

11-80

KB 670-679

XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX

High Country News 75¢

Vol. 12 No. 13

Lander, Wyoming

Friday, June 27, 1980

Idaho Phosphate

Mining mishap could spell future trouble

by Michael Moss

SODA SPRINGS, Idaho — No one is sure when it happened. The people responsible haven't even seen it yet.

Sometime last winter, however, during those sub-zero days here in the Caribou Mountains of southeastern Idaho, the dam that held toxic, sediment-laden waters from the Alumet phosphate mine breached.

It was a small dam, holding in check the wastes from a small open-pit mining operation. The sludge it stored is now running into a small creek already silty from overgrazing.

But the accident may cause significant ecological damage, nonetheless. And critics of the expanding phosphate industry in this area note that public officials' response to the dam break has been slow or nonexistent.

BAD WEATHER

Lanes Creek, into which the mine waters are spilling, starts just north of the Tin Cup Highway on its stroll south through Upper Valley.

Meandering on almost level terrain, it joins other creeks along the way — Sheep, Bacon, Diamond — emerging from the valley as the Blackfoot River, one of the state's most prized fisheries.

"I don't know what the hell happened," said Frank Hamill, Idaho operations manager for Alumet. Sitting in his office in Soda Springs, Hamill shook his head.

It is not the first time Alumet has had trouble. Taking 40,000 tons of phosphate ore a year from an estimated 13 million-ton deposit on Lanes Creek, Alumet's three-and-a-half foot-deep settling pond broke once before — in 1979.

"Last year the spillway got iced up," he said. "But we haven't been able to get out there yet (this year) because of the bad weather."

Fifty miles to the west in Pocatello, Henry Moran, head of the Environment Division of the state Department of (continued on page 4)



Photo by Richard Murphy, Jackson Hole News-Press
GETTY OIL Co. wants to drill an exploratory oil and gas well on this saddle at the top of Little Granite Creek in the proposed Gros Ventre Wilderness Area. U.S. Forest Service and Geological Survey officials — who must make the decision — recently hiked to the site for a firsthand view and discussion of impacts. See story page seven.

In the News

Diverting the Garrison Project 2

North Dakota's senators want to get moving on this billion dollar irrigation project — but some home-staters would rather see Burdick and Young moved out.

Whistle blows on narrow gauge 3

A citrus millionaire wants to buy the famous Durango-Silverton train; but before he gets his toy, the regulators are pulling a few switches.

Colorado's biggest uranium pit 6

If things go as planned, the proposed Hansen Project could as much as triple Colorado's uranium production — and change Canon City completely.

Energy 6

Bulletin Board 10

Western Roundup 11

Editorials 14

Letters 15

Afield 16

Trackings 16



Breath of the Mountain 8

The ground didn't tremble here, the mud didn't flow, but the Rocky Mountains got a sky full of ash from Mount St. Helens — and may be a bit better for it.

2-High Country News — June 27, 1980

N.D. solons open Garrison tap

by Ann Schimpf

A dispute over funding of the Garrison Diversion Project has prompted unprecedented lobbying in the U.S. Senate by Canadian government officials, a call from North Dakota farmers for the recall of their own senator, and a mad scramble by environmentalists to organize a two-month lobbying effort virtually overnight.

Last week North Dakota's Sens. Milton Young (R) and Quentin Burdick (D) took Garrison opponents by surprise when they introduced a supplemental appropriations bill that would tack \$9.7 million onto the Garrison budget for the remainder of this fiscal year.

"If passed, that would mean construction on Garrison could be resumed in a matter of days," said Richard Madson, Midwest Regional Representative for the National Audubon Society. "There have been no dollars for Garrison construction since fiscal year 1973, so this move took us totally by surprise."

The continued existence of the project in any form is a surprise to some, considering the controversial issues it has raised, among them:

Money — The cost of bringing irrigation water to 1,300 North Dakota landowners who own .06 percent of the state's agricultural land could exceed one billion dollars.

Land — In order to irrigate 250,000 acres for some farmers, Garrison will require the condemnation of 220,000 acres belonging to others.

Wildlife — The project will impact more national wildlife refuges than any water project in the nation's history.

Canada — Garrison could, Canadians say, have disastrous effects on the fisheries in Lake Winnipeg and Lake Manitoba.

"Most of the landowners and farmers in North Dakota are anti-Garrison,"

says Ordean Ebel, a farmer from Fessenden, N.D., who is chairman of the Committee to Save North Dakota.

OPPOSITION MOVES

The supplemental appropriation bill has outraged an alliance of Garrison opponents.

The Honorable Lloyd Oxworthy, Prime Minister Pierre Trudeau's special representative for Western Canadian affairs, arrived almost immediately in Washington to begin lobbying against the supplemental appropriation. A formal diplomatic note has been filed in protest.

Madson, who has spearheaded the environmentalists' fight against the project for over eight years, and who has called the project as fiscally irresponsible as "repainting the Titanic," launched a massive telephone campaign last weekend to communicate grass roots opposition to the senators.

Then on June 23, the Committee to Save North Dakota, a group representing over 350 farm families, called for the recall of Burdick. (Young is retiring at the end of his term in 1980.)

"Recently Sen. Quentin Burdick claimed the \$9.7 million he and Young have added...will not be spent on features that will affect Canada," the group said. "This claim demonstrates that Burdick has attempted deliberately to deceive Congress, or that he does not care how tax dollars are squandered, or a combination of all three. It is clearly time for Sen. Burdick to be retired."

On June 25, the largest farm organization in North Dakota, the Farmers Union, came out in support of an amendment introduced by Sen. Larry Pressler (D-S.D.). Pressler's amendment states that no funds appropriated to Garrison are to be used on construction or land acquisition until the inter-



Photo by Richard Madson

CANOEISTS on the James River — scheduled for "stream channel improvement" with Interior Department draglines, if legislation now before Congress is approved.

national issues are resolved and until a memorandum of understanding protecting the interests of South Dakota has been signed.

The fight over the supplemental appropriation could take place on the Senate floor as early as this week — but that would only be the beginning. Appropriations for Fiscal Year 1981 will be the next focus of the battle, and that fight has already begun in the House. A bill to add the \$3 million transferred from the Garrison budget in 1978 back into the project in 1981 may come to a vote on the House floor this week.

Fiscal Year 1981 appropriations will not be considered by the Senate until the supplemental appropriations for 1980 are taken care of.

CANADIAN CONCERNS

Authorized in 1965, with initial construction beginning in 1968, Garrison almost immediately drew criticism.

Canada began filing protests that have only escalated in intensity over the years. Canadians say Garrison is in violation of the 1909 Boundary Waters Treaty, which says neither country shall pollute the other's waters.

In 1975 the United States and Canada referred the controversy to the International Joint Commission. After a year-long study, the commission concluded that Garrison would have significant negative impact on the commercial, sport and native people's fisheries in Manitoba's waters. Garrison would join the Missouri River watershed with those waters flowing into Hudson Bay, watersheds that have not been joined since the last Ice Age.

"Our biggest concern is biotic transfers," said George Rejhon environment councilor in the Canadian Embassy in Washington, D.C. "There are any number of examples today of what man's interference in natural habitats has done — introduction of the lamprey to the Great Lakes with the joining of water from the upper and lower lakes, introduction of rabbits to Australia. You can't tell what could happen."

Local environmental questions also have plagued the project since its inception.

"It's a bit of an overstatement to say that the project threatens to destroy the only remaining prairie pothole wetland habitat in this country," said McEnroe.

"Much of eastern North Dakota and Western Minnesota is already drained. Garrison will destroy 73,000 out of the 2 million acres of remaining wetlands in the region, or about four percent. It will also destroy 66,000 acres of grasslands used by prairie nesting species and will affect 70,000 acres in our existing system of national wildlife refuges."

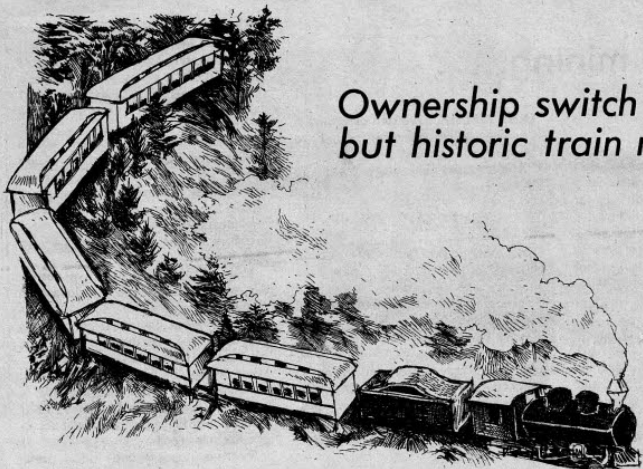
To mitigate the extensive loss of wildlife habitat, the U.S. Fish and Wildlife Service has proposed the acquisition of 146,000 acres of habitat. But therein lies a Catch-22 situation for the agency.

"We have recommended that those 146,000 acres be drained wetlands and agricultural lands returned to their natural state," explained McEnroe. "While possibly appeasing environmentalists and sportsmen with that



Photo by Richard Madson

AERIAL VIEW shows construction underway in 1974 on the McCluskey Canal, part of the Garrison Diversion Project. Sen. Milton R Young (R-N.S.) is pushing for further funding for the project.



Ownership switch untracked, but historic train runs on

by Van Becay

DURANGO, Colo. — Pity the soul whose life's goal is tantalizingly within reach, but seemingly unattainable.

Take Charles E. Bradshaw, Jr., a citrus millionaire from Orlando, Fla., whose one desire is to own and operate his very own train not just any train, but an original 19th century narrow gauge, one of the few still operating in the country.

Between Durango and Silverton, Colo., a distance of about 45 miles, runs the train that helped build these two towns back in the 1880s. Originally designed to haul ore from the Silverton mines, the train now hauls tourists, about 1,000 a day during its four-month summer season.

Operating the historic line is the company that built it nearly 100 years ago, the Denver and Rio Grande Western Railroad Company. The D & RGW is now primarily a fast, modern freight service, and has been trying to dump the antique narrow gauge for almost 20 years. According to D & RGW, they lose money on the train every year, even though tourists stand in long lines for reservations.

Enter Bradshaw, who innocently assumed that this was his chance, little

realizing the politics surrounding a coal-fired, steam-driven, smoke-belching relic of the old West.

The D & RGW first tried to abandon the line in the early 1960s, only to have the Colorado Public Utilities Commission rule that the train — both a National Historic and Civil Engineering Landmark — was of paramount importance to the economic survival of the two towns. The D & RGW was ordered to keep the train rolling, though it could sell it if a buyer was found who met with the approval of Durango and Silverton. Since then, changes proposed by D & RGW, such as eliminating intermediate stops, have been effectively blocked by local citizens through the commission.

When Bradshaw came along, the two towns liked what they saw. Here would be an ideal chance to be rid of the D & RGW and install a sympathetic owner. In July 1979 Bradshaw signed an agreement to buy the train for a reported \$2.2 million.

Businesses in the two towns were delighted, especially with Bradshaw's plan to rename the line the Durango and Silverton Narrow Gauge Railroad Company. Townfolk also liked his

proposal to retire the K-28 locomotives used now and switch to the more powerful K-36 and K-37 engines, which could pull longer trains and haul more tourists.

The commission, however, which had final approval on the sale, cast a jaundiced eye at this latest development. Larger locos and longer trains meant curves had to be widened and bridges strengthened. There was also the matter of Bradshaw's finances. How would Bradshaw secure additional funds from his company, Hi-Acres, in Florida? What was the financial structure of Hi-Acres? Bradshaw declined comment. The commission pressed the issue. Finally Bradshaw told them, "What goes on in Florida is none of your damn business."

Three months later, in December 1979 the PUC decided that Bradshaw could have his train, if he put a half-million dollars into the line for safety improvements. If he wanted to use the heavier K-36 and K-37 engines, he would have to finance an additional \$61,000 worth of work. The D & RGW, though, could operate the train without these improvements for the 1980 season.

When the deadline for the sale passed earlier this year, the D & RGW was

June 27, 1980 — High Country News-3

forced to operate the line for the 1980 season. But in a surprise move last month the company announced that if the commission considered the train unsafe, D & RGW would not operate the line, for liability reasons.

With visions of 1,000 tourists a day bypassing their businesses, local chambers of commerce panicked. The commission's decisions, which had previously protected them from the whims of the D & RGW, had backfired. The commission and Colorado Gov. Richard Lamm's office were deluged with letters requesting that the PUC declare the train safe.

Privately, Durango residents thought D & RGW's refusal to operate was designed to put popular pressure on the commission to expedite the sale. If the commission decided the line was safe, it couldn't very well demand Bradshaw pay an extra half-million dollars. The commission, it was thought, was still miffed at Bradshaw for refusing to disclose his finances.

Last month, at a specially scheduled meeting just eight days before the start of the train's tourist season, the commission addressed the safety issue. To no one's surprise, considering the public outcry and the economics involved, the line was deemed safe, for Bradshaw as well as the D & RGW. This latest commission decision may smooth the way for Bradshaw to buy his train, though it is uncertain when.

