The 35-million-acre land swap ✓See page 14

High Country news

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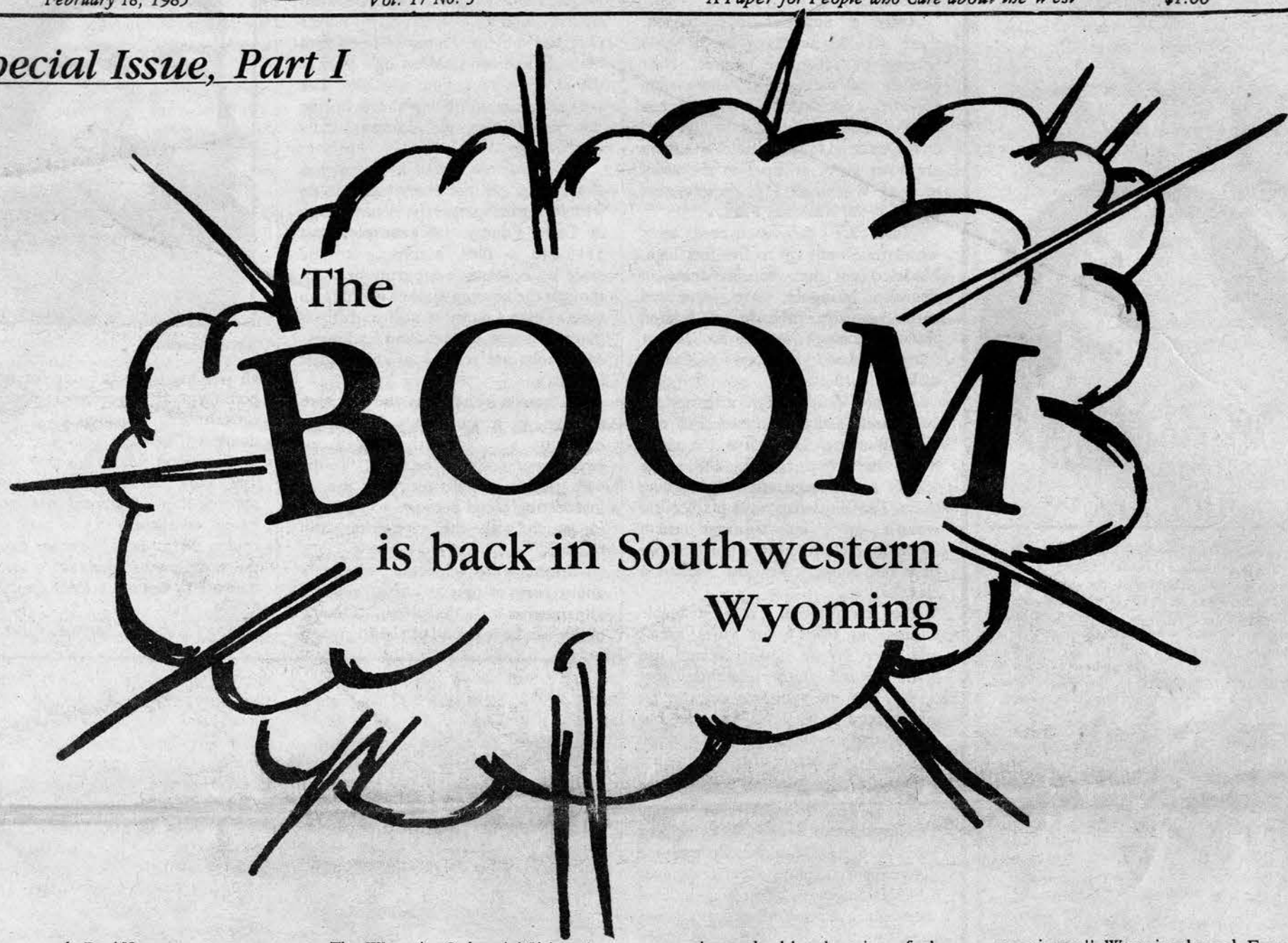
Special Issue, Part I



by Paul Krza

ROCK SPRINGS, Wy. -- "One of the ugliest and most despoiled (towns) in the West," proclaimed a *Wall Street Journal* reporter. "Dreary and windswept," nodded a colleague at *The New York Times*. "Sin City," intoned Dan Rather, perched like a righteous eagle on a rock outcrop just above the city.

For awhile in the 1970s, it looked like Rock Springs and Sweetwater County, situated in the energy-rich southwest quadrant of Wyoming, had spawned a cottage industry for journalists eager to learn more about the then-prevailing buzz word, impact.

Even a soft-core porn magazine got into the act, warning readers that since crime had reached such a level ("veins pop like champagne corks... drug pushers line the streets like parking meters..."), their chances of survival were probably greater on the interstate in a car wreck than during a night stopover in the city, "one of the meanest towns in America."

The spectacular and unbridled rapid growth sparked by massive industrial development thrust Rock Springs into the national spotlight. The trauma sent sociologists and legislators elsewhere scurrying for ways to avoid the same kind of unsavory situations. Rock Springs had unwittingly become the first example of a latter-day Western boomtown, a municipal "virgin," as an ex-mayor described the city, whose violation would scare the socks off the rest of the state.

The Wyoming Industrial Siting Act resulted, passed by the legislature in 1975, which requires advance notice from companies wanting to locate facilities in Wyoming, public hearings on the projects and agreements to do something about, or "mitigate," any adverse effects.

But gas processing facilities and other oilfield-related activities were exempted from the Act. The exemptions set the stage for another boomtown experience in southwest Wyoming, when development in the Overthrust Belt overwhelmed Evanston, then a tame town whose major employer was the state mental hospital. The construction of two gas processing plants and intensive drilling brought thousands to the area, sending Evanston through the same sudden growth scenario that hit Rock Springs.

The Siting Act was then amended to extend jurisdiction over major oil and gas facility construction. But other wellfield activity, like the actual drilling and completion of wells, remains exempt.

Now, with another boom looming on the southwest Wyoming horizon, the siting protections born in the lessons of Rock Springs and Evanston are about to be severely tested.

Already under construction at a location north of the two cities at a place called Shute Creek is the largest gas processing plant in the country. On top of that, the company building the plant, Exxon, has announced plans to at least double the size of the facility. If the plans materialize, a peak workforce of about 5,000 will be required by this summer.

In the wake of recent lean times, the surrounding communities are welcoming the development. The Rock Springs boom has subsided and oil and gas activity has slowed, resulting in a wave of layoffs throughout southwest Wyoming. The area was even beginning to lose population, reversing a decade-long trend of in-migration.

When the Bureau of Land Management held hearings in 1983 on the entire Riley Ridge development, of which the Exxon project is only one part, area residents turned out in force to ask that it proceed quickly to cure economic woes. Even Rock Springs and Green River officials got behind Riley Ridge, hoping that it would fill up apartments vacated by furloughed coal and trona miners.

Both Exxon and local officials are saying they think the coming influx can be accommodated and absorbed without the major disruptions associated with the "Rock Springs experience." Wyoming-based Exxon spokesman Steve Kettlekamp says although 5,000 workers represent a sizable influx, "it will be very short-lived and can be addressed effectively."

Exxon is spending $750 million on its first phase of construction at the Shute Creek plant site. The expensive processing plants, which are rapidly becoming fixtures in southwest Wyoming, are needed to remove hydrogen sulfide, a poisonous contaminant often encountered in the deep (about 14,000 feet) gas wells drilled in the area.

The Exxon plant will also remove carbon dioxide, once worthless but now used to squeeze more oil from aging fields. The CO_2 from Shute Creek has already been sold to Chevron to rejuvenate its nearly-depleted Rangely field in northern Colorado. Other contracts are in the offing, including a possible network to bring the CO_2 to the Powder River Basin in northeast Wyoming.

The numbers associated with the Exxon project are huge, especially

[*Continued on page 11*]

WESTERN ROUNDUP

Teton County seeks to accommodate yurts

Affluent Teton County in northwest Wyoming is wrestling with the question of how yurts and tipis fit into the rugged -- and expensive -- landscape.

Once a summer phenomenon, there may be as many as 50 yurts staying put for the winter. Near Jackson in tiny Kelly, population about 60, a community of 12 yurts has been established within a campground no longer open to the public, and there are other yurts or tipis in the small town of Wilson and elsewhere near Grand Teton National Park.

Yurts are canvas-covered tents with lattice walls up to five feet high. Modeled on the circular tents of nomadic Mongols, the American variety usually includes a built-in platform, comes in 16 to 24-foot diameters, and features a domed skylight.

No one paid much attention to yurts until Kelly residents Tim and Vicky Binderup, who live 150 yards from the campground, asked the county about regulations governing yurts. Tim Binderup says his request wasn't an "us against them situation... We lived in a tipi while we built our house. We just wanted a clarification."

No clarification was available because at this point yurts aren't addressed in the county's land use plan. This fall, county commissioners declared a one-year moratorium on adding any new yurts or tipis but agreed that anything already in place could stay at least until September 1985.

In the meantime, the County Planning Commission is studying how yurts and tipis can be fit into the comprehensive plan. County planner Julie Holding says adding conditional uses, which are exceptions to allowed uses, would give the plan more flexibility through public hearings and comment. Issues raised by the Binderups and now the Planning Commission include sanitation, lot density and electrical codes. To help the Planning Commission, commissioners also appointed a five-person yurt advisory committee which includes the Binderups, landowners who allow yurts and two yurt dwellers.

The expert on that committee is Richard Simmons, a former Outward Bound instructor who now makes yurts for a living. Simmons lives with his wife and two children in a yurt at the closed campground in Kelly. The yurt dwellers still living there during the winter use the campground's washhouse.

For Simmons, living in a yurt has something, but not everything, to do with living inexpensively. A new home in Teton County, for example, cost $113,718 in 1983, according to the state's economic department. Although the housing market is sluggish now, Teton County is still a difficult place to live moderately and find work. Most jobs are related to the tourist industry.

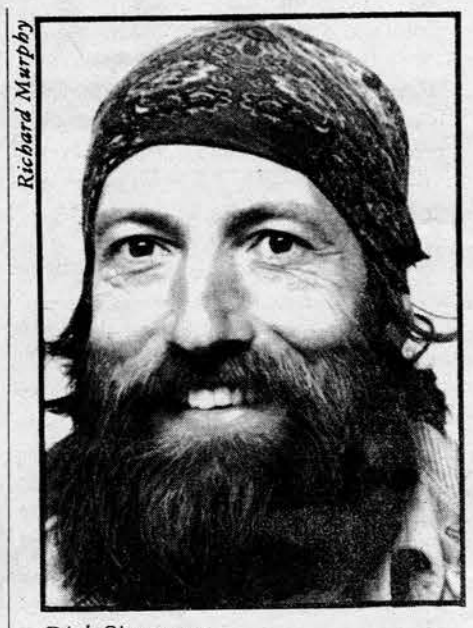
Simmons insists that the decision to live in a yurt isn't based on economics. "It's the kind of experience it offers," he says. "To the core people who started this, it's an interesting blend because you're still in touch with the elements, still outside."

Simmons says people who talk about yurts or tipis as cheap housing alternatives miss the point. "Quality of life can be just kind of cheap, too, if all you focus on is living for next to nothing." If a yurt cost more than conventional housing, "I'd still be doing it," he says.

Simmons, whose business is called The Yurt Works, predicts that an appropriate conditional use will be found to allow yurts to stay in the county. What he'd like to see evolve at the campground is a yurt community that offers natural science courses.

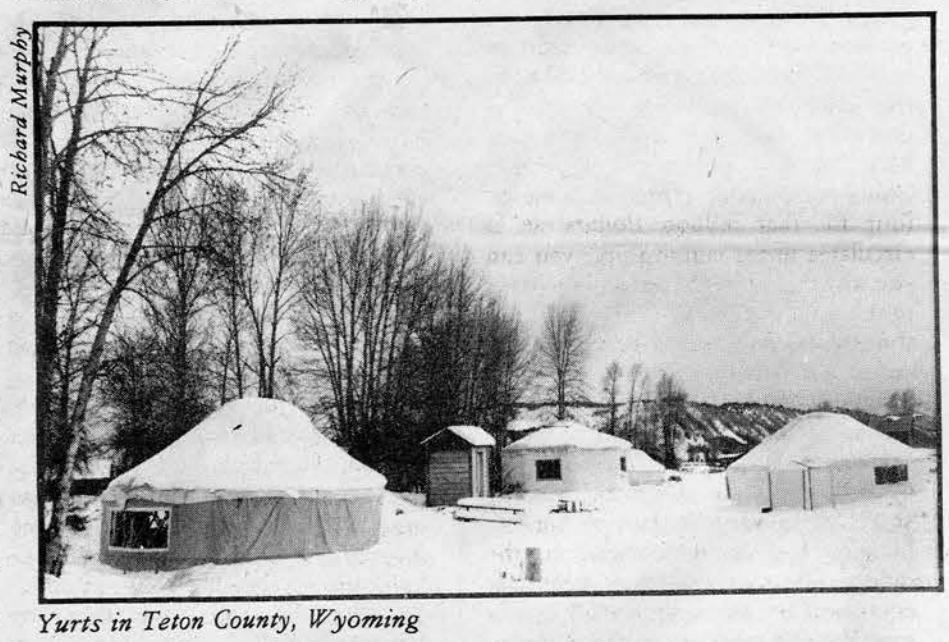
--Betsy Marston, T.J. Carter

Richard Murphy



Dick Simmons

Richard Murphy



Yurts in Teton County, Wyoming

High Country News

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Dear friends,

Life here in *HCN*'s corridor complex -- every office is a thoroughfare to the next office -- has been dominated by plumbing recently. The building, constructed back when local coal was a few bucks a ton, is innocent of insulation. So when the very cold weather hits, we let the water drip. Unfortunately, we cracked only the cold water tap, and the hot water froze. Now we have mixed feelings about the approaching thaw because it will mean a plumber's bill for burst pipes.

But a plumber is overdue. Last summer the office toilet plugged. The staff, knowing that plumbers dislike small jobs, took off the bowl, ran a snake down the drain, and, feeling very handy, replaced the bowl with a new seal. Unfortunately, the thing still didn't work.

So off it came again, and again, until we took the bowl outside, inverted it, and pounded on it with a rubber hammer while we poked at its convoluted innards with a wire hanger. That worked: out popped a non-reproducible blue pen and the toilet began to work.

