



High Country News

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Lander, Wyoming

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Looking for juice in backyard dams

by Michael Moss

ASPEN, Colo. — High on the Fryingpan River near this Western Slope resort town, there sits a 285-foot, earth-and-rock-fill dam called the Ruedi with a hole in its side.

There's no cause for alarm. All dams have holes to allow the stored water to escape. But the Ruedi hole is special. It was fitted with a 60 degree elbow, or wye, when the dam was built in 1968 by the Bureau of Reclamation.

The builders had the foresight that some day the wye-fitted hole in Ruedi would be fitted with generating turbines, smoothly spinning in the current and pumping electricity into the local grid.

Spurred by rising energy costs and federal incentives, that day has finally come, said Aspen city manager Wayne Chapman. So also said Meredith Flinn, Curtis Stewart, John Huston, Mitchell Dong and Rolf Paul.

Who are these people? City and county officials, a water lawyer, a private developer and the mayor of a tiny town 80 miles away over the Continental Divide, respectively. Each wants to be the lucky one to put the turbines in Ruedi's hole, and open the bank account that collects the steady profits.

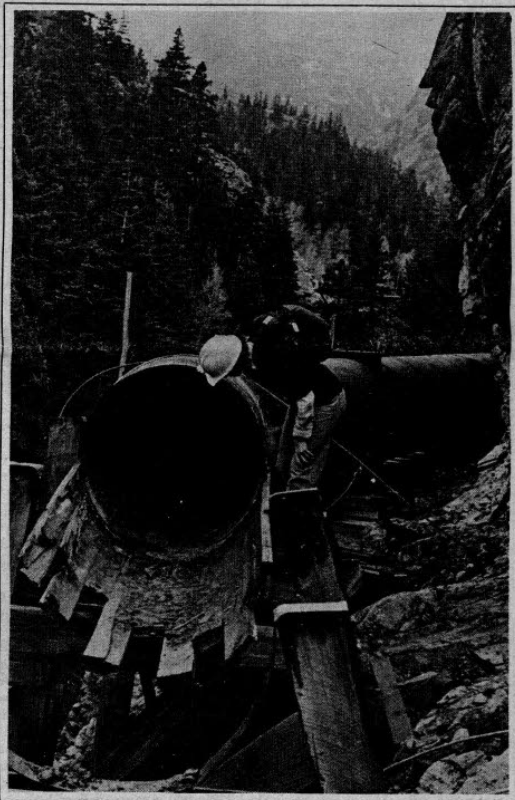
Their scramble for the development rights at the Ruedi site is only one of the dozens of squabbles over the hydroelectric future of the Rocky Mountain region.

ALL THAT POWER

Technologically, hydroelectric development is enjoying a second wind.

The U.S. Army Corps of Engineers has identified thousands of sites nationwide it claims could be profitably developed. From mill stone dams in Vermont to modern reservoirs in San Diego, there's a potpourri of structures sitting around which back up enough water to spin out thousands of megawatts of turbine-generated electricity, some of which is valued at a premium because it can be used selectively during hours of peak demand.

Many of the Corps proposals involve merely retrofitting existing diversions, with only minor changes in stream flow. To the dismay of environmentalists, however, other projects would greatly enlarge reservoirs in sensitive areas and even dam free-flowing rivers. Idaho Gov. John Evans (D) last week turned down a Corps proposal to upgrade the Dworshak Dam hydroelectric system because it would damage the steelhead trout fishery.



Throughout the irrigated Western states, however, fields laced with canals offer unique hydroelectric potential, despite their relative level-headedness and small water drop. Several canal companies in Idaho have recently contracted with the Boise-based J-U-B engineering firm to retrofit some 40 irrigation structures on the Snake River plains.

While hydroelectric power seems to be running over both technical and economic obstacles, it's creating political whirlpools around the question of who should reap the profits. There's anxious skirmishing among competing interests.

On the Oregon-Idaho border, no less than three private firms, nine water

districts and both states are competing for the privilege of pulling 13.5 megawatts from the still undeveloped Owyhee Reservoir system.

The Weber Basin Water District in Utah has filed for rights to develop the district's reservoirs. But the district actually does not plan to install turbines, it intends simply to block similar attempts by private companies. The Utah Legislature, meanwhile, voted this year to sharply restrict municipalities from joining the rush.

For sheer complexity, however, the Ruedi case is classic.

RASSLING FOR RUEDI

The first to get wind of Ruedi's forgot-
(continued on page 10)

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Dear Friends,

When Mary Margaret Davis retired as HCN's office manager three years ago, the staff went shopping for a replacement. Very quickly, the choice narrowed to two: A certifiable nine-to-five, who would keep the books and collect the paperclips, and a young woman from Albuquerque who would never settle for merely directing office traffic.

Always ready to choose assertiveness over mere competence, the staff invited Jazmyn McDonald. It was a Faustian bargain. Our many-headed Hydra of a staff thus took on another strong and hardnosed head. Jaz was no Dickensian clerk, scribbling in ledgers down in the basement; she helped make decisions. Jaz took on a business that had been operating as a defacto non-profit for eight years without ever bothering to inform the Internal Revenue Service of its existence.

She set about educating the staff in the dark arts of business, and calibrating the books. But there were other contributions as well, less tangible but equally important. She became the hub for the various spokes at HCN—typesetting, working circulation, doing advertising layout; she knew better than anyone how each department was getting along. But 'department' is a word she would have excised (as she often did when typesetting) — she kept track of individuals, not categories.

It was not, of course, three years of peaches and cream. In recent job evaluations, an editor described the look that came over Jaz when she was crossed — a frozen smile, a jaw like granite, and a few, terse words. She had a temper. But the anger — often the only way to awaken resident linguists to the needs and sensitivities of the rest of the staff — was always followed by conciliation.

Jazmyn decided she was tired of living from crisis to crisis. Luckily, she is floating free and in the vicinity for a while, so there will be some tennis, some business and metaphysics over drinks. And we'll still have her memos to remember her by. In a parting multi-page note on the pros and cons of typesetting systems, replete with dollars and picas and software technogeeze, Jaz concluded, typically, with her own bottomline perspective:

"Whatever, enjoy your new toy."

— the staff

Western Roundup

Oil seekers file Bob Marshall suit

The Mountain States Legal Foundation, challenging the U.S. House Interior Committee's emergency withdrawal of three Montana wilderness areas from oil and gas leasing, was denied a restraining order to stop the withdrawal last week.

Mountain States went to U.S. District Court in Denver seeking to revive the interrupted process of leasing in the Bob Marshall, Scapegoat and Great Bear Wildernesses. Leasing was banned when the Interior Committee voted 23-18 last month to invoke a little-used clause of the Federal Land Policy and Management Act that allows committee action to protect public lands in an "emergency."

The Mountain States lawsuit contends that the committee lacked the constitutional authority to block leasing, and that such withdrawals contradict Congress' will in passing the Wilderness Act of 1964, which says exploration and leasing are permissible in wilderness areas until 1984. Finally, the suit claims there is no "emergency" to justify the move.

U.S. District Court Judge Jim Corrigan, who denied the restraining order, said the case would still be heard in order to resolve the constitutional questions.

Representatives of the Sierra Club questioned whether Mountain States lawyers might have been tipped off about the withdrawal, citing Watt's previous service as director of the conservative non-profit foundation. A Mountain States spokesman denied the charge.

In a letter to House Interior Committee Chairman Morris Udall (D-Ariz.), Watt raised the same questions voiced in the Mountain States suit. The letter was hand delivered by Watt to Udall three days before the Mountain States suit was filed.

Watt wrote, in part: "The constitutionality of the action you have directed me to take is highly questionable...Nevertheless, in the interest of maintaining harmony between the Congress and the executive" he agreed to carry out the resolution.

The Mountain States suit was brought in the name of six members of the foundation holding oil and gas lease applications in the wilderness areas.

Nor did the suit exempt James Watt. Not only did it argue that the Interior Committee's action was unconstitutional, it said the Interior Secretary also lacked authority to tamper with leasing in the wilds.

Indians' Class I air boosted

Indian tribes' right to protect air over their reservations has been confirmed by the 9th U.S. Circuit Court of Appeals in San Francisco. The court rejected a challenge by several coal companies, a utility and another Indian tribe to the Northern Cheyenne tribe's designation of its southern Montana reservation as a Class I air quality region. The Northern Cheyenne in 1977 asked for designation as a Class I area under the prevention of significant deterioration (PSD) section of the Clean Air Act, becoming the first entity to seek that strictest air quality standard.

PSD statutes allow voluntary redesignation when requested by certain governmental bodies — including Indian tribes. However, because expensive studies are required only Indian tribes have requested redesignation.

Most of the petitioners who challenged the Northern Cheyenne Class I protection fear the U.S. Environmental Protection Agency will prohibit strip mining in the vicinity to prevent mine dust from degrading the reservation's air quality. Such dust is not now included in the PSD regulations, but it may be added soon. The court agreed

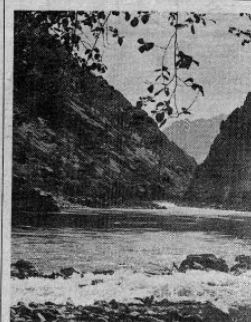
while EPA did not consider the effects of the Class I designation upon area strip mines, the agency was not negligent, and lawfully redesignated the reservation air.

The petitioners included Monto, Marcus L. Nance, Westmoreland Resources, Montana Power Co. and the Crow Indian tribe. Monto is planning a mine on the Nance ranch east of the Cheyenne reservation; Westmoreland now mines Crow-owned coal to the north; and Montana Power operates the Colstrip coal-fired power plant, also to the north.

Attorneys for the Cheyenne expect the petitioners to next appeal to Congress, which is now considering amendments to the Clean Air Act. Rep. Ron Marlenee (R-Mont.) has introduced a bill that would allow a state legislature to contest a redesignation by an Indian tribe.

At least three other tribal governments are now considering Class I applications — the Flathead and Fort Peck reservations in Montana and the Colville Confederated Tribes in Washington.

— Marjane Ambler



Hells Canyon

Cut Hells timber?

Proposed restrictions on commercial power boating through Idaho's Hells Canyon have caught most of the flak. But a new management plan for the Hells Canyon National Recreation Area also recommends timber harvest levels that have promoted sharp criticism from the state's congressional delegation.

Approved last week by U.S. Forest Service Chief Max Peterson, the plan cuts by a third the number of power boat permits, and carefully regulates the remaining trips down the Snake River. That would "eliminate a lot of jobs and businesses," said a boaters association spokesman.

Idaho Environmental Council president Dennis Baird said his group is more concerned about the reaction to the plan's recommended 8.6 million board-foot timber harvest level and two-acre limitation on clear cutting. Boise Cascade Corp. officials said that was a third less than the cut they had wanted.

Idaho's congressional delegation, including Senators James McClure and Steve Symms, and Rep. Larry Craig, all Republicans, want the harvest level raised to at least 11.8 million board feet. They are reportedly appealing the plan to Department of Agriculture Assistant Secretary John Crowell, the former Louisiana-Pacific Corp. official now in charge of the agency's natural resources and environment activities.

"The NRA was not created as a timber harvest area," said Baird. "It's recreational. And while some cutting should be allowed, the delegation's proposal would violate the intent of the law."

The plan covers some 611,000 acres along both sides of the Snake River in Idaho and Oregon. It recommends that 27,000 on the Oregon side be added to existing wilderness areas — a recommendation that both Baird and a spokesman for Symms called acceptable. The Forest Service will accept comments on the plan through July 12.

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Nuclear breeder Idaho-bound?

Congressional waffling on funding for the Clinch River Breeder Reactor project could spur interest in a new, larger breeder reactor facility, with the Idaho National Engineering Laboratory near Arco as one possible site.

The House and Senate science committees have disagreed over legislation to authorize \$254 million for further development of the Clinch River project in Tennessee. How the issue will be resolved by a conference committee is unpredictable. But *Nucleonics Week* reports that if funding for Clinch River is not approved, a new, even larger program might get the nod.

Sen. James McClure's (R-Idaho) Energy and Natural Resources Committee approached the Clinch River authorization. But a spokesman for the senator said this week that McClure has not taken a position on the project and that he expects Congress to approve funds for starting a larger breeder program, which the senator has long been a proponent of.

INEL is one of four possible sites for the larger breeder, according to Dick Blackledge, spokesman for the Department of Energy's research center in the Idaho desert. It is also one of four sites being considered for a replacement production reactor, which produces weapons grade nuclear material.

