even in drought years. An addition 500,000 acre-foot surplus exists in other state reservoirs. Slurry lines are not the straws that will suck Montana dry," said Fritz.

Since the January forum, DNRC offi-

cials have been lobbying for a bill to rid Montana of its coal slurry moratorium and to set up a water marketing program that focuses on exporting Montana water for out-of-state industrial use. Rep. Ted Neuman (D-Vaughn), a farmer, is carrying the Schwinden administration's bill. This bill would provide payment for the water to the state in an amount to be negotiated by DNRC and any water exporter.

Montana's water law problems are complicated by the fact that the state bans two kinds of water uses. In addition to the coal slurry ban, state law also restricts the sale or lease of water to out-of-state users. Both the *Sporbase* and *El Paso* decisions have thus added a sense of urgency — and confusion — to the Montana water marketing debate, while the South Dakota lease of 50,000 acre-feet to ETSI has pushed some Montana leaders to the brink of frenzy in their hope of creating a lasting revenue base from water sales.

According to Professor Al Stone of the University of Montana Law School, the state's interstate water transport ban is "almost assuredly unconstitutional" since it discriminates against out-of-state water users. The slurry ban, however, is "a close call," according to Stone, because it is not discriminatory — it bans slurry both in and out of state — and it is based on the constitutionally sound principle of conservation. *Sporbase*, according to Stone, does not necessarily threaten the slurry ban, since the decision allowed for prohibition based on the legitimate desire to conserve natural resources, a desire clearly expressed in Montana's language banning coal slurry.

These fine legal distinctions, however, are not well understood by the state legislature. Better understood is the fact that a prospective water buyer has appeared, garnered the support of the governor, and is moving quietly behind the scenes to make water for coal slurry legal.

Sandra Hawke, administrative assistant for Powder River Pipeline, has told the press that Montana had better hasten the process of removing the slurry ban because her company is beginning to negotiate with South Dakota municipalities for treated waste water.

Meanwhile, DNRC director Leo Berry has told the legislature that in light of the *Sporbase* decision Montana should move quickly to remove the slurry ban before it's challenged. The best way to protect the state against a constitutional attack, according to Berry, is to establish the water marketing program that his agency has devised.

The Democratic leadership in both the House and Senate are moving slowly through the slurry morass. House Speaker Dan Kemmis (D-Missoula) believes that a water marketing program can and should be established to protect Montana against a commerce clause attack, but he sees no reason to immediately remove the slurry ban. Kemmis is more in favor of a two-year legislative study on the issue, and is not

as inclined as the Schwinden administration to move quickly just because PRP stands ready to buy.

The *Sporbase* case, in tandem with the dollar signs lighting up in the eyes of western politicians, is the most significant spur to action on water marketing in the Rocky Mountain states. The case itself involved a farmer who owned land straddling the Nebraska-Colorado border who wanted to use some of his Nebraska water to irrigate his Colorado crops. Nebraska had a law that forbade export of water from within its borders.

The court found that water was an item of interstate commerce — just like Twinkies or Chevy Citations — and the states could not erect unreasonable barriers to commerce under the commerce clause of the U.S. Constitution. Nebraska's law, said the court, was an unreasonable burden on interstate commerce. This struck at the legal basis of all western water protection legislation.

Shortly after *Sporbase* was decided, the case of *El Paso vs. Reynolds* was decided by a U.S. District Court. The "fact situation" of this case was considerably more complex than the *Sporbase* case, but the district court was much more restrictive than the Supreme Court had been, at least in the eyes of many western water experts. In effect, the court ruled in the *El Paso* case that the only reason a state could impose restrictions on water export was for "basic human survival." The *Sporbase* decision seemed to approve of restrictions for "conservation" purposes, but even that was thrown in doubt by the *El Paso* decision. However, *El Paso* is only a district court decision and may be overturned on appeal.

In any case, it seems clear that all 14 states that have severe restrictions on water export are in violation of the U.S. Constitution as defined by *Sporbase*. A number of companies seeking export authority are reportedly being advised to skip the legislative approval route altogether and go straight to judicial remedies for their export authority. The states, on the other hand, are trying to devise laws that will protect their water resources and satisfy the *Sporbase* criteria at the same time.