Bradshaw is still struggling with the Public Utilities Commission, and has appealed to the federal Interstate Commerce Commission to get the state agency off his back. He would like to install the bigger engines without the expense of renovations the PUC still insists upon. The Denver and Rio Grande is also squabbling with workers on the line over what severance pay will be dished out if the sale comes through.

Bradshaw is learning the hard way that it isn't as easy for citrus millionaires to acquire train-sets as it is for younger boys.

But in the meantime, the Durango-Silverton run is rolling for the 98th year. Businessmen are happy, and the tourists keep pouring in.

Van Becay is a free-lance writer from Durango, Colo.

proposal, we have infuriated farmers who already see Garrison as gobbling up too much of their land."

LANDOWNERS

The Garrison Diversion Project is roughly 20 percent completed and has cost taxpayers about \$160 million to date. Originally, the estimated cost of the project was \$212 million, but the 74-mile McClusky Canal alone (one of three major canals planned) ran over \$110 million. If the project were completed in a year, cost estimates are now placed at over \$880 million.

Most of the project's benefits would go to irrigation for farmers in North Dakota.

The Committee to Save North Dakota was formed in 1972 as a direct result of harsh treatment landowners received when land was acquired for construction of the McClusky Canal portion of Garrison. Today its membership is concentrating its efforts on halting land acquisition for the New Rockford Canal, which will connect into the Lonetree Reservoir.

On May 5 Interior Secretary Cecil Andrus sent a letter to North Dakota Gov. Arthur Link that explained why

he could no longer negotiate with the state on compromises in the Garrison legislation.

Wrote Andrus: "I am not convinced that these problems can be resolved by the plan or the process you've proposed, and I cannot in good conscience lead you to believe otherwise."

Gov. Link was proposing a two-phase alternative that called first for irrigation of 24,800 acres that would not affect Canada. Link's second phase calls for the irrigation of 78,900 acres at a later date that would allow time to answer questions raised by the Canadians. (Original proposals called for the irrigation of 250,000 acres. A compromise proposal by Interior in 1979 called for the irrigation of 96,300 acres.)

Opponents feel the present inclination of Congress to tighten the budget belt works in their favor. But recent developments indicate a long fight ahead. Funding provided now for Garrison, however small, will, they feel, keep Garrison's supporters actively hunting financing in the years ahead.

Ann Schimpf is a staff reporter for the Duluth News-Tribune in Duluth, Minn.

Meet With Amory Lovins Sept. 21-27, 1980

A Very Important Workshop for anyone interested in:

Soft
Energy
Path
Exploration



For info on this and other programs including

• Herbs • Nutrition • Psychology • Parapsychology • Astrology • Yoga •

call or write Holistic Life Seminars, Box 1682, Helena, MT 59601 (406) 442-8196



A fine time to begin a year of absorbing and informative reading. Just \$15 for four seasons' worth.

Your name _____
Address _____
City _____
State _____ Zip _____

HIGH COUNTRY
NEWS

Send to Box 4, Lander, WY. 82520.

4-High Country News — June 27, 1980

Idaho phosphate mining...

(continued from page 1)

Health and Welfare, says he, too, doesn't know yet what happened this year.

"We had one person out there," said Moran, whose job it is to protect air and water quality in southeastern Idaho, "but he was a structural engineer and couldn't evaluate the environmental damage."

"I haven't been able to get out to the Alumet site yet because of the weather," Moran added.

That was June 13. Ten days earlier, this reporter visited the dam site on Lanes Creek. The roads were muddy in places from a month of rain and snow the area received this spring, but they were passable in a two-wheel drive passenger automobile.

The dam, along with a smaller dike just below, had been completely breached. Light-brown mud was streaming into Lanes Creek, just across from a flock of 12 nesting sandhill cranes.

Besides sediments, the breached dam is leaking into the creek minerals and other mining by-products which, because of already high levels in the river system, may prove toxic to aquatic life.

Bill Davidson, regional director for the Idaho Fish and Game in Pocatello, has also not seen the broken dam yet this year.

But his field officer, Russ Thurow, who has been studying the cutthroat population in Upper Valley for almost three years, has seen the site.

"The damage is at least as bad as it was last year," said Thurow. "I was there as it happened in 1979, and there were large quantities of sediment introduced into Lanes Creek. We saw an increase from a normal 40 milligrams of suspended solids per liter of water to over a thousand."

'NONE OF OUR BUSINESS'

It is unclear whether Alumet has done anything illegal. Even if they have, state officials say they probably won't be prosecuted.

Because the mining operation is on private land in Upper Valley, the federal government takes a second seat on regulatory matters, according to Charles Hendricks, Caribou National Forest Supervisor. "What Alumet has done is none of our business," he said.

Alumet's Hamill said that in rebuilding the dam after last year's break, his company followed the state's specifications and all work was done "with their approval."

Idaho's Moran declined to comment on whether Alumet may have violated state water quality standards. If they had, however, there is little chance his agency would prosecute, Moran said.

"As long as the company is willing to fix things up, that is not the approach to take," Moran said. "Alumet made a good faith effort last year to prevent a recurring break, and it's our policy to work with the companies."

The Fish and Game's Davidson agrees.

"We're finding that the industry is willing to work with us, and other than the fact that they were tearing up a whole batch of real estate," he said of the Alumet dam breach last year, "they mitigated most of the impacts."

AT THE LIMIT

"The fishing wasn't any good on that stretch of river, anyway," said Alumet's Hamill. Davidson agrees, pointing out that "Lanes Creek already carried a high load of silt from overgrazing."

But a May 1978 U.S. Forest Service research paper found that the Blackfoot system as a whole was already at its peak in terms of sedimentation and mineral levels.

While mining activity did not appear to degrade the water quality, the report concluded in 1978, "any future land use that adds to the system's fertility could significantly depress the cutthroat trout fishery."

"All the tributaries in Upper Valley are integral to the life history of the cutthroat," said Thurow.

"They're the principle spawning grounds producing a majority of the cutthroat for the entire (Blackfoot) system," he said. "That's why we're concerned about maintaining the integrity of these streams."

"Lanes Creek may already have high sediment loads," he said, but any further increase could cause damage.

"Other tributaries are still clear and it is here that phosphate mining will have the greatest impacts."

And it is here that Alumet wants to expand.

A TEMPORARY SLUMP

Business at the Trail Cafe in Soda Springs has been off lately. The mining industry, which dominates most of Soda Springs and much of southeastern Idaho, is in a slump.

Gary Greer, plant manager for Beker, one of the area's five main phosphate companies, blames it on the 20 percent drop in fertilizer sales this year. (Fertilizer is one of the main end products of phosphate ore; the other is elemental phosphorus used in the chemical industry.)

"When a farmer is faced with too many expenses," said Greer, "the first thing he'll cut is fertilizer use."

Sitting next to him at the counter, Greer's mine operator said that the weather is also responsible for idling 260 of his 300 workers. Sitting unused are 22 D-9 tractors, 40 trucks and six electric shovels.

The long-term picture for phosphate mining in Idaho is bullish, however.

Southeastern Idaho contains roughly one-third of the recoverable U.S. phosphate ore reserves, estimated at over 1 billion tons using current mining techniques.

The remaining U.S. reserves, which account for 14 percent of the world's supply, are largely in Florida. Morocco has one-half of the world's deposits — a situation some predict could spawn a one-country cartel and place greater pressure on the U.S. to mine its own reserves.

Four mining companies in southeastern Idaho now process close to 5 million tons every year. Most of the ore is processed at elemental phosphorus plants in Soda Springs and fertilizer plants north of here at Conda. There are other processing facilities in Pocatello.

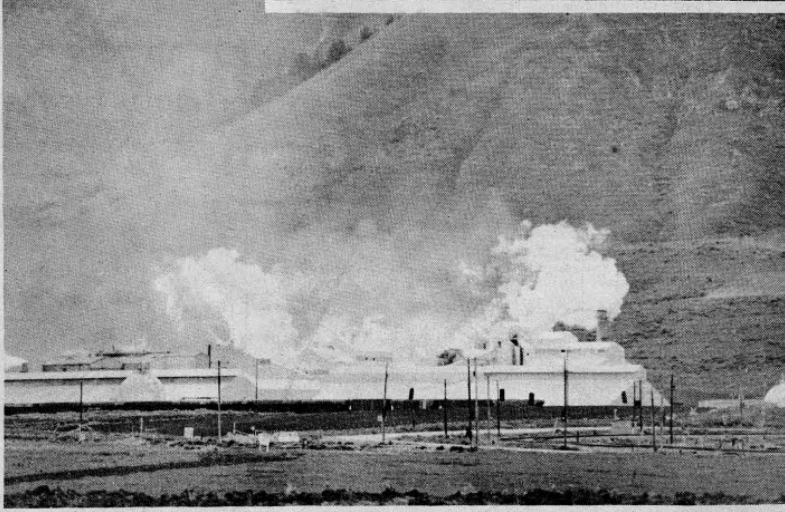
The industry directly employs half of the Caribou County work force and has an economic hold on much of southeastern Idaho's economy.

There are some 80 outstanding phosphate leases on more than 43,000 acres in the Soda Springs area; half are on Caribou National Forest lands, the rest on Bureau of Land Management or private holdings.

There are an additional 97 prospecting permit applications covering more than 121,000 acres of federal lands.

The prospective growth prompted the Forest Service and the U.S. Geological

RUSS THUROW, Idaho Fish and Game Research biologist, kneels by a cutthroat trout spawning area on Spring Creek, one of the Blackfoot River system's pure tributaries. The compatibility of such fragile reproductive areas with phosphate mining activities, such as this processing plant owned by the Beker Corp. at Conda, remains an unanswered question while the industry proceeds with expansion plans.



June 27, 1980 — High Country News-5

Survey in 1975 to prepare a three-volume environmental impact statement.

Based on proposed mining plans for 16 new operations, the agencies estimated that production could triple by the late 1990s.

Only three of those plans have been advanced, however, and many observers believe the industry's growth potential was overestimated.

Nonetheless, those three mine plans, along with a fourth subsequently proposed, would double the current annual production by the mid- to late-1980s.

Among the mining plans now being considered by the USGS is one filed by Frank Hamill's company, Alunet.

'GUSSIED IT UP'

Alunet's plan, says Hamill, is to dig an open pit on Diamond Creek, not far from its Lanes Creek operation. The new mine would boost Alunet's production from 40,000 tons a year to nearly 2 million tons a year.

Alunet's final mining plan was submitted to USGS in March, says Hamill, after the company took its original proposal and "gussied it up."

"Things have changed quite a bit from the old days," he said, leafing through the multi-sectioned document replete with air brush drawings and tabbed indexes. Only six copies of the mining plan were printed, and it is available for inspection only at Hamill's office or at the USGS in Pocatello.

"We're not going to have a tailings pond on the Diamond Creek site," Hamill pointed out, "but rather we're going to create the biggest natural filter system in southeastern Idaho by filtering the water flow from the mine through waste dumps and then into Diamond Creek."

The operation would have holding ponds to catch rain and other water running through the mining area, however; it was Alunet's holding pond on Lanes Creek that twice gave way, and the Diamond Creek ponds would contain far greater amounts of sediments and mining by-products.

Alunet's Diamond Creek operation, as on Lanes Creek, will be largely on private land. And again, the regulatory responsibilities among state and federal land agencies is unclear.

Apparently, Moran's Department of Health and Welfare and Davidson's Fish and Game have the lead responsibility for environmental quality. Davidson said he had worked with Alunet in designing the Diamond Creek mining plan and was satisfied the company would do all it could to mitigate environmental impacts.

SPARE NO EFFORT

The other major phosphate processing proposal is by Simplot, a privately-owned giant with assets in livestock and potatoes, as well as phosphate processing.

Simplot's two-million-ton-a-year operation would be based in Smoky Canyon, due east of the Blackfoot River watershed. By unspecified means the ore would be transported 25 miles west across Upper Valley to Simplot's processing plant in Conda.

Fred Zerza, public relations officer for Simplot in Pocatello, says that the exact details of the operation have not been worked out yet. They've settled on a slurry pipeline, however, and are "looking at four or five possible routes."

"All I can tell you is that we expect to engineer and design all our ponds in the most environmentally sound manner



SOMETIME LAST WINTER, this Alunet check dam, along with the larger holding pond dam in the background, breached. Above the road cut is Alunet's open-pit phosphate mine. Alunet wants to open a much larger operation on Diamond Creek ten miles to the south.

that has been developed," he said. "We want this to be a model operation and we'll spare no effort to make it that."

LOWERED EXPECTATIONS

The Caribou Range surrounding Upper Valley is prime habitat for wildlife, including several thousand moose, elk and deer.

In 1975, facing a projected tripling of production in 20 years, wildlife agency officials in the state predicted massive damage to fish and wildlife.

The line has changed, however. "We were largely guessing," Lonn Kuck, Thuro's Fish and Game associate in Soda Springs, now says. "And because our policy was that we'd rather be safe than sorry, we probably overestimated the impacts."

Kuck and Thuro are gathering baseline data to assess the numbers of fish and wildlife before and after mining occurs, in order to, according to their boss, Davidson, "better recommend to the industry what reclamation steps to take."