The spokesman for McClure said the senator had not taken a position, but would rely on DOE's technical expertise to choose a site. The Idaho Falls Chamber of Commerce, however, has organized a special committee to attract one of the two proposed reactors to INEL, because of feared layoffs at other INEL operations.

Those layoffs, said Blackledge, are likely to result from Reagan administration cutbacks on alternative energy programs, cutting into INEL's research projects using hydroelectricity, alcohol fuels, and geothermal energy.

—Marjane Ambler

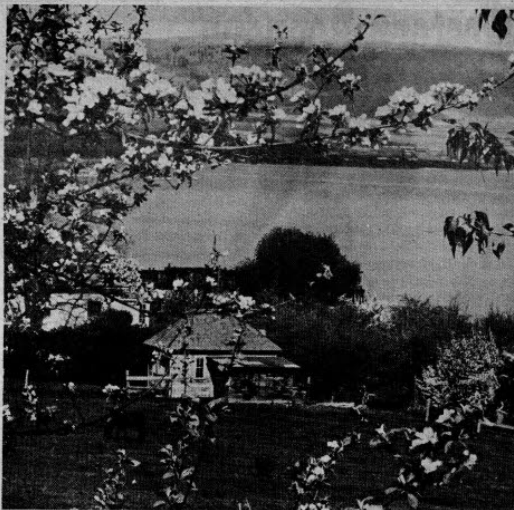
Id. logging awaits new forest plans

Whether Boise Cascade Corp. will be allowed to log some one-half million acres in two Idaho national forests will depend on upcoming Forest Service rules, said both sides of a recently settled lawsuit.

U.S. District Court Judge Fred Taylor dismissed a suit May 28 by the Idaho Wildlife Federation seeking to ban logging in parts of the Payette and Boise national forests. But Taylor also ruled invalid the management plans designed for the areas, known as the Warren and Landmark planning units, agreeing that the plans failed to protect the watershed's salmon.

Until new plans can be drawn up sometime in 1983, said Clifford Lee, Payette National Forest engineer, logging will be regulated by agency rules that may have been modified by the court decision.

Idaho Wildlife Federation president Bill Meiners and Boise Cascade attorney Mickey Turnbow agreed the agency's interpretation of the decision will determine whether logging will be allowed.



Flathead Lake

Flathead Lake: divided by subdivision

FLATHEAD LAKE, Mont. — Plans to build high density housing along the shores of the largest freshwater lake west of the Mississippi face intense opposition from some landowners here.

Flathead Lake today has kept its rural atmosphere intact, with farms, summer homes and cherry orchards lining its shores. The Mission Mountains jut sharply along the southern end and heavily wooded islands dot the clear blue surface of the lake.

But the developers of two large projects — a subdivision and condominiums — are eyeing the shores of the lake. The subdivision is proposed for the north shore near the small tourist town of Bigfork. The project, named Wanigan after a timber boat that used to ply the lake, is being developed by Crop Hail Management of Kalispell, Mont. The company plans an 18-hole golf course, a 250-slip marina, 104 townhouses and 119 single family lots.

The other project, Caroline Point Estates and Yacht Club, is currently under construction on Elks Bay, near Lakeside. Units in the 84-unit condominium proposal would cost \$160,000 a piece.

The proposals have ignited a flurry of protests from landowners along the lake.

Flathead County Commissioners have approved a final plat for the Caroline Point project, but a nearby landowner has filed suit against the county challenging their decision and asking that the project be declared a "public nuisance."

The State Department of Health and Environmental Sciences filed a notice of violation against the Canadian firm which is developing Caroline Point — West Central Development of Calgary — claiming that it had neglected to submit plans for sewer and water systems to the state Water Quality Bureau for review.

The developers then signed a stipulation with the state allowing them to construct four model units, which they

then would submit to the department for review.

The Wanigan proposal has drawn more fire from area residents than the Caroline Point development, primarily because it borders a 2300-acre U.S. Fish & Wildlife Service waterfowl production area.

According to Jon Heberling, an attorney for thirty area landowners and the Flathead Wildlife Club, the area is ideal goose, duck and osprey habitat. There were two bald eagle nests nearby, one north and one south of the project. This year, after one of the nests blew down, the eagles relocated to a site 220 feet south of the marina opening, and opponents of the project are concerned about the effects of construction on the eagles.

"Boat traffic into the marina would have an enormous impact on wildlife," Heberling said.

There is also concern over damage to water quality in the lake from sewage and storm runoff. Ron Cooper, director of the Flathead River Basin Environmental Study, said that the quality of the water in the lake now is excellent and that many residents drink directly from it.

The Wanigan proposal was dealt a serious blow when the Flathead Conservation District denied a permit to the developers, claiming that boat wakes would have a serious effect on shore erosion and cause sedimentation of lake water.

Mike Felt, a spokesman for Crop Hail Management, said the permit proposal has been temporarily withdrawn.

But Felt maintained that "high density development like Wanigan is the answer to saving our farmland. It's being destroyed by five-and ten-acre lots with trailer houses on them. It's deplorable."

Felt said that his firm is considering moving the development site up from the lakeshore to a site across the public road.

— Jim Robbins

BN access halted

A federal court has ruled that Burlington Northern, Inc., does not have an automatic right of access to timberlands it owns which are intermingled with Gallatin National Forest lands in southwestern Montana.

The ruling, by the U.S. Circuit Court of Appeals in San Francisco, could have a major impact on private access rights over all public lands, according to attorney James Goetz, who handled the case for several wilderness groups. If the ruling stands the forest service may be able to exercise more discretion in granting access to private inholders.

BN received a forest service permit to build a road to its holdings in Buck Creek in the Gallatin and began building a road in last fall. Forest Service spokeswoman Betty Schmidt said, "At this point we're not sure what effect (the ruling) is going to have." Forest Service lawyers are analyzing the decision, she said.

In the meantime, BN has been held up by winter weather and requirements that it mitigate the impact of its road-building on wildlife. Forest Service officials do not expect work on the road to resume before July.

Bozeman attorney James Goetz said the decision overturned two arguments made before a Butte federal judge who last September upheld BN's access right to Buck Creek.

Equally important, said the attorney, the appeals court ruled that the "Melcher amendment" to the 1980 Alaska Lands Bill applies only to National Forest lands in Alaska and not to Montana and other states.

The amendment, authored by Sen. John Melcher (D-Mont.), was an attempt to settle the controversial question of access rights to private landholdings within the National Forest. Melcher claimed the amendment simply affirmed long-held Forest Service policy of granting "appropriate access to private inholdings."

—Dan Hollow

Butte air cleared

Butte, Montana's high rate of lung cancer is a result of cigarette smoke, not the radioactive gas, radon, which was previously held responsible, according to the Butte-Silver Bow Health Department.

The newly-issued report is being used by department director Bill Burke to challenge a 1979 decision by the U.S. Department of Housing and Urban Development to withhold federal housing loans pending tests to determine the extent of the radon gas. Loans for planned construction in Butte-Silver Bow and Anaconda-Deer Counties were to be withheld unless the land was shown to contain less than .02 working levels of the gas and its microscopic particles called radon daughters. The particles result from the natural decay process of uranium located in the Butte area.

Although the report does not deny the presence of gas or that it is a potential cancer threat, it states that lung cancer in the Butte area is approximately 80 percent attributed to cigarette smoking. Most of the remaining cases are said to be due to "other environmental factors."

Burke said he expected the federal agency to respond this month.

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Western Roundup

Legislators reclaim S.D. mining code

An interim panel of state legislators is meeting this summer to completely revamp South Dakota's mining code, and their recommendations could sharply alter present mining practices in the Coyote State.

The impetus for the overhaul came from Gov. William Janklow (R.), whose proposed reforms were tabled by the legislature until it could draft its own new law.

Most observers agree with Janklow that the present code is antiquated, based on sand and gravel operations and only modified piecemeal to include uranium and other current mining activities. But agreement ends there, as environmentalists argue for stricter rules and industry, led by uranium extractors, advocates loosening the code.

New rules for exploration, milling, and mined land reclamation will receive first attention from the legislators, said George Boos, the attorney for the Legislative Research Council. Boos said he plans to have a draft of the bill drawn up next month after the panel holds a second public hearing June 29 in the Black Hills.

Among the issues to be resolved is

public participation. South Dakota voters narrowly rejected by 51 to 49 percent a referendum last fall to require state-wide voter approval of new nuclear-related activities, including mining and milling uranium.

Union Carbide and other uranium industry officials are arguing that only persons with a "monetary" interest should be allowed to participate in permit hearings. The administration's proposal would have restricted participation to those "directly affected."

"This whole business of trying to shut out the public has me worried," said Steve Paulson, head of the Rapid City-based Black Hills Energy Coalition, sponsors of the referendum. Paulson fears the uranium industry's reaction to the initiative will include heavy lobbying of the interim committee.

Other controversies to be resolved include the ease of obtaining permits, the need for secrecy to protect corporate interests and the need for written permission from landowners.

Oil and gas have been excluded from the recodification. A final proposal will await the legislature's next formal session in January.

Idaho air program to rise again

Public hearings in Idaho last week drew united opposition to Gov. John Evans' (D) plan to repeal the state's air quality protection rules.

Evans is responding to the scrapping of the Bureau of Air Quality by the state legislature during the last session (see HCN, 4-3-81). But both environmentalists and industry officials agreed that keeping the regulatory framework in place made more sense, in light of the strong chance that the state program will be refinanced next year.

"We'd just rather not go through the process of recreating new compliance schedules, variances and all the other hard fought-over regulations," said Pat Ford of the Boise-based Idaho Conservation League.

Support for the state program was rekindled by fears that the U.S. Environmental Protection Agency would do an inadequate job when it takes over July 1. Ford said he expects the EPA-run program will be unable to sort

through the complex issues. EPA officials have admitted it will be at least 12 months before they are able to grant new source permits for polluters, drawing the wrath of industry officials.

Gov. Evans is reportedly considering asking the legislature next week to consider refinancing the state program during its upcoming special session on reapportionment.

Former Bureau of Air Quality chief Murray Michael said he couldn't confirm such a move, but added that there is "widespread support for refinancing the program at some time in the future."

Meanwhile, most of Michael's staff have jumped ship — a loss of expertise critics of the legislature's action feel will sharply set back the program even if it is restarted. "It's not likely we'll get them back, either," said Michael. "Many have found jobs with industry that pay from \$3,000 to \$8,000 more per year. The discrepancy between public and private salaries in this region has really hit home."



SHALE SHINGLES

Nearly 500 mobile homes are already in place at Battlement Mesa near Parachute, Colo. But by 1984, the new town will sport 7,200 housing units, including houses with passive solar heating, a shopping center replete with supermarket, a school, golf course and 16 miles of jogging trails — all courtesy of the town's founding father, Exxon. Exxon is spending \$1 million a week to prepare Battlement Mesa for the projected 2,200 workers needed to run its Colony oil shale project.

SYNFUEL OVERRUNS

Citing possible cost overruns and the need for a separate pipeline, sponsors of the proposed ANG synthetic fuels project in North Dakota have upped their \$1.8 billion loan guarantee request to \$2.02 billion. It's the second increase sought from the Department of Energy,

with previous cost overruns attributed to stricter pricing formulas required by the Federal Energy Regulatory Commission.

WITHDRAWAL CLEANUP

Calling it a "positive move toward accelerated multiple-use," Interior Assistant Secretary Garrey Carruthers has opened to mining and other development some 680,000 acres of western federal land previously withdrawn. Of particular interest to miners, the agency said, would be potential uranium in the Muggins Mountains, Ariz., and hardrock minerals in the Rio Grande National Forest — some 54,000 acres of which will now be open to extraction. The other withdrawal revocations are scattered throughout the 11 western states. "We are moving quickly to review all withdrawals," Carruthers said of the 50 million acres of western land set aside to date.

LOCAL PLANS UPHELD

Charging the bills would "weaken the land use planning powers of local government," Colorado Gov. Dick Lamm (D) vetoed three measures passed by the legislature. The bills would have eased restrictions on land sales to non-residents, made county planning commissions optional when full-time planning staff were employed, and sharply restricted a county's ability to designate private land as wildlife habitat.

RAILROAD GOES UNDER

Littleton, Colo., voters, in a record turnout for a special election, approved a \$2.1 million bond to sink the railroad that runs through town. Some 35 coal trains currently rumble through city center daily — the projection is for 80 trains a day by 1990. So by a 2 to 1 margin, voters said yes to a plan to entrench the tracks in a new two mile ditch through town.