While Montana is trying to set up an as yet undefined water marketing program, Wyoming passed legislation that set up an administrative review of any export proposals. The law, sponsored by Rep. Al Wiederspahn (D-Laramie), establishes a review procedure similar to the state's industrial siting process. The state engineer will be required to review any requests in light of existing claims on the water, potential future uses, impacts on current users, benefits and detriments to the state and other criteria. In all, there are about 10 standards under which any request will be reviewed. The initial analysis of Wyoming's law by a number of water experts has indicated that it will probably satisfy the *Sporbase* criteria. However, no one will be certain until a court case is finally tried. □



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High Country News

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States start water sale scramble

by Dan Whipple
and Don Snow

Last year, the state of South Dakota sold Energy Transportation Systems Inc. about 50,000 acre-feet of water for \$1.4 billion. After a brief but startled silence on the matter, Rocky Mountain politicians suddenly grasped the fiscal possibilities inherent in the sale of precious water for export in coal slurry pipelines. No fewer than three states — Colorado, Montana and Wyoming — have looked at the possibilities of selling water to slurry companies.

Further muddying the water picture are two court decisions which threaten the very foundations of western water law. In *Sporbase vs. Nebraska*, the U.S. Supreme Court declared that a Nebraska statute limiting export of water was an unconstitutional burden on interstate commerce. Fourteen other states have similar laws, all probably unconstitutional. And, in *El Paso vs. Reynolds*, the U.S. District Court limited even further the authority of a state to protect its water.

So, the states are faced with the task of protecting their water with one hand while trying to sell it with the other.

In its recently concluded session, the Wyoming legislature passed a complex piece of legislation that would have authorized two slurry pipelines, one using heavily saline water from the Big Sandy River in a "commodities pipeline" from western Wyoming and western Colorado to points further west. The other pipeline would have taken water from the Little Snake River and put it in the North Platte River for the North Platte Joint Powers Board, which essentially would provide water for Casper and free water downstream for water development in Cheyenne.

The legislators — the Republicans, anyway — had great plans for this bill. The Big Sandy water was going to be sold for about \$100 per acre-foot and the Little Snake for \$400 per acre-foot. The Big Sandy water was cheaper because it is highly saline. However, there was a sure buyer, W.R. Grace Co., which wanted the water for its Aquatrain slurry proposal.

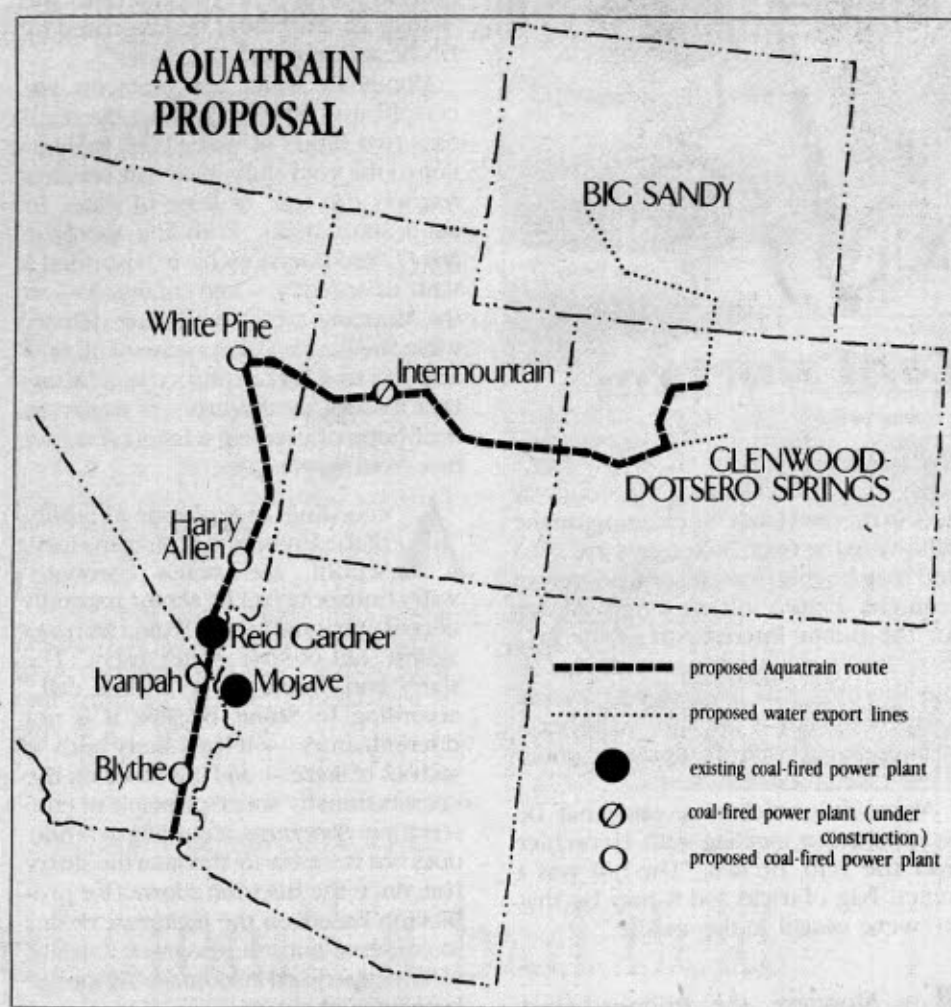
Wyoming Gov. Ed Herschler (D) dampened a lot of this enthusiasm when he vetoed the bill. Herschler said in his veto message, "This proposal puts the cart before the horse by authorizing water export before critical information is available on the proposal."

