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Lander, Wyoming

Friday, February 22, 1980

Tailings, pollution haunt uranium company town

by Timothy Lange

URAVAN, Colo. — Here at the confluence of the Dolores and San Miguel rivers, notched into the 350-foot face of Club Mesa, is one of the oldest operating uranium mills in America, a relic of the 1940s.

The mill town is wholly owned by the metals division of Union Carbide, the nation's 25th-largest corporation. Its history is tied to mineral development: Since the 1890s, radium, vanadium and uranium have been extracted from the area's carnotite ore.

Decades as a mining and milling center have left their mark. Groundwater is chemically and radioactively contaminated. Many areas of the mill and town register above-normal radiation levels. The river is polluted. Eight million tons of radioactive tailings perch unsteadily just back of the rimrock above the mill and the homes of the 600 people who live and work in Uravan.

Jim Montgomery, the radiation section chief in the Colorado Department of Health, calls it a "bad operation" and another state official labels it a "disaster area." But it puts food on the table for many of the 5,000 or so folks who live in the job-poor West End of Montrose County. Union Carbide, the mill owner, is the county's number one taxpayer and provides a quarter of the nation's vanadium supply.

State health officials say they won't allow Uravan to continue "as is." They want Carbide to promise big changes or to thoroughly justify why it shouldn't have to make them.

In December 1979, the department told the company to come up with a

detailed set of alternatives for Uravan's future, among them cleaning up and relocating the mill and-or the town, moving and monitoring the tailings piles, ending discharges and seepage into the San Miguel, decommissioning the mill and reclaiming the site. Between now and May 30, the department will work with Carbide to choose among the alternatives.

Whichever options are finally selected, there likely will be a multi-million dollar bill to pay, and the health department expects controversy.

FIRST BOOM

Back before the Ute Indians were muscled out of the Uravan region, they ceremonially decorated themselves with ochre paint made from carnotite. White men in the 1880s dug the yellow-gray ore for its gold. And sporadically until 1911, when richer deposits were found in Peru, carnotite millers extracted small amounts of steel-hardening vanadium. It was the need for "therapeutic" radium that created the first mining and milling boom, however.

Sometime around 1910, Standard Chemical Co. entrepreneurs Joseph and Michael Flannery staked claims to vast carnotite reserves on federal land. Shortly before World War I began in Europe, they built a radium mill on the lower San Miguel at a ghost town called Coke Ovens. The tent city they erected was dubbed Jo Junior Camp.

The Flannerys made themselves famous and their wallets fat producing

(continued on page 4)

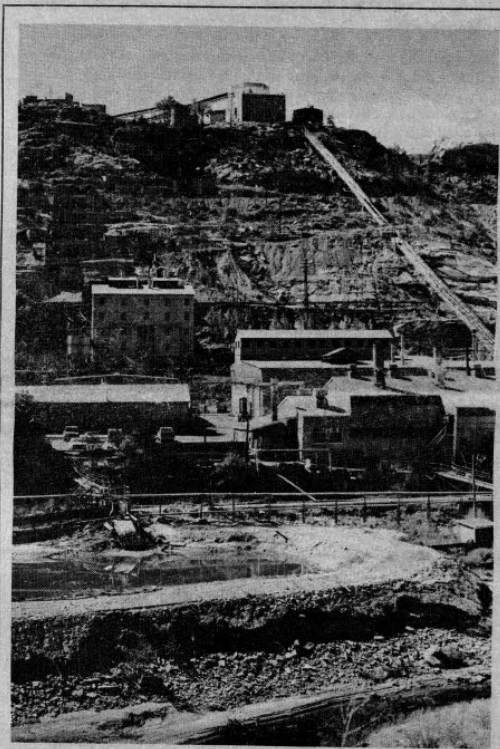
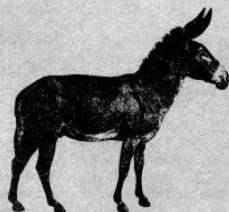


Photo by Timothy Lange

THE URAVAN MILL and homes lie at the base of the mesa where the mill tailings perch precariously. If a tailings dam broke, much of the town could be entombed.

In the News



THE FLYING BURRO 6

MUTTON MUTINY

A new predator control policy has sheep ranchers threatening to pull their money out of the federal animal damage control program. The policy is aimed at improving the program's humaneness and economy while efficiently ridding ranchers of coyotes that are killing sheep. But ranchers say the coyotes are laughing in their lairs.