However, after months of adequate though marginal flushing, it is again stonewalling us. We suspect a companion to the pen, perhaps a red pencil remaining in the bowl, has shifted into a blocking position. And although the office is filled with energetic people, none of the energy is directed at dismantling the contraption yet again.

So the burst pipes may be a blessing. The plumber will happily come to replace the pipes, and while he's here (this isn't chauvinism: Paonia has no female plumbers) we're going to have him look at the toilet.

While pipes are occupying us in Paonia, we've been doing a burst of mailing in advance of the coming postal rate increase. About 120 questionnaires went out to recent new subscribers asking them to tell us how, and why, they came to *HCN*. The source of half of our 1,600 or so new subscriptions each year is easily identified: they come back with the cards we mail out in samples. But the other half comes in over the transom. If we can learn how they get to our transom, we may do a better job of designing future circulation efforts. So if you received one of the forms, we hope you will mail it back in the postage-paid envelope.

Another, less happy, batch of survey forms went out to lapsed subscribers in an attempt to discover why they left the paper. There is no use asking you to return that form since no one now getting the paper should have received it.

As you know, the last several issues of this column have been optimistic -- stable circulation, a slim budget surplus, high hopes for the future. We think we're beginning to see the results of those columns: the response to the second Research Fund mailing is down, even though the first mailing and the Publishers Fund appeal did well. That probably proves the wisdom of organizations which always contrive to cry wolf, such as the TV minister who pled near bankruptcy while buying expensive homes, cars and toys. Our solace is that the situation will correct itself.

If the second Research Fund mailing continues to do pooriy, then some time in the next eight months we will be able to legitimately declare a crisis.

--the staff

Rafters seek to swamp a dam proposal

Economic arguments are upstaging environmental concerns in a Colorado River dam controversy.

Located near Glenwood Springs in Western Colorado, the Hellsgate Dam proposal has commercial river outfitters hopping mad because they say the project could cut their income in half and damage the local tourist-based economy.

Hellsgate Associates, the project's sponsor, says that the outfitters' concerns are exaggerated and should play second fiddle to the cheap electricity that will be available to Glenwood Springs once the dam comes on line.

The Hellsgate proposal is small compared to existing Colorado River hydro projects. Calling for a low-head dam, 25 feet high and 200 feet wide, the project would inundate 17 acres of shoreline, convert 1½ miles of river into slack water and generate 32 to 35 million kilowatt hours annually.

The resource facing the most change is recreation. Seven miles west of Glenwood Springs, the dam and reservoir would be on a section of river used by outfitters taking customers on full-day-raft trips. The rivermen contend that customers won't pay for a trip that involves portaging a dam and paddling in 1½ miles of slack water. slack water.

Glenwood outfitter Gary Hansen says full-day trips represent half of the commercial trips on the river, and without them the outfitting industry will collapse. "The commercial river trip industry generates one million dollars in this area and represents $300,000 in wages for 175 people. Using a multiplier effect of three or four for that million dollars as it circulates in the community, you can see why the outfitters are so important to this area's economy." Hansen adds that if the dam is built, businesses will suffer and "there may not be many people around to enjoy lower electricity rates."

The local lodging industry also opposes the dam. According to the secretary of the Glenwood Springs Lodging and Hotel Association, the dam's effects on reducing electricity costs will be inconsequential. Secretary Patty Wagner says the Association includes 25 motels in the Glenwood Springs area, most of which are heavily dependent on the rafting industry.

Scott Fifer, spokesman for Hellsgate Associates, doesn't dispute the rafting industry's income figures. But he says that outfitter impact on the total Glenwood economy is exaggerated. "A recent Chamber of Commerce survey indicates that only 16 percent of the tourists visiting Glenwood Springs come here to raft. Seventy percent are here for the hot springs pool."

Hellsgate Associates is building into their proposal measures they say will mitigate the dam's effects on river running. Fifer says they plan to build boat ramps, parking areas and either a portage or raft chute around the dam. "We want to work together for multiple-use of this river, because its potential is great." He adds that the dam will generate property tax revenue for Garfield County.

The bottom line for the proposal, however, is electricity production. Hellsgate Associates has two potential buyers for the power: the City of Glenwood Springs, which has its own electric company, and the Colorado Public Service Company. Just how much the power benefits Glenwood residents depends on who eventually buys the electricity. If the city is the purchaser, local ratepayers will save $1.2 million annually for the next 10 to 20 years, and $5.5 million annually after 20 years, according to Fifer. If the Public Service Company buys the power, it will be absorbed into a state-wide power grid, providing no real savings for locals.

Glenwood Canyon

Complicating the picture is the possibility that Glenwood may sell its electric company. Both the Colorado Public Service Company and the Holy Cross Electric Association have made bids to buy the city's utility. Glenwood City Manager Michael Copp says the city is only studying the offers at this point. He adds that if the electric company is retained, the city will consider buying power from the dam project. The Glenwood City Council has taken a neutral stand on the Hellsgate proposal, making no commitment to purchase power before the dam is built.

Still, Fifer is confident that the project "is in the public's best interest." According to research Hellsgate Associates has done, projections indicate that energy costs will rise over nine to 10 percent for the next 10 to 20 years. Because hydro entails only an initial investment, and the life of a dam may be three or four times as long as a coal-fired power plant, Fifer says the project is a good investment and will help lessen Colorado's dependence on coal.

Fifer also points out that "tax incentives are a driving force for investors in the project." Hellsgate Associates consists of four local businessmen and professionals, plus one out-of-state investor.

Outfitter Hansen contends that this project affects more than the local economy. "It could set a dangerous precedent. The Roaring Fork River could be next." Hansen says both commercial and private boaters are aware that this dam could open the door for more projects in Western Colorado. The Hellsgate proposal has already aroused attention outside of Colorado as dam opponents have alerted the Sierra Club and the Audubon Society. The flap even prompted a letter to a local paper from author Edward Abbey. He wrote that the project is "just beaverheads building another dam on the Colorado River," and urged opponents to "stop the buggers."

Incentives for small hydro proposals such as Hellsgate come from 1978 congressional legislation that encouraged investment in low-head dam projects. Congress guaranteed a market for power produced from such projects and threw in some tax benefits for good measure. Critics of the law claim that proposals once considered uneconomic have suddenly become cost-effective, resulting in a "second gold rush" in the West as entrepreneurs seek permission to build small dams on thousands of western streams.

Hellsgate Associates has already invested $200,000 in the proposal and is now looking for the green light from the Federal Energy Regulatory Commission to start dam construction. The partnership is completing an environmental analysis on the project to be forwarded to the Commission for the government's decision. Scott Fifer says if given the go-ahead, Hellsgate Associates plan to have the $14 million dam on line by late 1988.

In the meantime, both dam builders and outfitters are trying to marshal support. An informational forum, with both sides presenting their arguments, will be held in Glenwood Springs Feb. 19 at 7:30 p.m. at the Methodist Church.

--Bruce Farling

Mill proposal draws fire

A Dallas-based steel company is pursuing plans for a $120 million "mini" steel mill south of San Antonio, New Mexico, despite some local opposition.

Both Socorro and Carizozo city councils rejected Zia Steel Corporation's request in mid-1983 for $10 million in industrial revenue bonds to finance the project. In response, Zia's president and investor Edward Botinelli called city officials "idiots" and announced he would carry out his proposals with private financing. Zia Steel consultant Norman Bishop said Zia would apply for an air quality permit again even though New Mexico's Environmental Improvement Division rejected an initial application last fall. The state said the mill's stack emissions would degrade the Rio Grande Valley's Class I air status. Environmentalists are also concerned about where the steel mill would be. The site is 30 miles from Zia's iron ore mine in Bingham, 15 miles from Socorro and only a few miles from the Bosque del Apache National Wildlife Refuge, wintering grounds for one of the world's two nesting flocks of whooping cranes. Bishop said the plant will comply with federal PSD (Prevention of Significant Deterioration) standards by using the best SO2-removing equipment. In contrast with antiquated large steel mills, these efficient small operations will regenerate demand for domestic steel, Bishop predicts.

--Lynda Alfred

HOTLINE

Aspen appeal rejected

Turning down an appeal from two conservation groups, the Forest Service has ordered a 640-acre aspen cut in Western Colorado to go through as planned to Louisiana-Pacific Corp., the high bidder. The groups, Western Colorado Congress and Western Slope Energy Research Center, appealed the Lone Cone "aspen treatment" sale this summer to the Regional Forester. They charged that the sale was spurred by L-P's need to buy aspen for its waferwood plant and that the aspen cuts were not addressed sufficiently in the Forest Plan. After Regional Forester Jim Torrence denied their appeal Jan. 31, the conservation groups requested an extension and readied another appeal. The tough question, said a WCC staffer, is whether the groups have the financial resources to carry the battle to court, if necessary.

World-class Colorado Plateau

John P. George

Molar Rock, Canyonlands

The Colorado Plateau may be in line for international recognition. Before he left office, Utah Gov. Scott Matheson asked the Park Service to nominate 21 national parks, monuments and recreation areas, 26 classified wildernesses, and an undetermined number of state parks to United Nations World Heritage program. Matheson said the areas within the five-state Colorado Plateau region merit inclusion as a thematic world heritage site, and international recognition, he pointed out, would increase tourism in the region and bolster a sagging economy. Economic benefits, however, are incidental to the educational goals of the Heritage Program, according to the Park Service. If the collection of sites, including the Grand Canyon, is nominated, a committee representing 78 nations makes the final selection, a process which can take three or four years.

Poachers' pocketbooks

The Idaho Department of Fish and Game is zeroing in on poachers' pocketbooks. Citing $54,000 in outstanding fines and a required $79,000 in damages that magistrates did not mete out to violators, the Department has asked the Idaho Legislature for help. A recently introduced amendment would put teeth into the law by requiring mandatory civil penalties in certain wildlife violations. Violators would also lose hunting, fishing and trapping privileges if damages are not paid within a year. The Department doesn't anticipate any problems in getting the amendment approved.

HOTLINE

Indians may kill bald eagles

Indians are free to kill any wildlife on reservation lands, including endangered species, the eighth U.S. Circuit Court of Appeals ruled last month. The case followed the conviction in a federal court of several Indians for killing more than 200 bald eagles in South Dakota and Nebraska, and selling parts of the birds as native American artifacts. The U.S. Fish and Wildlife Service arrested the Indians last year for violating the Endangered Species Act. The appeals court reversed part of the lower court's decision, ruling that treaty rights still allow Indians to hunt freely on reservations. It upheld the conviction for selling animal parts as artifacts.

A subsidized lunch

It's almost five times cheaper to support a cow on federal land than on private, a recent Forest Service and Bureau of Land Management study reveals. And taxpayers are picking up the slack. The fee for grazing domestic livestock on federal land has decreased for the fourth year in a row, according to the Wildlife Management Institute, while the price of forage has steadily risen. This year it will cost $1.35 per animal unit month, a drop from $2.36 per AUM in 1980. The fair market value for public land forage is $6.65 an AUM. Taxpayers' share in managing rangeland is about $33 million annually. Ranchers whose livestock do not graze on federal rangeland and conservationists are protesting the continued livestock subsidy.

Red Rim simmers

January hearings in Rawlins failed to settle the dispute over Wyoming's Red Rim, where rancher Taylor Lawrence fenced out antelope last winter. Lawrence and Rocky Mountain Energy Company hope to mine coal in the 19,000 acre area, but are encountering strong opposition from conservationists. The Wyoming and National Wildlife Federations have petitioned agencies to declare the area unsuitable for mining. They charge it is critical winter range for 3,000 antelope and technically and economically unfeasible to reclaim. Lawrence and the mining company argue that reclamation would benefit the herd. The hearings, conducted by the Interior Department's Office of Surface Mining and the Wyoming Environmental Quality Council, only resulted in formalizing battlegrounds for future debate. The two agencies will issue their decisions on the petition this spring, but it is unlikely the controversy will be settled for good.

Idaho conservationists welcome Stallings

For the first time in 16 years, southern Idaho conservationists can talk to the occupant of Idaho's Second Congressional seat. Democrat Richard Stallings edged scandal-plagued incumbent George Hansen in November by 170 votes out of 200,000 cast.

By comparison, Hansen and Idaho conservationists were strangers during his eight terms in office. "Hansen was just a write-off," says veteran Sierra Club leader Ralph Maughan of Pocatello. It was not just Hansen's antipathy to things environmental, for with the exception of Frank Church, antipathy has characterized Idaho's four-person congressional delegation for many years. What distinguished Hansen was his lack of interest in natural resource issues from any standpoint, Maughan says. "It's an axiom that you don't burn bridges in politics, but with Hansen communication was a total waste of time."

Conservationists worked hard for Stallings. Maughan says the Sierra Club's PAC gave him $5,000 and Club members raised $2,000 more. Marcia Pursley, co-chair of Stallings' Ada County (Boise) campaign, says the Sierra Club and other conservationists gave Stallings much volunteer help as well: "They were smart about it. They undertook discrete functions and activities so they would have clear credit for the work. They didn't give us lists of volunteers; they delivered the volunteers and organized them to do the job. And they were politically realistic."

Is Stallings an environmentalist? Pursley, who was the Idaho Conservation League's first director 11 years ago, says: "Not by temperament, no. Other kinds of issues, like family issues, are much more innate to him. But he has a lot of depth. He cares about the substance of issues, and he listens."

Born in Ogden, Utah, Stallings, 44, first taught history in high school, and in 1969 joined the faculty of Ricks College, a two-year Mormon school where he became chairman of the history department. He and his wife, Renee, have three children, the oldest now serving an LDS mission in Chile.

Stallings first ran for office in 1978 for the state Legislature from heavily Republican Madison County, and lost. In 1982 he challenged Hansen for the first time, losing 52-48 percent. When Hansen's financial troubles mounted as he was convicted of felony in early 1984 for failure to file financial disclosure reports, Stallings was a natural to run again. He is a Mormon, a fiscal and social conservative, and he has a semi-scholarly but not stuffy personal style.

Hansen's finances and character dominated the campaign. In addition to the conviction, Hansen refused to discuss where $80,000 he had run through a Glenns Ferry bank in 1979 had come from or gone to. Stallings had a wide lead early in the polls, but Hansen in the closing weeks on the campaign identified himself with Ronald Reagan and almost pulled it out. The morning following election day, Stallings was declared the winner by 66 votes. Later canvassing and a selective recount paid for by Hansen widened the final margin to 170 votes.