State Senate President Eddie Moore (R-Converse-Niobrara), one of the chief sponsors of the bill, was critical of the veto, saying the state would net more than \$50 million a year from the sale of the saline water.

Moore's financial estimate demonstrates the confusion surrounding the bill. An examination of the Aquatrain proposal indicates that the state would not garner anything close to \$50 million.

Aquatrain is a proposal put forth by W.R. Grace Company to move coal from Colorado to markets on the West Coast and, perhaps, to export markets in the so-called Pacific Rim countries — Japan, Korea, etc. Aquatrain has gone through a number of incarnations as Grace has continued to examine and refine the concept.

From Grace's point of view, Aquatrain will accomplish several things. According to Aquatrain President Ira McKeever, "We have a great deal of coal in western Colorado that we may not be able to market unless we have a form of



The U.S. Supreme Court found that water was an item of interstate commerce — just like Twinkies or Chevy Citations.

transportation that is cheaper than the railroads."

From the Bureau of Reclamation's point of view, Aquatrain would help clean up the salinity in the Colorado. BuRec is charged by law with cleaning up the salt in the Colorado. Aquatrain would remove a total of about 30,000 acre-feet of highly saline water from the Big Sandy and the Glenwood-Dotsero Springs area in Colorado. According to BuRec, this would result in the removal of 250,000 tons of salt annually from the Colorado. The project alone would help meet about 25 percent of the salinity reduction BuRec must achieve by the year 2010. In addition, this would be achieved almost entirely with Grace's money, requiring little federal investment.

And, for Colorado and Wyoming, Aquatrain is an opportunity to cash in on the "scarce" water resources of those two states.

However, as Warren White, of the Wyoming state planning coordinator's office, said, "There are a number of questions about this project that the governor didn't have the answers to. We didn't know the routing of the pipeline, the quantity of water or the commodities that would go through it."

There also seems to be considerable confusion among the legislation's sponsors, as evidenced by Moore's casual reference to \$50 million a year that the state would supposedly receive from the saline water project. According to Aquatrain's McKeever, the project would use only about 6,000 acre-feet a year from the Big Sandy. At \$100 per acre-foot, that comes to \$600,000 annually. That's nothing to sneeze at, but it isn't \$50 million.

ship the coal in the pipeline. Initially, the coal would have been put in plastic bags and shipped through the pipeline using water as the transportation medium. The salt water would then probably have been evaporated or dumped in the Pacific Ocean.

However, a recent alteration in the plan would use liquid CO₂ — probably gathered from oil and gas operations in the Overthrust Belt where CO₂ is plentiful — as the pipeline's transportation medium. According to McKeever, this provides a number of economic advantages because the CO₂ is cheaper than the water and requires less energy to pump the coal because it is "slipperier."

If Grace is using CO₂ instead of water, what does the company want the water for? McKeever hedges on this somewhat, saying, "Back 18 months ago, we made an agreement with the seven Colorado River Basin states and the Bureau of Reclamation that we would work with them on cleaning up the Colorado River salinity. There's no point in changing the goals just because you have a different medium of transport."

"It's not just altruism, though. We have some coal to market and it seems clear to us that it isn't likely to be marketable without some cheaper transportation than railroads."

However, since the pipeline will use CO₂, not water, to move the coal (and other unnamed commodities), that argument still doesn't answer why Grace wants the water. When pressed, McKeever said that there are some possibilities for marketing the water, perhaps to power plants for cooling. He mentioned as possibilities the Jim Bridger plant in Rock Springs, Wyoming, the Intermountain Power Project under construction near Delta, Utah, and several Utah power plants in the area of the Price and San Rafael Rivers. However, IPP is the only utility with which Grace has discussed this possibility and IPP already has a firm water supply, purchased from agricultural users in the vicinity of the power plant. That water is expensive, however, costing about \$1,400 per acre-foot.

In addition to the existing power plant, Grace may be counting on selling water to a number of proposed power plants in southern Utah, Nevada and Arizona. However, most of those plants have been postponed because of the low demand for electricity in the past few years.

Another explanation for Grace's interest was suggested by a Colorado environmentalist who has monitored Aquatrain's progress. He said, "One of

(continued on page 15)

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