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SAGEBRUSH REBUTTAL

For all the talk about wresting federal lands from Uncle Sam, the real "Sagebrush Rebellion" is a failure to communicate among the feds, state officials and citizens. The danger is that ranchers, farmers and environmentalists will lose sight of their common interests — and lose it all to natural resource exploiters.

2

WIPP LOSES GRIP

The Waste Isolation Pilot Project was a controversial favorite for a permanent nuclear waste storage site, until a presidential announcement this month. Now WIPP is only one of several candidates that will be studied over the next five years as potential homes for toxic nuclear wastes.

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The Sagebrush Rebellion: Misdirected dynamite

The real danger of the Sagebrush Rebellion is not that the federal lands will be taken over but that the deep sentiments aroused by the effort will drive a wedge between agricultural and environmental interests.

Legal experts agree that Nevada and other states have a very weak case in their bid to take over federal lands within their boundaries. In fact, many of the rebellion's foremost spokesmen practically will admit that it is a public relations hype — an attempt to bring national attention to problems they face trying to work with federal desk jockeys.

David Leroy, Idaho's attorney general and a vocal proponent of the rebellion, told a group in Sun Valley last fall that he sees it as a plea for a more meaningful partnership between states and the federal government in making land management decisions.

Rebels have a saddlebag full of problems they can reach into for examples. They cite labor department regulations that require hot and cold running water and dwellings with constant temperatures for sheep herders satisfied with considerably less. A rancher tells of a land exchange he has been trying to arrange with the Bureau of Land Management: the BLM wants the land and the terms have been agreed to, but red tape has stalled it for eight years. Another rancher says that when he showed a BLM man antelope grazing on his land as evidence of the good browse there, the BLM cowboy accused him of herding the antelope there from public lands.

BLM no doubt has its own side of the stories. However, anyone who has tried to work with the BLM — which is the principle target of the rebellion — has his or her own tales of bureaucratic bungling, unnecessary red tape, ignored public input, lack of understanding of the West or just plain arrogance.

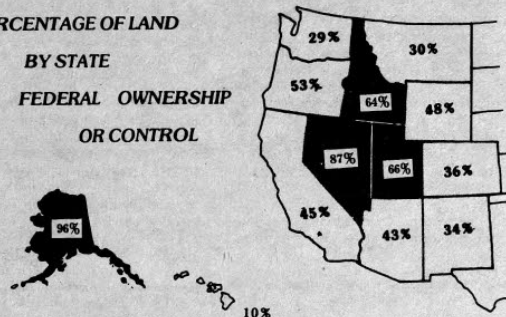
The West is entering a difficult transition period in its relationship with its principle landlord. The BLM is suddenly changing from a caretaker to an active manager, and neither the agency nor the public land users are quite ready for the transformation.

"The rancher is getting to be a little pipsqueak who can't do anything without the okay of some young fellow who is well-educated, but who doesn't know the land," one oldtimer complained recently.

Another said he was born in Wyoming and raised with the concept that the federal government is bad. "The idea was like mother's milk," he said.

The Sagebrush Rebellion is only going to make this new era more difficult — for everyone. Gary Wicks, director of the Utah BLM, predicts that the legal uncer-

PERCENTAGE OF LAND BY STATE IN FEDERAL OWNERSHIP OR CONTROL



tainty caused by the rebellion lawsuits and legislative efforts will bring all actions on public lands to a halt for 10 years.

Whether or not BLM and Congress respond as Wicks predicts, we know already that the rebellion fever has set some ranchers and environmentalists at each other's throats. And that no doubt pleases some mining companies and land developers who fear the two groups' collective strength.

Environmentalists, farmers and ranchers should be working together to solve common resource problems. Environmentalists should not use the rebellion as a vehicle to arouse sentiment for the public lands and against ranchers. Ranchers and farmers should refrain from joining the other rebels in spreading misinformation, such as maps that show all federal land with "Keep Off" signs or statements that millions of acres are being withdrawn from any public use.

As Jim Posewitz of the Montana Fish, Game and Parks Department says, you can't go around throwing dynamite at random.

— Marjane Ambler

Dear Friends,

We've welcomed a new writer to the staff this week. He arrived on Monday in a Volkswagen bug teetering under the weight of a huge cardboard box wrapped in plastic and affixed with wide, black tape.