Stallings sought and has received appointments to the House Agriculture and Science and Technology Committees. According to his chief of staff Randy Furniss, Stallings wanted the Ag Committee "to make sure Idaho farmers' interests are heard and incorporated in the new farm bill." The Science and Technology Committee oversees about one-third of the Idaho National Engineering Laboratory's budget. INEL, a nuclear research and development facility, is the largest employer in Stallings' destrict.

Stallings has hired Kelly Olson, formerly with Idaho's state energy division, to handle natural resource and energy issues on his Washington staff. Cary Jones, former natural resources aide to Idaho Gov. John Evans, will handle those issues from the District's Idaho Falls office. Chief of Staff Furniss worked eight years for Sen. Church in the 1970s.

Stallings has two conservation issues on his immediate agenda--national forest wilderness and protection of the Henrys Fork of the Snake River. These were the topics at a mid-January meeting between Stallings and five conservation leaders in Boise, and at a later meeting with Ralph Maughan in Pocatello.

Henrys Fork winds through the Island Park area west of Yellowstone and is one of Idaho's most popular fishing rivers, nationally known as a fly-fishing stream. Six small hydro dams threaten a major stretch of it. Stallings, a fisherman, floated parts of Henrys Fork during the campaign. He told conservationists in January that he intends to protect the threatened stretch, probably through Wild and Scenic River legislation. But aide Cary Jones cautioned that the process may take awhile.

Can he keep his traditionally Republican seat in 1986? "Richard

Rep. Richard Stallings

Stallings didn't win; George Hansen lost," say state Republican leaders. They are confident the real election for the seat in 1986 is the Republican primary. Marcia Pursley offers some hope, "If he does good constituent work, builds his name, keeps in touch district-wide, raises more money and builds an even bigger campaign, he might be able to do it."

George Hansen, who challenged the election results right up to Stallings' swearing-in, got in a final shot at his successor. When the Stallings staff examined the government-owned computer left by Hansen, they found not only the data base and all programs gone, but the cable connecting keyboard to printer snipped in two.

--Pat Ford

Big Horn bombardment

Conservationists and ranchers joined forces against the Forest Service in Sheridan, Wy., last month. Protesting the draft Bighorn National Forest Plan at an "advisory" hearing, speakers charged that the Forest Service was conducting a sham meeting only because it had been bombarded with letters demanding public comment.

The battle, says Sierra Club's Larry Mehlhaff, is over road construction and timber plans, specifically in roadless areas released in last year's Wyoming Wilderness Act. When Congress designated 195,000 acres of new Wyoming wilderness in the closing days of the last session, nearly 700,000 roadless acres were also opened to other uses.

The Bighorn Plan identifies 147,000 acres of roadless area as suitable for timbering, calling for an average of 13.6 million board feet to be logged in each of the next 10 years. By the end of the plan, there will have been a timber sale in every roadless area. At the meeting, speakers said the Forest Service's "blueprints and bulldozers" would ruin the roadless areas for recreation and ranching.

In areas already roaded, the Forest Service plans to increase average timber harvests from 14.2 million board feet currently to 16.3 mmbf per year by 1995, and 22 mmbf per year by 2035. These figures do not include harvests for "vegetative management" to control the pine beetle or other threats. To support these and roadless area timber sales, 463 miles of roads would be constructed or reconstructed by 1995.

Mehlhaff and other conservationists say the Forest Service plans to increase lodgepole clear-cutting nearly 20-fold annually in some of the most marginal timber in the country. The draft plan says timber cuts create gains for wildlife habitat through "wildlife openings." But cover, not openings, is the critical factor for wildlife forage in the Bighorn, Mehlhaff says. And although the Forest Service says that stepped-up timbering will increase water yield, Mehlhaff argues that greater runoff will speed up erosion if there are fewer trees to hold the soil together.

Almost 300 people attended the four-hour meeting and most opposed the draft plan, responding to critical comments with loud applause. Of the 46 speakers, only three supported the draft plan.

--Lynda Alfred

BARBS

So you can underestimate the intelligence of the American people.

Ma Bell has discovered that people are not interested in paying several hundred dollars for a telephone with lots of computerized bells and whistles. People's lives are complicated enough, says one analyst, and they just want a telephone that they can dial when they want to make a call and that rings when someone wants to reach them. As a result of this peculiar taste, Ma Bell is having to heavily discount its higher-priced phones.

Hype comes to the Library of Congress.

"Book readers are generally active people, and active people are generally book readers," says a Library of Congress study which attempts to dispel the image of readers as indolent weaklings.

The Rockies are standing up to acid rain

Six months after stories in Colorado's major newspapers suggested the arrival of acid rain damage to forests in the Colorado Rockies, a team of scientists has laid the possibility to rest. Speaking at a three-day scientific conference in Boulder, the team spokesman said trees in the Gothic Valley of Colorado near the Continental Divide were dying only of natural causes.

But forest pathologist Dr. Robert Bruck of North Carolina State University provided little other comfort at a press conference on Jan. 31 and in a scientific paper he presented Feb. 1. According to Bruck, scientists are in a "horrible position," unable to advise society how to best cope with acid-deposition damage to forests. He said the question was being unravelled, but that definitive results would take three to five years. And while the scientific work proceeds, he said, damage may be occurring that could take 10,000 years to correct.

Although the big picture remains uncertain, Bruck was definitive on the question of damage in the Gothic area. The Forest Decline Investigation Team was sent into Gothic by three state and three federal agencies in response to the headlines which came out of an acid rain conference held last July in Gunnison, Co. (*HCN*, 9/3/84). On a field trip during the conference, two scientists, Dr. Richard Kline and Dr. Erich Elstner, said, "See, that's what the trees (in Germany and the northeastern U.S.) look like when they die."

The yellowed branch the American and West German scientists found in Gothic touched off a six-month investigation to determine if man-caused factors are stressing trees along the Continental Divide. The answer, Bruck said, is that "the yellowed Gothic trees do look like the trees we see dying on mountaintops in the Northeast and at all elevations in central Europe. But that is because all trees die the same way. First the needles turn yellow, then brown, and then they fall off," no matter what the cause is.

In each case in Gothic, the team found root rot or fungi as the cause. Moreover, they found no evidence that the tree had been weakened and made susceptible to the rot or fungi by acid deposition. None of the needles showed the pollution-damaged needle wax that had been found in the forests near Munich, Germany, by Dr. Elstner, and that had presumably made the trees susceptible to disease.

Having eliminated pollution damage as a cause of yellowed and dying trees, Bruck discussed whether the trees in Gothic are showing early signs of acid deposition damage.

In European forests where damage is acute, as well as in U.S. Appalachian spruce and fir forests, test bores show that tree ring growth was suppressed starting between 1958 and 1962. This tree ring growth suppression is as characteristic of trees that have already succumbed to the "Waldesterben," or forest death syndrome, as of the trees that still appear healthy.

In Gothic, however, the team found no evidence of growth suppression. In fact, he said, 20 percent of the samples showed increased growth rings in recent years.

The team also looked at the acidity of rain and snow, but the results here appeared less than clear-cut. They didn't look at data gathered by Dr. John Harte of the University of California at Berkeley, who has been monitoring the pH of rainfall at the Rocky Mountain Biological Field Station in Gothic. Bruck said the Harte data wasn't subject to the same quality control as data from six National Acid Deposition Program sites in the state. However, the six sites are all remote from Gothic.

The data showed that precipitation pH, hydrogen ion deposition, sulfate deposition and nitrate deposition in Colorado for 1980 and 1981 are well below the values believed to cause damage. The Colorado values were between 4.9 and 6.0, while the damage threshold is believed to be 4.0. In the eastern U.S., the values are 3.8 to 4.6, and in central Europe, 3.6 to 4.5.

Bruck, who has investigated acid rain damage in many areas, was especially interested in the Gothic Valley because it is at a high altitude. In the Eastern U.S., all acid rain damage to forests is found at high elevations. But in those locations, the trees are shrouded in highly acid clouds or fog much of the time. In the Rockies, the fog and cloud shrouds are lacking.

In his talks and in interviews during the conference, Bruck discussed acid rain control strategies. The only bills introduced thus far in Congress have aimed at reducing the 27 million tons of sulfur dioxide emitted each year in the U.S. Environmentalists have called for a 12 million ton per year reduction, while former EPA administrator William Ruckleshaus proposed a four million ton reduction, but couldn't get President Ronald Reagan's support for that.

Dr. Bruck said there are good reasons to control the SO2 coming out of electric power plants, oil and gas refineries and smelters. It affects human health, acidifies lakes and streams, and eats away at cultural monuments. But, he warned, a reduction in SO2 will not save dying forests. Current research, he said, points to the nitrogen oxide component of acid precipitation as the major culprit in forest decline, while SO2 is believed to acidify lakes and streams.

He theorized that the nitrates may do their forest damage by acting as fertilizer, throwing off the trees' normal growth cycle. Some tree ring bores, he reported, show much larger yearly growth increments near the tops than closer to the roots. It's as if the trees were being fertilized at the top, he said. He compared it to the house plant enthusiast who complains that his favorite plant is dying even though he fertilizes it every week. The fertilization can only hurt, he said. "They were doing just fine before we started showering them with nitrogen compounds."

Bruck's emphasis on NOx was in marked contrast to presentations at the Gunnison acid rain conference in July, where representatives of the automobile industry argued that nitrogen emissions were not a problem, and that attention should remain centered on the SO2 coming out of utilities and smelters.

Autos as well as industry in general play an important role in another theory about forest decline. Bruck said heavy metal contamination of forest soil is a possible cause of forest decline. Reports of high levels of lead, cadmium and other toxic metals emitted by autos and industry have been coming in from afflicted forests all over the world. Lead in soil from Appalachian mountaintops is 10 to 100 times more concentrated than in soils near the bases of mountains.

If heavy metal contamination is killing the trees, the damage is here to stay. Metals like lead take 10,000 years to cycle themselves through the soil in cold climates.

Once the symptoms of forest decline appear -- the yellowing of leaves and needles, the falling off of new green growth, a flurry of seed and cone production -- the process is irreversible. In West Germany, the symptoms are spreading with alarming speed. In 1982, 8.1 percent of the forests were affected; in 1983, the figure rose to 34 percent. An as-yet unpublished 1984 survey puts the damage figure at 55 percent of all the trees in Germany, Bruck said.

By comparison with Germany's devastation, "You here in the West have a unique opportunity to gather baseline data on a relatively untroubled forest ecosystem," Bruck concluded. "But there is no reason for complacency in the Rocky Mountains."

--Candi Harper

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Candi Harper is the producer of Colorado Speaks, a five-minute radio program which is played on many Colorado stations. This article was paid for by the High Country News Research Fund.

Sangre de Cristo rescued

Thanks to the U.S. Forest Service, cooperative land owners and an array of conservation groups, an Achilles' heel has been removed from the heart of Colorado's Sangre de Cristo Wilderness Study Area.

The removal came via the purchase by the Forest Service of a 160-acre tract along Sand Creek in Rio Grande National Forest in southern Colorado. The land owners wanted to develop the land into four 40-acre tracts, and had applied to the Forest Service for a road over Music Pass. The Melcher Amendment to the Alaska Lands Act requires the Forest Service to provide access to private inholdings within the forests.

But the road would have damaged the now unroaded 70-mile-long wilderness study area. After negotiations for a land swap between the landowners and the Forest Service broke down, the Wilderness Society, the Colorado Open Space Council, Audubon and the Colorado Mountain Club fought the landowners' request for a road through National Forest land. At the same time, the Wilderness Society asked the Trust for Public Land to negotiate purchase of the land.

According to Steve Thompson of the Trust's Santa Fe office, the negotiations, which began June 1983, led to a $176,000 purchase by the Forest Service based on an appraisal. Regional Forester James Torrence in Denver said acquisition of the property had been the highest priority in his Rocky Mountain Region.

--Ed Marston

HOTLINE

The jets win

Boeing 737s will continue to land at the Jackson Hole, Wyoming, airport Noise from the jets does not pose an environmental threat to nearby Grand Teton National Park, ruled the U.S. Court of Appeals in Washington, D.C. last month. The court ruled in favor of the Federal Aviation Administration, Western and Frontier Airlines, and the Jackson Hole Airport Board. The Sierra Club sued the airport in 1981 when a three-year permit was awarded for Boeing 737 service. The Club charged that the permit violated the National Environmental Policy Act. Sierra Club national treasurer Phil Hocker, a Jackson architect, says that in 1981 the suit was dismissed because the permits were only temporary. The Club challenged again when the permits were made permanent.

Trading elk for bass

Kathy Hopkins, DCI

About 100 elk accustomed to free lunches in the orchards of Delta County in Western Colorado were trapped and shipped to Arkansas last month. The elk made the 33-hour trip in darkened vans. In return, Colorado expects to receive warm-water fish such as bass from Arkansas. Colorado wildlife officer Jim Houston said he hoped the elk rounded up on private land near orchards were some of the ones finding fruit trees more attractive than native grasses in the high country. About 300 elk have been spotted loitering in or near orchards.

Plan for the Targhee

The Targhee National Forest, which straddles the Wyoming-Idaho state line, has released a roadless area supplement to its 1981 land management plan (*HCN*, 1/21/85). Thanks to last year's Wyoming Wilderness Act, the Targhee already has two brand new wildernesses, and a wilderness study area in Wyoming's part of the Palisades. And unlike the Caribou National Forest's recent plan, which set aside only 16,000 acres as wilderness, the Targhee supplement recommends 57,200 acres of wilderness near the Montana border, 110,000 acres of wilderness study area in Idaho's part of the Palisades and 200,000 acres, much of it in the northern Caribou Range, for primitive and semi-primitive roadless management. The Targhee makes no decision on 140,000 roadless acres in the Lemhi Range and the Centennial Mountains. The timber industry preferred no wilderness in the Targhee; Jerry Jayne of the Idaho Environmental Council said conservationists had proposed 600,000 acres. But Jayne said the draft supplement protects much of the 600,000 acres from logging by study or other status.

HOTLINE

Colorful, unbashful Al

Sen. Alan Simpson

Now that he's the second ranking Republican in the Senate, Wyoming Senator Alan Simpson isn't being bashful about his views on the national budget. The colorful Simpson is emerging as a leader in a Senate that is looking for bipartisan solutions to fiscal deficits. He is questioning the administration's reluctance to cut the military budget and vows to be part of Congress's campaign to force the Defense Department to slice programs. Veteran Simpson-watchers were surprised at the turn-around because the Republican senator has always been a staunch military supporter. Now, even the MX, slated for deployment in Wyoming, may lose his support, he told reporters.