Indeed, the higher commitment to reclamation that mining companies now have is another reason the department is lowering its impact assessments, said Kuck.

That commitment may be what prompted the area's four major phosphate companies — Beker, Simplot, Monsanto and FMC — to each chip in \$15,000 a year to fund one-half of Kuck's study.

A POSITIVE STAND

Much of the final decision-making on proposed mining operations rests with the USGS, which must approve mining plans.

Environmentalists have argued that the agency should prepare individual environmental impact studies for each mining plan, to accompany the regional study done in 1975. The USGS's Brunelle says the decision for site-

specific EISs will be made only on a "case-by-case basis."

"We've had tremendous success," he added, in working with the companies in designing restoration and revegetation plans.

The Bureau of Land Management and the Forest Service are charged with working with the USGS on mining plans involving federal minerals — minerals on federal lands or federal mineral rights on private lands, holdings that account for most of the phosphate deposits in Idaho.

"We're legally responsible for managing the land and its resources," says Caribou National Forest Supervisor Hendricks. "And we'll be working with USGS to make recommendations on mining plans."

"You can't go to a mining site and see everything beautiful," said Hendricks. "But we've come a long, long way," and again he stressed, "We're going to have to work closely with the industry."

PROGRESS WITH CONFIDENCE

Decision-makers here in Soda Springs and throughout the region are,

for the most part, confident that phosphate mining and wildlife can exist with neither resource seriously constraining the other.

This optimism is shared by the mining industry and many of the industry-dependent area residents, despite Alunet's dam problems and the 1978 Forest Service study.

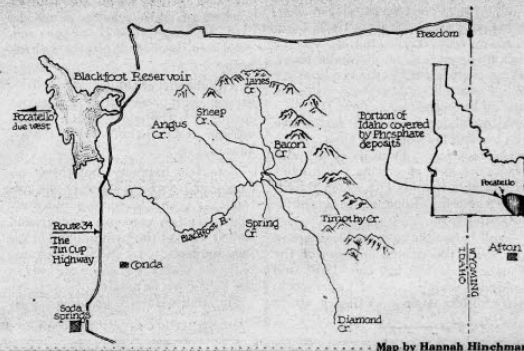
An expanded phosphate industry in southeastern Idaho will affect not only wildlife, however, but the area's entire social and environmental fabric.

Yet unclear is whether the state of Idaho has the regulatory structure and the necessary enforcement resources to manage the industry. And if they don't, will the federal government intervene?

If the answer is 'no,' the burden of self-regulation will rest on the industry.

For now, says the Fish and Game's Davidson, "all we can do is gather data so that responsible companies can use it to mitigate the impacts."

And what of irresponsible companies? "There is nothing you can do about irresponsible companies," he says.



6-High Country News — June 27, 1980

ENERGY

Hansen could be king of Colorado's uranium digs

by Bob Anderson

CANON CITY, Colo. — This is an out of the way place, tucked back in the Front Range foothills west of Pueblo's steel mills.

But don't think it is all backwater calm. The state's prisons are here. And so is the Cotter Corp.'s uranium mill, which produces uranium oxide — yellowcake — for Chicago-area reactors. A proposed expansion of Cotter's facilities recently provoked what seemed like a hot debate.

But that was all before the Hansen project, the biggest thing to hit this town and the upper Arkansas River Valley in 20 years. Proposed for a site on Middle Tallahassee Creek some 15 miles northwest of here, the project involves an investment of \$250 million and the moving of about 250 million cubic yards of earth. The product would be 30 to 40 million pounds of yellowcake.

Standard Oil of Indiana and Westinghouse Electric have joined forces on the project, which would be the largest open pit uranium mine and mill in the state. The mill would have a 3,600 to 4,000 ton per day capacity, three times larger than the expanded Cotter mill, and four times larger than the mill proposed to accompany Homestake's new Pitch Project near Marshall Pass, Colo. In full swing, the Hansen mill alone would double or triple the state's total 1978 uranium production.

Uranium mining is not new in the Tallahassee Creek drainage. In the late 1950s and early 1960s, small operators mined out its shallow, high grade uranium deposits.

In 1977 the exploration division of Cyprus Mines decided to go deeper. At 500 feet, it encountered a body of .084

percent uranium ore spread across two-thirds of a square mile and roughly 300 feet thick.

Cyprus started looking for funding to help develop this massive deposit and a smaller, shallower ore body left behind by previous diggers. Cyprus didn't have to look far. Westinghouse has been searching desperately for new deposits to develop, to fulfill lawsuit settlements requiring the company to deliver between 20 and 70 million pounds of yellowcake promised in old supply contracts. Through Wyoming Minerals, a wholly-owned subsidiary, Westinghouse bought a 49 percent interest in

In full swing the Hansen mill would double or triple the state's uranium production.

the project. Meanwhile in October 1979 Cyprus Mines was purchased by Standard Oil of Indiana.

TWO PITS

The proposed mine would consist of two open pits — the shallow, 110-acre Picnic Tree Pit and the deep 440-acre Hansen Pit. The ore would either be trucked or slurried to the mill site three miles to the northeast.

Three hundred workers would be hired to build the project and 550 to run it. There would be a 20-month overlap when a peak of 850 workers and their families could be expected to live in the area. Though the majority of them would probably live in Canon City

(1970 population: 11,000), some might settle in the much more sleepy-eyed communities of Guffey and Texas Creek. For Guffey the problem is a complex one: it lies in Park rather than Fremont County, and is therefore ineligible for severance tax money from the project.

Colorado is one of 26 "agreement states," meaning that the responsibility of licensing and inspecting most users of radioactive materials falls on the shoulders of the state.

In Colorado's case, the agency saddled with the responsibility is the Department of Health's Radiation and Hazardous Waste Division. But Hansen does not become a "user" of the uranium ore until it is crushed, leached or processed in some way. Until then, the responsibility is that of the Department of Natural Resources' Bureau of Mined Land Reclamation. Both the mine and mill permit applications have been submitted and are under review.

The major questions facing the state are what to do with the pit, the mine overburden, and the streams that now flow through the valley.

Whatever the outcome of these negotiations, the mine will change Canon City. On its wide streets, one usually hears talk about cows and hay and water wells. Snowy peaks cap the view in three directions. To the east, beyond a small rise, lie the vast high plains.

A pair of elderly women cross the street in the wind, holding down their hats and their skirts. A life-size horse statue presides calmly over the entrance to Canon City Western Wear, while Rex Drug with its faded orange sign stares blankly across the street at the bank, where a sign blinks to an electronic beat.

"Have a Nice Day...and a Happy Forever...Temperature 76...3:18...Have a Nice Day..."

Bob Anderson is a free-lance writer and geologist.

Gros Ventre

by Geoffrey O'Gara

BRIDGER-TETON NATIONAL FOREST, Wyo. — Hiking up the steep slopes near the head of Rough Hollow in the proposed Gros Ventre Wilderness Area, there are few human imprints: the path is as narrow as a deer trail, the diminishing snowfields smooth as blankets.

But near the sloping, 8,440-foot saddle, a row of red flags waves amid the early summer green. The wooden laths are marked "CGG" — the initials of a

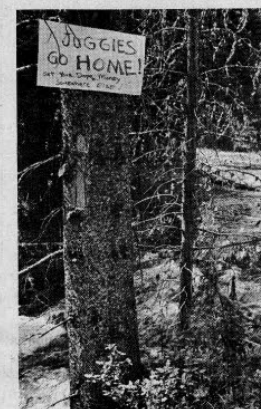


Photo by Richard Murphy
Jackson Hole News

'JUGGIES', slang for workers doing seismic tests for oil and gas up Little Granite Creek, get the word from anonymous critics along the wilderness trail.

Guffey's volcano left bathtubs full of uranium

Colorado lacks a Mt. St. Helens with which to claim modern geologic fame. But a good deal of the mining in the state is tied to volcanic events of the past. The Hansen uranium deposit, for instance, derives from a volcanic field that used to dominate the landscape — what is now South Park.

Then came the volcano sm. started by a massive set of eruptions from a volcanic center to the west that spewed hot ash flows as far east as Castle Rock, along the present front of the Rockies. What was left of the grabens was soon buried beneath volcanic flows, ashfalls and mudslides. Some 6,000 feet above the present town of Guffey then stood a massive volcano. From its slopes slid the same sorts of glowing avalanches and muddy torrents with which Mt. St. Helens has been honoring its neighboring landscape.

Well before the onset of volcanism in the area, the general outlines of the Southern Rockies had been built and eroded, leaving a set of huge, rock, bathtub-like basins — called grabens

— to the south of the present South Park. These soon filled with stream and landslide deposits of gravel, sand, silt and clay, creating what is called the Echo Park formation.

But the Guffey volcano met a catastrophic end. On some May 19, 30 million years ago, the volcano blew its top, sending ash helter-skelter across the land. What remained of the peak subsided into the molten depths and solidified.

With the end of the volcanic activity erosion again became king, its streams cutting into the edges of the various volcanic units on their way to the Arkansas River.

Now it so happens that these volcanics, and perhaps some of the surrounding granites, have a relatively high uranium content. The ground waters leached the uranium out of the lava and deposited it in the pre-volcanic bathtubs. Thus the Hansen ore body in the Echo Park formation.

Though the Hansen uranium deposit

is different from other large Colorado occurrences, such as the hard rock vein deposit in Cotter's Swartzwalder mine northwest of Golden and the numerous sandstone-type deposits in the Uravan

Mineral Belt south of Grand Junction, it is perhaps not the only one of its kind. Amidst the mountains of Colorado, exploration has accelerated over the past 15 years in search of similar riches. By 1969 some half a million acres had been acquired for uranium exploration in North, Middle, and South Park regions. The prime target, however, has been the South Park region, where early uranium mining has already shown promise.

The Pikes Peak Justice and Peace Commission in Colorado Springs has recently published an overview of 400 square miles of uranium properties in five southern Colorado counties extending from the Hansen region south into the Wet Mountain Valley. Nearly every big energy company is represented. Hansen may be just the beginning.



COAL-HAULING MAULING. The city of San Antonio, Tex., fighting to get railroad coal-hauling rates from Wyoming cut, won a big decision from the U.S. Court of Appeals in Washington, D.C., this month. The ruling will roll back freight rates to earlier levels, reducing the city's coal costs by as much as \$5 per ton. The city-owned utility in San Antonio switched from natural gas to coal a few years back, then watched hauling rates jump from \$12 a ton in 1978 to the current \$20 a ton. The court said that the Interstate Commerce Commission, in approving rate hikes by Burlington Northern, had forced captive consumers to pay for more than the cost of moving the coal. The court said the ICC's calculations erroneously "double counted" railroad equipment costs and right-of-way

June 27, 1980 — High Country News

faces bite of drillers' bits

seismic testing company, Consolidated Georex Geophysics.

From the saddle one can look north at the Gros Ventre Mountains and the Cache Creek drainage. Balsam root and lupine cloak the slopes below in yellow and purple; the air is cool and still, except for an occasional rumble from the south. Sometimes the noise is the distant crackle and snap of thunder; other times it is a sharper, briefer report, a manmade explosion.

And every now and then the air is stirred by the whir of helicopters carrying in equipment to crews that are setting off nitroglycerine charges to determine the geological structure below the surface of the proposed wilderness.

CGG is working for the Getty Oil Co., which has proposed drilling a 17,000-foot-deep exploratory oil and gas well on the saddle where Rough Hollow and Little Granite Creek originate. The site of the proposed well, which will be pinpointed when the seismic work is completed later this month, lies three miles within the proposed wilderness area.

Along with another proposed well just south of Jackson on Cache Creek, Getty's Little Granite Creek proposal will be the subject of the second environmental impact statement on an exploratory oil and gas well in the nation's history. The first was done in 1974 on a well in Florida.

Though the Forest Service does an environmental analysis on any project affecting forestlands, oil and gas wells have rarely caused the controversy or environmental impacts that lead to an environmental impact statement. The EIS will require more detailed research and allow more public involvement than an analysis.

The Cache Creek well, which would be located only six miles from Jackson, first encountered local opposition when it was proposed in 1977 by the National

Cooperative Refinery Association. Ever since, outfitters, environmentalists and representatives of the local tourist industry have noisily opposed any drilling.

Jackson attorney Hank Phibbs recently warned that the well might produce "sour" gas — laden with hydrogen sulfide — which could drive away tourists with its smell and might even pose a health hazard. The Geological Service says the risk of sour gas reaching Jackson in the case of a blowout is "unlikely," and the company has promised to install additional safeguards if sour gas is found.

Opponents of the Cache Creek plan have cited a memorandum written by Interior Secretary J.A. Krug in 1947,

Full development of an oil and gas field in the proposed wilderness area of Little Granite Creek would require power lines, road access, and, possibly, a gas 'sweetening' plant nearby.

which said, among other things, that in the Jackson Hole area the scenic and wildlife values must be given first priority and no wells should be drilled on public lands unless the Geological Survey is confident that gas or oil will be found.