The box has never been opened. The back seat has not been emptied. Our new man, Michael Moss, took out his typewriter, a few books and his sleeping bag and set himself to writing Western Roundup.

We're left with the pleasant feeling that a whirlwind has arrived.

Michael comes from San Francisco, where he spent four years working as a writer for the Sierra Club, freelancing on the side for such publications as the **Rocky Mountain News** and **Outside** magazine, and writing much of the material for the Club's environmental news service. Even before he got here, his influence was felt in the paper — our expanded front-page index was a response to a suggestion in one of his letters.

Michael majored in geography at college, and water, politics and agricultural land use are three areas in which he already knows the issues and should have much to contribute. Perhaps he'll write about the weather, too: He was initiated on his first day in Wyoming when his car, after making the long, hard trip over the mountains from the West Coast, simply refused to start. He may have considered running the 10 miles from Joan's house to town — that would be nothing compared with the marathon he ran in December — but we got him in by car, fearing the effects of one shock too many on the first day.

There's still room for one last word about Marjane Ambler, who we thought had left us to go back for Houston last week. With midnight approaching, she comes in to announce that it's time to stop — forget the extra energy page story, she says, the paper is full to the brim. Finish "Dear Friends" and hit the sack. Sometimes you have to be told to stop, and that's part of a managing editor's job. Don't know how we'll manage without her.

The Staff

Opinion



SPRING PLANTING

This spring plant something that will really grow. Place **High Country News** in the hands of a friend and watch a growing awareness take root.



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Michael Moss

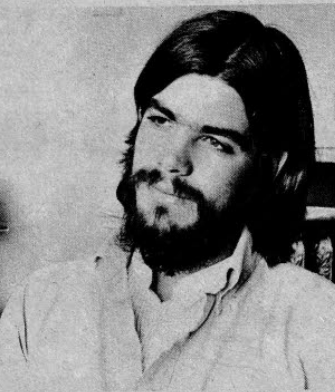


Photo by Sara Hunter-Wiles

GRAZING AND WILDERNESS

Dear HCN,

I've been interested in the debate between wilderness and grazing but am totally shocked at the position some environmentalist-conservationists are taking. The wilderness battle has been too long fought to start compromising it now.

Congress gives us this wilderness definition: "A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are **untrammeled by man**...retaining its primeval character and influence, **without permanent improvements...which is protected and managed so as to preserve its natural condition.**"

I'm bothered by the role our quasi-environmentalists are taking concerning our Western ranges. Very few environmentalist-conservationists understand grazing principles or range ecology.

I read the bureaucratic rhetoric written by Dick Carter of the Utah Wilderness Association, and if that's the stand that our environmental coordinators are taking, I will no longer support their movement but change my allegiance to the naturalist cause.

Bill Hashim
Ontario, Oregon

HOLES IN AIRPORT STORY

Dear HCN,

Your recent story on the Jackson Hole Airport completely missed the point.

Grand Teton National Park's local staff had agreed with the Jackson Airport Board on a noise "abatement" plan which would have left the way wide open for starting commercial flights of Boeing 737 jets into the park next summer.

The agreement by these "guardians" of our national parks would impact 64 times as much land in and around Grand Teton with unacceptable noise levels, compared with present airport landings and takeoffs, according to figures by the Environmental Protection Agency.

Fortunately, Director Whalen took the Park Service's legal obligation to protect the park more seriously than the staff at Grand Teton. For this we owe him our deep thanks.

Apparently your reporter was taken in by the deliberately ambiguous wording of the local park's announcements on the agreement. It is simply not possible to "set aside the most controversial issue" (your words) of jets when the local Airport Board, the Federal Aviation Administration, and Frontier Airlines all have immediate plans to approve and commence regular jet flights in a few months if they are not stopped. And it is the Park Service's legal responsibility to stop them.

Philip M. Hocker
Sierra Club Conservation Chairman
Wilson, Wyo.



POSITIVE ABOUT PROFITS

Dear HCN,

Your editorial of Jan. 11 was a most interesting (and disturbing) one. You headlined the piece "Congress' windfall profits plan not taxing enough for us." A main between-the-lines-theme was that taxes are somehow beneficial, but profits are bad.

Have you considered there would be no "windfall" if oil prices had not been controlled by the federal government since 1971?

Chevron's fiscal activities in 1978, in round numbers, were as follows: **PROFITS** \$1 billion (less than half went to our quarter of a million owners, the balance was plowed back and spent in the business in 1979). **PLOWBACK** \$2 billion (our biggest budget, by far, is for domestic exploration). **TAXES PAID** \$3 billion.