Black bears get a better shake

Wyoming Travel Commission

Some recommendations from a task force on limiting black bear hunting in Colorado were accepted last month by the state Wildlife Commission. None involved a draw system for limiting licenses, but that has a good chance of adoption for the 1986 season, says task force chairman Reed Kelley of the Colorado Wildlife Federation (*HCN*, 12/24/84). What went through in time for this year's season are: limiting dogs in a pack to eight, enforcing the law requiring hunters to pack out edible bear meat, and requiring bear hunters to personally present a carcass for inspection.

A softer position

The Idaho Fish and Game Commission has backed off from its earlier decision to appeal any Forest Service entry into roadless areas recommended for wilderness. (*HCN*, 1/21/85). Instead of appealing, the Commission's new chairman, Fred Christensen, said last month he hoped problems could be resolved through public review, congressional action or Forest Service planning.

Can Denver learn to stop fouling its nest?

With a commuting range of 55 miles, part of the Denver-area's air pollution problem has been summed up this way: Too many people driving too far, too often, with too few people in a car.

Only Los Angeles beats Denver for the most cars per capita and the lowest vehicle occupancy. There is a regional bus system, but just 3 percent of the metropolitan area's 1.7 million people use it. In the sprawling Front Range, where three quarters of all car trips are not related to work, the car is still the most convenient transportation around.

Although it is still the quickest way to move in Denver, the car is *the* culprit when it comes to carbon monoxide pollution. Ninety-four percent of the colorless, odorless and poisonous gas in Denver's air is emitted by automobiles.

Faced with the legal requirement to significantly reduce carbon monoxide no later than January 1988, Denver experimented with voluntary self-restraint this winter in a program called the Better Air Campaign. For the two high pollution winter months, drivers were asked to leave their cars at home one day a week. On the nine high pollution days that occurred, residents were also urged to postpone any unnecessary trips.

The results were moderately encouraging, reports John Leary at the state air pollution control division. As much as a 3 percent reduction in vehicle miles travelled was achieved, although the goal was 5 percent. Next year the goal is 10 percent and 1987's target is a 15 percent drop.

Can the campaign do better in the next two years? Leary says a survey of 267 people during the campaign showed the effectiveness of the $700,000 media blitz, which promoted more trip planning and less dependence on the automobile (*HCN*, 11/12/84). He says 96 percent knew about the campaign, 82 percent were favorable, 72 percent could identify what day to leave their car at home -- depending on the last number of their license plate -- but only 17 percent understood the need to refrain from driving on a high pollution day.

"With the type of behavioral change asked," Leary says, "you can expect to get a gradual shift. If we keep at it, it will happen."

When drivers failed to respond on most of those high pollution days, carbon monoxide levels rose to 19 or 20 parts per million, the highest levels in the country. The legal limit established by the Environmental Protection Agency is nine parts per million.

What should make the carbon monoxide season of Nov. 15 to Jan. 15 easier in 1986, Leary says, is that people will start out with full awareness. "Ninety-eight percent of the people polled reported they were aware of the program by the end of it."

The Better Air Campaign will be fine tuned for next year, he says. But by then the 24 million miles drivers put in every day will be increased by some four million miles. In any case, no one assumes that the only solution to Denver's air pollution problem is driving less.

Unlike invisible carbon monoxide, the other area where Denver lacks legal attainment is the very visible particulates that make up the "brown cloud."

Half the cloud is created by industrial pollution, Leary says, with 20 percent of that coming from power plants. The remaining 50 percent is caused by diesels, fireplaces and cars. The particulates are trapped by the mountains that border Denver.

Denver

No strategy has been developed yet for dissipating the brown cloud, although both the mayor's office and State Health Department are urging EPA to develop stricter standards for diesel trucks and buses. Tony Massaro, an aide to Mayor Federico Pena, says other approaches could be tougher, including phasing out power plants and banning any new wood-burning stoves. "The brown cloud has cost Denver millions economically," Massaro says.

One obvious solution, but a touchy one both politically and financially, is better mass transit. Pena supports an aboveground light railroad system, but three major players in developing such a system are not enthusiastic.

One player is the Denver Regional Council of Governments, dubbed Doctor Cog, which is made up of 42 members from the Denver area's six counties and towns. It tends to represent suburbia more than Denver, which has only two votes.

Doctor Cog and the second player, the State Highway Department, both lean towards highways rather than railways.

The third player is the Regional Transportation District, established in 1969. After its first elected board took office a few months ago, RTD immediately called a moratorium on further planning for a rail system. Last month the RTD proposed 55 miles of new, dedicated highway lanes for buses to move commuters faster through traffic.

The question is whether more buses and bigger highways are the best mass-transit solution. Massaro says Mayor Pena supports building at least one light-rail corridor to downtown Denver. "Light rail could eliminate 10 tons of CO a day at a cost of $2,340 a day. An exclusive bus ramp cuts 0.3 tons of CO a day, but at a cost of $1,250," Massaro points out.

Five years ago, a billion dollar, 77-mile light rail system was voted down, in part because it would have been funded by a sales tax. Massaro says any new proposal would have to include more funding from the downtown businesses that would benefit most. No new proposal seems forthcoming.

Last month a new player may have emerged in the air pollution debate. A Political Action Committee called Colorado Concern, composed of 50 business leaders committed to contributing a total of $250,000, announced it would help elect representatives whose goals included combating Front Range air pollution. The PAC has not yet announced what strategies it supports.

Under the Clean Air Act, cities that failed to meet air standards by 1982 must do so by the end of 1987. Denver was one of 44 cities that failed to comply. What forced Denver-area and state government to work out the voluntary campaign for carbon monoxide was a lawsuit brought by the Colorado Wildlife Federation. The suit ended in a negotiated settlement which directed voluntary and, if necessary, mandatory action. Helping push the region toward compliance are emission devices installed on all new cars, and an annual maintenance check.

--Betsy Marston

BARBED WIRE

A circle is a lovely thing.

Colorado legislator Steve Durham asks: "Why have we waited so long to do anything about correcting" the dangers from five hazardous-waste sites? His answer: The sites "don't present a real present danger, because if they did it would have been our duty and the Department of Health's duty to do something about it" before this. Durham was EPA's regional administrator in Denver under Anne Burford.

Wouldn't he be better off putting his fingers in his ears?

Colorado state Senator Al Meiklejohn will vote for a bill to litigate against six industrial polluters. But he doesn't care for the idea of going after large corporations. He said, in fact, that he was going to "hold his nose and vote for it."

BULLETIN BOARD

UTAH ENERGY SAVERS

The Utah Energy Office has a new publication detailing six successful small-scale, low-cost energy projects around the state. The projects include a photovoltaic highway sign, a neighborhood solar project including residential retrofits, and a university recycling project. All received funding through the Department of Energy's Appropriate Technology Small Grants Program. "Effective Uses of Appropriate Technology in Utah" gives background information on each project, describes the technology involved and problems encountered, and makes recommendations for similar projects. Copies of the publication are free. Contact the Utah Energy Office, 355 West North Temple, 3 Triad, Suite 450, Salt Lake City, UT 84116 (538-5410 in Salt Lake City or 800/662-3633).

FOR AMATEUR GEOLOGISTS

Anyone interested in the planet Earth shouldn't miss the new *Field Manual for the Amateur Geologist*. Author Alan Cvancara, a geologist at the University of North Dakota, devotes a good portion of this book to a description and key to landform types. He introduces you to geologic time and processes, and to mineral, rock and fossil identification. There's how-to advice on collecting fossils and rocks, reading and making geologic maps, reading rock weathering from tombstones and prospecting for gold. A table lists major geologic attractions in the national parks, and appendices list geological museums, state geological surveys and sources for obtaining regional geologic maps. And once you've absorbed all this, there's a chapter on "how geologists think." The book *is* a field manual -- good for taking along as well as for reference. It's part of the PHalarope Book Series, which is designed for amateur naturalists and covers everything from hiking and bird watching to star gazing and plant identification.

Prentice-Hall, Inc., Englewood Cliffs, NJ 07632. Paper: $12.95. 257 pages. Illustrated with photos, diagrams and maps.

HARDER ON HUNTERS

The beginning of 1985 brought tougher hunting laws into effect in Colorado. The state has extended its mandatory 10-hour hunter education course for firearm hunters born after 1948 to archers and trappers. In addition, the system for revoking hunting licenses according to violation points has been slightly modified. Fines for illegal possession of wildlife have increased from $400 to $700 for elk; from $200 to $500 for deer, antelope, bear or mountain lion; from $50 to $200 for raptors excluding eagles; and from $50 for the first and $25 thereafter to $200 each for wild turkeys. Illegal sales or destruction of big game, endangered species or eagles, a class 5 felony, was formerly punishable by a prison sentence. A sentence can now be supplemented with or replaced by a fine of $1,000 to $20,000. Finally, "camouflage fluorescent orange" has been outlawed. Now "solid daylight fluorescent orange" material must be worn -- 500 square inches, above the waist, including a hat.

PLANETARY ANSWERS TO PLANETARY QUESTIONS

The good old days, when environmental problems were local, are gone. Raw sewage dumped into rivers, power plants spewing ash and surface strip mines scarring the earth are still local problems. But they are overwhelmed by global problems: acid falling out of the atmosphere, carbon dioxide and methane not falling out of the atmosphere, the possible spread of deserts and soil erosion decades after America supposedly solved that problem. These situations, which defy simple cause-and-effect analysis, could lead to an international scientific effort similar to the International Geophysical Year of 1957-1958. According to Peter Osterlund in the January 8, 1985 Christian Science Monitor, an international Geo-Biosphere Project is gaining support among the world's scientists and scientific agencies. Satellites, computers and international cooperation are expected to yield information and focus attention on the global questions.

WATER POLLUTION CONFERENCE

Pollution from multiple sources that are difficult to identify will be the topic of a national conference in Kansas City on May 19-22. Perspectives on Nonpoint Source Pollution will address the impacts, economics and solutions regarding this issue's relationship to clean water. The program includes a side trip to Konza Prairie, the last known stand of native tall grass prairie in the country. For more information contact the North American Lake Management Society, P.O. Box 217, Merrifield, VA 22116 (202/833-3382).

ON BEARS AND INTEGRITY

There's still time to catch two programs in the Teton Science School's 1985 Humanities and Environment Lecture Series entitled: "The Great Bear: A challenge to Human Integrity." U.S. Fish and Wildlife Service biologist Chris Servheen, a key member of the Interagency Grizzly Bear Study Team, will present a slide show and talk on grizzly natural history at 7:30 p.m. on March 15 at the Jackson Hole, Wyoming, High School Little Theater. On April 13, Forest Service biologist John Weaver, University of Colorado philosophy professor Dr. Holmes Ralston, and outfitter Barbara Eagen will lead a roundtable discussion on grizzly management and environmental ethics. Their forum begins at 2 p.m. at the Little Theater. Each presentation costs $1.50. For registration and information, call or write the Teton Science School, Box 68, Kelly, WY 83011 (307/733-7465).

JACKSON HOLE ALLIANCE

You can help the Jackson Hole Alliance for Responsible Planning by participating in the group's third annual Silent Art Auction. The Alliance, a non-profit land use planning organization, works for protection of Jackson Hole's natural resources and quality of life. The auction will be held Sunday, Feb. 24 from 5-7 p.m. at the Gallery of the West in Jackson, Wy. The artwork can be previewed all day on Feb. 23 and the afternoon of the 24th. For sale are more than 240 works, ranging from oils and watercolors to etchings, sculptures and photographs; all donated by nationally-recognized artists and regional and local talents. For information and/or a catalogue, call 307/733-9417, or write the Jackson Hole Alliance, Box 2728, Jackson, WY 83001.

WATER PROBLEMS EVERYWHERE

Judging by *Worldwatch Paper #62*, a Rocky Mountain resident has a front row seat on the water problems which plague the world: declining water tables, land that is salt-logged due to irrigation, irrigation projects that don't come close to paying their way, and polluted groundwater. There is plenty of water, Sandra Postel writes, but only on the average, and it is often polluted, wasted or in the wrong place. Some of the need is for better housekeeping, some for conservation. The new technology she sees as helpful is the recharging of groundwater. The 65-page booklet, titled "Water: Rethinking Management in an Age of Scarcity," is available for $4 from: Worldwatch Institute, 1776 Mass. Ave. NW, Washington, D.C. 20036.

COMMENT WANTED ON A MONTANA FOREST

Montana's Beaverhead National Forest is taking comments on its Proposed Forest Plan and Revised Draft Environmental Impact Statement. The documents outline management on the forest for the next 50 years and include land use allocations for the Beaverhead's 1.2 million acres of roadless country. Additionally, the fate of four Salmon National Forest roadless areas, totalling 200,000 acres and contiguous with the Beaverhead Forest, is considered in the plan. Comments should be sent by May 1 to the Forest Supervisor, Beaverhead National Forest, Box 1258, Dillon, MT 59725. The documents can be obtained by calling Susan Giannettino or Sherry Milburn at the Supervisor's Office (406/683-3900).

HUMAN ECOLOGY

The Human Ecologist is a quarterly publication dedicated to human illnesses resulting from habitat -- factors found in your air, water, or food. The fall, 1984 edition (No. 27) includes articles on wood smoke and the toxic fumes it creates in your home; commercial meat and the hormones, pesticides and antibiotics they contain; and the effects of dental materials on environmentally sensitive people. The classifieds offer such amenities as "ecologically safe housing" (all-electric, no carpets, water filter system....) and filters that will remove chlorine from your shower water. A subscription to the magazine comes with a membership in the Human Ecology Action League (HEAL). Membership is $15, or $10 for low-income persons. Write to HEAL Membership Dept., P.O. Box 1369, Evanston, IL 60204.

WILDLIFE TOXICITY HANDBOOK

The National Technical Information Service has released the first updated *Handbook of Toxicity of Pesticides to Wildlife* in more than a decade. Nearly 200 environmental pollutants and chemical compounds commonly used in pesticides were tested on two or more generally widely distributed species of wildlife, commonly a bird and another species. For consistency, the mallard duck was tested against almost all of the pesticides. The handbook lists both immediate and 30-day clinical signs of intoxications for each test. These lists can help in identifying contamination sources or potential contamination threats to wildlife.

National Technical Information Service, Order No. PB85-116267/KAP, 5285 Port Royal Rd., Springfield, VA 22161. $11.50.