Geological Survey experts do not con-

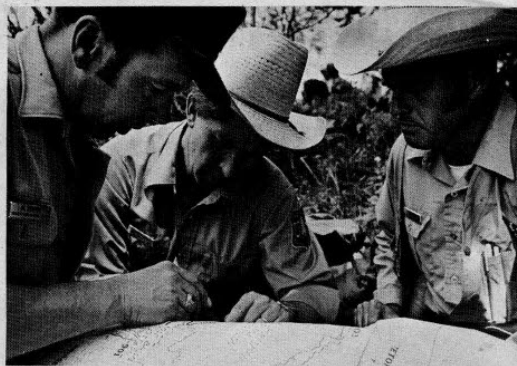


Photo by Richard Murphy Jackson Hole News

AL REUTER (left), minerals specialist with the U.S. Forest Service, will play a key role in deciding whether Getty Oil can drill in proposed wilderness. Shown with him are the Forest Service's Garth Baxter (center) and Al Oman (right).

sider the Cache Creek site likely to produce.

LITTLE GRANITE

But Little Granite Creek is another story.

Here, Geological Survey geologist David Love considers the prospects for a find much better. According to Love, the saddle where the drilling would take place is not, however, part of the Overthrust Belt, as has been widely reported. Rather, it is a basin sandwiched between two shoving plates: the Overthrust Belt on the west, and the Gros Ventre foreland structure from the east. Love calls it the northwest arm of the Green River Basin.

The environmental assessment will evaluate the impacts of two road access routes, one up Little Granite Creek, the other up Rough Hollow, but the Geological Survey and the Forest Service will also consider a helicopter-serviced exploratory operation. Rough Hollow climbs steeply along a small creek to the saddle, and would require a road with switchbacks — Little Granite

Creek is even less stable. The helicopter approach would get around the tricky question of whether road-building should be allowed in the delicate, steep terrain of the proposed wilderness area.

At least for the moment. Should the well find commercial quantities of oil or gas, further development would require more than helicopters.

Al Reuter, mineral specialist with the Bridger Teton National Forest, says the environmental assessment will consider not only the impacts of exploration, but also the effects of full development, if a commercial-size field is found. That would mean a corridor for power lines to the site, road access, and possibly, if the well produced sour gas, a "sweetening" plant either at the site or at the bottom of one of the drainages.

OTHER DEVELOPMENTS?

According to Reuter, about 90 percent of the administration-proposed 289,000-acre Gros Ventre Wilderness area is of no interest to mineral developers, and has not been leased. But the Rutherford Division, which was added to the proposal last year as part of the Forest Service's roadless area inventory, is of intense interest.

Much of the public land in the Rutherford Division is under lease, but Forest Service officials have received no further proposals for development. They suspect that the lease-owners are waiting to see which way the Little Granite Creek proposal goes.

If the Forest Service elects to allow the drilling on the Little Granite Creek saddle, results of the seismic testing now underway will become immediately of great value, and more drilling proposals can be expected.

The testing involves setting off charges along lines totalling about 68 miles in the forest, from the Hoback River north to the southern side of Snow King Mountain. Results of the \$750,000 test will belong to Getty Oil, though some information will be released to the Geological Survey to help with the environmental assessment.

The routes for the charge lines were set to avoid elk calving areas and other sensitive wildlife areas. The plan also was designed to avoid tourists: originally, it was expected to be completed this month.

However, weather made that impossible. And there has recently been another problem: vandalism. Vehicles have been defaced, equipment stolen and survey stakes torn up.

maintenance, according to the industry newsletter, *Electrical Week*. The case could have important ramifications for other coal-hauling rate disputes now before the ICC and the courts.

EXXON SHALE PLAN. No sooner had it bought its way into the oil shale business (with a \$400 million purchase of ARCO's interest in a northwestern Colorado oil shale project) than Exxon Corp. announced a plan sure to dwarf even the federal government's grandest dreams of synthetic fuels production. Exxon wants to see private industry pour \$500 billion into an oil shale program that would produce 8 million barrels a day by 2010. An additional \$300 billion investment in gas and liquid fuel from coal would make the country nearly energy independent in 30 years, the company announced. All the government has to do is stand aside, eliminating the "inordinate delays" it has created in the past. Besides pouring money into the oil shale industry, Exxon's plan would pour people into Rio Blanco and Garfield County in Colorado, where, according to the *L.A. Times*, population would rise from the present 75,000 to 1.5 million people, and the landscape would be dotted with oil shale plants.

CLOSING CHURCH ROCK. The New Mexico Environmental Improvement Division last month shut down United Nuclear Corp.'s uranium-tailings mill in Church Rock N.M. The state agency, citing nearby groundwater contamination, said United Nuclear has not controlled seepage of radioactive wastes since last year's tailings dam spill. The company will be required to come up with a plan to clean up the groundwater and control further seepage, according to the Council on Energy Resource Tribes, before it can reopen.

SOLAR PROJECTS. Federal facilities throughout the Rocky Mountain region will get a good chunk of the \$31.1 million the Department of Energy plans to spend on solar energy systems over the next 18 months. Most of the money will go to installing things like solar hot water systems at national parks and monuments. In our region, 56 federal facilities, worth \$3.06 million, will go to Colorado; Wyoming, 73 projects, \$272,675; Utah, 30 projects, \$536,265; Montana, 18 projects, \$340,600; North Dakota, 30 projects, \$333,700; and South Dakota, 15 projects, \$93,270.

NEW MEXICO IN SITU. A small pilot in situ uranium mine is being planned 40 miles west of Albuquerque, N.M., by Exxon Minerals USA, according to *Nuclear Fuel*, an industry newsletter. Exxon has applied to the New Mexico Environmental Improvement Division for a five-year, 2.5-acre operation on private land. During the test period, the project will produce about 100,000 pounds of uranium from ore bodies 500 feet below the surface. Mobil is also conducting an in situ leaching test in the area. Exxon holds uranium leases on 60,000 acres there, which it hopes in the future to mine on a much larger scale.

TAR SANDS PLANT. Sohio Natural Resources Co. wants to turn Utah sand into oil at a plant near the Asphalt Ridge tar sand deposit in Uinta County. The company proposes building a pilot plant capable of producing 5,000 barrels of oil a day and then expanding it to 25,000 barrels a day by 1990 if the technology proves workable. According to the *Deseret News*, Sohio estimates that 0.87 tons of spent sand would be left over after the extraction of oil from one ton of oil sand, for a total of 30 million tons a year at full production.

8-High Country News — June 27, 1980

The breath of Mount St. Helens falls on the Rockies — her

Photos from Washington state by Jeff Neu

by Bob Tkacz

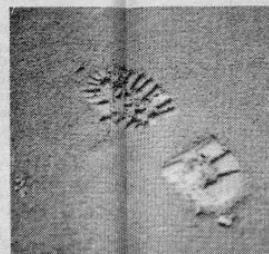
The great eruption of Mount St. Helens and its subsequent lesser burbles and showers of ash appear to have done no serious lasting damage in the Rocky Mountain region. In fact, barring a more violent explosion, they may have done some good.

Except within the 150 square miles devastated by the initial May 18 blast, plant life downwind from the topless mountain may actually benefit from the fertilizing effects of repeated ash doublings. The long-range effect on animal and aquatic life is less certain.

Mountain goats, deer and bear were among over a million animals killed in the Washington wilds by the blast, and the Washington Game Department estimates that at least 500,000 game fish and millions of hatchery fish died in the muddy aftermath. The wave of ash and mud scorched or buried everything from the smallest insects to herds of elk. But despite rumors that animals were choking on dust in Idaho and Montana, game officials report no loss of life in the Rockies directly linked to Mount St. Helens.

Scientists' initial fears that the ash that hovered over much of Idaho and Montana — and to a lesser degree Wyoming, Utah and Colorado — would dump sulfuric acid on the region have proved unfounded.

Analysis of the ash shows it was about 60 percent silicon and only slightly more acidic than the normal soil of the area. According to Robert

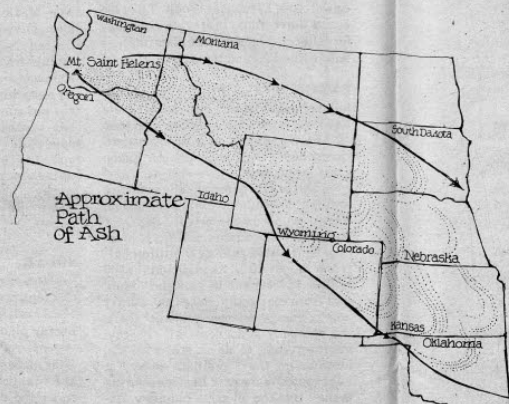


Gunther, chief chemist for the Washington Department of Social and Health Services, the ash was "no more acidic than a glass of orange juice." In addition to silica, the ash contained 23 percent aluminum and traces of sulfide, lead, iron, copper, zinc, magnesium, cadmium, silver, manganese, arsenic, chromium, selenium, and fluoride.

While the ash was in the air, Northern Rockies residents were warned to stay indoors or wear masks to protect them from silicosis, an incurable, emphysema-like disease caused by chronic or large-scale exposure to silica. Visitors to Glacier National Park were asked to drive at speeds of less than 15 miles per hour to keep from kicking up dust.

Some fields in Montana and Idaho were smothered by early falls of ash estimated at more than three tons per acre by state agriculture officials. But damage was reported light, and in fact the ash may have made a positive con-

Unless there is a great deal more spouting, the volcano will do no lasting damage to the environment of North America, but it will provide about two years of spectacular sunsets.



Map by Hannah Hinchman

e, at least, it's mild and may even be beneficial

wirth

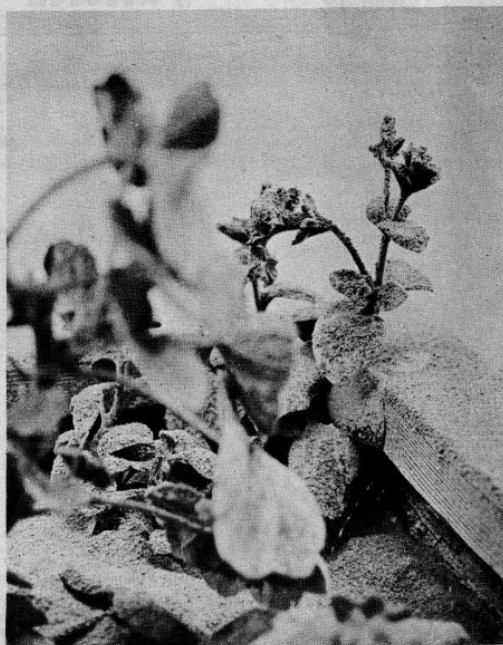
tribution. Recently farmers in the region have reported better than normal growth rates for crops they earlier had thought they might lose.

In Washington State, Department of Game officer Mike Mercer characterized the damage to the local fish population as a total disaster. Referring to a river that originates in what was once Spirit Lake on the flank of the mountain, Mercer said, "We lost everything. The Toutle River will not be the same in our lifetime." The river was one of several choked with mud, debris, and some of the \$1 billion worth of lost timber from the mountain.

Looking farther ahead, scientists with the National Oceanic and Atmospheric Administration told the *New York Times* that particles from the explosion will remain suspended at an altitude of over 55,000 feet over North America for about two years. Presuming there are no further, larger eruptions, they predicted no lasting damage to the environment and no noticeable lowering of the Earth's temperature.

They foresaw some spectacular sunsets, though, when the rays of the falling sun strike the suspended particles.

Bob Tkacz is a free-lance writer based in Casper, Wyo. He and photographer Jeff Neuwirth visited Mount St. Helens in May.



The ash from Mount St. Helens was "no more acidic than orange juice" and in fact may be boosting crop growth in the Northern Rockies.



10-High Country News — June 27, 1980



Bulletin Board



WHO NEEDS DAMS?

Denver water users could save several billion dollars by adopting new conservation measures, according to a new study. Prepared by an economist with the University of Colorado and funded by the Environmental Defense Fund, the three-year study concludes that most of the water projects being promoted by the Denver Water Board can be substituted for by conservation measures well into the 21st century. By metering water customers, for instance, the study predicts an almost one-half reduction in home water use, or an annual savings of 9.1 billion gallons in Denver alone. Copies of the 200 page study (\$12 each) or an executive summary (\$1) are available from EDF, 1657 Pennsylvania St., Denver, CO 80203.

EARTH FILMS

Looking for a film on nuclear power or other environmental issues? Green Mountain Post Films' latest bulletin reviews 15 nuclear and alternative energy movies if has in stock, as well as 10 other films, including: "It's Not a One Person Thing," a study of rural cooperatives in the South, and "In Memory of the Land and People," a look at the world of strip mining. Write: GMPF, PO Box 229, Turners Falls, Mass. 01376.

WHAT CAN YOU DO?

Lots, according to the authors of *What Can We Do?*, a collection of interviews with organizers in food- and hunger-related projects. Co-written by Frances Moore Lappe and published last May, the book is available for \$2.55 postpaid from: Institute for Food and Development Studies, 2588 Mission St., San Francisco CA 94110.