CUP WARNED

"No contract, no work," the federal Office of Management and Budget has told the Bureau of Reclamation, ordering the dam builders to put a hold on new construction contracts for the Bonneville Unit of the Central Utah Project until a new repayment contract is worked out. The bureau has already committed some \$24 million over and above the \$75 million project ceiling agreed to in 1965. In order to ensure the bureau will be repaid by the local municipal water users a new ceiling must be approved, with the added costs paid for by new property taxes or increased water prices. A referendum vote is likely, although local water district officials are still trying to avoid that step. Strong public opposition to the higher costs is expected.

WILD POUDRE DELAYED

Pending state studies on possible water projects on Colorado's Cache La Poudre River will not delay a federal "wild and scenic" designation, said Milt Robinson, head of the U.S. Forest Service's wild rivers team in Denver. "We'll complete our studies based upon existing information," he said, denying reports this week that the agency would wait for the state report. Robinson added however, that he expects long delays once his final environmental impact statement reaches the Office of Management and Budget this fall. President Ronald Reagan must make the final recommendation to Congress, which ordered the Forest Service in 1978 to complete its studies by 1979. The draft agency study recommended wild and scenic designation for all but 5 miles of the Poudre.

MORE LEGISLATING

Colorado's interim legislative committees will study a dozen issues this summer, including utility cost structures, mineral and energy taxes, the transfer of water rights and detailed reviews of the Departments of Agriculture and Natural Resources. The panels' recommendations often kick off legislation during the next full session.

WEST GOVS AGREE

The 12-state Western Governors' Policy Office, WESTPO, meeting in Denver May 16, agreed to: fight proposed federal limitations on state coal severance taxes; support reauthorization of the Clean Air Act with greater state roles and maintained existing automotive standards, including high altitude rules; oppose the relaxation of restrictions on the importation of yellowcake; and study new potentials for exporting coal to Pacific Basin countries, including Japan.

Industry likes federal air rules...compared to Wyo.'s

In this year of reauthorization of the federal Clean Air Act, industry lobbyists have spoken few kind words about federal regulation.

But at a hearing in Wyoming last month Rocky Mountain Energy Company lauded federal rules regarding dust pollution, saying they were based on "a great deal of effort and research."

The firm's mission was not to praise the federal government, however, but to try to bury certain state regulations that it says could stop new mines in the Powder River Basin and in other coal-rich areas of the state. Represented by attorneys who formerly worked for the state, Rocky Mountain Energy and Cities Service companies are leading an industry effort to weaken Wyoming's rules concerning "fugitive dust."

Partly because the issue is a technical one, the ranks of those defending the

state regulations are thin. At a May hearing before the Wyoming Environmental Quality Council, Wyoming's air quality administrator, Randolph Wood, was the sole supporter of the state's rules.

Wood claims that there's not much difference between the state and federal rules. Both will allow a limited amount of dust to cloud the skies around mines. The state, however, gets into the regulatory act early by requiring that most new mines file for an air permit. The feds require a permit for any facility spewing a significant amount of dust out of a smokestack, but not from mines.

If, however, a mine violates the overall air pollution limits set for a region, it would have to be stopped under either the Wyoming or the federal rules, Wood says.

"The (U.S.) Environmental Protection Agency has stuck its head in the sand and ignored permits for mines," Wood said.

But industry claims big mines might fail to get permits, based on inaccurate state estimates of how much they might pollute. (The difficulty in estimating how much dust a mines will stir up is part of the reason that the Environmental Protection Agency failed to include them in the permit process.)

Al Minier, an attorney who represented Fort Union Coal Mine and Kansas City Power and Light at the hearing, told the council that state's rules would shut down big mines such as his clients.

Wood said mine size is not the most important factor. Under Wyoming rules, a mine's acceptability depends on how much of the dust it generates falls outside of the mine site.

—Joan Nice



PITKIN CROSSES POWERLINE

Pitkin County, Colo., has sued the Public Utilities Commission for trying to override local land use concerns by reconsidering the proposed 345-kilovolt Western Slope transmission line (see HCN, 5-29-81). County commissioners had rejected the project last year, fearing the line running 11 miles through the county would impact its scenery—a major economic asset to the area's resort communities. But the PUC nonetheless is still considering approving the line. County Attorney Sandy Stulter said that was an "abuse of discretion" that could impact local governments statewide.

AMAX TO MINE

Amax Mineral Co. can proceed immediately to explore for molybdenum in a potential wilderness area near Pagosa Springs, Colo., a federal judge has ruled. The court denied a request for a temporary injunction by seven environmental groups, who argued that normal appeals were taking too long. "Amax will be halfway through with their bulldozing by the time we get to the Forest Service's officials with our administrative appeal," said a group spokesman.

LOWRY LEVY

Chemical Waste Management, operators of the controversial new hazardous waste site at the old Lowry landfill near Denver, has been fined \$20,000 by the U.S. Environmental Protection Agency for improperly disposing highly corrosive material. EPA found last March that the firm failed to adequately inspect a cargo and erringly judged it to be non-corrosive. The firm declined to comment on this fine, but a local group opposed to the new facility said the levy was just one more reason to close the operation.



INFERTILE CLOUD SEEDING

There's no validity to claims that commercial cloud seeding has been successful, said Peter Hobbs, professor of atmospheric sciences at the University of Seattle. Nonetheless, officials with the Colorado International Corporation claim last year's efforts near Sun Valley may have paid off with a 30 percent increase in snowpack. Hobbs said more proof is needed, but company vice president Ralph Papania said such studies would cost ten times that of actual seeding. Sun Valley official Kathy Hoy said the town is "convinced" by unscientific observations and will continue the seeding next year.

MORE COAL, PLEASE

Federal coal production targets in the western North Dakota and eastern Montana areas are still too low to give

the industry enough flexibility in selecting project sites, said Layton Binon of North American Coal Corp. Binon was responding to the Fort Union Regional Coal Team's recommendation that 400 million to 800 million tons of federal coal eventually be mined in the area, which already hosts 11 mines producing 15 million tons annually to feed six coal-fired power plants. The team is now preparing environmental impact statements.

INVERTED RATES BLASTED

The Idaho Public Utilities Commission's proposed inverted rate structure for electricity pricing will have inverted results, the Idaho Power Co. charged last week. The PUC claims the new system will encourage energy conservation by setting progressively higher prices of electricity as use increases. But by reducing customer bills, the utility said, "the signal is to encourage electrical consumption, not decrease it." The company also testified that the proposed new rates would cost it more than \$2 million in revenues this year.

WATER TRANSFER INVALID

The Denver Water Board must get local as well as federal approval for its proposed expansion of the Williams Fork River diversion project north of the Dillon Reservoir in Colorado, U.S. District Court judge has ruled. The board had argued the project's original starting date back in 1924 exempted it from environmental regulations. But design changes since then, the judge said, necessitate new permits. Northwest Colorado Council of Governments member Bob Child said the decision "vindicates Grand County's power to regulate environmental impacts within its boundaries."

barbed wire

Denver county park maintenance crews received a black eye last month when Jeaninne Azar fell through a hole in the floor of a Lookout Mountain Park outhouse. Azar says she suffered severe pain from multiple bruises, fractures, loss of wages, fright and anxiety, and hysteria. She's suing for \$50,000.



Pot and kettle blackening: While environmentalists cry out that Interior Secretary James Watt's reshuffling of the Office of Surface Mining will weaken mine reclamation enforcement, Rep. Pat Schroeder (D-Colorado) has other concerns. Schroeder recently criticized plans to move OSM technical personnel from Denver to Casper, Wyo.; she claimed the latter city is "unattractive and inaccessible" and lacks an "intellectually stimulating environment" for those technical types who evidently need "academic resources" to unwind after a day inspecting mines.

Just the Facts, Please: Not to be out smeared by Schroeder, the Casper Star-Tribune reported her remarks under the headline: "Greenie legislator says..."



Charles Thomas, the former U.S. Geological Survey inspector who first blew the whistle on the unpaid royalty fees on Indian oil leases, is changing jobs. Thomas will move his post as director of the minerals department on the Wind River Reservation in Wyoming to a similar post with the Blackfeet in northern Montana. He will earn the same salary: \$36,000. So why move? The Blackfeet are also offering him five percent of whatever unpaid royalties he uncovers. "In going through some of the documents up there, that five percent, I'm going to come out all right," commented Thomas.



During this year's minority roast of the majority Republicans in Colorado, state Rep. Paul Schauer (R-Littleton) was acclaimed for refusing to allow even discussion of severance tax bills in his committee. His trophy in the "Carries the Ball for the Mining and Banking Industries" category was a 300 pound sample of molybdenum ore, placed on his desktop.

6-High Country News — June 12, 1981

by Philip White

LARAMIE, Wyo. — The Old West tradition of bounty-hunting had a warty revival here last summer when The Nature Conservancy offered a \$50 reward for information leading to the capture of bug-eyed creature using the alias *Bufo hemiophrys baxteri*.

Bufo is not an armed and dangerous desperado. *Bufo* is a two-inch-long toad. They want him alive.

The toad had prospered in the Laramie Basin for ages. Its ancestors hopped down from the north in advance of the Wisconsin ice sheet during the Pleistocene Era. When the ice receded 10,000 years ago, the Dakota toads followed northward.

At least, most of them did. Today their descendants live in Alberta, Saskatchewan, southern Manitoba and parts of Montana, North Dakota and Minnesota.

In 1946, a University of Wyoming zoology student became intrigued with some unidentified toad specimens in the university's collection. He went out to the lakes, irrigated hay meadows and seepage ponds west of Laramie and captured others. He identified them as Dakota toads, a population left behind when the glacier retreated. They have somehow survived at the 7,200-foot elevation of the Laramie Basin 500 miles away from their lowland relatives.

Today that student, George Baxter, is a zoology professor at the university.

"We couldn't find any females last year," Baxter said. "If we can capture some females that are reproductively active then there's no reason we can't establish a little refuge for this toad and protect it. If we can't find any females this year then I would say the Wyoming toad will probably become extinct." And *Bufo* isn't the only critter in trouble.

Until recently, the northern leopard frog (*Rana pipiens*) was also abundant in the Basin. Researchers have seen no sign of a leopard frog for two years. The tiny but vocal boreal chorus frog, however, has not suffered a similar nose-dive.

The virtual disappearance of these two anurans (that is, the frogs and toads—anuran means "tailless") in the Basin happened so quickly biologists can only speculate as to the cause. Their concern, however, is directed presently toward an organophosphate insecticide called fenthion.

THE INCREDIBLE JOURNEY

The anurans are amphibians of course: amphi, meaning "on both sides," combined with bios, "life," makes amphibious, or "both lives"—water and land. In water, the one-celled egg becomes a tadpole, which breathes first with external gills, then internal gills. Hind legs sprout, the tail is absorbed and finally a lung-breathing adult clambers up on land.

Though some toads may venture into

Baffling *Bufo* plight tied to Basin Baytex fight

quite a while for mosquito control." He said the oil and Baytex are about equally effective against mosquitos.

The city only sprays wetlands near town, so mosquito-plagued ranchers and landowners along the rivers pooled their resources to bring Baytex rain another 30 miles up the rivers and into the foothills.

Last year it cost 77 cents an acre. This year it'll be \$1. Why are the ranchers willing to pay thousands of dollars to kill some — nowhere near all — of the mosquitos?

John Proctor, product manager for Mobay Chemical in Kansas City, Mo., said, "It's a very wise use. They're doing it to make a living, to make it a habitable environment and enable them to carry on their enterprises. Have you ever been out there in spring when you couldn't breathe because of the mosquitos?"

Proctor cites "an excellent published study by Everett Spackman there at the University of Wyoming which shows a well-documented weight loss (in cattle) directly attributed to mosquitos."

The same ponds that foster frogs also play host to great swarms of mosquitos.

He's very worried about this isolated subspecies of toad that he prefers to call the "Wyoming toad."

"You could find them almost anywhere in the Basin 25 years ago," Baxter said. "You could hear them in May and June at every pond. But about three years ago I was talking to a colleague here and we agreed we hadn't been seeing many Wyoming toads lately. We began looking carefully and found they were very scarce."

In 1979, Baxter searched many areas that formerly supported large toad populations. He didn't see one. In May 1980, Baxter and others searched all known toad sites. They struck out again.

WANTED POSTERS

In desperation, zoologist Mark Stromberg of The Nature Conservancy in Cheyenne offered a reward for information on the toad. *Bufo*'s mugshot appeared in the June 10 edition of the *Laramie Daily Boomerang* above an article describing its habitat and mating call ("a 15-second monotonous buzzing trill, clearly different from the clattering chirrups of the chorus frog which has been calling loudly the last few weeks").