RUN, RIVER, RUN

Ann Zwinger's 1975 book *Run, River, Run* has made a welcome return in a new paperback edition. Winner of the 1976 John Burroughs Memorial Medal for book of the year on natural history, it is an enjoyable account of the natural and cultural history of the Green River. Zwinger's travels on the Green River have resulted in a combination of naturalist exploration and a refreshing philosophic view of the natural world.

The University of Arizona Press, 1615 E. Speedway, Tucson, AZ 85719. Paperback: $10.95. 317 pages. Illustrated with maps and sketches.

37,500,000,000 TOOTHPICKS

Nearly five million cords of firewood are harvested yearly on U.S. national forests. A cord is a stack of wood four feet high, four feet wide and eight feet long. If you like analogies and comparisons, the Forest Service says one cord yields 7,500,000 toothpicks, 942 one-pound books, 4.4 million postage stamps, 460,000 personal checks, 1,200 copies of *National Geographic* or 12 dining room tables that each seat eight. And they say it takes 20 cords of wood to build an average 1,800 square-foot house. On Wyoming's Bridger-Teton National Forest, over 13,600 cords of firewood were cut last year, equal to a pile of wood 20 miles long, four feet high and four feet wide.

WILDERNESS FIELD STUDIES

The Sierra Institute of the University of California, Santa Cruz Extension, is offering a series of summer and winter programs in field ecology, natural history and wilderness issues in 1985. The programs offer up to 15 units of college credit and take place in the canyons of Utah, the Sierra Nevada, and Hawaii. For more information, call or write: Sierra Institute, Box H, Carriage House, UCSC, Santa Cruz, CA 95064 (408/429-2761).

HELP MONTANA'S WILDLIFE

Montanans with state tax refunds can help support the state's 500 nongame wildlife species. The Department of Fish, Wildlife and Parks is asking citizens to check off $2, $5, or $10 on line 61 of their state tax form to help preserve habitat for species such as mountain bluebirds and hoary marmots. Those not receiving refunds can still contribute by sending donations to the Montana Department of Fish, Wildlife and Parks, 1420 East Sixth Avenue, Helena, MT 59620. Questions can be directed to the Department's nongame spokesman Patrick J. Browne at 1125 Lake Elmo Drive, Billings, MT 59105 (406/252-4654).

WILDLIFE FILM FESTIVAL

Wildlife in film and photos will be featured at the University of Montana during the first week of April. The university's student chapter of the Wildlife Society is sponsoring the International Wildlife Film Festival, a showcase for the best professional and amateur wildlife films released in 1984. A wildlife photo contest for amateurs will be held in conjunction with the festival. Professional photographers and artists will judge the photos, and prizes will be awarded. The deadline for your photo entries is March 25. For information about the festival or photo contest entry blanks, write to IWFF, Wildlife Biology Program, University of Montana, Missoula, MT 59812.

EXPLORING THE COLORADO

Frederick Dellenbaugh's *A Canyon Voyage, The Narrative of the Second Powell Expedition*, originally published in 1908, is now available in paperback. Powell's historic first trip down the Colorado River -- from Green River, Wyoming to the mouth of the Virgin River below the Grand Canyon -- lasted three months. It was during his second trip from May, 1871 to late 1872 that there was time for accurate surveying and construction of topographic maps, geologic study, photography and drawing. Dallenbaugh was 17 years old when the trip began; he served as artist and, later, assistant surveyor as well. It was almost 40 years later when he transformed his field notes into this book, which *The Nation* magazine aptly called an "unadorned yet vivid" narrative account.

The University of Arizona Press, 1615 East Speedway, Tucson, AZ 85719. Paper: $9.95. 277 pages.

RIVER REFLECTIONS

River Reflections is a new book of essays, historical accounts and excerpts from novels focusing on the subject of rivers. Editor Vern Huser has included writers ranging from William Faulkner and Mark Twain to Ann Zwinger, Edward Hoagland and Edward Abbey. Unfortunately there are several selections from lesser writers that seem more at home in "Boys Life" or a "True Story" adventure column.

The Eastwoods Press, 429 East Boulevard, Charlotte, NC 28203. Hardcover: $14.95. 272 pages. Line drawings.

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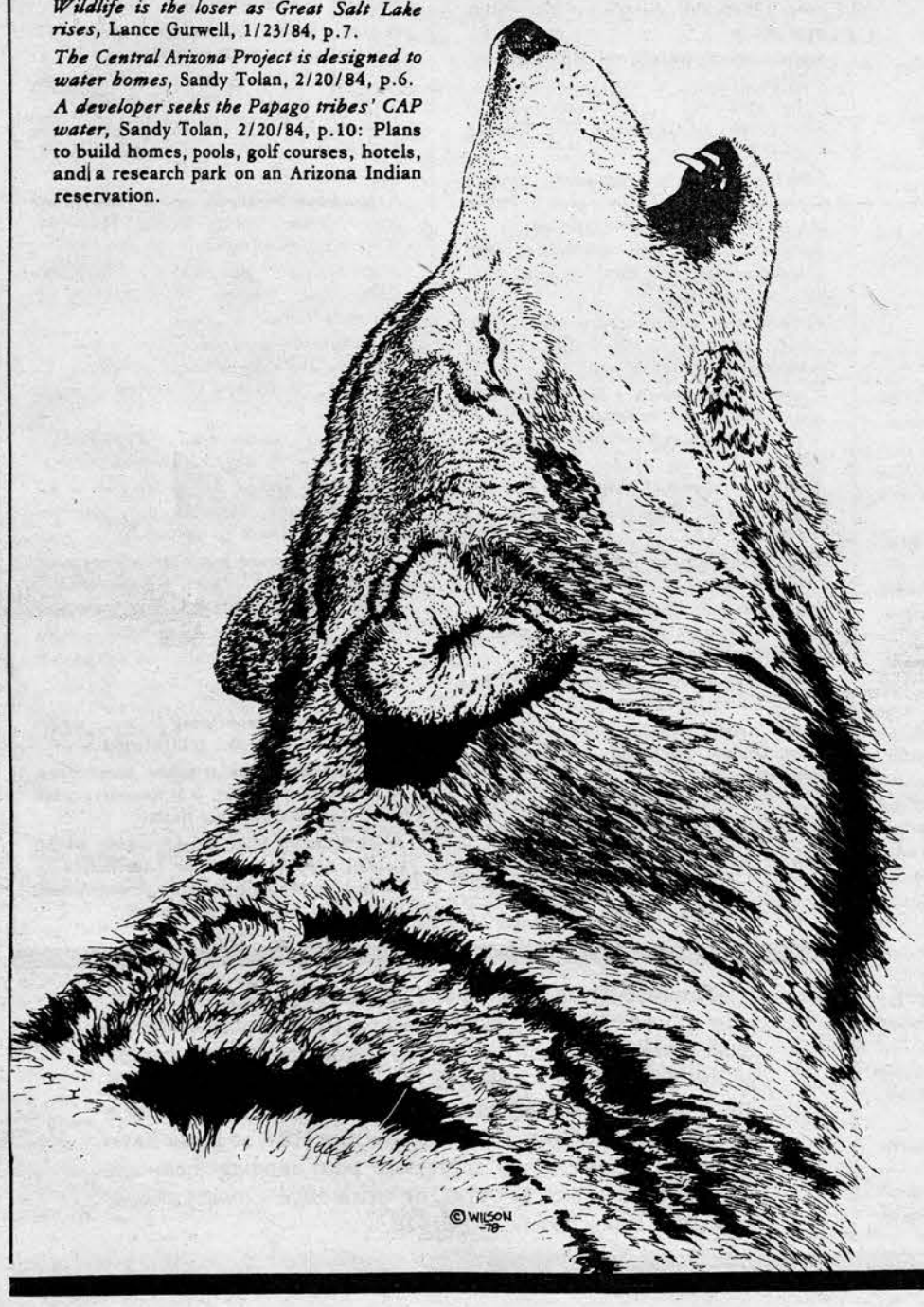

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Boom...

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given the sparsely-populated area where intensive development will take place. The two Sublette County towns of Big Piney and Marbleton are located nearest to the Riley Ridge wellfield which will feed the processing plant. Drilling to develop the wellfield alone will require over 1,200 workers, nearly equal to the 1980 population of the two communities.

The two towns, once tiny hamlets supported by cattle ranches that dot the Upper Green River Valley, have seen at least two oil-related booms before, but nothing of the size the Exxon development will bring.

"You're goddammed right it scares me," says Big Piney Mayor Dick Holgate. But so far he says he's been impressed with the effort made by Exxon to plan for and to help offset the coming impacts. Although the state siting laws now cover the processing plants, the wellfield activity remains outside the jurisdiction of the Industrial Siting Council. But Kettlekamp says the company has committed itself to mitigate any problems developing out of the drilling activities even though it is not required to do so.

Not long ago, Exxon was calling its project marginal, a victim of the natural gas glut. Three other companies which also had planned sizable processing plants also put their projects on hold. It appeared that the entire Riley Ridge development, which would ultimately involve the drilling of about 240 wells and the construction of four processing plants, was on ice.

The delays were confirmed at a community meeting in May, 1983, when company representatives broke the bad news to a group of disappointed Kemmerer residents anxious to share in the mineral wealth that their neighbors in Rock Springs and Evanston seemed to be enjoying.

Then things began to change. Exxon first hinted that, well, maybe, the project might develop after all, but the decision hinged on selling the carbon dioxide. The company pressed forward, filing for permits with the Industrial Siting Council. By early 1984, still with no commitment to proceed, it had its siting permits in hand. The peak workforce would be about 2,200, Exxon officials said. Finally, work began at the Shute Creek site in the summer of 1984, after the company secured its air quality permit.

No sooner had dirt been turned than rumors began that the project was going to get bigger, much bigger than anyone had expected. The demand for CO_2 had skyrocketed, and for the Exxon project, it seemed like the sky might be the limit.

By last fall, the company had confirmed the rumors. The project would double in size, requiring another 1,000 workers for the second phase of development. And company officials revealed they had underestimated the peak workforce for the first phase. Figure on another 1,500 workers, they said.

That put the numbers at just over 3,700 for phase one, and 4,700 with phase two. A month later, another 300 were added. That meant the peak for phase one was now nearly double what had been outlined to the Siting Council one year ago. It also meant that the company had to amend its siting permit to adjust to the new workforce.

The new numbers were "a little bit surprising," says Siting Administration Director Richard Moore from Cheyenne. It was "a little perturbing for them to be that far off."

The reason for the miscalculation, Kettlekamp says, was that Exxon was on a "fast track" schedule at Shute Creek. Ground was broken there when only about 10 percent of the engineering drawings were completed, leaving the company with little information on which to base predictions, he says. Would the same apply to the second phase? "It could," Kettlekamp replies.

Housing for the expected influx of construction workers is the difficult problem. When the boom came to Rock Springs, some workers had to live in tents. The development by the oil and gas companies in the Evanston area was largely accommodated by construction "man camps," but people attracted to the area by the prospect of jobs often ended up parking campers wherever they could. The squatters became a serious problem because they usually established themselves near springs and streams, driving off wildlife, polluting streams, and the like.

In the early stages of work at Shute Creek, Exxon, responding to communities that wanted to see vacant mobile homes and apartments occupied, adopted a policy aimed at encouraging residence in nearby Kemmerer, Green River, and Rock Springs. The company provides free bus transportation to the work site and charges workers who opt to live in a construction camp established there. This combination has encouraged most of the roughly 900 workers now employed at Shute Creek to stay in the communities.

A large share of the initial employees were already living in the area, having lost jobs due to layoffs in the mining industry and cutbacks on the oil and gas rigs. But as the work accelerates this spring, and more specialized craftsmen are required, the influx of out-of-state laborers will increase. Kettlekamp says the work camps at both the plant site and near the wellfield are designed for quick expansion and should be able to accommodate the workers.

Already, rental units are scarce in Kemmerer, the Lincoln County city of about 4,000. But Exxon is predicting a shift towards Rock Springs and Green River, where many vacant apartments still remain.

For Kemmerer, the crowded conditions are a welcome sign of growth. The community, almost a miniature version of Rock Springs with a multi-national mix and its roots also in coal, has tried hard to attract industry. Several years ago, at a time when everyone else in Wyoming was worried about "impact," Kemmerer town fathers stood out, beating the brush in search of industry. The mayor of the city at the time, ironically, packed his bags and left the community just as the Exxon project started to materialize.

Meanwhile, as work intensifies and expands at Shute Creek, other major projects are also on tap in southwest Wyoming. At Rock Springs, Chevron is investing $250 million in its fertilizer plant, which will employ a peak work force of 1,000 this summer. In Uinta County, another Chevron division will be building the $92 million Painter Reservoir Unit gas processing plant; a peak of about 450 workers is expected at the project, located near Evanston. Also in Sweetwater County, work will be continuing on the staged $312 million installation of sulfur dioxide scrubbers at the Bridger power plant. All told, as many as 14,000 people could be moving into southwest Wyoming over the next 18 months, Moore estimates.

In the face of all of this development, there is the hope that it can be accommodated, especially now that the siting law covers most of the projects. Even Kettlekamp, while stopping short of giving the siting concept a ringing endorsement, is supportive of what it has done so far. "The process requires a great deal of commitment by the companies, communities and state agencies," he says. But Kettlekamp adds, "Whether it's good policy for that kind of process to be in place, and for that kind of extreme commitment and dedication and hard work, is another question."