Please consider that when American businesses make profits they use the vast majority to produce goods and services **Americans** want.

Too often funds raised from taxes are spent to produce counter-productive regulations or goods and services **bureaucrats** want. There's a difference.

I'd like to see our national attitude become more positive about profits and more negative toward taxes. The net effect would be less coercion by government and more choice and better prices for consumers.

Owen Murphy
Public Affairs Manager
Chevron U.S.A. Inc.

VICTIMS OF PREJUDICE

Dear HCN,

Reflecting on the Jan. 11th feature article "New kind of public interest group pushes growth" has made me realize more than ever that human beings are increasingly victims of one another's prejudices. We cannot blame disease, suffering, cruelty and the malignancies which increasingly dominate our social spheres on anything but our own lack of understanding of where we came from and where we are going.

When people such as Mr. Watt, Mr. Shipley, and "clear Rocky Mountain Spring Water" Coors, spend their time and energies poisoning not only the environment which supports all of us, but, more distressingly, the minds of their fellow men who do not know enough facts to make sound judgements, they are being a disservice not only to humanity, but in the end, to themselves and creation.

Van Shipp
Versailles, Ken.

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WHY NOT BOTH?

Dear editors,

Your new goat is handsome, especially in Hannah Hinchman's fine style, but I miss the Tetons.

Couldn't we have both? Instead of the double rule across the top, why not the contour of the mountains?

Dan Elliott
Casper, Wyo.

SMILING GOATIE

Dear editors,

Congratulations on choosing the mountain goat as your new emblem. We sorely miss the valiant goat who once proudly rode the trains of the now-merged and forgotten Great Northern Railroad. My only regret is that you didn't choose a more "smiling" goatie.

Linda Weirather
Billings, Mont.

LIKES IT STRAIGHT

Dear HCN,

I like your mountain goat even though its horns weren't curled before its picture was taken.

Ed Foss
Seeley Lake, Mont.

ONE OUT OF THREE

To the editors:

High Country News used to be one of my three favorite newspapers. The other two have died. All health to you.

John McPhee
New York, NY



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Troubled uranium town...

(continued from page 1)

a few thimblefuls of radium. Grams sold for \$120,000 apiece.

In 1922, the flamboyant brothers' boom went bust. From a rich lode discovered in Africa, radium soon was being produced for a bargain \$70,000 a gram. Jo Junior Camp was abandoned.

A subsidiary of Union Carbide, U.S. Vanadium, bought the old mill, 3,500 acres of the camp and Standard Chemical's mining claims. By 1936 a new mill and small town had been built and rechristened Uravan.

Between then and 1942, Carbide produced most of the world's vanadium at Uravan and a mill in Rifle, Colo. The unmarketable uranium was dumped, along with tons of tailings.

Then the U.S. Army Corps of Engineers arrived to work with Carbide on a secret project. Until 1945, they leached uranium from the Uravan tailings for the first atomic bombs. When the war ended, so did the immediate need for the Uravan mill, and the town emptied a third time. But not for long.

As the Cold War developed, the U.S. Atomic Energy Commission began buy-

information have been blamed for the delay.

The department team hopes to write a new license sometime this summer. But radiation chief Montgomery said, "Unless they're (Carbide) willing to make changes and bring the mill to the current state of the art, I don't think we'll renew their license. It's up to them to bring the mill up to standards. It is federal law that dictates what this is to be. We're not pushing this because we want to bring trouble for Union Carbide."

And John Yeagley, head of the solid wastes division in the U.S. Environmental Protection Agency's Region VIII office in Denver, said, "I don't think they could invest enough money in that site to make it acceptable by today's standards."

NEW RULES

From the company's point of view, "today's" standards are actually tomorrow's, and they aren't completely known. The NRC last April issued its

sulting regulations will boost companies' costs unnecessarily. Other critics argue the proposed rules aren't strict enough.

One NRC proposal would require all uranium tailings to be buried to reduce emissions of Radon-222, a radioactive gas known for its potent cancer-causing effects on uranium miners. Since tailings remain dangerous for thousands of years, NRC wants them buried at least 10 feet underground in impermeable basins to prevent erosion and groundwater seepage.

For the past 25 years, Uravan has dumped its tailings into two ponds atop Club Mesa. A company plan to spend \$10 to \$15 million stabilizing these piles where they are would meet the NRC's proposed criteria, said Beverley.