The ad produced a report of a toad in a certain irrigated meadow along the Little Laramie River west of town. This led to the not-very-reassuring capture of two males. Several others were heard chorusing but observers could find no eggs or larvae. The search is on again this spring.

the woods, neither frogs nor toads move far from water. They must return to their birth-medium to reproduce. The anurans never developed feathers or scales or fur. Their skin is highly water permeable.

Since *Bufo* was left behind in southern Wyoming, the derelict group has thrived in ponds along the floodplains of the Big Laramie and Little Laramie rivers flowing from the Medicine Bow Mountains. The toads didn't bother anything bigger than a grasshopper. But the same ponds that foster frogs also play host to great swarms of mosquitos.

This has led to aerial bombardment of fenthion all along the two rivers and the spraying of a similar chemical up and down the alleys of Laramie itself.

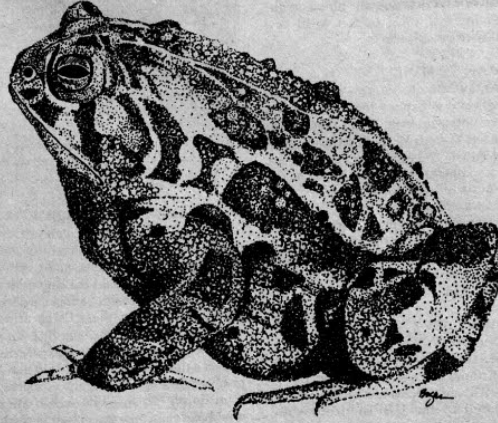
The spraying was initiated by the city. Don Forcum, city sanitarian, said, "There was a tremendous mosquito problem. People couldn't go into their backyards and patios and wanted something done. The old idea of fogging in town just didn't work because the mosquitos were coming from the wet areas outside of town."

The city began aerial spraying in 1973 using a larvicide oil that lies on the water and suffocates mosquito larva but is non-toxic to larger animals. "But it became too expensive," Forcum said, "so we went to Baytex six years ago." Baytex is the brand name of fenthion manufactured by the Mobay Chemical Corp. of Pittsburgh, Pa., a subsidiary of Farben Bayer of Leverkusen, West Germany. Forcum said Baytex "has been used widely in this country for

WANTED ALIVE!

\$50.00 REWARD

for information
leading to capture of

BUFO HEMIOPHRYS

But Spackman said he is in agricultural extension, not research, and that neither he nor any other scientist has studied "the effects of mosquitos on cattle production in Wyoming. As to the economics of the spraying we just don't have any information on that."

Spackman said he has heard reports from ranchers that the spraying has given them larger calves and lambs and improved breeding results.

COINCIDENCE OR CAUSE?

The spraying of Baytex onto more than 50,000 acres of the Laramie Basin each year occurs just at the time the embryos and tadpoles of Bufo and Rana are in their most sensitive stage. The young of the early-breeding chorus frogs are much further advanced. The rapid decline in Bufo and Rana numbers appears to coincide with the onset of the spraying program in 1976.

These factors point toward mosquito spraying as the cause. But other factors take a different tack. Baxter says several frogs and toads have declined drastically in areas of the mountains of southern Wyoming and northern Colorado that are not sprayed for mosquitos.

Baxter said, "I'm a little suspicious of all these gulls." Increased numbers of gulls and other natural predators in the Basin contribute to the problem. No testing has been done on whether herbicides used in the Basin are harmful to amphibians. Drought conditions and changing land use patterns are listed as other possible factors.

"I don't think we should be indiscriminately spraying the whole Laramie Basin."

— George Baxter, zoologist

"And it's possible it might just be a cyclic thing with these species," Baxter said, "or a combination of things. Leopard frog populations went way down in Wisconsin. There were indications that overexploitation by biological supply houses was partly to blame there. Now those frogs are coming back very strongly."

Baxter said he has no basis for asserting that Baytex spraying is harmful to anurans or humans. Although fenitron in sufficient concentrations is highly toxic to birds, destroying their nerve functions, its effect on amphibians hasn't been studied.

But Baxter worries about the scope of the operation.

"I've always objected to the way it is administered," he said. "They load it in a big airplane and spray it over almost all of the aquatic and riparian habitat in the area. It's not a very precise process and I don't think we should be indiscriminately spraying the whole Laramie Basin."

In 1978 a report from U.S. Fish and Wildlife Service biologists assessed the effects of Baytex spraying on birds within six study plots in the Laramie Basin spray area. The scientists found that "fenitron, at the rate applied, appears to be bordering on hazardous to birds even when sprayed with precision under favorable conditions."

On one small plot, 20 dead birds and five sick ones were found the day after the spraying and 90 sick or dead birds of several species were found during the next 21 days.

This degree of mortality was not ob-

served on the other plots. The study concluded that an accidental overdose had occurred and cited several possible causes: a double spray, excessive drift, failure to mix the chemical properly or a malfunctioning spray boom.

Mobay's John Proctor said Baytex is not hurting the anurans in the Laramie Basin. "We have no information on the effects of Baytex on frogs and toads but we've done much research on its effects on many species of aquatic organisms. We can extrapolate from those and we find it would be below the area of sensitivity and would have no effect" on the Basin anurans.

As to the 1978 overdose, Proctor said that "was an accident, an incorrect application. An accident can always occur no matter what you're doing. You can fall down stairs and hurt yourself. Does that mean we should stop using stairs?"

LAST DITCH

Biologists are pursuing several research and protection options in a literally "last ditch" effort to save the Wyoming toad. Baxter and The Nature Conservancy have asked the Fish and Wildlife Service to declare the toad an "endangered" animal under the Endangered Species Act.

In February, Baxter submitted a 1981 research proposal to all interested parties. The \$11,000 proposal includes a field survey of Bufo populations and lab tests on fenitron toxicity to anuran eggs and larvae.

"We need to get a little money some-

place. If we don't, we'll have to do it ourselves, operating on a shoestring," Baxter said. The U.S. Fish and Wildlife Service, the Wyoming Game and Fish Department and the Conservancy are assisting Baxter in the study, but Mobay Chemical has not yet provided any funding. Proctor said the proposal "is under evaluation by our research department."

MORE GOOD THAN HARM

Worldwide, frogs and toads are used in human pregnancy tests, as laboratory animals in biology courses, and as fish bait. Some three million pounds of frogmeat are consumed yearly in the United States alone. The warty, hopping toads and the smooth-skinned leapers, the frogs, both have lightning-fast tongues that zap countless insects daily. In some places anurans are hired to patrol gardens.

Humanity is not repaying the favor. The scientific literature contains a number of reports of declining anuran populations. One study showed that three of the six amphibians in the British Isles are declining due to habitat destruction, human collecting and pesticide use. Another British paper reports that application of the herbicide Atrazine in one marsh reduced the fertility of a large frog population to almost zero. In a 1971 paper, a specialist guessed that frog populations in the U.S. had declined 50 percent in 10 years.

The trend has now reached the Laramie Basin.

June 12, 1981 — High Country News-7

NOTICE OF PROPOSED RULEMAKING

AND

PUBLIC HEARING

WYOMING INDUSTRIAL SITING COUNCIL

Pursuant to W.S. 9-4-103(i) NOTICE IS HEREBY GIVEN THAT THE Industrial Siting Council intends to amend Chapter I Industrial Development Information and Siting Rules and Regulations to implement Chapter 127, 1981 Session Laws, Industrial Siting Act Amendments and Chapter 145, 1981 Session Laws, Impact Assistance Payments.

Specifically, the proposed amendments apply to the following:

Definition of permit applicant;
Definition of information applicant;
Definition of industrial facility;
Application information to be submitted;
Impact assistance funds.

Copies of the proposed amendments are available from the Office of Industrial Siting Administration, Suite 500, Boyd Building, Cheyenne, Wyoming 82002.

Comments and recommendations concerning these proposed regulations are invited and should be addressed to Richard C. Moore, Director, Office of Industrial Siting Administration.

A public hearing on the proposed regulations will convene June 17, 1981 at the Ramada Inn, Gillette, Wyoming. The hearing will commence immediately following the scheduled hearing on the North Antelope Coal Company permit application. Persons desiring to enter an appearance at the hearing are urged to notify the Director, Office of Industrial Siting Administration, concerning the scope and extent of prospective testimony. At the hearing the presiding officer will establish time limits for appearances.

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:

NORTH ANTELOPE COAL COMPANY

the

APPLICANT

PERMIT APPLICATION TO CONSTRUCT

THE NORTH ANTELOPE MINE, CAMPBELL COUNTY, WYOMING

DOCKET NO. WISA-81-1

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 NORTH ANTELOPE COAL COMPANY APPLICATION FOR AN INDUSTRIAL SITING PERMIT TO CONSTRUCT THE NORTH ANTELOPE MINE IN CAMPBELL COUNTY, WYOMING. The Council will convene at 1:00 p.m., Tuesday, June 16, 1981, in the Energy Room of the Ramada Inn in Gillette, Wyoming. The Council will consider the application pursuant to the provisions of the Wyoming Industrial Development Information and Siting Act (Wyoming Statute 35-12-101 - 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 35-12-112(c). Limited appearance statements will be received in the Office of Industrial Siting Administration, Cheyenne, not later than June 22, 1981, or may be submitted to the presiding officer at the hearing.

Dated this 22nd day of May, 1981.

Office of Industrial
Siting Administration
500 Boyd Building
Cheyenne, WY 82002
(307) 777-7368

BEFORE THE WYOMING INDUSTRIAL SITING COUNCIL

IN THE MATTER OF:

ANTELOPE COAL COMPANY

the

APPLICANT

PERMIT APPLICATION TO CONSTRUCT

THE ANTELOPE MINE, CONVERSE COUNTY, WYOMING

DOCKET NO. WISA-81-2

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 ANTELOPE COAL COMPANY APPLICATION FOR AN INDUSTRIAL SITING PERMIT TO CONSTRUCT THE ANTELOPE MINE IN CAMPBELL COUNTY, WYOMING. The Council will convene at 8:30 a.m., Monday, June 15, 1981, in the Riverbend Ballroom of the Holiday Inn in Douglas, Wyoming. The Council will consider the application pursuant to the provisions of the Wyoming Industrial Development Information and Siting Act (Wyoming Statute 35-12-101 - 35-12-121), and Rules and Regulations adopted thereunder.

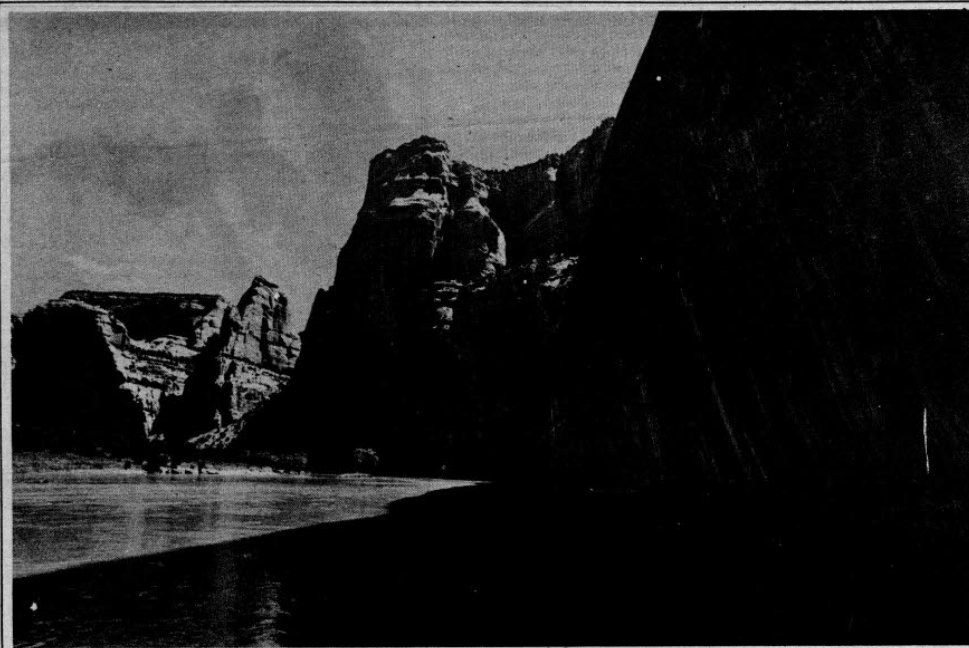
The Council and its presiding officer will conduct the hearing in accordance with Sections 13-15 of the Rules of Practice and Procedure of the Industrial Siting Council. The presiding officer will conduct the hearing and will make all procedural rulings.