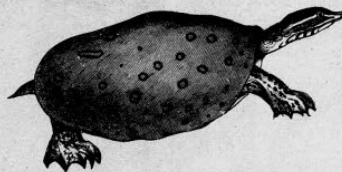
SOLAR SAVINGS

Two new solar financing projects have sprouted in California. The first, offered by Continental Savings and Loan, involves a solar savings account. Money deposited in a special fund is used to provide long-term financing for conversions of buildings to solar energy. The account, known as the Safe Energy Fund, requires deposits of \$1,000 for 2½ years or \$10,000 for six months. Interest rates are competitive with money market certificates. The Center for Renewable Resources says the account makes solar energy competitive with electricity and natural gas.

The second project, a solar mortgage corporation known as Sunny Mac, is sponsored by the California Solar Energy Industries Association. Sunny Mac is a secondary loan market that purchases solar loans from banks, savings and loan institutions and credit unions. Information on these projects is available from The Solar Center, 62 Townsend St., San Francisco, Ca., 94107.

NATURE CHILD

Sharing Nature With Children, as the title implies, is a new book showing how to be an effective nature guide for children. It includes 42 field tested games, including "Meet a Tree," "The Night World," and "What Animal Am I?" Its 144 illustrated pages cost \$5.95, including postage, and can be obtained from Ananda Publications, 14618 Tyler Foote Road, Nevada City, Calif. 95959.



MEETING THE MO. RIVER

The Missouri River Basin Commission will be meeting in Bismarck, N.D., on July 9-10 to consider adopting a two-year study of water resources and management alternatives in the Upper Missouri River Basin in Montana and North Dakota. For more information: MRBC, Suite 403, 10050 Regency Circle, Omaha, Neb. 68114; (402) 397-5714.

A MOSAIC COLORADO

A spectacular mosaic map of Colorado prepared from 15 LANDSAT images in false infrared is available from the Colorado State University for \$10. Wall size, the map even shows major roads, such as Denver's Colfax Avenue, as well as reservoirs and center pivot irrigated fields. Proceeds from sales go to further research into remote sensing. Order from: Dr. Eugene Maxwell, Earth Resources Department, College of Forestry and Natural Resources, Colorado State University, Fort Collins, Colo. 80523.

HELP WANTED

The director of EPA's 208 water quality program in southeastern Utah is looking for individuals in Carbon, Emery, Grand and San Juan counties who could serve on an environmental quality advisory board. Contact: Richard Walker, 20 Water Quality Program Manager, 93 E. 100 South, Logan Utah 84321; (801) 753-0987.

CLASSIFIEDS

Classified ads cost 10 cents a word. They must be prepaid.

WILD HORIZONS EXPEDITIONS. Box 2345-H, Jackson, WY. 83001 (307) 733-5343. Guided backpacking, mountaineering, ski touring, field seminars in conservation. Emphasis on all aspects of conservation and wilderness education. Custom and family trips, small groups, free brochure.

HAWAII VACATION: Kona Coast, Old Hawaiian rural resort, health resort, Bed-Bkft, \$88-134 wk., sl-db, (415) 221-2121; 1588 Fell St., San Francisco, CA 94117.

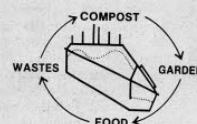
BLACKIE: "Le roi a fait battre tambour." You sang that once, at lunch on the Rue de Vallee, across the table from Karl Wallenda, who was chewing my comb. I chose you instead. You didn't know I was in the stands watching last week — yet you made two errors. I'm back. CUMQUAT.

PRODUCTION MANAGER-ART DIRECTOR. Design layout and supervise paste up crew for 16-page tabloid. Some proofreading, ad production and work on promotion materials. Design and/or layout experience necessary; art skills helpful. Low salary. Health insurance. Application deadline Aug. 11; send resume and sample of work to Geoffrey O'Gara, High Country News, Box K, Lander WY 82520.

UNORTHODOX ex-academic geologist turned landedunker-innovator, 33, seeks smart, spunky, interesting, physically fit, self-motivated, honest, energetic outdoorswoman-friend-companion-kindred soul to share interests, encouragement, knowledge, hope, mountain travel, peace and quiet, quality relationship. Box 91, Victor, Idaho 83455.

Clivus Multrum

An environmentally sound, waterless waste treatment system for homes, cabins and campgrounds. Composts toilet wastes and organic garbage into a rich fertilizer, conserving nutrients, water and energy.



FOR INFORMATION AND NAME OF NEAREST DISTRIBUTOR CONTACT:
Clivus Multrum Northern Rockies
205 Meadows Rd.
Whitefish, MT. 59937
(406) 862-3854

SUMMER NATURE CLASSES IN THE TETONS. 5 day courses on wildlife, plants, geology, astronomy, river ecology, archaeology, photography, environmental education and backpacking. For brochure write Teton Science School, Box 68, Kelly, WY 83011 or call (307) 733-4765.

SMALL MAMMALS OF THE TETON AREA. A field course on identification, habits and habitats of small mammals. July 21-25. For information write Teton Science School, Box 68, Kelly, WY 83011 or call (307) 733-4765.

BACKPACKING. Backpacking course emphasizing outdoor living skills, use of map and compass and outdoor safety. July 29-Aug 2. For information write Teton Science School, Box 68, Kelly, WY 83011 or call (307) 733-4765.

THE RIVER RESOURCE. A study of the Snake River, its geology, wildlife and history, by raft, car, and on foot. Aug 3-7. For information write Teton Science School, Box 68, Kelly, WY 83011 or call (307) 733-4765.

State of Wyoming Public Notice

PURPOSE OF PUBLIC NOTICE

THE PURPOSE OF THIS PUBLIC NOTICE IS TO STATE THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS UNDER THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972 (FWPCA), P.L. 92-500 AND THE WYOMING ENVIRONMENTAL QUALITY ACT (35-11-101 et. seq., WYOMING STATUTES 1957, CUMULATIVE SUPPLEMENT 1973). IT IS THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS TO (1) ONE INDUSTRIAL FACILITY AND (4) FOUR OIL TREATER FACILITIES, TO MODIFY (1) ONE INDUSTRIAL PERMIT AND (1) ONE OIL TREATER PERMIT, AND TO RENEW (1) ONE COMMERCIAL PERMIT AND (41) FORTY-ONE OIL TREATER PERMITS WITHIN THE STATE OF WYOMING.

APPLICANT INFORMATION

(1) APPLICANT NAME: DANIEL CONSTRUCTION COMPANY
MAILING ADDRESS: 5100 SOUTHWEST FREEWAY
HOUSTON, TEXAS 77056
FACILITY LOCATION: CHEVRON-CARTER CREEK CONSTRUCTION
CAMP, UINTA COUNTY
PERMIT NUMBER: Wy-0028690

The Daniel Construction Company plans to build a camp to house workers constructing the Chevron Oil Company's Carter Creek gas plant. The camp will have 44 units and will house 1,000 persons. Wastewater treatment for the camp will consist of a 3 cell lagoon system with the first 2 cells aerated. The lagoons will discharge to Whitney Canyon Creek (Class IV water).

The proposed permit requires compliance with National Secondary Treatment Standards and Wyoming's in-stream water quality standards effective immediately. The proposed permit also requires periodic self-monitoring of effluent quality and reporting of results quarterly. The permit is scheduled to expire on June 30, 1985.

(2) APPLICANT NAME:

MAILING ADDRESS:

FACILITY LOCATION:

PERMIT NUMBER:

FACILITY LOCATION:

PERMIT NUMBER:

FACILITY LOCATION:

PERMIT NUMBER:

Facilities are typical oil treaters located in Natrona County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skin ponds. The discharges are to Castle Creek and Salt Creek (Class IV waters) via unnamed draws.

The discharges must meet Wyoming's Produced Water Criteria effective immediately. Chapter VII of the

TERRA RESOURCES

P.O. BOX 2500
CASPER, WYOMING 82601

WELL NO. 13-69, TRACT 30,
SALT CREEK UNIT SOUTH, NE¼,
NE¼, SECTION 13, T39N,
R79W, NATRONA COUNTY, WYOMING

Wy-0028738

WELL 7A-X, TRACT 26,
SALT CREEK UNIT SOUTH, SE¼,
NW¼, SECTION 18, T39N,
R78W, NATRONA COUNTY, WYOMING

Wy-0028711

WELL NO. 3A, TRACT 10,
SALT CREEK UNIT SOUTH, NE¼,
NW¼, SECTION 7, T39N,
R78W, NATRONA COUNTY, WYOMING

Wy-0028703

(continued on page 12)

Western Roundup

EPA to curb 'plume blight' over public wild lands

New rules to maintain or clean up the air quality over national parks and wilderness areas have been proposed by the U.S. Environmental Protection Agency.

Known as visibility regulations, the rules would require states to design programs that will keep or regain the highest possible visual air quality in some 156 Class I areas — regions the EPA has identified as deserving complete protection under the Clean Air Act.

The program is aimed largely at the Southwest, where fine solids and other coal-fired power plant emissions cause haze and a vertical smoke known as plume blight.

Under EPA's proposal, a state or federal designated land manager is given the power to require existing polluters to install pollution control equipment if they are causing visibility impairment.

The agency has defined visibility impairment as any change from the natural condition, including visual range, contrast or atmospheric color.

The land manager could also disapprove new construction permits if they would affect visibility in Class I areas.

The proposed program would protect vistas outside Class I areas, such as the view from Bryce Canyon National Park to Navajo Mountain, and recognizes fugitive dust emissions that do not pass through a smoke stack, chimney or vent as a potential source of visibility impairment. Fugitive dust is a major problem associated with strip mines.

Cost estimates for implementing the

program's first phase run as high as several billion dollars. According to the **Public Lands News**, a study prepared by ICF, Inc., says \$3 billion in capital expenses and almost \$860 million in annual expenses will be needed to retrofit some 21 existing power plants with pollution control equipment.

A less expensive alternative not recommended by EPA would involve just 11 plants and cost roughly half that amount.

PLNews also quotes a White House official as saying there could be a considerable variation in how states will implement the regulations.

"Based on past history, Utah, New Mexico, and Wyoming will probably come out fairly strongly for development. Montana, North Dakota and Colorado will probably be more restrictive," the unidentified source said.

Environmentalists have reacted favorably to the proposed program, although the process of resolving disputes between state land managers and the EPA needs to be clarified, says Friends of the Earth.

FOE also says the program's monitoring scheme needs revamping, and the group has urged its members to back the EPA proposal overall. "The coal companies, utility industry and their allies will be doing all they can to produce weak regulations," the group wrote its members.

EPA has set a 75-day comment period on the rules, which were published in the May 22 Federal Register, and a public hearing is scheduled in Salt Lake City on July 2.



Photo by Jack McLellan

ENDANGERED VISTAS such as this one at Canyon Lands National Park in Utah would get tough new visibility protection under proposed EPA rules.

State-private venture may save Colo. farm

A state official, working the political backrooms of Denver, is perfecting a plan that could set a precedent in the fight to stem urban sprawl.

Colorado Treasurer Roy Romer has proposed that the state join private investors in purchasing an 11,000-acre ranch midway between Denver and Colorado Springs.

The ranch, recently placed on the auction block for \$11.5 million, is the largest undeveloped tract between the two Front Range cities, which are rapidly expanding towards each other.

Romer's proposal, already sparking considerable controversy, would create a corporation called The Front Range Land Bank. The details are still being

worked out, Romer says, but one option is to develop a small portion of the tract and use the profit to pay for the entire purchase, keeping the remaining acreage as open space.

"I am not advocating public ownership or development of land in competition with the private sector," he told the **Denver Post**. The Land Bank would "only put the master plan in place," he said, then turn it over to private interests for development.

The plan has upset Franklin Mullen, the listing agent handling the sale of the ranch. Mullen reportedly said that he does not want to see "real estate broker signs hanging out the windows of the State Capitol."

Carl Winkler of the Douglas County Commission, which would have final zoning authority over the master plan, says he too has reservations about the state becoming involved in land speculation.

The biggest obstacle to Romer's plan, however, will be the state legislature, which would have to approve the use of general revenues for the purchase when it meets next January. Romer says getting the authorizing legislation through the conservative body will be "an uphill battle."

Romer reportedly has raised private funds to purchase an option to buy the ranch, pending the legislature's approval next year.

'Filthy Five' give congressmen funds

Since 1978, Sen. Alan Simpson (R-Wyo.) has received the eighth largest campaign donations in the Senate from corporations with poor environmental records, Environmental Action charges.

The Washington, D.C.-based group has charted campaign contributions from five U.S. corporations — Amoco, Dow Chemical Co., International Paper, Occidental Petroleum, and Republic Steel — that it says have long histories of pollution violations.

Simpson has received \$6,700 from the companies, which Environmental Action has labelled the "Filthy Five." Other western members of Congress receiving donations from the companies for the 1980 elections include: Symms and Hansen, Idaho; Kramer, Colo.; Marlenee, Mont.; Garn, McKay and Marriott, Utah; and Cheney, Wyo.

"To be sure, there is nothing illegal about these contributions," an Environmental Action representative said. "But they seem to be substituting campaign contributions for pollution clean up expenditures and they're fouling up the political process."