Others are skeptical. Dave Shelton, a staff member of Colorado's Mined Land Reclamation Board, said, "There's no way those tailings will remain on that site for long periods. Those tailings will eventually wind up in the river" if they aren't moved, Montgomery agrees.

Besides being susceptible to erosion and earthquakes, the pond bottoms are not sealed, and contaminated water seeps through the mesa face where it now is collected, and discharges into the river. Health officials want to keep the radioactive water from reaching the San Miguel after Carbide dismantles the mill and moves on.

The company has been searching for new places for the 7 to 24-million tons of additional tailings it must dump during the mill's remaining 15-year life. Presumably, old tailings could be moved to the new site. One impediment is that half the tailings are left from the years when Carbide worked under contract with the AEC, and the company expects the government to share responsibility and costs of any move. The feds have not agreed yet to do that.

For some time now, state health officials have worried that the tailings won't wait for company or government action to move them, but will move on their own — over the cliff, bringing disaster to Uravan townspeople.

As each Club Mesa pond fills, bulldozers scrape some of the sandy tailings into ever higher dikes near the mesa cliff. One dike crest is now 140 feet above the base of the tailings.

In 1974, Carbide agreed with the health department to install a rock berm to make the dam on the No. 2 pile safer. But the company never did, and the department didn't push it. During the past year, however, wide sloughing at the No. 2 pile has made health officials edgy. After a tailings spill last summer at Churchrock, N.M., the department ordered Carbide to stop discharging tailings into first one pond, then the other. On Jan. 4 this year, having no place for its daily 1,300 tons of tailings, the mill closed. Hasty talks between health officials and Carbide personnel yielded a 45-day interim solution. The company would dump tailings

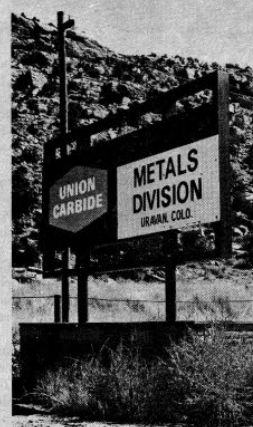


Photo by Timothy Lange
SINCE THE 1890s, radium, vanadium and uranium have been extracted from the area's carnotite ore.

into an unused pond away from the mesa cliff while Carbide consultants and health officials evaluated safety measures that have been under construction on the No. 2 pile since September 1979.

WORRIED ABOUT ECONOMY

Although the four-day shutdown resulted in no layoffs, Montrose County officials weren't pleased. County Commissioner Guy Mock says, "The report that caused the mill to close indicated that this tailing pile is up there just hanging on the side of the cliff ready to fall down on the town. And that's not true." Mock explained the importance of Carbide to the county — \$439,000 in 1977 taxes and \$40 million each year to the local economy — and added, "Nobody on this current board of commissioners is inclined to go along with some of the extreme attitudes of the environmental type."

Loyalty to Carbide comes from longstanding ties. Commissioner Neil Reams was once a millhand. Montrose Sheriff Tom Gilmore, whose deputy is the only law in Uravan, hauled ore for Carbide 15 years ago.

One worker, Bill Kettle, who pays \$38.50 a month rent on his company-owned three bedroom house in Uravan, said, "I don't see what the holler is about on that tailings pile. I saw that pile grow. I was there when there was nothing up there on that mesa but pinyons and juniper." Kettle, president of Local 13545 of the United Steel Workers union at the mill, insisted that "this company has worked overboard on safety and health."

A press release issued by Carbide

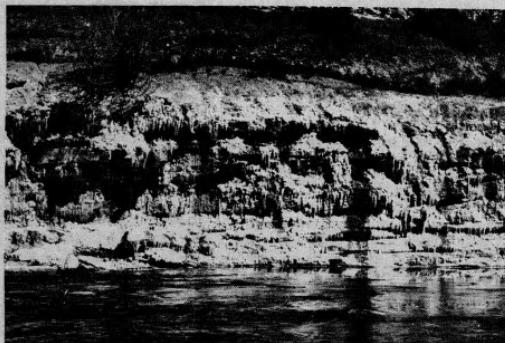


Photo by Timothy Lange
STALACTITES formed on the east bank of the San Miguel River about ¼ miles downstream from the plant as a result of seepage from the mill waste ponds.

ing uranium at high prices. Another carnotite prospecting and mining boom swept the area, and in 1949 Uravan geared up for renewed production. Additional company housing was built, and in 1956, Carbide invested in a modern grinding and leaching plant to improve the old mill's capacity. Since then, Uravan each day has turned out about 4,000 pounds of yellowcake uranium concentrate and perhaps five times as much vanadium. The vanadium is further treated at Carbide's Rifle mill. About 75 percent of the ore comes from company-owned mines, the rest from independents under Carbide contract.