Persons desiring to make a limited appearance statement shall do so in writing as provided by Wyoming Statute 35-12-112(c). Limited appearance statements will be received in the Office of Industrial Siting Administration, Cheyenne, not later than June 22, 1981, or may be submitted to the presiding officer at the hearing.

Dated this 22nd day of May, 1981.

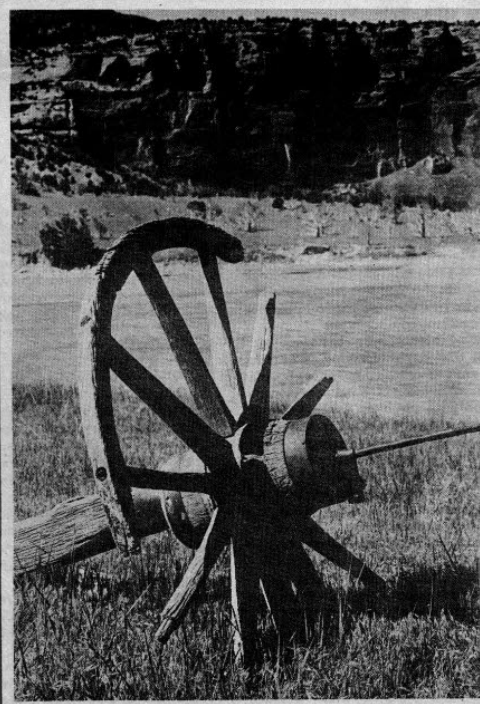
Office of Industrial
Siting Administration
500 Boyd Building
Cheyenne, WY 82002
(307) 777-7368

8-High Country News — June 12, 1981

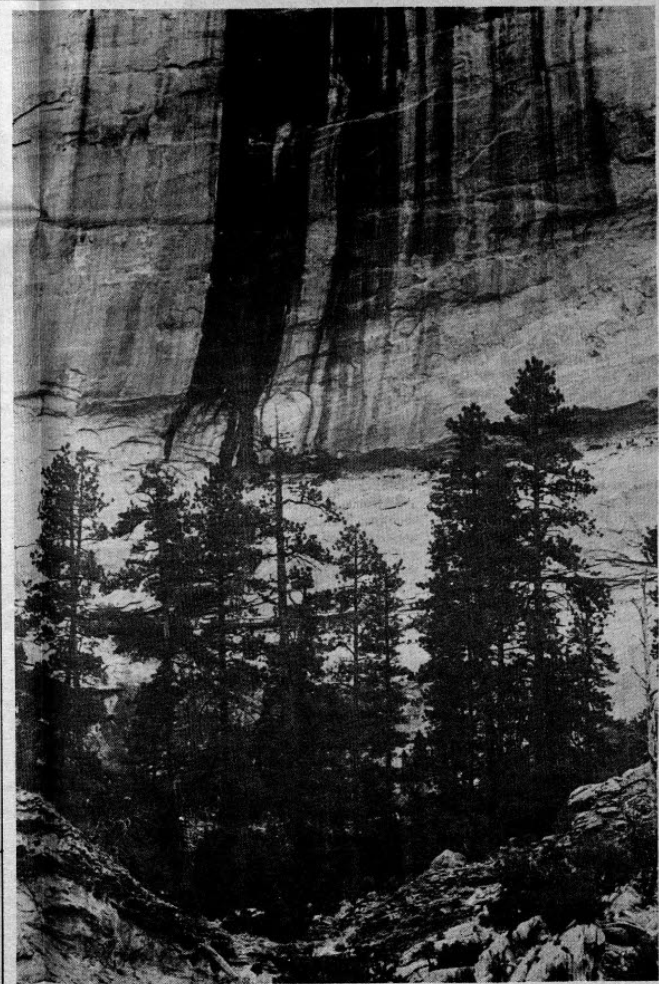
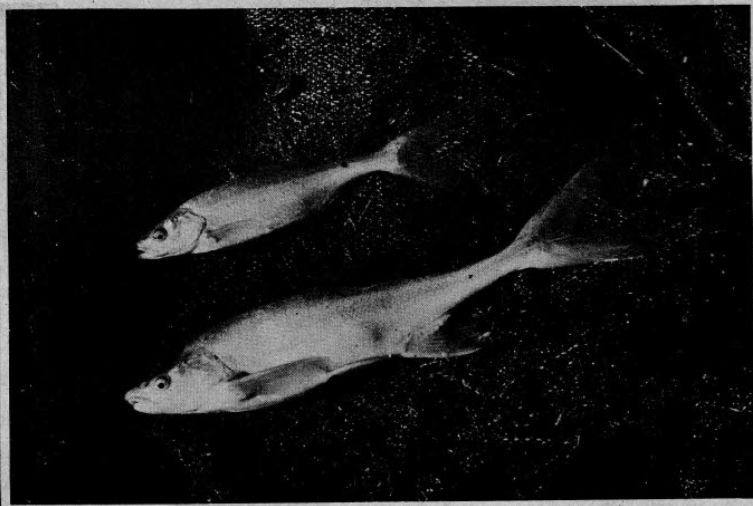


Slipping through Dinosaur,
the Yampa carves with
a free-flowing style

Photos by David Sumner



Dinosaur National Monument is not only one of the Park Service's jewels. It's also one of the Yampa River's finer creations, displaying desert varnish, the endangered native Humpback Chub, douglas fir in sandstone alcoves, and even aging wagon wheels left by earlier settlers. Upstream in Colorado, the river has carved other canyons of less repute, but equal beauty.



"Every prognostication indicates that Colorado is likely to put to use its remaining undeveloped water — whether by private, state or federal sponsorship — sooner or later," Colo. Gov. Dick Lamm (D) once stated. "The question is only how, when and for what purpose."

That use-it-or-lose-it creed, written in the certitude that "water is blood in Colorado," is shared by nearly all Coloradans, liberals and conservatives, Republicans and Democrats, even moderate conservationists. Says water developer Jim Pughe of the Yampa River: "All we want to do is conserve the water, to keep it from running down to Los Angeles. And we can't conserve it if we don't store it."

The Yampa begins high in the Park Range, writes Philip Fradkin in his new treatise on the Colorado River system, *A River No More*, "flowing across the high desert, interspersed with low mountains and hogback ridges, before merging with the Green River at Echo Park in Dinosaur National Monument."

The river's drainage basin, encompassing 10,000 square miles of northwestern Colorado, feeds eight major reservoirs, 550 stock ponds and erosion-control structures, and 5,822 small reservoirs on private and public land. The Yampa itself on its 150 mile run to Dinosaur is tapped over 100 times by small diversions.

Most of that water has gone to raise livestock feed. But oil shale and other energy development on the Western Slope are making new demands, and small reservoirs just won't do. Vidler, Hog Park, Juniper-Cross Mountain, and other major water development schemes propose to finally tame this river that still yearly scours its banks with flood waters.

To many, the plans will save the state's blood. To others, more water storage drawn from the Yampa is merely blood money for growth and energy industries. With the river's future in throes, today's scenes along the Yampa are even more poignant.

10-High Country News — June 12, 1981

Hydro...

(continued from page 1)

ten wye was Denver-based real estate and water lawyer John Huston, who filed for the preliminary permits required by the Federal Energy Regulatory Commission (FERC) last September.

The following month, Aspen city manager Wayne Chapman filed with FERC for the same rights in a joint application with Pitkin County. Chapman's interest was piqued by a 33 percent jump in fuel bills and a query from another investor, Boston-based Mitchell Dong of Mitchell Energy, Inc. Dong wanted to join Aspen in a profit sharing venture — a proposition Aspen rejected.

Two months later in December, city administrator Meredith Flinn filed a third application on behalf of Glenwood Springs, a city some 35 miles downstream in the Fryingpan-Roaring Fork watershed. She, too, had gotten a fat power bill increase. She also had been approached by Dong.

Meanwhile, Huston, realizing that the 1920 Federal Power Act gave local governments priority over private interests in acquiring federal licenses for hydroelectric projects, refilled. Only this time he first called his friend Buck Anderson, a real estate developer and city commissioner for Morrison, a Denver suburb of 450 people nearly 80 miles east of Ruedi on the other side of the Continental Divide. Huston filed a joint private-municipality application in early December, deciding to test the federal rules.

Huston's earlier refiling took precedence over Glenwood Springs', which, along with the Aspen-Pitkin team, promptly protested. Then, with the matter still unsettled, Glenwood Springs joined up with Aspen, Pitkin and Carbondale counties, and two other area towns to form a tenuous coalition called the Ruedi Water and Power Authority, which filed yet another application with FERC last March.

And here the case rests with FERC. Mitchell Energy is out. Glenwood Springs, by itself, is out. Huston or Huston-Morrison, or perhaps both, are in. Pitkin-Aspen is in. And the multi-government Ruedi Water and Power Authority is in.

One problem at FERC is that from January through April this year, the agency received 1,072 other applications to prepare preliminary studies on potential hydroelectric sites. Only three years ago the same FERC staff

was processing a year's total of 30 applications. Many of this year's thousand compete for the same sites.

Another problem for FERC is deciding who is really capable of following through with development plans — one of three criteria for ranking competing applications that also include order of filing and municipality priority.

To the Ruedi contenders, that raises a serious jurisdictional issue.

A PRIVATE MATTER

John Huston, boyish-looking but sharp-talking, sat at a large round table in his sixth floor suite in Denver. He wore cowboy clothes, fielded phone calls concerning real estate deals, and explained why 12 months ago hydroelectric power development suddenly sounded "like the perfect business."

The electricity market had taken a curious turn, he said. Utility revenues in the highest growth areas were leveling off; elsewhere they were dropping. Financing had gotten so tight that large power plants became unaffordable. Yet there were still prospects of critical power shortages, and utilities like Colorado's Public Service Co. seemed willing to "pay a lot of dough for raw power."

"I heard about federal tax credits for developing alternative energy sources," he said. "I heard about PURPA." (The 1978 Public Utility Regulatory Policies Act, among other things, forces utilities to buy energy from smaller producers). "I saw that in all the water rights cases I was seeing, no one was paying attention to the power rights issues."

"And then I heard a startling fact — that there are some 17,000 existing dams in the country that do not have hydroelectric facilities."

"Right out here," he said, pointing to the Front Range through his tinted window, "the Roberts Tunnel has a 280 foot fall that could generate 100 kilowatts of power if someone would drop in a turbine and generator."

Huston formed Hydroelectric Constructors, Inc., and set out to find the best sites, the cream of the hydroelectric crop.

So far, he's discovered less than a dozen perfect cases, filing some 8 or 9 applications with FERC. Huston is not alone, however, and his approach is conservative. Two Washington D.C.-based firms, Continental Hydro and EnaGenetics, have each filed over 150 applications with FERC in the last few months. Many of those are in the five Rocky Mountain states, where 173 ap-

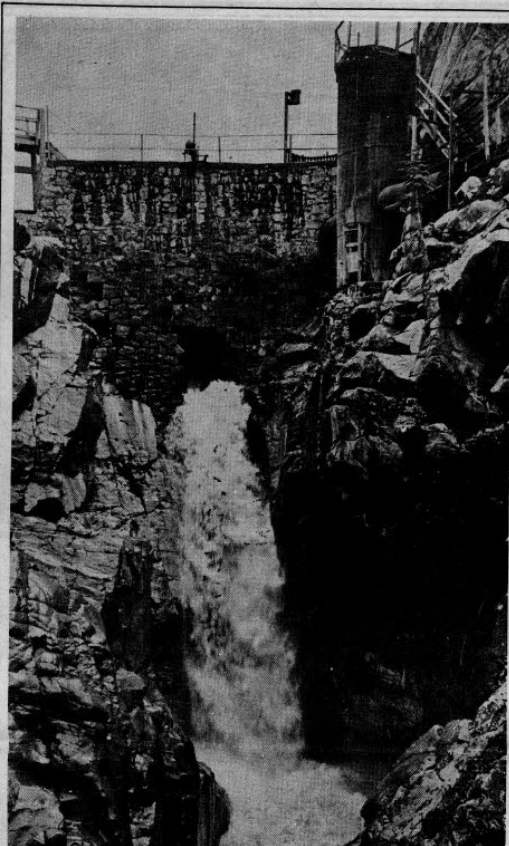


Photo courtesy Colorado, Inc.

RENOVATING THE 1902 Ouray hydroelectric power station on western Colorado's Uncompaghe River will help forestall the need for the controversial Rifle to San Juan transmission line, say Colorado-Ute Electric Association officials. New steel piping, a retaining wall, and a rewound generator will have the plant turning out 500 kilowatts by November.

plications were filed through April this year.