Western states contest Indian fishing rights

Montana and eight other western states are contesting a court ruling giving the Crow Tribe regulatory power over hunting and fishing on private lands within their reservation.

The Ninth U.S. Circuit Court of Appeals ruled that the tribe could bar non-members of the tribe from hunting and fishing on their own land. (Almost one-third of the reservation lands are owned by non-Indians.) And while the Crows could not impose criminal sanctions on violators, the court ruled, the tribe could take civil action.

The U.S. Supreme Court has agreed

to hear Montana's appeal.

Meanwhile, the Nez Perce in Idaho are challenging a state order closing the Rapid River to salmon fishing. But they're contesting the ban in the water, not the courts.

Some 65 Nez Perce, including women and children, faced 25 officers from the state's Fish and Game and Law Enforcement departments earlier this month in a tension-filled encounter that prompted one Indian leader to say, "That's how you got Watts, Wounded Knee and Miami."

The tribal government, reacting to

low salmon runs on the river, had limited Indian fishing to weekends, with each family restricted to 10 fish. But state officials had closed the waters completely, a move tribal officials say violates 19th century treaties.

The culprit behind the low salmon runs, according to the **Idaho Statesman**, may be the Idaho Power Co., which in obtaining a federal permit to dam the Snake River in 1964, agreed to build a hatchery to stock the Rapid River. The company, however, has failed for several years to meet salmon quotas set in that agreement.

12-High Country News — June 27, 1980

STATE OF WYOMING PUBLIC NOTICE (continued from page 10)

Wyoming Water Quality Rules and Regulations infers that as long as the Produced Water Criteria is met, the water is suitable for beneficial use. There is no evidence to indicate that limitations more stringent than the Produced Water Criteria are needed to meet Wyoming's Water Quality Standards. The Department will continue to evaluate the discharges and, if necessary, will modify the permits if evidence indicates that more stringent limitations are needed.

Semi-annual self-monitoring is required for all parameters with the exception of oil and grease, which must be monitored quarterly. The proposed expiration date for the permits is February 28, 1981.

(3) PERMIT NAME: MEDICINE BOW COAL COMPANY
MAILING ADDRESS: P.O. BOX 530
HANNA, WYOMING 82327
FACILITY LOCATION: MEDICINE BOW MINE, SECTIONS
19, 29, 32 and 33, T23N,
R83W, CARBON COUNTY, WYOMING
PERMIT NUMBER: Wy-0023604

The Medicine Bow Coal Company is the owner and operator of a large open pit coal mine located near Hanna in Carbon County, Wyoming. Water encountered in the mine pits is pumped to settling ponds which discharge to Big Ditch (Class IV water).

The existing permit for this facility authorizes a discharge from 2 separate locations. The Company has now requested that the permit be modified to allow a discharge from a new, third, settling pond to Big Ditch.

The proposed permit authorizes the new discharge point. All discharges will be required to comply with effluent limitations which are considered to represent best available treatment by the State of Wyoming. In addition, the proposed permit requires control of runoff from disturbed areas and requires monitoring of effluent quality on a regular basis, with reporting of results quarterly.

The proposed permit is scheduled to expire June 30, 1985, however, it does contain a re-opener clause which allows the permit to be modified if more stringent effluent limitations are adopted at the Federal Level.

(4) PERMIT NAME: UNION OIL COMPANY OF CALIFORNIA
MAILING ADDRESS: P.O. BOX 79
WORLAND, WYOMING 82401
FACILITY LOCATION: DALLAS PIT (DISCHARGE POINT 001),
AND FOURT 4 AND 5 PIT (DISCHARGE POINT
002), SW¼, SECTION 13, T32N, R99W,
FREMONT COUNTY, WYOMING
PERMIT NUMBER: Wy-0001171

Facility is a typical oil treater located in Fremont County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharges are to a Class II water, the Little Popo Agie River.

The discharge must meet Wyoming's Produced Water Criteria effective immediately. Chapter VII of the Wyoming Water Quality Rules and Regulations infers that as long as the Produced Water Criteria is met, the water is suitable for beneficial use. There is no evidence to indicate that limitations more stringent than the Produced Water Criteria are needed to meet Wyoming's Water Quality Standards. The Department will continue to evaluate the discharge and, if necessary, will modify the permit if evidence indicates that more stringent limitations are needed.

This permit is being modified to distinguish the Dallas Pit and the Fourt 4 and 5 Pit as being 2 separate discharge points. Semi-annual self-monitoring is required for all parameters with the exception of oil and grease, which must be monitored quarterly. The proposed expiration date for the permit is December 31, 1983.

(5) PERMIT NAME: HIDDEN VALLEY ESTATES
HOMEOWNER'S ASSOCIATION
MAILING ADDRESS: 4307 HIDDEN ROAD
GILLETTE, WYOMING 82716
FACILITY LOCATION: HIDDEN VALLEY ESTATES,
CAMPBELL COUNTY, WYOMING
PERMIT NUMBER: Wy-0024589

The Hidden Valley Estates Homeowner's Association owns and operates a subdivision known as Hidden Valles Estates located southeast of the City of Gillette, Wyoming. The wastewater treatment facilities serving the subdivision consist of an extended aeration package plant which discharges to Donkey Creek (Class IV water).

The proposed permit for the facility requires compliance with National Secondary Treatment Standards and Wyoming's in-stream water quality standards effective immediately. The proposed permit also contains regular self-monitoring of effluent quality and quantity with reporting of results quarterly. The permit is scheduled to expire on July 31, 1985.

(6) PERMIT NAME: DIAMOND SHAMROCK
MAILING ADDRESS: 5730 WEST YELLOWSTONE
CASPER, WYOMING 82601
FACILITY LOCATION: MARTIN SPRING STATE NO. 31-16
NE¼, SECTION 16, T36N, R74W,
CONVERSE COUNTY, WYOMING

PERMIT NUMBER: Wy-0027014
FACILITY LOCATION: HORNBECK STATE NO. 2-16, NW¼,
SECTION 16, T36N, R74W,
CONVERSE COUNTY, WYOMING

PERMIT NUMBER: Wy-0027022
FACILITY LOCATION: MARTIN SPRING WERNER NO. 11-9,
NW¼, SECTION 9, T36N, R74W,
CONVERSE COUNTY, WYOMING

PERMIT NUMBER: Wy-0027057
FACILITY LOCATION: MARTIN SPRING FEDERAL NO. 1-9
SW¼, SECTION 9, T36N, R74W,
CONVERSE COUNTY, WYOMING

PERMIT NUMBER: Wy-0027065

(7) PERMIT NAME: MARATHON OIL COMPANY
MAILING ADDRESS: P.O. BOX 120
CASPER, WYOMING 82601
FACILITY LOCATION: OREGON BASIN FIELD, SAMUEL
No. 27 WELL, NW¼, SW¼, SECTION
32, T51N, R100W,
PARK COUNTY, WYOMING
PERMIT NUMBER: Wy-0027604

Facilities are typical oil treaters located in Converse and Park Counties, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The Diamond Shamrock facilities discharge into Brown Springs Creek, a Class IV water, and the Marathon facility

discharges into the South Fork of Dry Creek, also a Class IV water, all via unnamed draws.

The discharges must meet Wyoming's Produced Water Criteria effective immediately. Chapter VII of the Wyoming Water Quality Rules and Regulations infers that as long as the Produced Water Criteria is met, the water is suitable for beneficial use. There is no evidence to indicate that limitations more stringent than the Produced Water Criteria are needed to meet Wyoming's Water Quality Standards. The Department will continue to evaluate the discharges and, if necessary, will modify the permits if evidence indicates that more stringent limitations are needed.

Semi-annual self-monitoring is required for all parameters with the exception of oil and grease, which must be monitored quarterly. The proposed expiration date for the Diamond Shamrock permits is December 31, 1982, and for the Marathon permit is December 31, 1983.

(8) PERMIT NAME: AMOCO PRODUCTION COMPANY
MAILING ADDRESS: P.O. BOX 2520
CASPER, WYOMING 82601
FACILITY LOCATION: ROBINSON RANCH UNIT, SE¼, SE¼,
SECTION 19, T50N, R67W,
CROOK COUNTY, WYOMING
PERMIT NUMBER: Wy-000299

(9) PERMIT NAME: GARY ENERGY CORPORATION
MAILING ADDRESS: P.O. BOX 99
BELLE CREEK, MONTANA 59317
FACILITY LOCATION: JONES LEASE, SE¼, SECTION 5,
T57N, R68W, CROOK COUNTY, WYOMING
PERMIT NUMBER: Wy-0002631

(10) PERMIT NAME: TENNECO OIL COMPANY
MAILING ADDRESS: 720 SOUTH COLORADO BLVD., PENTHOUSE
DENVER, COLORADO 80222
FACILITY LOCATION: TURNER SAND UNIT, TRACT 1 BATTERY,
NW¼, SECTION 25, T48N, R68W,
WESTON COUNTY, WYOMING
PERMIT NUMBER: Wy-0026239

Facilities are typical oil treaters located in Crook and Weston Counties, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharges are to Robinson Creek, Gammon Prong and Raven Creek, all Class IV drainages.

The discharges must meet Wyoming's Produced Water Criteria effective immediately. No chemical limitations have been imposed on these facilities except for oil and grease (10 mg/l and pH 6.5 — 8.5). This is due to the extreme aridity of the areas which allows for beneficial use of the water for agricultural purposes. There is no evidence to indicate that limitations more stringent than the Produced Water Criteria are needed to meet Wyoming's Water Quality Standards. The Department will continue to evaluate the discharges and, if necessary, will modify the permits if evidence indicates that more stringent limitations are needed.

Semi-annual self-monitoring is required for all parameters with the exception of oil and grease, which must be monitored quarterly. The proposed expiration date for the permits is December 31, 1984.

(11) PERMIT NAME: AMOCO PRODUCTION COMPANY
MAILING ADDRESS: P.O. BOX 2520
CASPER, WYOMING 82601
FACILITY LOCATION: ROCKY POINT FIELD, NE ¼
SW¼, SECTION 35, T57N, R69 W,
CAMPBELL COUNTY, WYOMING
PERMIT NUMBER: Wy-0000281

(12) PERMIT NAME: BANTA & HAIGH
MAILING ADDRESS: 800 FIRST NATIONAL BANK BUILDING
DENVER, COLORADO 80293
FACILITY LOCATION: RECO - NORFOLK STATE NO. 1,
SW ¼, NW ¼, SECTION 6, T54N,
R70W, CAMPBELL COUNTY, WYOMING
PERMIT NUMBER: Wy-0027278

(13) PERMIT NAME: PRENATA CORPORATION
MAILING ADDRESS: P.O. BOX 2514
CASPER, WYOMING 82602
FACILITY LOCATION: PRENATA GOVERNMENT 6-1 LEASE,
NW ¼, SECTION 6, T54N, R70W,
CAMPBELL COUNTY, WYOMING
PERMIT NUMBER: Wy-0026310

(14) PERMIT NAME: TEXACO, INC.
MAILING ADDRESS: P.O. BOX 2160
DENVER, COLORADO 80201
FACILITY LOCATION: GOVERNMENT-SPRAGUE BATTERY, DONKEY
CREEK FIELD, SW ¼, SECTION 29,
T50N, R68W, CROOK COUNTY, WYOMING
PERMIT NUMBER: Wy-0002372

(15) PERMIT NAME: ATLANTIC RICHFIELD COMPANY
MAILING ADDRESS: P.O. BOX 5540
DENVER, COLORADO 80217
FACILITY LOCATION: DAVIS MEYER T-1 BATTERY,
NW ¼, SECTION 12, T51N,
R68W, CROOK COUNTY, WYOMING
PERMIT NUMBER: Wy-0025470

FACILITY LOCATION: WEST MOORCROFT MUDDY UNIT,
SW ¼, SECTION 1, T51N,
R68W, CROOK COUNTY, WYOMING
PERMIT NUMBER: Wy-0025496
(16) PERMIT NAME: BEREN CORPORATION
MAILING ADDRESS: 2160 FIRST OF DENVER PLAZA
633 - 17th STREET
DENVER, COLORADO 80202