Under an agreement with the U.S. Nuclear Regulatory Commission, Colorado is one of 25 states that handles its own licensing of radiation sources. Carbide's Uravan mill license was up for renewal by the health department's radiation section in July 1975. But relicensing has been held up for 4½ years. Uncertainty over changing regulations, understaffing at the health department, events at other mills and company delays in supplying adequate

draft Generic Environmental Impact Statement on uranium milling, and last August proposed new regulations that would restrict the location of mills and require careful pollution controls and complete reclamation. The EPA has been developing new airborne radiation standards, some of which remain unfinished, some of which become effective this year.

Bob Beverley, the director of environmental control in Carbide's Grand Junction office, said the uncertainty over how these new and proposed regulations will translate into concrete rules has been the company's major hang-up in supplying the health department with complete information about the Uravan facility.

Companies, including Union Carbide, have criticized NRC's proposed rules, which are scheduled for final approval in May. Beverley explained, "We probably have 500 pages of very critical comments on the impact statement... It was written to justify preconceived notions." The industry claims NRC has exaggerated health dangers associated with uranium milling and that the re-

The Uravan mill license came up for renewal in 1975. For 4½ years, changing regulations, understaffing at the health department, and company delays have held up relicensing, while the mill keeps operating.

after the mill reopened Jan. 8 concluded, "Although the Corporation is confident the tailings pile is safe, there is essentially no probability of a tailings dam failure affecting the housing area which is across the San Miguel River from the mill and tailings disposal facilities (sic)."

Carbide's consultants see things somewhat differently. In the company's 1978 environmental report, a consulting firm outlined for conjecture's sake a "worst case" dam failure at Uravan. They estimated about 200 million gallons of water and 2 million tons of tailings would plunge over the mesa, destroy the lower millworks and entomb much of the town. Such a structural

"Unless Carbide is willing to make changes and bring the mill to the current state of the art, I don't think we'll renew their license."

— Colorado Department of Health

failure, they wrote, "is considered remote."

As it often does when it needs additional information, the state health department asked for NRC's help. On Oct. 30, 1979, NRC inspector Joe Kane visited the site and reported later, "Our inspection has revealed significant retention dam instability...and (without changes) the safety of the residents of Uravan should be considered as a major concern." Further signs of instability led to the temporary shutdown in January.

While Carbide believes its No. 2 pond is safe to use again, Alan Pearson of the state Division of Water Resources wrote in a Jan. 15 report that it was not safe enough to "meet licensing criteria for continued operation."

The health department has until Feb. 22 (today) to decide whether it is satisfied that Carbide's consultants are right in assuming that Uravan residents will be adequately protected by monitoring systems and rock berms along the tailings base.

Besides meeting the long- and short-term requirements for managing tailings, Carbide must comply with new EPA standards for airborne radiation exposure to the general population. The standard that takes effect Dec. 1 includes everything but radon exposure, which is particularly difficult because of day-to-day variations in natural radon even in areas where no tailings or mills exist.

Everyone is exposed to some radiation from outer space and natural earthbound elements. People are also exposed to human-caused radiation, the most common being medical X-rays. Previous federal rules allowed uranium mills (and other parts of the uranium fuel cycle like reactors) to expose the population at large to a level of radiation that the Surgeon General's office has subsequently estimated would about double leukemia rates among ex-

posed people. The new proposed EPA standard is 20 times stricter.

"By existing and future engineering methods," said Beverley, "it should be possible (for Uravan) to meet the standard."

Montgomery greeted this assertion skeptically. "Maybe they can convince me, but I doubt it," he said. A consulting report under the radiation section's scrutiny cites one spot in Uravan registering 10 times the new standard, and earlier sampling showed some readings of 20 to 30 times the standards.

One health official noted that Carbide is stuck with a legacy at the site: the EPA standard does not separate radioactivity caused by old tailings scattered throughout Uravan from the company's current emissions. Carbide consultants suggest possibly paving areas with high readings, controlling emissions better and studying the situation further. But it may be necessary to move the town to meet the standard, and Carbide is also studying that expensive option.