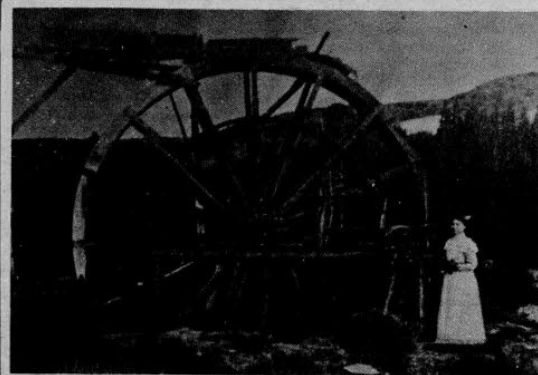
"Sure I've heard of John Huston," said Glenwood Springs administrator Meredith Flinn. In fact, she said, had the city council not recognized "who he was — the 'Water King' — we probably would have gone with him."

(Huston has gained an infamous reputation among Western Slope officials for

fighting a massive, precedent-setting battle over control of underground water rights.)

Huston's profit-sharing offer to Glenwood Springs in exchange for the town's name on the FERC application was also rejected, said Flinn, "because we figured we could do it ourselves."

Taking an opposite tack was Morrison, a tiny suburb of Denver that gains



Tinkering with turbines to

"The ideal turbine for a little mill up on a creek somewhere in inconsistent country would be one that was prepared to take whatever might come, to sit there and react calmly in any situation, to respond evenly to wild and sudden demands, to make the best of difficult circumstances, to remain steadfast in times of adversity, to keep going, above all to press on, to persevere, and not vibrate, fibrillate, vacillate, cavitate, or panic — in short, to accept with versatile competence what is known in hydroelectric engineering as the run of the river."

Thus wrote John McPhee (The New Yorker, Feb. 23, 1981) of New England's small-scale hydro-power rush. That technical perfection is a must for many Western situations too.

But the Rocky Mountain and irrigated West also have a unique array of canals, ditches, irrigation ponds, town reservoirs, and springs, all relatively level, with no sharp drop in elevation to excite the water into a powerful run.

Low head, the engineers call it, and despite its inherent passivity low head hydro is a kilowatt producer.

most of its \$250,000 annual revenues from private property taxes and a couple of antique stores.

"I didn't have any reservations about it at all," said mayor Rolf Paul of Huston's offer of 25 percent of the gross income from Ruedi hydroelectric power.

"I can see how someone living near the river would complain about this," he added, "especially if they hadn't thought about it yet. But this whole filing thing is gimmicky anyway. And it's like oil leases. The idea is to promote development and the law doesn't proscribe who can file."

Aspen and the other members of the Ruedi Water and Power Authority are protesting the joint Huston-Morrison application on a technicality.

But to Chapman, the issue cuts deeper into an issue he calls "foreign policy." Both Morrison and Huston, he feels, are too far removed to care about the impacts Ruedi hydroelectric development may have on the local area.

"The federal statutes are designed to get hydro built," he said. "There should be economic benefits for anyone involved, private or municipal. That's not bad and we don't have any great sense of proprietorship. But the effects on this valley have to be considered."

Exxon has already made a bid for Ruedi's water for its oil shale development plans, and may ask for electricity too. By owning that power, argues Chapman, Aspen would have a stronger voice in that decision and its ramifications on Aspen's future.

Other town managers throughout the Rocky Mountain region have perspectives similar to Chapman's. Gunnison, Colo., city manager Dale Howard is excited by the nearby Taylor Dam and Reservoir. "All we'd have to do is plop in a turbine and we're in business," he said, "producing maybe one-third of the power we now use." The city will decide this month whether to cough up an estimated \$400,000 for the feasibility study.

Others, like Riverton, Wyo., are finding it useful to contract with private firms for the initial feasibility study, sidestepping any financial investment. "For the revenue-short, capital-short community this is the way to go," said Riverton city administrator Bill Peterson. A typical contract will obligate the municipality to reimburse the developer for the study costs if the town backs off or decides to tackle the project on its own.

Private developers are also in the hydroelectric game to stay. With a staff

of 30 and a battery of word processors and computer equipment, the Boston-based Continental Hydroelectric has plans to develop some 400 sites by 1990 at a cost of \$500 million, said Jim Wilfong, vice-president of the parent company, Schooner Capital Corporation.

Wilfong admits he is working with municipalities largely to gain an edge over competitors. But he also sees their role as beneficial in other ways.

"If the local people really don't want the thing developed, we probably would shy away from it," he said.

A NEW GAME

While private and municipal interests continue to vie for FERC's regulatory attention, two other unresolved factors could alter the way the whole game is played.

The first is PURPA. Under section 210 of that law, states were to have set by April this year standards for utility calculations of "avoided costs" — the price a utility must pay small-scale hydropower producers (having avoided the need for the utility to generate its own power).

The higher the avoided cost, the more profitable the small-scale enterprise. But few states have complied with the law. In the Rocky Mountain region, only Idaho has designed the necessary standards. That informational void makes for tricky, if not entirely speculative, feasibility studies.

The second unresolved issue is FERC's regulatory power over hydroelectric development. Swamped by the dramatic jump in applications, FERC staff has recommended raising the permit requirement threshold from its current five megawatts to 15 megawatts. Projects producing less than 15 megawatts — roughly one-half of the applications with FERC fall below that mark — would be exempt from FERC regulation and paperwork requirements.

To Huston, who fears FERC staff may start giving permits to municipalities without fairly considering his private proposals, that change would be welcome. But he also thinks that some alternatives to FERC regulation, including a leasing program in the Department of Interior or one run by states, could be just as constricting.

Meanwhile, high in the Colorado Rockies, Wayne Chapman looks at his latest energy bill, shakes his head, and thinks of penstocks, switchyards, powerhouses and a new string of electric lines buzzing with cheap clean electricity.

tap the run of the ditch

Leading a staff of 20, Jim Barber of J-U-B Engineering in Boise, Idaho, is designing low head hydro schemes, both large and small, across the state.

In Denver, John Williams of Tudor Engineering said he has 70 people working on some 100 projects in the two to three megawatt range, many of them tapping low head hydro locales.

Both firms are relying on several dozen new firms manufacturing turbines and other generating equipment such as Hydro Energy Systems, Inc. of New York, a distributor for the French manufacturing firm Neyrpic.

"It's really incredible that so much attention is being spent on unproven technologies," said Hydro's president, G.D. Leonard, in a promotional letter, "while an immediately available, renewable, proven energy source remains virtually untapped in low head, small-scale hydro."

In the past, said Barber, the cost of adding hydroelectric generating capabilities to a dam was considered negligible by the federal dam builders — as little as five percent of the total.

Things have changed, and today people are looking for the cheapest hardware, the lowest installation and maintenance cost, and the quickest payback. "Otherwise," said Barber, "who the hell's going to invest?"

June 12, 1981 — High Country News-11

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12-High Country News — June 12, 1981

STATE OF WYOMING

Financial Statements of Insurance Companies which are Authorized to do business in Wyoming.

Published in High Country News May 15, 29; June 12, 26; July 10, 24, 1981.

DEPARTMENT OF INSURANCE
STATE OF WYOMINGWorld Life and Health Ins. Co. of Penna.
550 W. Dekalb Pike, King of Prussia, Penna. 19416
BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1980

Insurance Written	\$1,181
Gross Premiums Received	1,181
Direct Benefits and Losses Paid	-0-
Direct Benefits and Losses Incurred	-0-
Total Admitted Assets	1,745,708
Liabilities	1,732,079
Capital Stock Paid Up	-0-
Surplus	13,629
Income during year ending December 31, 1980	3,255,753
Expenditures for year ending December 31, 1980	3,191,996

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE
STATE OF WYOMINGWorld Book Life Insurance Company
P.O. Box 3476, Chicago, Illinois 60654
BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1980

Insurance Written	\$214,000
Gross Premiums Received	8,849
Direct Benefits and Losses Paid	165
Direct Benefits and Losses Incurred	147
Total Admitted Assets	60,983,128
Liabilities	55,285,401
Capital Stock Paid Up	1,540,000
Surplus	4,157,227
Income during year ending December 31, 1980	10,394,538
Expenditures for year ending December 31, 1980	9,756,472

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE
STATE OF WYOMINGZurich American Life Insurance Company
231 North Martingale Road, Schaumburg, Illinois 60196
BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1980

Insurance Written	\$None
Gross Premiums Received	4,040
Direct Benefits and Losses Paid	1,668
Direct Benefits and Losses Incurred	1,800
Total Admitted Assets	22,208,980
Liabilities	16,543,297
Capital Stock Paid Up	1,100,000
Surplus	4,456,683
Income during year ending December 31, 1980	9,775,501
Expenditures for year ending December 31, 1980	9,060,562

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE
STATE OF WYOMINGWorld Insurance Company
203 South 18 Street, Omaha, Nebraska 68102
BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1980

Insurance Written	\$45,344
Gross Premiums Received	25,806
Direct Benefits and Losses Paid	77,200
Direct Benefits and Losses Incurred	53,409
Total Admitted Assets	97,892,414
Liabilities	89,442,044
Capital Stock Paid Up	-0-
Surplus	8,470,369
Income during year ending December 31, 1980	30,696,234
Expenditures for year ending December 31, 1980	29,662,085

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE
STATE OF WYOMINGYosemite Insurance Company
717 Market Street, San Francisco, California 94103
BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1980

Gross Premiums Received	\$17,499
Losses Paid Deducting Salvage	-0-
Losses Incurred	3,432
Total Admitted Assets	44,264,144
Liabilities	31,589,545
Capital Stock Paid Up	2,100,000
Surplus	10,549,599
Income during year ending December 31, 1980	9,168,457
Expenditures for year ending December 31, 1980	6,996,848

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE
STATE OF WYOMINGYork Insurance Company
209 North York Street, Elmhurst, Illinois 60126
BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1980

Gross Premiums Received	\$-0-
Losses Paid Deducting Salvage	-0-
Losses Incurred	-0-
Total Admitted Assets	6,423,787
Liabilities	1,902,784
Capital Stock Paid Up	1,250,000
Surplus	3,271,003
Income during year ending December 31, 1980	2,017,710
Expenditures for year ending December 31, 1980	1,524,326

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE
STATE OF WYOMINGZurich Insurance Company
231 North Martingale Road, Schaumburg, Illinois 60196
BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1980

Gross Premiums Received	\$121,555
Losses Paid Deducting Salvage	54,608
Losses Incurred	87,806
Total Admitted Assets	797,683,621
Liabilities	635,792,124
Statutory Deposit	600,000
Surplus	121,291,496
Income during year ending December 31, 1980	372,602,999
Expenditures for year ending December 31, 1980	359,978,387

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE
STATE OF WYOMINGWorld Service Life Insurance Company
Home Office: 7344-A South Alton Way, Suite 129, Englewood, CO 80112
Mailing: Post Office Box 1876, Fort Worth, Texas 76101

Insurance Written	\$29,198,762
Gross Premiums Received	756,609
Direct Benefits and Losses Paid	259,234
Direct Benefits and Losses Incurred	251,182
Total Admitted Assets	283,077,499
Liabilities	275,545,354
Capital Stock Paid Up	1,250,000
Surplus	6,279,145
Income during year ending December 31, 1980	85,126,330
Expenditures for year ending December 31, 1980	79,567,950

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE
STATE OF WYOMINGWestern National Life Insurance Company
P.O. Box 871, Amarillo, Texas 79167
BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1980

Insurance Written	\$6,568,364
Gross Premiums Received	397,830.60
Direct Benefits and Losses Paid	140,090.66
Direct Benefits and Losses Incurred	None
Total Admitted Assets	279,887,671.58
Liabilities	288,608,790.99
Capital Stock Paid Up	1,500,000.00
Surplus	9,878,880.59
Income during year ending December 31, 1980	112,060,241.69
Expenditures for year ending December 31, 1980	112,298,523.20

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE
STATE OF WYOMINGWestern Reserve Life Assurance Co. of Ohio
201 Highland, Box 5068, Clearwater, Florida 33518
BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1980

Insurance Written	\$-0-
Gross Premiums Received	3,717
Direct Benefits and Losses Paid	4,905
Direct Benefits and Losses Incurred	-0-
Total Admitted Assets	89,466,991
Liabilities	82,613,996
Capital Stock Paid Up	1,200,000
Surplus	5,652,995
Income during year ending December 31, 1980	32,787,856
Expenditures for year ending December 31, 1980	32,351,942

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE
STATE OF WYOMINGWestern Surety Company
Box 2907, Fargo, North Dakota 58108
BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1980