FACILITY LOCATION:	SOUTH WOOD FIELD, SCHURICHT LEASE, SECTION 30, T51N, R67W, CROOK COUNTY, WYOMING	PERMIT NUMBER:	Wy-0000663	FACILITY LOCATION:	CENTRAL HILIGHT UNIT, TANK BATTERY NO.5-2, NE ¼, SECTION 12, T44N, R71W, CAMPBELL COUNTY, WYOMING	PERMIT NUMBER:	Wy-0026557
PERMIT NUMBER:	Wy-0000663						
FACILITY LOCATION:	SOUTH WOOD CENTRAL TANK BATTERY, NE ¼, SECTION 25, T51N, R68W, CROOK COUNTY, WYOMING	PERMIT NUMBER:	Wy-0001074	(22) PERMIT NAME:	MCCULLOCH OIL AND GAS CORPORATION		
PERMIT NUMBER:	Wy-0001074			MAILING ADDRESS:	3033 NW 63rd STREET, SUITE 250 OKLAHOMA CITY, OKLAHOMA 73116		
(17) PERMIT NAME:	DIAMOND B INDUSTRIES, INC.	MAILING ADDRESS:	P.O. BOX 608 NEWCASTLE, WYOMING 82701	FACILITY LOCATION:	ROCKY POINT FIELD, SW ¼, SE ¼, SECTION 35, T57N, R68W, CAMPBELL COUNTY, WYOMING	PERMIT NUMBER:	Wy-0000264
MAILING ADDRESS:						(23) PERMIT NAME:	NATIONAL COOPERATIVE REFINERY ASSOCIATION
FACILITY LOCATION:	WIND CREEK LEASE, SECTION 23, T49N, R66W, CROOK COUNTY, WYOMING	PERMIT NUMBER:	Wy-0000434	MAILING ADDRESS:	HILLTOP NAT'L BANK BLDG., SUITE 201 CASPER, WYOMING 82601		
PERMIT NUMBER:	Wy-0000434						
(18) PERMIT NAME:	ENERGY RESERVES GROUP, INC.	MAILING ADDRESS:	P.O. BOX 3280 CASPER, WYOMING 82601	FACILITY LOCATION:	WOOD B BATTERY, SE ¼, NE ¼, SECTION 22, T50N, R66W, CROOK COUNTY, WYOMING	PERMIT NUMBER:	Wy-0001678
MAILING ADDRESS:						(24) PERMIT NAME:	OLDS OIL COMPANY
FACILITY LOCATION:	L.H. ROBINSON "G" LEASE, SECTION 5, T49N, R67W, CROOK COUNTY, WYOMING	PERMIT NUMBER:	Wy-0025674	MAILING ADDRESS:	P.O. BOX 4300 CASPER, WYOMING 82604		
PERMIT NUMBER:	Wy-0025674			FACILITY LOCATION:	COMINGS NO.2 & NO.3 LEASE, NE ¼, SECTION 15, T48N, R65W, CROOK COUNTY, WYOMING	PERMIT NUMBER:	Wy-0024899
FACILITY LOCATION:	ELIZABETH "B" HOFFPNE LEASE AND L.H. ROBINSON "F" LEASE, SECTION 5, T49N, R67W, CROOK COUNTY, WYOMING	MAILING ADDRESS:	P.O. BOX 99 BELLE CREEK, MONTANA 59317	(25) PERMIT NAME:	PETRO-LEWIS CORPORATION		
PERMIT NUMBER:	Wy-0025682			MAILING ADDRESS:	P.O. BOX 20919 BILLINGS, MONTANA 59104		
(19) PERMIT NAME:	GARY ENERGY CORPORATION	FACILITY LOCATION:	FOWLER LEASE, NW ¼, SECTION 7, T54N, R67W, CROOK COUNTY, WYOMING				
MAILING ADDRESS:				PERMIT NUMBER:	Wy-0003417		
FACILITY LOCATION:	FOWLER LEASE, NW ¼, SECTION 7, T54N, R67W, CROOK COUNTY, WYOMING	MAILING ADDRESS:	BOX 1953, PROFESSIONAL BUILDING BILLINGS, MONTANA 59103	(26) PERMIT NAME:	SUPERIOR OIL COMPANY		
PERMIT NUMBER:	Wy-0002666			MAILING ADDRESS:	P.O. BOX 71 CONROE, TEXAS 77301		
(20) PERMIT NAME:	GREAT NORTHERN DRILLING CO., INC.	FACILITY LOCATION:	GOVERNMENT ROBINSON LEASE, NE ¼, SECTION 27, T50N, R67W, CROOK COUNTY, WYOMING				
MAILING ADDRESS:				PERMIT NUMBER:	Wy-0025615		
FACILITY LOCATION:	GOVERNMENT ROBINSON LEASE, NE ¼, SECTION 27, T50N, R67W, CROOK COUNTY, WYOMING	MAILING ADDRESS:	308 LINCOLN TOWER BUILDING DENVER, COLORADO 80295	(27) PERMIT NAME:	TENNECO OIL COMPANY		
PERMIT NUMBER:	Wy-0024775			MAILING ADDRESS:	720 SOUTH COLORADO BLVD., PENTHOUSE DENVER, COLORADO 80222		
(21) PERMIT NAME:	INEXCO OIL COMPANY	FACILITY LOCATION:	GRADY UNIT, ATTEBERRY BATTERY, NW ¼, SECTION 1, T45N, R71W, CAMPBELL COUNTY, WYOMING				
MAILING ADDRESS:				FACILITY LOCATION:	SOUTH COYOTE CREEK, TURNER SAND UNIT, TRACT 17, NE ¼, SECTION 26, T48N, R66W, WESTON COUNTY, WYOMING	PERMIT NUMBER:	Wy-0023477
FACILITY LOCATION:	GRADY UNIT, ATTEBERRY BATTERY, NW ¼, SECTION 1, T45N, R71W, CAMPBELL COUNTY, WYOMING	PERMIT NUMBER:	Wy-0026450				
PERMIT NUMBER:	Wy-0026450			FACILITY LOCATION:	WOOD 395-3, WELLS NO.1 & NO.2, SE ¼, NW ¼, SECTION 14, T51N, R66W, CROOK COUNTY, WYOMING	PERMIT NUMBER:	Wy-0024741
FACILITY LOCATION:	CENTRAL HILIGHT UNIT, TANK BATTERY NO.0-1, NW ¼, SECTION 16, T46N, R70W, CAMPBELL COUNTY, WYOMING						
PERMIT NUMBER:	Wy-0026468			PERMIT NUMBER:	Wy-0024759		
FACILITY LOCATION:	CENTRAL HILIGHT UNIT, TANK BATTERY NO.2-1, NE ¼, SECTION 18, T45N, R70W, CAMPBELL COUNTY, WYOMING						
PERMIT NUMBER:	Wy-0026476			FACILITY LOCATION:	WOOD 395-2, FEDERAL 768, NE ¼, NW ¼, SECTION 14, T51N, R66W, CROOK COUNTY, WYOMING		
FACILITY LOCATION:	CENTRAL HILIGHT UNIT, TANK BATTERY NO.2-2, NW ¼, SECTION 8, T46N, R70W, CAMPBELL COUNTY, WYOMING	PERMIT NUMBER:	Wy-0026484				
PERMIT NUMBER:	Wy-0026484						
FACILITY LOCATION:	CENTRAL HILIGHT UNIT, TANK BATTERY NO.3-1, SE ¼, SECTION 14, T46N, R71W, CAMPBELL COUNTY, WYOMING						
PERMIT NUMBER:	Wy-0026492						
FACILITY LOCATION:	CENTRAL HILIGHT UNIT, TANK BATTERY NO.3-2, NW ¼, SECTION 11, T45N, R71W, CAMPBELL COUNTY, WYOMING						
PERMIT NUMBER:	Wy-0026506						
FACILITY LOCATION:	CENTRAL HILIGHT UNIT, TANK BATTERY NO.3-3, NE ¼, SECTION 15, T45N, R71W, CAMPBELL COUNTY, WYOMING						
PERMIT NUMBER:	Wy-0026514						
FACILITY LOCATION:	CENTRAL HILIGHT UNIT, TANK BATTERY NO.4-1, NW ¼, SECTION 36, T45N, R71W, CAMPBELL COUNTY, WYOMING						
PERMIT NUMBER:	Wy-0026531						
FACILITY LOCATION:	CENTRAL HILIGHT UNIT, TANK BATTERY NO.4-2, SW ¼, SECTION 26, T45N, R71W, CAMPBELL COUNTY, WYOMING						
PERMIT NUMBER:	Wy-0026549						
FACILITY LOCATION:	CENTRAL HILIGHT UNIT, TANK BATTERY NO.5-1, SW ¼, SECTION 1, T44N, R71W, CAMPBELL COUNTY, WYOMING						

14-High Country News — June 27, 1980

POPULAR REALITIES

Mt. St. Helens: a 'dollar' disaster, environmental wonder

by Dan Whipple

From the eruption of a volcano, one would think mankind would learn, at the very least, a little humility. This is a once-in-a-millennium event, a cataclysm of the type that shapes continents, forms mountain ranges and, in its very early incarnations, spread the seed from which life sprang. An environmental disaster to some, it is also the environment in all its glory.

But with all the shallowness available to the human mind, we put a dollar sign on it. "Mt. St. Helens' eruption has created a mess that will cost skateyeight million to clean up," *TIME* magazine featured a headline: "The Big Blowup." Doubtless *TIME* will headline Armageddon "The Huge Poof."

This volcano jammed up the Columbia River with timber, mud and debris, for chrissakes. Have you ever seen the Columbia River? Clogging it is not to be sneezed at. The Corps of Engineers has taken years to do what the volcano did in a day.

Rivers have been formed and reformed for generations past without man's assistance — but now mankind is used to the channel that was there before the volcano and by god we want it to stay that way. Too much money is involved to leave the future of the earth to the vagaries of nature. So we send out a fleet of dredges to clear the channel of volcanic droppings.

Consider this: when an oil well blows in the Gulf of Mexico, spewing enough

oil to pave south Texas, an oil company executive or Mexican bureaucrat may call it an "act of God." When a volcano erupts, changing the face of the earth, it is an economic disaster, according to the evening news.

There are those whose only frame of reference for Mt. St. Helens is how many atomic bombs it equals: how many Hiroshimas? The timber industry sees it all in board-feet. *TIME* says the trees "flattened" were worth at least \$1 billion but "executives expect to salvage about 80 percent of the logs by sawing those not badly scorched into usable lumber," reducing losses to \$200 million.

There are probably several businessmen out there who will soon remind us that Mt. St. Helens polluted the air worse than all the steel mills in Pittsburg, and didn't file a single word with the Environmental Protection Agency.

And in a show of good old American ingenuity, two young men — one identified as an HCN freelancer — were out in the streets of Casper, Wyo., selling vials of Mt. St. Helens ash.

I'd bet my last vial of volcanic ash that somebody is even going to make political hay out of this. It is, after all, an election year. Reagan will say that Carter didn't help the people enough. Carter will say that Reagan didn't understand the problems attending a volcanic eruption. Congress will be responsible, but not helpful.

There will be a move afoot to start volcanic ash dumps. There's enough

ash coming out of that mountain to go around the world and back. Maybe it's good for your garden. Maybe not. To avoid the environmental damage, the government can get out some tractors and shove all the loose dust back on top of the mountain so that we can recover the 1,300 feet lost in the explosion. The Office of Surface Mining can require a return to original contour.

Ash must be removed from streets. Houses were damaged. Roads, like rivers, are clogged. It is a nuisance. But this is a primitive event, beautiful in its fury and unpredictability. There isn't anybody to get mad at. It isn't the gov-

ernment's fault, and there is no force known to man that could have prevented it.

Maybe we should reconsider our relationship to the planet. We keep trying to fit this volcano into our systems — economic or philosophical. The now-famous mountain man Harry Truman (not the president) may have exemplified the attitude when he said that he would stay on his mountain, regardless. Truman said: "No one knows more about this mountain than Harry and it don't dare blow up on him." He refused to be removed from the mountain; the mountain blew up on him.

Dear Friends,



Photo by Sara Hunter-Wiles
Hannah Hinchman

The production room still has a sign reading "Proofreaders: Let us prove our vigilant diligence," but the gentle, tongue-in-cheek perfectionist who put it there is a free agent now.

Hannah Hinchman has resigned her position as production manager. Her immediate future is uncertain: She may be off next week for Connecticut, and then art school, or she may be building fences up Squaw Creek for a while. But either way we will have to make do with only the reminders and remnants of her years here, and not expect her back until her drummer tells her to come.

Hannah says she "quailed a little" when she took over the production room three years ago, but she managed to make the job seem simple and civilized. Even in the final throes of pasteup, the production room was more orderly than any other space in the office. Fresh wildflowers stood in a clear vase next to the Exacto knives and grease pencils.

The dummy sheets, guides for the pasteup staff, tell you where everything goes; but in the blanks spaces there was another touch of Hannah: a hole for a wildlife photo might be labelled "little mouse on the prairie," or, across the top of page one, she might write, "Hikin' Tree Noose."

On a night out, Hannah often promised to "get a little impertinent" after some dancing and imbibing. It's a little hard to know what she meant — she never punched anybody or browbeat a stranger. But she was always ready to take pokes at the pompous and undress the emperors — and she could turn that "impertinence" on her friends when they needed it.

That feistiness will be missed. So will her loyalty to and appreciation for the beauty of the West, and her searching eye for its nuances.

She's hanging on to some of her other tasks for a while — how long we can't be sure, and neither can she. Her column, "Afield," will still appear, and so will occasional artwork. Here in Lander, we'll be reminded of her constantly — her drawings hang on many walls, and you're likely to see her rendering of a steak when you open a local menu.

Hannah says that after a stint in art school she'll likely "get weird on us," and be rollerskating across canvases with paint-laden brushes tied to her heels. Maybe so. But we're impertinent enough to believe that she's just putting up a front: Her art is here in the West, and her desire is to render it faithfully. She'll be back.