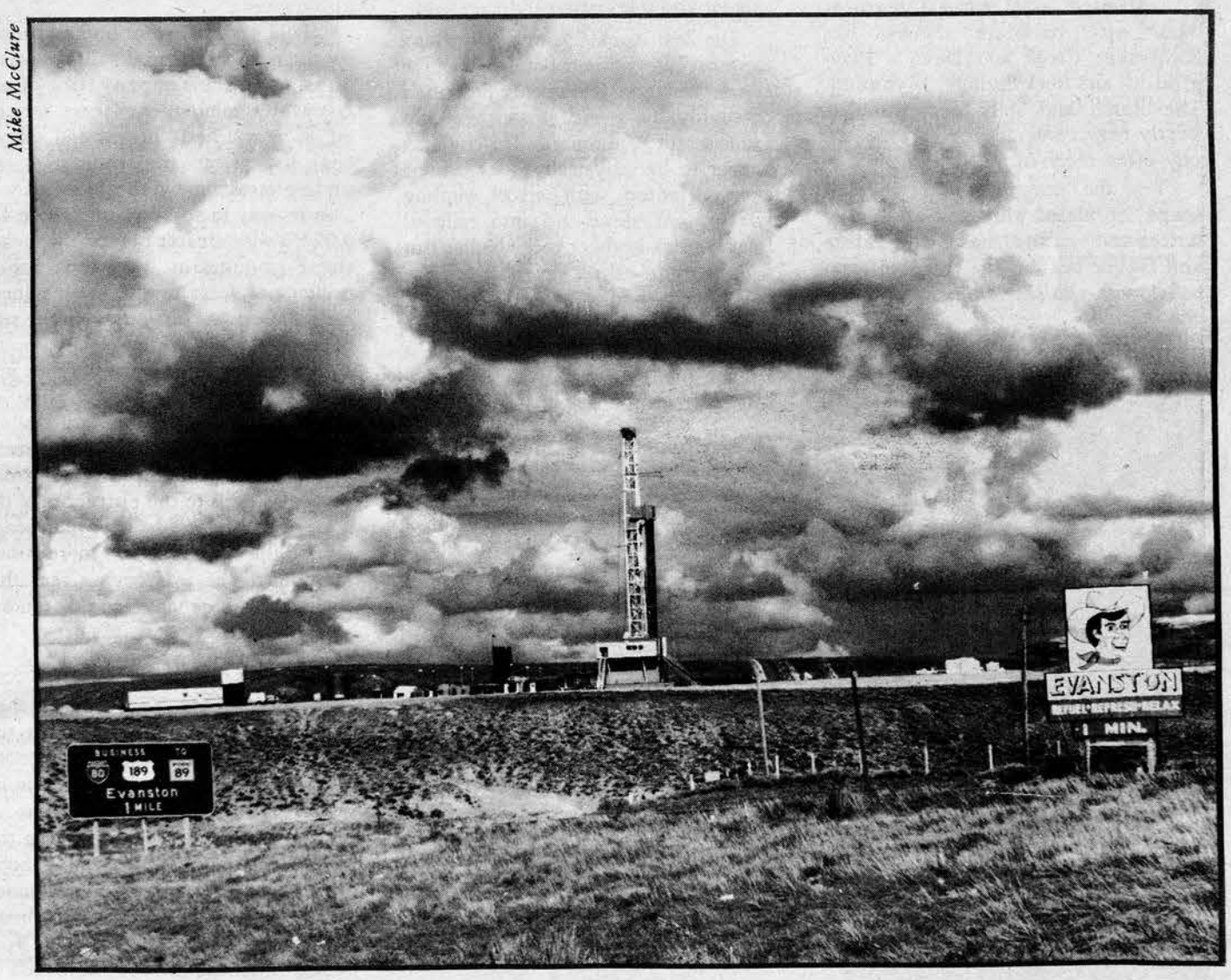
That an effort will be made to offset the negative effects of growth is comforting to local officials like Holgate. But he says he worries about those not under Exxon's control -- the people who will come in search of jobs.

"Them's the people we're going to have a problem with," he predicts. "They're the people who will be in town looking for something to do and probably don't have enough money to get out of town. It wouldn't take more than eight or 10 guys to take over one of these bars in town."

And there will be other impacts associated with the project besides housing, crime and what are now called "socio-economic impacts." The drilling will put pressure on diminishing elk habitat in the Upper Green River Valley. Most unsettling is the possibility that the processing plant, once it goes on line, will contribute to acid rain in the highly sensitive lakes of the Wind River Mountains. Exxon experts say it won't, but environmental groups which opposed the company's air quality permit at recent hearings see the danger as very real. (*HCN*, 11/26; 12/24/84)

This summer may help provide the answers to the questions. If Exxon is right, the big bulge, the major impact on the area, will diminish after the peak is reached by this fall. Then the numbers will decline, reaching the permanent plant workforce totals of around 500 persons needed to operate the Shute Creek plant over the next 50 years.

If the journalists from national publications start showing up in droves this summer and fall, it may be an indication of one of two things: the process has worked, and they are here to spread the word of how it works. Or it has broken down, in which case the failings, like those bad nightmares in Rock Springs and Evanston, will again be dissected and dramatized.



Mike McClure

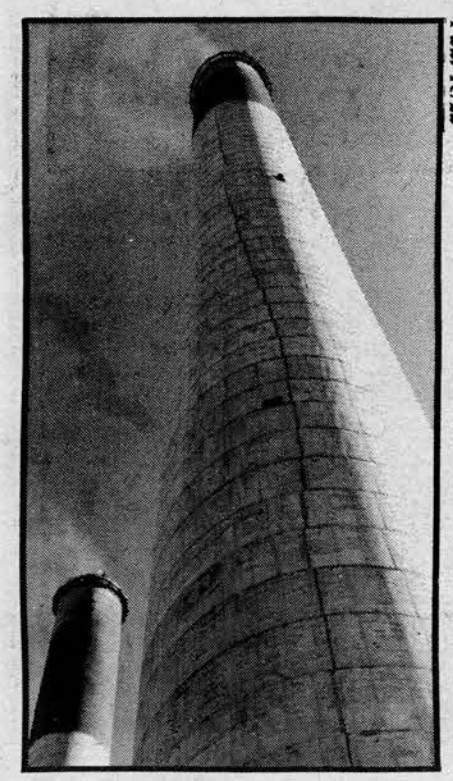
Mike McClure

Rock Springs has travelled the boom-bust road before

by Paul Krza

On the western edge of the Red Desert amid natural features with hard-core names like Killpecker Creek and Devil's Playground, sits Rock Springs, Wyoming. The harsh and stark geography is partly responsible for the bad rap the city often receives.

Yet the seemingly barren landscape, sprinkled with sand and sage, buttes and badlands, has a captivating and fragile beauty. The city's colorful past, with characters such as Butch Cassidy and events like the 1885 Chinese "massacre," also provides a Wild West setting our Eastern cousins long for and television producers seek.



Paul Krza

Stacks at the Jim Bridger Power Plant

The real Rock Springs is perhaps the most interesting, politically active city in the state. It was once described charitably by a visitor as the "San Francisco of Wyoming." The city may appear to be physically disorganized and disoriented, with narrow, winding streets that dead-end into railroad tracks, creek beds or rocky bluffs. But with its multi-ethnic diversity and the more recent boom-induced infusion of new human energies, the class structure has fractured, resulting in a strange blend of permissiveness and conservatism.

Still, the existence of Rock Springs is dependent upon economic waves, tied largely to the presence (or in the case of busts, the absence) of large corporations. Other Western cities facing the same fate might reflect on the industrial evolution in Sweetwater County. Indeed, the events now unfolding at Riley Ridge have curious parallels to what happened only 10 years ago when an unsuspecting Rock Springs was overwhelmed by the construction of the Jim Bridger Power Plant.

Boom and bust may be a new experience for some Rocky Mountain communities, but for Rock Springs a ride on the economic roller coaster is nothing new. From its beginnings in 1868, Rock Springs has always been an industrial town. The city in fact was created by the Union Pacific Railroad, which routed its rails through the otherwise inhospitable Bitter Creek Valley to capitalize on easily accessible coal deposits needed to fuel locomotives.

Having a convenient energy source for the transcontinental railroad was a blessing for the company, one of the company's mining engineers reflected, as he watched "bright and shiny" coal appear at the mouth of an underground mine in the 1920s. It was "on its way to serve the purpose for which a wise creator placed it beneath these mountains millions upon millions of years ago," the engineer mused. God was obviously on the side of the U.P.

Rock Springs grew by lurches and bounds, with few thoughts of permanence. The result, still visible, was an odd mixture of add-on houses built on the winding streets which served as trails to the entrances of the mines that dotted the landscape around the city. Another, more subtle by-product was a lingering fear that the riches of today could quickly vanish tomorrow.

Those fears were more than justified in the 1950s, when the area was plunged into the most prolonged depression in its history. The U.P., after months of denying any mass layoffs were in the works, delivered an economic body blow to the area: it closed its mines after deciding to convert railroad locomotives from coal to diesel. Just before Christmas in 1953, hundreds of miners learned from notices tacked on U.P. company store bulletin boards that their jobs had disappeared. The industrial axe had fallen, and many simply packed up and left. Rock Springs became, as one writer observed, "a Western outpost of Appalachia."

Whole towns, company towns, literally disappeared from the map. The U.P. ripped up its tracks snaking through Horsethief Canyon to Superior, leaving in its wake a decaying ghost town which was once a bustling community of 5,000. The company camps of Dines, Winton and Stansbury ceased to exist, their once "permanent" homes torn from foundations and trucked away. Federal "surplus commodities" were shipped to families of the unemployed miners to supplement what one official had found to be "starvation diets."

Less than 20 years later, the fortunes of Rock Springs shifted again, reversing dramatically the sharp decline. After stagnation and decay, the heady boom days were back, this time at a rate few would understand until later.

The area's economic turning point was Bridger, a billion-dollar, 2,000 megawatt steam-electric giant plunked down in the Red Desert. The builders, Pacific Power and Light Company and Idaho Power Company, told local officials to expect about 1,000 workers at the peak of construction activities.

But as construction timetables slipped, and as productivity dropped and worker turnover and absenteeism accelerated, the company simply added more bodies. By the mid-1970s,

the workforce at Bridger had climbed to 3,000. To make matters worse, expansion was also underway in the soda ash industry along with intensive oil and gas drilling sparked by the Mideast oil embargo.

Rock Springs underwent a belated, and nearly overnight, transformation into modern culture, which had largely bypassed the area during the slack decades of the 1950s and 1960s. Some aspects of the change were welcomed. Locals liked not having to drive 200 miles to Salt Lake City to eat a pizza at Shakey's or shop at the K-Mart.

But there was a darker side to the change. Teams of prostitutes walked the streets looking to pick up the heavy-duty construction worker types who staggered from bar to bar. Big-city traffic jams were commonplace, as were long waits at restaurants. Crowded schools became places for children not only to learn, but to shower, because their parents lacked access to basic services. "The livability of the area has suffered," a PP&L official told residents at a community gathering in 1974, with masterful understatement.

The rags-to-riches metamorphosis of Rock Springs and Sweetwater County in the 1970s was simply history repeating itself, although this time with a variation on the economic theme. In the early days, there was only one industrial guy on the block: the U.P. But the accompanying boom in trona production brought in a host of multinationals.

The switch from synthetic to natural soda ash refined from the trona prompted Tenneco, Allied and Texasgulf to join FMC Corporation and Stauffer Chemical Company and locate operations in western Sweetwater County. The white mineral, actually a pure form of sodium carbonate, is used primarily in the manufacture of glass. Now, over 90 percent of the nation's soda ash comes from the mines in the county.

With the new industrial diversity, it might be expected that a level of disarray would have resulted. The opposite occurred. Industry, despite its differences, got its act together in Sweetwater County. And local government almost got into bed with the magnates.

In 1974, the companies formed the Southwest Wyoming Industrial Association "to act as a vehicle for industry to interface with local government relative to impact problem areas," and "to provide a means for industry to discuss and address areas of mutual concern," the organization charter indicated. One year later, SWIA got several feet in the government door when a "priority board" was formed, later becoming the local Association of Governments. Four slots on the supposedly governmental board were reserved for industry, prompting the city attorney in Rock Springs to call the arrangement "plain illegal." A bit of shuffling resulted. The association's by-laws were changed to eliminate the industrial slots, but the county commissioners simply reappointed several industry managers as part of their delegation.

More recently, SWIA has been showing signs of taking on a higher profile, activist role. Last summer, the industrial organization went public, suggesting that perhaps money was being wasted on some human services. Although none of the services were cut, the point was made. SWIA officials were quick to say that the suggestion wasn't meant to be "intimidating." But as then-county commission chairman Fred Radosevich noted, "it gives you a funny feeling," since industry, responsible for most of the county's $1 billion tax base, pays about 90 percent of local taxes. The old company town approach of running things may have disappeared, but a new company town of subtle influence and leverage had arrived to take its place.

The U.P., meanwhile, has not been idle, although the corporation may be a bit harder for the casual observer to spot. A reorganization shuffle in 1971 created some specialized offspring: Champlain Oil, Rocky Mountain Energy, Upland Industries and the Union Pacific Railroad. The shuffling allowed the company to claim, at least when it came to leasing federal coal, that it is really not just a railroad anymore. The distinction is important because under the Mineral Lands Leasing Act of 1920 railroads are forbidden to hold federal coal leases except for locomotive fuel. That put the U.P. in a tight spot, since its "checkerboard" land ownership makes coal mining not as attractive and often impossible without the federal sections, except in less profitable joint ventures with other companies.

In 1976, Rocky Mountain Energy became the first railroad subsidiary to net a federal coal lease. The company argued successfully that because of its reorganization, it was merely a subsidiary of a multi-faceted corporation, not a railroad. The result was the huge Black Butte strip mine east of Rock Springs, where thousands of acres of arid, semi-desert land is being turned upside down to recover five million tons of coal annually.

When the U.P. and its partner in the strip mine, Peter Kiewit Sons, dedicated the operation in 1979, a special train was chartered to bring an array of financial heavyweights from New York City, including banker Lawrence Rockefeller, to the sagebrush hills near Point of Rocks in central Sweetwater County.

"It's a little dirty, but it's beautiful," U.P. corporate board chairman James Evans told an onlooker at the dedication. The coal from Black Butte was initially destined for a power plant in Idaho, but after plans for the facility were abandoned, shipments were diverted to the Midwest.

Other coal mines, including some of the same underground operations closed during the 1950s, are on U.P.'s drawing boards for future production. And besides the old reliable, coal, U.P. also gets a cut of the trona, oil and gas action in southwest Wyoming because of its land grant ownership. The company has access to a variety of other minerals on the lands, like clinoptilolite, a highly-absorbent material with possible coal scrubber applications. It will be mined experimentally this spring near Rock Springs.

Diversification of the Sweetwater County economic base currently is generating a lot of discussion, especially in the wake of layoffs in the mining and soda ash industries that first cooled -- and then killed -- the Bridger boom beginning in 1982.

One soda ash company, Allied Chemical, has laid off more than 1,000 workers since 1981, leaving 745 still employed. Allied says it has been hit hard by declining demand for glass and competition from the East, where trona is made synthetically. Although synthetic trona is more expensive, Allied says its cost has decreased because freight is cheaper.