Insurance Written	\$1,063,672
Gross Premiums Received	137,465
Direct Benefits and Losses Paid	71,063
Direct Benefits and Losses Incurred	22,053
Total Admitted Assets	118,084,440
Liabilities	106,711,500
Capital Stock Paid Up	1,790,484
Surplus	9,582,455
Income during year ending December 31, 1980	33,328,899
Expenditures for year ending December 31, 1980	31,404,401

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE
STATE OF WYOMINGWestern Surety Company
908 West Avenue North, Sioux Falls, SD 57192
BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1980

Gross Premiums Received	\$256,007
Losses Paid Deducting Salvage	(4,664)
Losses Incurred	7,160
Total Admitted Assets	42,754,765
Liabilities	22,968,805
Capital Stock Paid Up	4,000,000
Surplus	15,785,960
Income during year ending December 31, 1980	22,371,479
Expenditures for year ending December 31, 1980	18,874,606

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE
STATE OF WYOMINGWestfield Insurance Company
Westfield Center, Ohio 44251
BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1980

Gross Premiums Received	\$-0-
Losses Paid Deducting Salvage	-0-
Losses Incurred	-0-
Total Admitted Assets	125,956,727
Liabilities	82,991,689
Capital Stock Paid Up	1,500,000
Surplus	41,465,038
Income during year ending December 31, 1980	87,985,868
Expenditures for year ending December 31, 1980	82,139,427

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE
STATE OF WYOMINGWestfield Life Insurance Company
Westfield Center, Ohio 44251
BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1980

Insurance Written	\$50,000
Gross Premiums Received	612
Direct Benefits and Losses Paid	-0-
Direct Benefits and Losses Incurred	-0-
Total Admitted Assets	35,333,350
Liabilities	23,902,373
Capital Stock Paid Up	1,500,000
Surplus	9,930,977
Income during year ending December 31, 1980	11,069,834
Expenditures for year ending December 31, 1980	9,843,312

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE
STATE OF WYOMINGThe Wisconsin Life Insurance Company
709 North Segoe Road, P.O. Box 5099, Madison, WI 53705
BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1980

Insurance Written	\$296,000
Gross Premiums Received	33,698
Direct Benefits and Losses Paid	29,105
Direct Benefits and Losses Incurred	37,167
Total Admitted Assets	122,356,818
Liabilities	102,938,025
Capital Stock Paid Up	-0-
Surplus	19,418,793
Income during year ending December 31, 1980	67,947,557
Expenditures for year ending December 31, 1980	68,706,415

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE
STATE OF WYOMINGWoodmen Accident and Life Company
P.O. Box 82288, Lincoln, Nebraska 68501
BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1980

Insurance Written	\$1,601,402
Gross Premiums Received	468,056
Direct Benefits and Losses Paid	232,298
Direct Benefits and Losses Incurred	90,974
Total Admitted Assets	227,774,504
Liabilities	207,901,365
Capital Stock Paid Up	-0-
Surplus	19,873,138
Income during year ending December 31, 1980	70,622,670
Expenditures for year ending December 31, 1980	70,108,336

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 12, 1981
s. John T. Langdon
Insurance Commissioner

Bulletin Board

ENERGY WORKSHOP

Solar cell panels are easy to construct, inexpensive and capable of providing electricity for your home, remote cabin, or even boat, says the New Age Energy Council. Learn how to build and maintain the panels at a solar photovoltaics workshop July 11 and 12 in Ft. Collins, Colo. Registration is \$75 and limited to 25. For more information contact Jim Welch, The Home Energy Workshop, 720 Whedbee St., Ft. Collins, Colo., 80524, or phone (303) 482-9507.

BREAKS TRAVEL

The Bureau of Land Management is trying to determine how best to manage access to and across public lands in the Missouri Breaks Montana area. Off-road vehicle management will be discussed at two open houses June 17 in Lewiston, and June 18 in Fort Benton. For more information: Glenn Freeman, BLM's Lewiston District Office, Airport Road, Lewiston, Mont. 59497.

THE UN-ENDANGEREDS

Not all endangered species stories have tragic endings, says the International Association of Fish & Wildlife Agencies, and to document the success cases in which species have been nurtured back to health, the association is distributing a filmstrip and slideshow. Contact the group at 1075 Post Road, Riverside, Conn. 06878.

CYCLING MAPS

To keep Colorado bicycle tourists from getting lost, the state Department of Highways has published a revised series of maps, showing locations for obtaining supplies and hazards like cattle guards and high traffic areas. For a list, contact the agency, Room 235, 4201 East Arkansas Ave., Denver 80222.

INFORMATION MINE

Everything you need to know about food, housing, energy, money, health, and general consumer information compiled in a 102 page booklet sounds too good to be true. But Ralph Nader's Center for Study of Responsive Law, has uncovered hundreds of sources of free information on everything from nutrition, food additives and energy efficiency, to heart diseases, medical frauds and quackery. The booklet, updated each year, contains brief description and addresses of over 1,500 publications. It's **Yours for The Asking**, plus \$5, from Center for Study of Responsive Law, P.O. Box 19376, Washington D.C. 20036.

ENERGY POLICY

Changes in federal energy programs and their impact on conservation will be discussed at an Environmental Protection Agency public hearing July 14 and 15 in Washington D.C. Public testimony is invited which addresses the expected transition from federal to private and state or locally supported activities and the impact of rising energy prices on conservation efforts. Testimony should be mailed to Section 11 Coordinator, RD-681, Office of Research and Development, EPA, 401 M Street S.W., Washington D.C. 20460. Questions regarding the hearing should be directed to Gregory Ondich, at the same address, or call (202) 426-9434.

POWER TOWERS

A critical review of power towers — giant air-cooled solar electricity generators — can be found in Brian Gallagher's **Solar Thermal Power Towers: A Costly Boondoggle?** According to the study the towers are expensive, overly complicated, a threat to the environment, and could lead to further concentration of solar energy planning in the hands of a few large corporations. For a copy of the study send 90 cents (plus 20 cents postage) to: The Citizens' Energy Project, 1110 Sixth Street NW, Suite 300, Washington D.C. 20001.

ROLL ON, COLUMBIA

Named after a 1941 Woody Guthrie ballad, "Roll On, Columbia," a map and poster overview of the Columbia and Lower Snake rivers, their histories, fish and wildlife, irrigation, agriculture, recreation, and hydroelectric development, is available free for single copies, or at cost in bulk. For more information or a copy of the map, write to Pacific Northwest River Basin Commission, P.O. Box 903, Vancouver, Wash. 98666.



ENERGY PROSPERITY

A controversial study revealing a strategy which would increase national income, reduce national consumption of energy by 25 percent, and save nearly 4.2 million barrels of oil a day is now available through a private publisher. The DOE's report, **A New Prosperity: Building a Suitable Energy Future**, reviews energy planning, use and reuse and the nation's capability of eliminating all oil imports. The text is available for \$39.95 (hardcover) or \$19.95 (softcover) from Brick House Publishing Co., 34 Essex Street, Mass. 01810.

WATERPOWER '81

An international conference on hydropower will be held June 22-24 in Washington D.C. The program will offer workshops discussing the latest developments in equipment, funding, and international cooperation. In addition, there will be briefings on legislation relating to hydropower development. Registration is \$150; for more information: Waterpower '81, 2033 M Street NW, Suite 300, Washington D.C. 20036, (202) 466-7290.



HUMBUG MINERALS

There's a good chance of finding copper deposits in the southwestern Montana wild lands known as the Humbug Spires, a new Bureau of Mines report concludes. Other mineral potential is low in the area, which is currently being analyzed for wilderness classification. Copies of the report can be purchased for \$11.25 from U.S. Geological Survey, Box 25425, Federal Center, Denver, 80225; ask for Open-File Report 80-836.

INSURED ENERGY

By minimizing financial risk, several of the world's major insurance carriers are helping to facilitate the search for energy resources worldwide. To learn more about various policies available to energy companies send for a copy of **The Insurance Company of North America's 12-page booklet Insurance Decisions: Attracting Capital to Energy Development**, at INA, Department R, 1600 Arch Street, Philadelphia, Penn., 19101.

NTIS DATA BANK

The National Technical Information Service's 1981 General Catalog of Information Services is available free. The catalog offers sources for the public sale of U.S. Government-sponsored research, development and engineering reports, as well as information on government inventions and energy-related data. The 1981 publication outlines the latest information on computer services, foreign technology, and patents. Write to NTIS, 5285 Port Royal Road, Springfield, Vermont 02161.

TAKE THE NEXT STEP

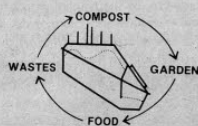
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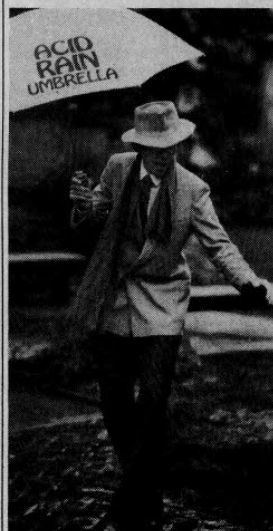
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Whitefish, MT 59937
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MOVING?

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DON'T LEAVE US BEHIND!

14-High Country News — June 12, 1981

Opinion

Watt "balance" act teeters

Several years ago, the Texas legislature voted in favor of a resolution commending Albert DeSalvo for his pioneering work in population control. The resolution was sponsored by two legislators who wanted to show that the legislature would vote in favor of any resolution placed before it without much regard to content. DeSalvo, of course, was convicted as the Boston Strangler.

In a similar spirit, commendations may someday be forthcoming for the James G. Watt Environmental Balance Resolution. "Balance" is the current administration's buzz word for opening the public lands to corporate exploitation. Wilderness Society chairman Gaylord Nelson said recently, "Their concept of 'balance' is a scale with the nation's resources piled on one end and their uninhibited right to exploit them piled on the other, while the public interest is not weighed on either end of the scale."

It seems reasonable to ask exactly what the "public interest" is in resource management. What does the public stand to gain from uninhibited exploitation of the country's mineral resources? Immediately following the Arab oil embargo of 1973, there was a great deal of talk about "energy independence." This concept was defended on national security grounds. If we didn't have enough domestic oil production, we were vulnerable to economic blackmail from the outside.

No one in the Nixon administration seriously believed that true energy independence was possible even then. However, the rhetoric and reasoning of the jingoistic energy independence era took hold and are still used eight years later to justify many actions. The trouble is that the reasoning is no longer applicable.

Most of the pressure to open wilderness lands for mineral development comes from oil companies. Interior Secretary Watt has opposed competitive bidding for leases on these lands. A company gets a lease by paying a dollar an acre a year and a 12 percent royalty on any production. Quite a bargain. Where is the public benefit? Not from any great surge in federal revenues. Not from a miniscule, and costly, contribution to domestic energy production.

Oil imports have dropped about 20 percent from their 1978 high. Despite the rhetoric of the oil industry, the reason for this has not been production — supply-side — growth. Domestic production has decreased. It has been demand-induced, i.e., conservation. People have reacted rationally to high prices and short supplies. They are driving smaller cars and driving them less.

It could be argued that the public interest demands not more oil but less. Not even the staunchest industry advocate argues that there is more than a few years of oil left to be found. The sooner policy makers act to wean the American public from their petroleum addiction, the sooner we will reach a higher level of self-sufficiency.

It seems clear that the main, if not the only, beneficiary of the wholesale opening of public lands is the companies themselves and their stockholders. This hardly constitutes "balance."

So, the first James G. Watt Environmental Balance Award goes to Ronald Reagan, for promoting short-sighted solutions to misperceived problems.

— DSW



New foxes guard chickens

Remember how industry boosters used to cluck that the foxes were guarding the chicken coop during the Carter administration? They'd point to Joe Browder, formerly with the Environmental Policy Center, appointed to a top-level position at the Interior Department; and Jill Claybrook, a Naderite who, for Corvair's sake, was issuing edicts on auto safety questions over at Transportation.

Industry must be crowing now. While it was "unbalanced" to have so-called environmentalists involved in policy-making a year ago, there has been little outcry about the Reagan Reversal.

John Crowell, Jr., formerly an attorney for the Louisiana-Pacific Corp., which thrives on public lands timber, will set timber policy for the U.S. Forest Service. James Harris, who insisted as an Indiana legislator that the federal strip mine law was unconstitutional, is now supposed to enforce that law as head of the Office of Surface Mining. The Occupational Safety and Health Administration is headed by a construction company owner; the Bureau of Land Management is managed by a rancher who's been at odds with BLM over his grazing leases.

Finally, of course, we have James Watt, reformed Sagebrush Rebel and anti-environmental lawyer, running the Interior Department. He must be picking the feathers from his teeth.