Opinion





MODERATING VOICE

Dear HCN,

Western land is being developed at a phenomenal rate. It should be done in an environmentally sound manner, or it should not be done at all. A great challenge faces us; we must take the opportunity to be a moderating voice to affect land development. To be effective in the future, environmental people must be innovative and creative.

John Catlin
Redwood City, Calif.



Photo by Sara Hunter-Wiles

SMALL FRY — in this case Sam Schimpfpenig and Sarah Strouse — get a little encouragement before embarking on their own race. Everybody won.



MAYFLOWER PEREGRINE

Dear HCN,

Re: Dave Hall's story on reintroducing peregrine falcons in northern Utah (HCN 6-13-80).

Did you know that (according to the Mayflower Society) the first child born in Plymouth Colony, Mass., was Peregrine White — a falcon rather than a tiercel. I wonder if she had a sister called Purity?

I really enjoy HCN from up there where the antelope roam.

S.D. Isbell
Cheyenne, Wyo.

GRIZZLY GRUMP

Dear HCN,

I was surprised at your caption (HCN, 5-30-80) which told of the loss of two grizzlies near the Mission Mountains last month. If you had checked into the matter you would know that:

- 1) The rancher has had sheep molested or killed by grizzlies for several spring seasons in a row;
- 2) He has never killed any grizzlies on his land before;
- 3) He respects grizzlies and is saddened because he had to kill two of them;
- 4) The bears were within 30 yards of his house;
- 5) In this instance, he tried repeatedly to get help from the Montana Department of Fish, Wildlife, and Parks, the U.S. Fish and Wildlife Service, and the Lake County Sheriff's Office. None of the agencies even bothered to return his telephone calls.

So now we have the armchair experts, headed by the U.S. Fish and Wildlife Service, leading a chorus of complaining. How much better they could have done by responding when they should have.

The record of the states is so far above the fed's in grizzly management, protection, and expertise that there is no comparison. For example, when the Montana grizzly hunting regulation proposals were discussed with the U.S.

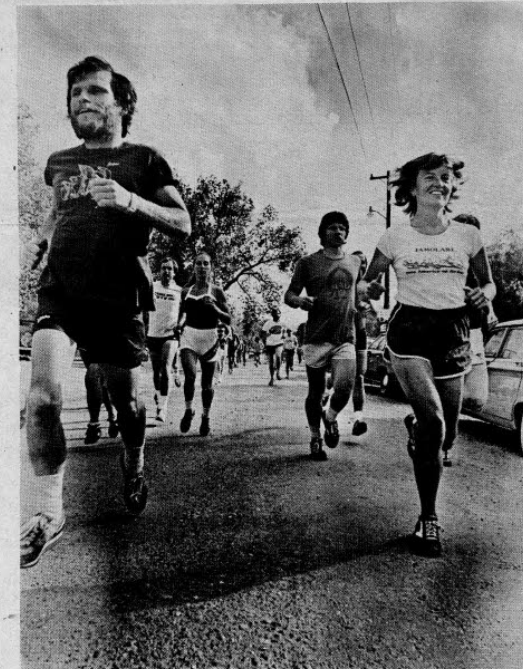


Photo courtesy of Wyoming State Journal

HCN'S FOURTH annual citizens' footrace attracted over 100 participants again this year. Five miles of running up into the foothills and back down Sinks Canyon were followed by food, frisbees, beer, and a ribbon or two.

Fish and Wildlife Service in the middle 1970s, the feds did not even know where the Bob Marshall Wilderness was located, in spite of the fact that the wilderness is the nucleus of the most viable grizzly population in the 48 states.

The caption which hints that the rancher "gunned down" two grizzlies unnecessarily is naive. People who are really concerned about grizzlies, or any threatened predators, had better learn to start cooperating with ranchers.

now.

Every uninformed slur against ranchers is two steps backward for the grizzly.

Gary T. Balaz
Missoula, Mont.

High Country News

The independent
natural resources biweekly
of the Rockies

Published biweekly at 331 Main, Lander, Wyo. 82520. Telephone 307-332-4877. Second class postage paid at Lander. (USPS No. 087480) All rights to publication of articles herein are reserved.

Publisher	Thomas A. Bell
Editor	Geoffrey O'Gara
Associate Editor	Joan Nice
Staff Writer	Michael Moss
Contributing Editor	Peter Wild
Correspondents	Philip White
	Timothy Lange
Business Manager	Jazmyn McDonald
Production	Betsy Schimpfpenig
Editorial Assistant	Sarah Doll
Photography	Sara Hunter-Wiles
Circulation	Will Murphy
	Betsy Schimpfpenig

Subscriptions \$15.00 per year.
Single copies 75 cents.

Call for permission to reprint any articles or illustrations. Contributions (manuscripts, photos, artwork) will be welcomed with the understanding that the editors cannot be held responsible for loss or damage. Articles and letters will be published and edited at the discretion of the editors. To have a sample copy sent to a friend send us his or her address. Write to Box K, Lander, Wyo., 82520.

Announcing the
HIGH COUNTRY NEWS66 FLYING DISC⁹⁹

Imprinted with the HCN Mountain Goat, these streamlined "discs" are exceptionally maneuverable and accurate. Spread the word by flipping a "disc" for HCN.

\$3.00 each, postage paid.
(Wyoming residents add 3 percent sales tax.) Send to HCN, Box 4, Lander, WY, 82520.



Please send — discs to:

Name _____
Address _____
City _____ State _____ Zip _____

16-High Country News — June 27, 1980

Trackings

followups on previous stories

Gillette coal

(See HCN 2-22-80 for previous story)

Federal officials planning to lease coal in the Gillette area of the Powder River Basin — said to contain the nation's richest coal deposits — have targeted about 8.1 billion tons of federal coal in the area for possible leasing by mid-1980.

The figure, added to federal coal already under lease, could mean development of a little less than half of the roughly 28.8 billion tons of federal coal in the Gillette Review Area, which runs along Wyoming state highway 59 in a four-to-ten mile wide band for about 45 miles.

However, two problems may stand in the way of future coal leasing.

First, of the 8.1 billion tons of availa-

ble coal, 5.1 billion tons might be excluded from mining because of alluvial valleys, drainages which are protected from strip mining under the 1977 Surface Mining Control and Reclamation Act.

Second, of 101 owners of surface land above federal coal deposits, 25 responded to a BLM survey saying they would refuse to allow mining on their lands. Surface owners have veto power over strip mining of underlying federal coal.

Glen Bessinger, project manager for the Powder River Basin Coal Planning Project, said neither problem could be said to finally rule out coal leasing.

In the case of alluvial valleys, federal regulators have yet to set a firm definition: until they do, BLM's figures for the Gillette area are only tentative, and revision is expected.

As for surface owner consent, the initial survey, in which 25 surface owners, representing 17,600 acres and 1.3 billion tons of coal, said no to mining, was far from final. A BLM source said many of the owners who opposed mining were actually energy companies — owners who would not qualify under the strip mine act, because they do not occupy

the land. The surface owner consent provisions are designed to apply to ranchers and farmers whose spreads would be curtailed or destroyed by coal development.

BLM will next begin receiving "expressions of interest" from coal companies interested in developing the Gillette area reserves.

The U.S. Geological Survey will delineate tracts, the tracts will be ranked, and a regional environmental statement will be prepared before lease sales.

— GOG

Saving farms

(For previous story, see HCN 5-30-80)

Maintaining its lead in western land use planning, Colorado's Weld County is proposing to revamp its zoning rules to help preserve the county's agricultural focus.

The zoning rules now in use are based on the county's first zoning resolution adopted in 1961. The new rules, according to Tom Honn, county zoning ad-

ministrator in Greeley, will help tackle growing residential pressures around agricultural areas.

"The basic philosophy and approach in the first resolution is fine," he said, "but development pressures have changed drastically. We've cut and pasted the original resolution into a mess."

Producing almost a third of Colorado's farm sales, Weld ranks third in agricultural production among all counties nationwide. Land use planners for the county enjoy widespread community support for a continued farm economy, and have taken planning initiatives deemed "radical" elsewhere in the West.

The new rules clarify how the county's plan is to be administered and enforced, including permits and grievance procedures. The rules also establish five county zones: agricultural, transitional, residential, commercial and industrial.

Hearings on the proposed new rules will be held in July and a final resolution is due this fall.

— MM



by Hannah Hinchman

I lean over a log, holding it in place while my friend hammers a spike through the other end. We're building a buffalo-proof fence across a draw in a high pasture at the foot of Table Mountain's cliffs. We're still on the south face of the draw — the light and heat make the red sand look like the side of a wood stove glowing red hot. I try to make shade for myself while waiting. A tiny wasp flies into my shadow. It looks like it's sewn together with copper wire and cotton thread. As it hovers over the

sand, the hum it makes sounds like a note from a wasp-size violin. In fact it carries a small parcel. I lean over to look more closely. The wasp is one-half inch long, its burden is a much smaller spider, legs folded back. Spider and wasp disappear neatly into a burrow in the burning sand.

We stop for a fruit break. Handfuls of grapes and a ripe peach for throats so dry — I can feel my mouth strain for the pure moisture first, not the fruit flavor. A snake fly makes a surprise appearance. It's a small insect with a long flexible neck that gives it an alert, intelligent appearance like a minuscule tyrannosaurus rex. It is a predator. No lounging on succulent lupine stalks for it. I look again and it's gone, hunting. I wonder if it would have taken on the frail crane fly that has been sitting on my sleeve for several minutes, quaking in the breeze.

But nothing slakes a serious thirst like water. It is the compound our

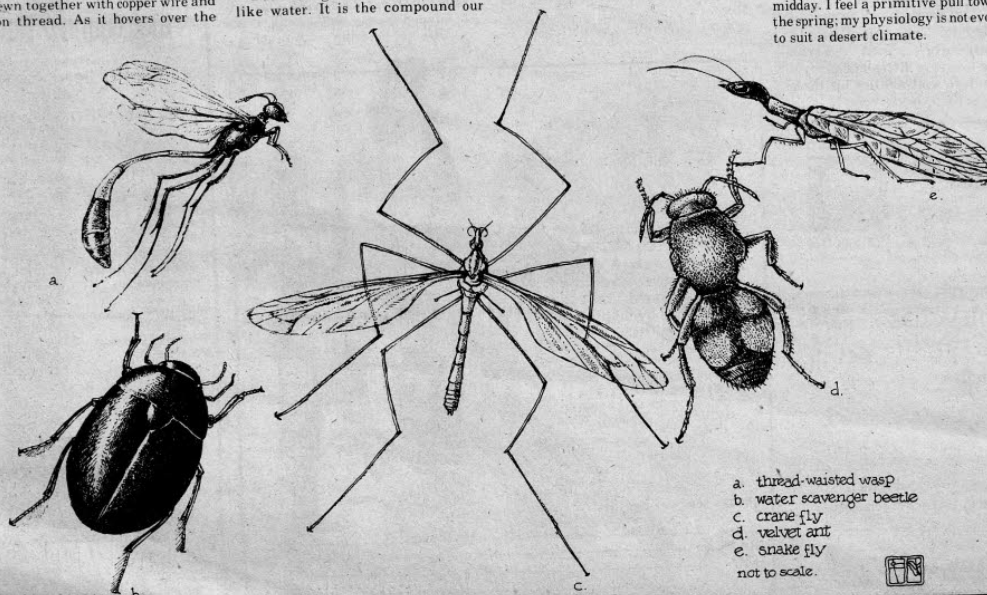
bodies desperately need when the salt content gets too high in our bloodstream. Yet our brains don't send us a message that says "too much salt, take in H₂O right now." Instead, the brain provides recurring seductive images of bubbling springs, clinking ice cubes, mountain torrents. Fortunately, this draw has a spring, and it has turned a little section of this dry sage upland into a true oasis. I suck down cupful after cupful from the place it issues quietly from the rock.

All I hear is the buzz of innumerable flies and bees that have gathered at the spring too. The buzz of a fly is a sound I associate with the wildest and loneliest places on earth.

After the ecstasy of quenching a thirst, the fervent activity centered at this little pool becomes apparent to me. Tiny black beetles appear and disap-

pear in the bottom silt. Caddisflies lumber along the bottom carrying shells they've constructed out of grains of rock, each about the same size. Honeybees and hornets alight in the mud on the edge of the water. Azure butterflies drink, wings opening and closing like slow breathing. A brilliant orange velvet ant (really a wingless wasp) appears on the sandstone shelf above the water. In this spring we found the strangest animal I've ever seen: a round, white, featureless worm, about the size of a strand of thin spaghetti, five inches long. Not soft as you expect worms to be but as hard as a strand of uncooked spaghetti: yet still flexible enough to coil itself into elaborate knotwork when we picked it up.

The cicadas, the flies, the crickets: all sounds from a hot day that escalate and pulsate as the temperature rises, the way the blood pounds in my head as I drag a log through the wild roses at midday. I feel a primitive pull towards the spring; my physiology is not evolved to suit a desert climate.



a. thread-waisted wasp
b. water scavenger beetle
c. crane fly
d. velvet ant
e. snake fly
not to scale.