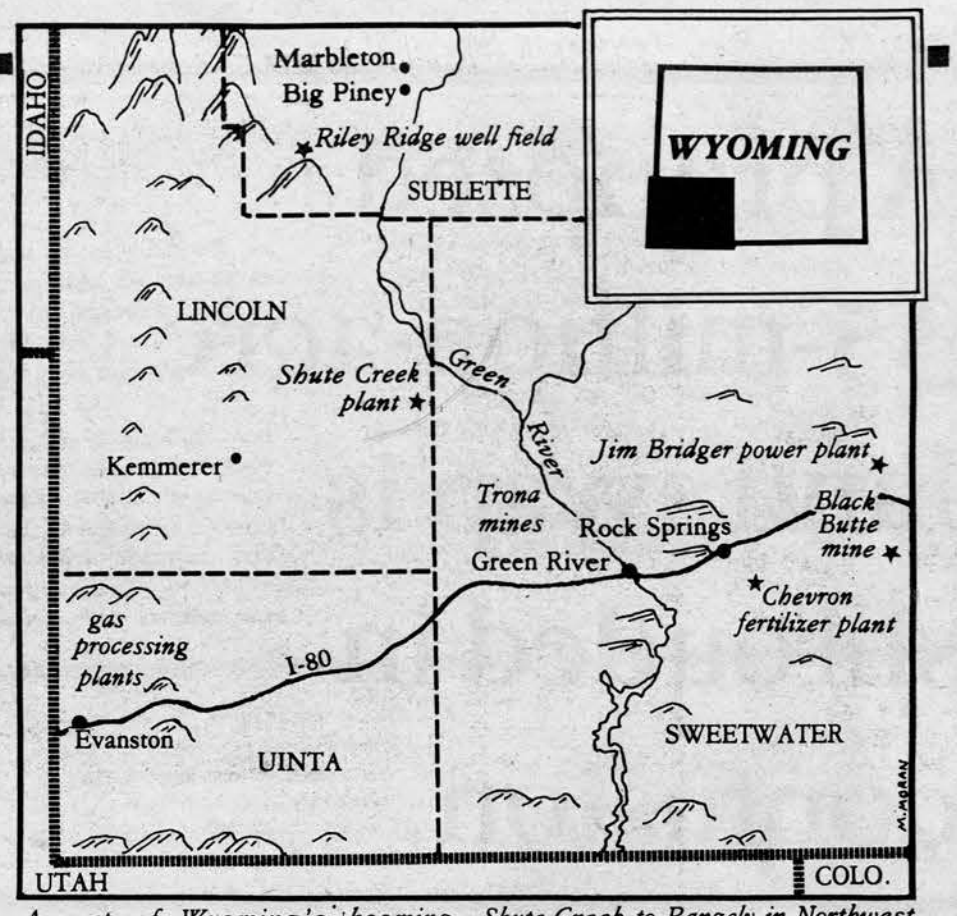
Chevron's fertilizer plant, now under construction on the outskirts of Rock Springs, was at first touted as diversification, even though it will depend upon a byproduct of the energy industry. The plant will combine sulfur from Chevron's gas processing plant in Uinta County with phosphate slurried in 100 miles from near Vernal, Utah. The phosphate will share a corridor, not so coincidentally, with Exxon's carbon dioxide pipeline from Shute Creek to Rangely, Colorado.

The fertilizer facility may not be true diversification, but it does seem to make locals feel a bit better that the economy is not based only on coal and trona. Meanwhile, even as the latest boom at Riley Ridge is just beginning to gather steam, a Chicago-based consultant has been hired to locate other kinds of businesses that officials hope will help level the peaks and valleys of the historical boom and bust economy.

Still, it is big industry that drives the Sweetwater County economy, and increasingly, the economies of Lincoln and Uinta Counties. This time, with the siting laws amended to include gas processing plants, the communities will have at least a buffer between themselves and the industrial giants. But that layer of protection could be in trouble. As unemployment has risen in the state, some are saying that the siting laws might just be making it too tough for industry to locate in Wyoming.

□

Paul Krza is a Rock Springs, Wyoming native who writes for the Casper *Star-Tribune*. His stories were made possible by the High Country News Research Fund.



A map of Wyoming's "booming Southwest. Missing is the pipeline which will carry the sour gas from Riley Ridge to the Shute Creek plant, the pipeline which will carry CO2 from Shute Creek to Rangely in Northwest Colorado, and possibly another CO2 pipeline to Amoco's Bairoil field in south-central Wyoming.

Rock Springs is a real town

Paul Krza is a rarity in southwest Wyoming: a journalist for a major publication (the state-wide Casper *Star-Tribune*) who is also a native of the region, descended on one side from a coal miner and on the other from a blacksmith. Both sides migrated here from Slovania, in northern Yugoslavia.

Krza understands that most outsiders, not just the reporters who descend on the town during booms, see Rock Springs as an undesirable place to live: it is surrounded by desert, its neighborhoods are mixes of homes and industry, and it lacks a right-side-of-the-tracks section dominated by large homes and expansive lawns.

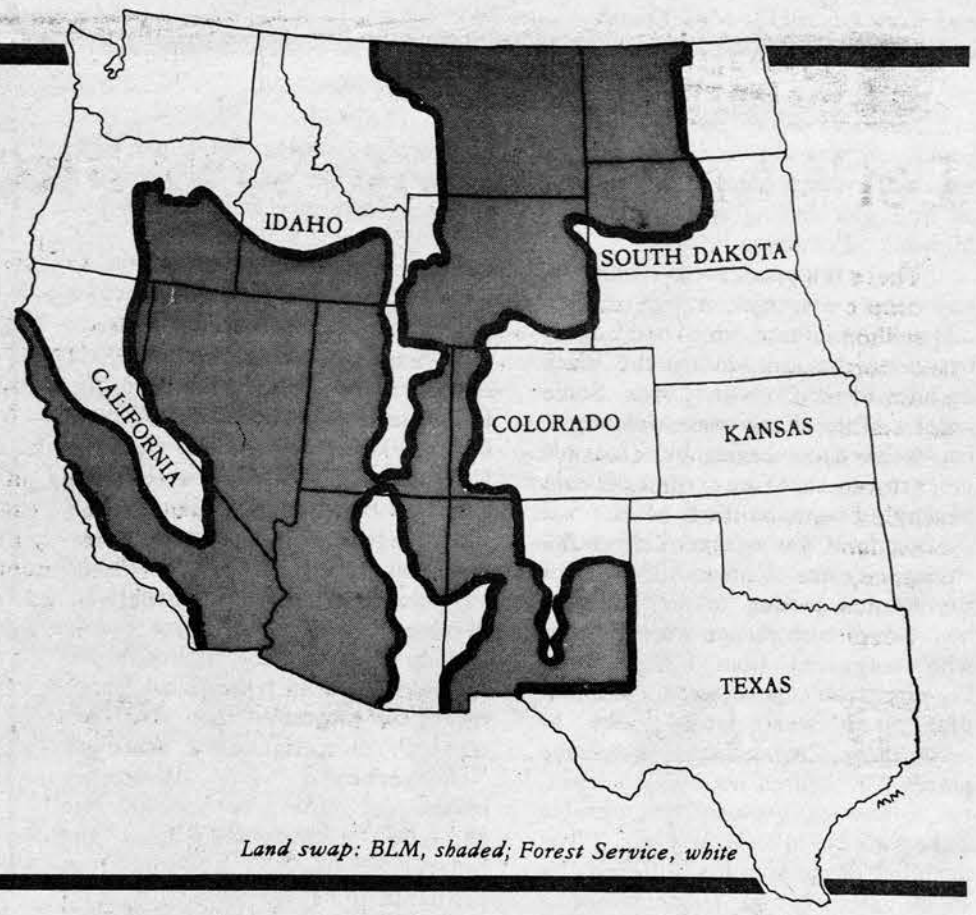
In Krza's view, that's all to the good. The desert, he says, is initially unattractive, but grows on those who try to appreciate it. "The desert requires a longer term perspective. It provides a different kind of solitude than that found in wooded areas."

And if you're looking for real community, Krza says Rock Springs has strong appeal. "You don't have the elitist class structure you find in a place like Jackson. And that's a real benefit. Nor do you have a 'nice part of town.' Every neighborhood has its own industrial site."

The lack of right and wrong parts of town plus the many ethnic groups "make it a friendly place to live. Boom and bust brought those ethnic groups here. It's nice it worked out that way." Unfortunately, continues Krza, the unstable forces which built the diverse community remain at work today. "We still have to ride the economic roller coaster."

Paul Krza

A proposed 35-million-acre land swap is shrouded in confusion



Land swap: BLM, shaded; Forest Service, white

by Ed Marston

A BLM land manager scheduled to add several hundred thousand acres of forest to his existing domain doesn't know whether to work like mad to prepare for a possible June takeover, or to sit back and assume the Reagan administration's swap proposal will blow away, like its proposal to sell off public lands.

On the other side of the swap, hundreds of Forest Service employees who until now believed they would spend their working lives in an elite agency, wonder if they'll be forced to follow their land into the younger, less prestigious Bureau of Land Management.

BLM employees are looking at the situation from the other side. Accustomed to a more flexible, less tradition- and regulation-bound agency, they wonder how they will fare in the Forest Service. Given their BLM backgrounds, what chance will they have to move up in that family-like, forester-dominated agency?

Perhaps the most ironic aspect of the proposed swap is on display in Gunnison, Co. There, a BLM office staffed by employees who had just moved to town, opened a few days after the swap was announced. Part of the announcement was that their new office was on the Forest Service side of the north-south line dividing the two domains in Colorado.

Officially, the front-line Forest Service and BLM people will toe the line, showing as much loyalty to the proposed 35-million-acre swap as Forest Service Chief Max Peterson and BLM head Bob Burford are showing. The pair has been selling the idea in Washington with apparent enthusiasm.

But privately, on-the-ground officials may be rooting for the opponents of the swap: environmentalists who immediately jumped on the proposals, and the members of Congress who have already called for hearings or dispensed with the need for hearings and declared outright opposition.

An indication of possible in-the-ranks feeling came from retired Colorado Forest Supervisor Jimmy Wilkins, who told the Grand Junction *Daily Sentinel,* "I can't understand why they come out all at once and draw a line from Craig to Durango. This is asinine. More thought needs to go into it."

BLM and Forest Service officials in the field can be formidable opponents. Peterson and Burford may be at the top of the pyramid in Washington. But area managers, district rangers, and timber and range specialists are out at the base of the pyramid, in touch with county commissioners, cattlemen, small timber operators, and guides and outfitters.

In coffee shop conversations, they can stress the positive aspects of the swap -- the up to 1200 jobs to be eliminated, the one-stop shopping for permitees, the $25 to $35 million a year to be saved, the separating of intertwined parcels of land, and the elimination of millions of miles of extra travel by land managers driving across one agency's domain to look at their own domain.

Or they can point out the flaw: the administrative confusion the swap will cause; the down-from-above way the lines were drawn; the difficulty the BLM -- which has lost wildlife and similar experts -- will have in taking over the national forests. The bureaucrats may also point out to the Western public that the administration, while promising better service, has proposed very large budget cuts for both the Forest Service and the BLM for the coming fiscal year.

By all accounts, the proposal to swap the 35-million acres of land in 11 Western states, plus mineral rights on millions of additional acres, took the agencies and the public unawares. It shouldn't have. Having two agencies managing adjacent blocks of land under different laws and regulations, and often interacting the way foreign nations do, makes little sense.

That lack of sense was noted by former President Jimmy Carter. In May 1980, his last year in office, Carter ordered the two agencies to study a land exchange. An interagency task force was set up and the two agencies began studying exchanges of land in the 11 states. But the barely begun process was jolted in 1981, when the Reagan administration proposed the sale of millions of acres of public land under the Asset Management Program, pulling personnel out of the land swap study and making them wonder if land should be traded or sold.

The question became moot in January 1983, when Peterson and Burford agreed that their agencies had reached an impasse and abandoned talks.

A report released on Dec. 27, 1984, by the Government Accounting Office detailed the failings of the swap program. Titled, "Program to Transfer Land Between the BLM and the Forest Service Has Stalled," the report looked at how well the Jurisdiction Transfer Program had progressed in five states: California, Idaho, Oregon, Utah and Wyoming.

The GAO found that only Wyoming had done a good job. In addition to a lack of commitment and uneven work within the agencies, it found that the BLM and Forest Service were very wide apart on what kinds of savings were possible. The BLM believed yearly savings of about $30 million were possible; the Forest Service thought savings would be much lower.

Despite the lack of agreement on the ground, a month after the GAO report was released the Reagan administration proposed to swap jurisdictions over 35 million acres of land. It also sent out to the field maps which showed precise new boundaries, subject only to "minor" modifications based on suggestions from the field.

Most national forests and BLM districts would remain untouched by the change, but some will be drastically changed. Nationally, 19 million acres of BLM land will go the the Forest Service, and 15 million acres of Forest Service land will go to the BLM.

In Nevada, two entire national forests are to be managed by BLM personnel. In Idaho, 4.1 million acres of land will be swapped, and 300 employees will either have to move or change agencies. Two BLM districts with 92 employees and five ranger districts are in the path of the swap.

In Colorado, 4.5 million acres will be swapped, with the Forest Service gaining almost 2 million acres. The BLM will hold onto and gain land only in the far western part of the state. But that includes part of the Grand Mesa National Forest and the Uncompahgre National Forest. On the Grand Mesa, which is used heavily in winter and summer for recreation, the line is drawn down State Highway 65, meaning that the two agencies will be managing facilities side by side.

A spokesman for the BLM said that kind of division seems to create the duplicate administration the land swap is supposed to eliminate. A Forest Service official said he was disappointed that lines seemed to follow roads rather than drainages and other natural features. Perhaps in the interests of keeping the program secret until the last minute, consultation on boundaries was reportedly limited to telephone conference calls between the boundary drawers and the field in the few days before the official announcement.

In Montana, a rough northwest to southeast Maginot Line is drawn between the two agencies, with the BLM gaining the Highwood and Snowy Mountains in central Montana and the eastern portions of Custer National Forest. The Forest Service would gain BLM land in southwestern Montana and along the eastern slope of the Rockies. The net effect would be a gain of 700,000 acres for the Forest Service.

Wyoming, which the GAO said had done the best job of preparing for a swap, seemed the least pleased. Big Horn National Forest Supervisor Ed Schultz, slated to lose his entire forest in north central Wyoming, told the Casper *Star-Tribune* his employees were "Somewhat shell-shocked." He said many will transfer to other forests rather than work for the BLM.