It's no crime to have been on the other side of the fence; in a way, those who have dealt with public agencies as private businessmen may have less to learn when they go public. And no administrator, whatever his or her stripe, can act decisively without showing what some will call a prejudice.

If in the future, though, somebody reaches the upper levels of government who once, in their naive, youthful days of romantic affiliations, embraced some environmental inamorata, and if at that point the industry folks bring forth the wretched 'environmentalist' skeleton and moan about foxes fortifying the fowl...we'll calmly put aside our drumstick and ask them to remember 1981. Never before have there been so many long, red tails in Washington D.C.

— GOG

Letters

DON'T BLAME BOULDER

Dear HCN,

After all that we have done to restrain, control, and channel growth, the lead paragraphs in your article about small farmers reverses the emphasis and lays blame on the "ever-growing Boulder" for the "encroaching subdivisions" which threaten the Domenico farm. In fact, their farm lies on the fringe of Boulder, threatened by the ever-growing Lafayette.

Indeed, Lafayette's attempt to gobble up farmland in the Boulder valley is, not to my knowledge, exceeded by any other community.

Please place the blame where it in fact lies. Not upon those of us who have

supported restraint in Boulder but are continually frustrated by actions in the remainder of the county and, indeed, the entire front range area.

Karl F. Anuta
Boulder, Colo.

SILLY EDITORIAL

Dear HCN,

Your May 15 editorial was silly. We all know that lots of business people mistrust the marketplace. But their distrust doesn't mean that environmentalists should also be against the marketplace. In fact, in several large cases it appears that the marketplace is on the side of angels.

For example, the marketplace — in the person of millions of little Japanese cars — has done wonders for Detroit's view of little cars. It appears that with the J car, GM has finally built an efficient car. The fact that Chrysler subverted the marketplace doesn't detract

from its efficiency. It just shows that Iacocca and company are a bunch of hypocrites.

The marketplace, from an environmental point of view, has been very sound on oil shale: It has continually flashed "no go" signals which the oil companies have obeyed. Then Carter and a liberal Democratic Congress decided to save America from the Arabs by subsidizing oil shale. That decision was a disaster, and it is not clear that Reagan-Stockman can stuff the Carter genie back in the bottle.

The marketplace is also working in the case of oil. Conservation has cut world oil consumption drastically, and OPEC is in disarray, without any help from oil shale or from federally-financed solar technologies. In fact, it now appears that Congress moved on oil shale after energy had emerged from its crisis state. By this time the U.S. was supposed to be importing half its oil. Actually, we are importing only one

third of our oil.

The marketplace, of course, does not solve all problems. It fails spectacularly in the areas of air and water quality standards, worker safety, wilderness, and the like. But it works very well in large areas, telling us to build small cars, stay away from oil shale and nuclear energy, and to live thrifty and active lives.

The underlying point of your editorial was expressed in the last sentence: "There is a difference between good and greed." Writer DSW obviously objects to the working of the marketplace because its driving force is the desire of people to make money. He doesn't like the system even when it produces results he favors. That's a defensible point of view, but he should make it clear in his writing that that is his point of view. Instead, he pretended that that the marketplace couldn't work.

Ed Marston
Paonia, Colo.

guest editorial

Environmental sophistry imperils the West

by John Soisson

"We kill the things we love," A.B. Guthrie has said, "because we don't have clean choices and, lacking them, destroy our lives by a sort of attrition, until at last we wonder what it was we ever loved or how it could have been that we loved it. We never have the clean choices that our youth and innocence have led us to expect; and not having them, weaken or lose our attachments in the compromises we can't avoid."

Wyoming conservationists began making their own unavoidable compromises years ago, and when the Little Horn Water Project came along the consequences of their sophistry finally struck home.

The Little Big Horn River rises in the northern reaches of the Big Horn Mountain Range in north central Wyoming. It is a gathering of numerous springs and streams on the eastern side of the range's divide and flows on a north-northeast course down and out of the mountains into Montana, where it eventually joins the Big Horn and the Yellowstone Rivers.

Several years ago a group of people acquired water rights on the Little Big Horn and began to formulate plans to develop and market the water. By 1978 they had found a buyer, the Texas Eastern Transmission Corporation, and had learned that water has far more commercial value as a transportation medium for coal than as anything else. The group went to the Wyoming Legislature to ask permission to pipe the water out of state. A bill funding a study of the proposal was approved but died on Wyoming Gov. Ed Herschler's (D) desk in 1979.

In 1980, during the biennial budget session of the legislature, a new authorization bill failed to get the two-thirds vote needed for introduction of non-budget legislation.

That spring and summer the group was joined by a few people who had long been active in the Wyoming environmental movement and by fall an elaborate

plan of water development, promotion and sale was developed.

Of three proposals for development of the water — mountain storage reservoirs, tunnel diversion of the water through ridges of the Big Horn range, and diversion of the water near the canyon mouth exit of the Little Big Horn from the mountains — the mountain reservoirs became the preferred alternative almost everyone who voiced an opinion.

That plan involved construction of a 220-foot high dam near the confluence of Half Ounce Creek and the Little Big Horn, near the headwaters of the river on top of the mountains. The dam would impound 34,000 acre-feet of water in a reservoir with a surface area of 426 acres. That water would be shipped 4.25 miles via a buried pipeline to Lick Creek, from whence it would flow into Dry Fork Reservoir.

The Dry Fork Reservoir would be formed by a 310-foot high dam in the deep, narrow Dry Creek Gorge in the northeast corner of the range. An additional 30,000 acre feet of water, with a surface area of 280 acres, would be held there and eventually shipped to another reservoir in the foothills near Parkman, Wyo., 16 miles away.

An expensive multi-media advertising campaign promoted the water development project to the public and especially to the legislature. The ads linked use of the water to coal transportation, in another attempt to secure export authorization. At the 1981 session of the legislature, the proposal caused mixed and heated reactions before it was killed by a committee in the House of Representatives.

The water developers, still holding rights to water they want to sell, said they will proceed with their development project and find a buyer who does not want to ship the water out of state. But there is speculation that they will return to the legislature in 1983 with still another export plan.

The fight over the use of Little Big Horn water in a coal slurry pipeline



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greatly distressed the Wyoming environmental community, not the least because some of its own members had joined the water developers and still others supported them. The reasons for the concern go far beyond the immediate conflict over the issue.

Several years ago, environmental organizations in Wyoming chose to begin making compromises. They were unavoidable, any political realist would say. The compromises continued over the years, some small, some large, and each was neatly rationalized. Good, sound political decisions, rooted as they are in compromise, always lend themselves to airtight rationalization.

It was politically expedient, for example, to compromise on the strip mining of coal. So during the 1975 state legislative session, the Wyoming Citizens Lobby — a coalition of state conservation groups — raised several thousand dollars for an advertising campaign to sell a coal export policy. Wyoming coal, they argued, could be mined in the state, but should be sent elsewhere for burning or conversion to synthetic fuels. The idea was a forerunner to the advertising campaign for the

Little Big Horn proposal, which advocated export of Wyoming's coal and water.

The 1981 debate with the Little Big Horn water developers focused on coal slurry pipelines, not on high mountain reservoirs. That was a choice made by conservationists as well as developers. It was a compromise that was made either by a sophisticated political sense or by a force of habit that began forming when conservation groups entered politics. Either way, the consequences would be the same: the relatively untouched northern Big Horn Mountains would be lost.

The considerable anger and sadness that resulted from the Little Big Horn controversy points to private misgivings of Wyoming's environmentalists. It is the knowledge that slowly, inexorably, they are losing whatever it is they love. They can blame no one but themselves.

John Soisson, formerly of Sheridan, Wyo., has worked for the Wyoming Citizens Lobby and other environmental groups. He is presently a free-lance writer based in Portland, Ore.

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books

The Montana Renewable Energy Handbook

Jan Konigsberg; 1980, \$3 or free to Montana residents, paper, 114 pages. Department of Natural Resources and Conservation, 32 South Ewing, Helena, Mont. 59620.

The Making of a Solar Village

William S. Becker; 1981, \$1, paper, Wisconsin Energy Extension Service, 432 North Lake St., Madison, Wisc. 53706.

Review by Geoffrey O'Gara

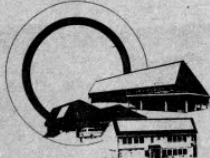
In this busy period of budget pruning, one of the favorite, and funniest, types of largesse plucked by wags has been government-funded information services. Most of us have heard about the expensive film paid for by the U.S. armed forces instructing new recruits on the difficult art of brushing one's teeth. And then we have the stentorian remarks, most of them never actually uttered, of our representatives printed daily and expensively in the Congressional Record, so legislators can show their constituents they were working on the Senate floor when they actually weren't. There is no end to it.

For this reason, one must be cautious when reviewing taxpayer-underwritten tomes. Waste and propaganda could sneak by. Is it another rip-off? Will people think I'm a dupe if I found I like it?

Here, then, are two such books that appear to have duped me. I found them useful and readable, and each gives civilization a nudge in the direction it's going to have to go if we're to survive the world's energy warfare. If that's not too Big Brother for you, send for them.

The first, published by the Energy Division of the Montana Department of Natural Resources, compiles a wealth of information on solar energy, geothermal, wind energy and conservation that can be applied in Montana. The presentation is neat — even sophisticated — with color photos, detailed charts, and wise little boxed-off quotes

THE MAKING OF A SOLAR VILLAGE



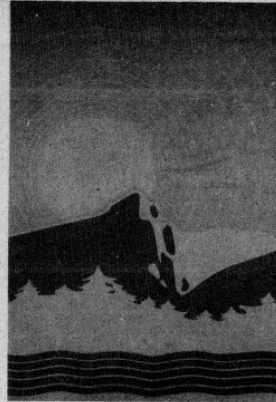
from the likes of Mahatma Gandhi and Robert Rodale.

In this case, the packaging may be a little unnecessary — after all, if one is looking for energy alternatives, it's Btu, not color photos, that you're after. On the other hand, maybe this is what it takes to attract readers. With the first printing of 10,000 already gone, and another 10,000 on the way, it must work.

The book is as good a survey of available alternative energy literature as you'll find, and each chapter is followed by a thorough bibliography. The writing is occasionally dull or cluttered (perhaps they tried to offset that weakness with the eye-catching, spacious graphics). It contains numerous descriptions of individual projects — most of them residential — funded by Montana's Alternative Renewable Energy Grants Program, which like the book, is paid for out of the state's coal severance tax.

Some minor quibbles. Insulated shutters and superinsulated houses are not given the space they deserve. And while I know personally that author Konigsberg is acutely aware of woodstove pollution problems, his wood-burning chapter does not cover that. The reason, apparently, was that these fields were still evolving when the book was researched two years ago.

The second book was produced by the Wisconsin Energy Extension Project and was brought to our attention by Lorna Wilkes, a Lander energy consul-



THE MONTANA RENEWABLE ENERGY HANDBOOK

conservation • solar
wind • hydro • biomass
geothermal

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION **DNRC**
ENERGY DIVISION

tant. Its publication was funded by the U.S. Department of Energy.

The book features dull pictures, a forgettable cover and no color graphics. But the drab presentation disguises an exciting piece of reading.

What the book offers is a real-life case study of a flood-prone, backwoods community, struggling against natural and economic disasters and forced finally to consider what were, for the villagers, radical new ideas. It even has a happy ending.

Soldiers Grove, Wisc., was a 100-year-old former logging town on the brink of financial ruin. Timber-cutting and farm expansion had led to increased moisture run-off in the Kickapoo River, which runs through the town, and severe floods were destroying the downtown.

The townspeople were of an independent bent — they once, after a flood, asked Red Cross workers to leave so they could care for their own. Put off by the high cost, restrictions, and poor return on federal flood protection aid, they asked for an alternative: Give us the dollars you would spend on ineffective levees, said the town to the federal government, and we'll relocate the whole downtown out of the floodplain. What's more, the town decided to increase its independence by requiring that the new downtown, which is built

on city-owned land, be 50 percent solar-heated.

It took time and self-education, but Soldiers Grove is now well on its way to a new life. The saga is modestly told and thoroughly inspiring.

Author Becker said recently that since the book's publication the new, half-built downtown has endured its first winter, with the expected mixed results. The largest building, a foodstore, didn't use a drop of oil heat. The new medical clinic, on the other hand, had heating problems when users failed to operate the insulated shutters properly.

Such small-town success stories are the proper complement to Montana's more general survey of alternative approaches to energy. Whether you look first at the price tag or the contents, it would be hard to argue that these books were a poor investment of state and federal funds.



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