"Forest Service people are a very professional, dedicated bunch of people with a tradition of long-term service. I think the attitude of the people is that they will want to continue to work for the Forest Service."

All together in Wyoming, the BLM will gain 1.5 million acres of national forest land, including the Big Horn, Thunder Basin National Grassland in northeast Wyoming, and the Medicine Bow National Forest's Laramie Peak District.

A significant part of the exchange is the proposed elimination of dual management of national forest land. At present, the Forest Service manages only the surface of its property. The BLM is responsible for the leasing of oil, gas, coal, geothermal and other resources. Joint management requires a great deal of consultation and interaction. A Forest Service offical wanting an oil company to fence a drill site or to regrade a road must work through the BLM, requiring multiple trips to a site, as well as multiple record keeping.

Under the proposal, the Forest Service is to manage its own minerals, perhaps starting in June. However, that agency lacks expertise in such management. The solution, as with other administrative problems posed by the change, may be to have one agency's officials move over to the other agency.

While Forest Service people in Wyoming may not be enthusiastic about such shifts, the minerals management employees in the BLM should be able to make the move without batting an eye. For some, it will be their fourth reorganization in the past five years. In a series of reorganizations under former Interior Secretary James Watt, they went from the U.S. Geologic Survey to the new

[*Continued on page 16*]

OPINION

Let's turn this sow's ear into silk

There is a great, almost irresistible temptation to jump on the Reagan administration's proposed 35-million-acre land swap with hobnailed boots. It was formulated with great secrecy by an administration whose previous land excursions had stalled, if not destroyed, the land exchange initiative set in motion by President Carter in 1980.

Moreover, those administration excursions included such beauties as the sale of national forest land, the selling of the public's coal for a pittance, and drilling oil and gas wells in wilderness areas.

Despite all this, we think the idea of a land exchange should be looked at as positively as possible. It should not, of course, be allowed to proceed "administratively" in June, with the BLM managing forest land and the Forest Service managing BLM land under laws and regulations they know nothing about.

But we welcome the efforts to get BLM and Forest Service people on the ground to seriously think about trading responsibility for land and minerals management. History has stuck us with two different land management agencies, and there is probably no way around that. But we can exchange land and responsibilities so that the historical burden lies more lightly on both the resources and on the taxpayer.

Sen. Alan Simpson of Wyoming was quoted as saying that the proposed land exchange could take many years to implement. It will require lots of work and discussion on the ground, public hearings, horse trading and public education.

We think the time and effort would be well spent. It opens up the possibility of not just exchanging boundaries, but of making our entire approach to land management more rational. It is in everyone's interests to overlook the way in which the administration presented this proposal. and get on with the work.

--Ed Marston

afield

Destination snowbank

by Peter Anderson

Somewhere in the midst of a towering snow-cloud, high above the Continental Divide, a particle of dust is whirling around picking up wayward water molecules. And the water molecules are linking up like square-dancers on a Saturday night, forming themselves into a star-shaped crystal. Gravity pulls, the star falls down through the cloud, and a cold wind latches onto it, carrying it off toward a distant ridge.

There, a pocket gopher is building a network of tunnels, as complex as any subway, foraging as he goes for the roots of alpine plants that no one else will see until spring. Nearby, several ptarmigans huddle together on the leeward side of a few soon-to-be-covered boulders.

A weasel's white head pokes up through the snow. Black eyes quickly scan the ridge, then disappear. Deer are wandering down through the timber toward the valley floor.

Over on the eastern side of the valley a hiker, following coyote tracks, finds a pile of grouse feathers next to a hole in an old snowbank. Coyote must have gotten lucky. Sitting on a rock, he watches the storm roll in. Silence. He can almost hear the snowflakes hit the ground.

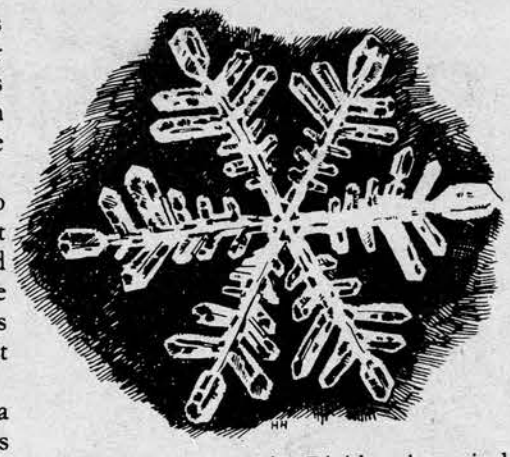
A trucker on his way over the Divide sits in a small cafe, clearing a circle in a steamed-up window to see what the weather's doing. Still snowing. "I sure hate haulin' doubles over the pass on days like this," he says to the waitress. "What kind of pie did you say you had?"

Two trucks are parked out in front of the bar, the neon Budweiser sign flashing some color into an otherwise grey afternoon. Inside, an old man is telling the bartender about the winter of 1881, when his grandfather was working for the Denver and South Park Railroad, building the Alpine Tunnel.

"Those storms were howlin' so bad up there," he's saying, "that they'd link up in chains so's they could get from the boardin' house to the tunnel without gettin' lost. There's more than a few of 'em never made it through that winter."

An old two ton rumbles out into a pasture. In the cab, a rancher listens to the stockman's advisory on the radio. "Damn radio," he says to his son. "If it ain't static, it's bad news. Oughta just rip it out."

He thinks back on a winter when the snow drifted in over hay piles, the deer hunkered down underneath the pinons, and cattle walked out over the tops of woven-wire fences and were scattered all over the valley. Over by a grove of cottonwoods, where a bunch of Herefords are seeking shelter from a raw western wind, they stop to unload some hay.



Back up on the Divide, the wind blasts up and over a ridge, carrying with it an ice crystal, which by now has merged with several thousand others to form a snowflake. Over on the eastern slope, it finally hits the ground, molecules crunching together, and the star-shaped crystal disappears into a snow bank.

□

Peter Anderson lives ten miles from the Continental Divide near Salida, Colorado.

Jan Scar
Buena Vista, Colorado

Charles Gaylord
Denver, Colorado

Everett C. Long
Boulder, Colorado

Thomas W. George
Austin, Texas

Miss Elinor K. Willis
West Haven, Connecticut

Dorris Marxhausen
Seward, Nebraska

John B. Reubens
Livingston, Montana

Marge and Dan Schlitt
Lincoln, Nebraska

Thomas H. Jefferson, Jr.
Livermore, California

Arthur Bloom
Evanston, Illinois

Lee Rozaklis
Boulder, Colorado

Michael Gardner
Helena, Montana

Sara Michl
Salt Lake City, Utah

David A. Stephenson and Heidi A. Harten
Scottsdale, Arizona

Dr. Robert L. Berger
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Bob Borcherdt
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Martha and Matt Donachie
Manchester, Connecticut

Lynn McLaughlin
Salt Lake City, Utah

Gary and Mary Splittberger
Billings, Montana

Bob Wagenknecht
Dillon, Montana

Dorothy Harvey
Salt Lake City, Utah

John Sisk
Juneau, Alaska

Barbara R. Stinson
Warrenton, Virginia

Carolyn Ruth Johnson
Denver, Colorado

Arlo A. Brown
Green Village, New Jersey

Joe W. Thorn, Jr.
Boulder, Colorado

Michael Ehlers
Boulder, Colorado

David Kuntz and Patricia Mulvihill
Boulder, Colorado

Vini and Bill Scott
Tetonia, Idaho

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Breckenridge, Colorado

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Broomfield, Colorado

Richard Latterell
Shepherdstown, West Virginia

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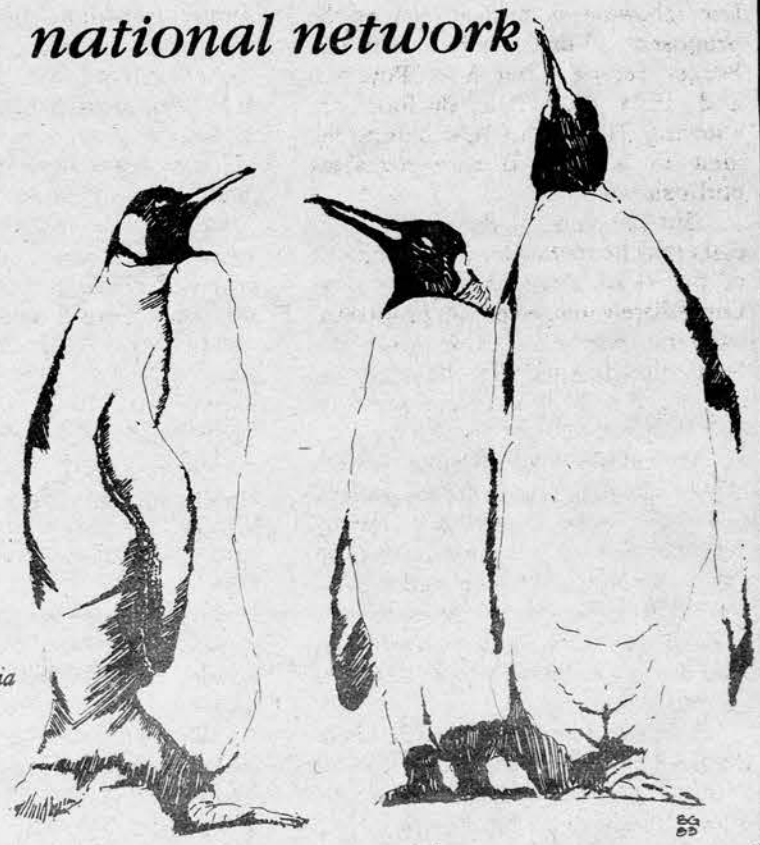

Land swap...

[Continued from page 14]

Minerals Management Service, and then two years ago on to the BLM.

According to the Reagan administration, it has the power to have the national forests and BLM land managed by any agency it chooses. By presidential order, BLM officials can take over national forests, Forest Service officials can start managing minerals, and so on.

But it takes an act of Congress to make a national forest part of the BLM lands, and vice versa. Until that happens, the BLM must manage national forest lands according to laws such as the National Forest Management Act, passed for the national forests. Those laws, of course, are supplemented by Forest Service regulations, and the BLM will also have to administer those regulations.

Forest Service officials taking over BLM lands will have to manage according to the Federal Land Policy Management Act and its BLM regulations. BLM people will find themselves administering, or even completing, Fifty Year Forest Plans while Forest Service officials will be in charge of RMP's and other BLM land plans they may not know the acronyms for.

The initial impression to come out of Washington, D.C. on Jan. 30 was that the two agencies planned to implement the swap administratively in June and then ask the Congress for legislation to actually transfer the lands, so that the two national forests in Nevada, for example, would become BLM lands and be administered according to BLM laws. The press release issued by the two agencies jointly on Jan. 30 said of the 30 to 35 million acres of land:

"The interchange would be followed by a legislative proposal to transfer the involved land and underlying minerals management responsibilities between the two agencies... Until legislative action occurs, they (the two secretaries) said, both national forest lands and the public lands will continue to be managed under the current laws that apply to those lands."

Some conservationists think the land swap is designed to benefit the "extractive public" -- mining and drilling companies.

Terry Sopher, a staffer with the Wilderness Society in Washington, D.C., charged that the administration was attempting to present Congress with a "fait accompli," by first transferring management and then asking for a change in the status of the land.

The Jan. 30 press release glossed over some history. It did not mention that the swap program started by Carter had broken down in 1983. Instead it said, "Forest Service Chief R. Max Peterson and BLM Director Robert Burford said the agencies have been working on this effort for several years."

Nor did it mention that the GAO study had concluded that the swap effort had foundered in four of the five states studied. "The action announced today results from a study initiated in 1980 by the secretaries of Agriculture and the Interior of opportunities to save costs and improve efficiency by consolidating management of blocks of land between the two agencies. A number of other reports, including those by the Grace Commission and the General Accounting Office, have pointed out the need and obvious benefits of such transfers."

In a telephone interview on Feb. 8, Jan Bedrosian, the BLM's Assistant Chief of Public Affairs, indicated that the administration's intent was not to move ahead with a 35-million-acre swap this June. "The trading of management responsibility will be done on a case by case basis...The big change can't take place until Congress acts. Obviously none of this is going to be done overnight."

Bedrosian said the major thrust of the GAO report was to point out a major flaw in the 1980 approach: that it attempted to look at swaps on a state-by-state basis. This, she said, led to "introspection" and a bogging down of the effort. "Everyone felt a need to make a national plan between the two chiefs."

The Forest Service and BLM proposed budgets that were submitted by the administration to Congress for the fiscal year starting in October already reflect the land swap. The Forest Service has an additional $14 million in it to take care of the extra costs the swap will cause in the first year. In addition, approximately $55 million is shifted from the BLM budget to the Forest Service budget to take care of the so-called O&C lands -- former railroad grant property in Oregon and California now managed intensively for timber by the BLM. It is likely to be a controversial issue in the Northwest, because local government gets much more revenue from the timber under the laws regulating the BLM than it would under Forest Service laws.

If the administration is backing away from plans to implement the full swap administratively in June, that may be a response to Congress. The Congress could use its appropriations power to block any administrative change, as it did with coal leasing and drilling in wilderness areas.

There are indications that Congress may indeed be willing to act, although as of this writing no consensus had formed. Sen. Malcolm Wallop, R-Wy., chairman of the Public Lands Subcommitee, has called for hearings. An aide to Sen. Alan Simpson, R-Wy., said a swap could take as much work and time as the Wyoming Wilderness Act, which took five years.

A few powerful congressmen aren't sitting on the fence. Rep. Morris Udall, D-Az., chairman of the House Interior Committee, said, "Something as sweeping as this plan is likely to shortchange revenue to local government, shrink the economic base, disrupt the fabric of Western communities, and have dangerous implications for good land management." His counterpart, Sen. Mark Hatfield, R-Or., chairman of the Senate Interior Committee, opposes the swap because it leaves "too many unanswered questions."

Udall sees the fine hand of administration budget-cutter David Stockman behind the proposal. But some environmentalists see a different threat. Because the merger will cost money for at least the first few years, they say it won't help present budgets. The goal of the swap, they think, is "service to the public." And the Wilderness Society's Terry Sopher says the public in mind is the "extractive public" -- the mining and drilling companies which will now not have to deal with two agencies.

But spokesmen for the various industry groups which extract from public land, perhaps because they've been burned by earlier administration initiatives, were not speaking strongly in support of the swap.

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