No cancer surveys have been carried out in Uravan. Money is unavailable for such an effort and regulators call it futile anyway. In a small population like Uravan's, the significance of cancer figures would be statistically undeterminable, according to EPA's Yeagley.

The changing standards strain state officials' resources, as well as the company's. The state also must ensure compliance with the old license.

Health physicists on a pre-announced inspection in July 1978 cited the company for breaking the rules in five instances, including sale of contaminated scrap, use of tailings for dikes along the river and seepage of radioactivity into the San Miguel.

Carbide also ignored for 18 months a requirement to work out a financial bond with the state to pay for adequate air and water radiation surveys and for eventual reclamation at Uravan. The situation developed into a frosty exchange of letters between Bob Beverley and Al Hazle, who is head of the health department's Division of Radiation and Hazardous Wastes and Montgomery's boss. Beverley argued "oversight," something Hazle said was especially hard to accept because Beverley had chaired the state's Radiation Advisory Committee, which helped to draft the bond regulations in the first place.

Hazle in December 1979 told visiting executives from Carbide's New York headquarters that he questioned the company's commitment to making the needed changes. Carbide claimed otherwise. Beverley noted that of the 4½ years of delay, at least "2½ to 3 years were the department's fault."

ANOTHER PERMIT

Uravan's effect on water quality also presents problems.

From the time of the Flannerys till the late 1950s, the mill's radioactive and other sewage was casually flushed downstream. In 1958, Carbide began water treatment.

As with NRC, the state has agreed with EPA to issue its own permits under the federal Clean Water Act. Within limits, Carbide is allowed to discharge wastewater directly into waterways, a privilege no other uranium mill has. The health department should have renewed Carbide's

water permits by September, 1979, but like their counterparts in the radiation section, the health department's water quality engineers are severely backlogged.

Calculations show the Uravan mill contributes more salts to the Colorado River System than any other industrial polluter. However, 98 percent of the system's pollution comes from agricultural sources.

EPA guidelines for discharge permits have been tied up in various sorts of litigation. The health department's water engineer evaluating Carbide's permit, Steve Snider, thinks that when the new guidelines are issued, he'll be able to require a phased end to the company's discharge. But Beverley said, "The feds are coming up with...guidelines right now, and I am personally quite confident that they will not require zero discharge."

Again, just keeping Carbide in compliance with the current permit is tough. Based on company data, between 1974 and 1978, a sixth of Uravan's sampled discharges exceeded permit limits for Radium-226, the primary radioactive concern.

At Uravan, the yellowcake-making process produces toxically and radioactively contaminated waste liquids. These are evaporated in the Club Ranch Ponds, which Carbide built in 1963. Unevaporated water is piped back to the mill, treated, then discharged into the San Miguel.

Carbide is happy with this system, pointing out in the environmental report that the ponds are "enhancing the river by catching salts that would otherwise add to the salt load of the river."

Snider agrees it's helped. "The San Miguel River has been improving for 15 or 20 years," he said. "Life in it now is probably as plentiful as it has been this century. But it's hard to say if it's clean." And there are obvious problems.

On a number of occasions, pipeline breaks have sent thousands of gallons of radioactive wastes into the San Miguel. Moreover, these recurrent accidents are accompanied by a steady, uncontrolled seepage from the ponds themselves. Crystalline stalactites mark the riverbanks where the Club Ranch Ponds drip whitish-yellow fluid into the San Miguel as they have done for at least a decade. Studies of possible degradation from this seepage are highly contradictory. No one is certain just how much seepage occurs or where it all goes.

In the environmental report, consultants Dames & Moore concluded that the "probability of any radioactive ef-

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fluent entering the eco-system via groundwater is considered negligible." But Bob Shukle, chief of the health department's water quality division, wrote in an Oct. 10, 1979, internal memorandum that the company's own data showed "seepage is impacting groundwater with both chemical and radiological parameters, and in turn surface water impact is resulting."

For 10 years, everyone from the Federal Water Quality Administration to the health department has recommended that the Club Ranch Ponds be lined. Carbide has ignored the repeated recommendations. Now, the company plans a new water treatment system. According to Beverley, the ponds will either be discontinued or will be lined at a cost of \$5 million, although Carbide has made no guarantees this will be done. Regulators in the Health department, NRC, EPA and other government offices say there is "no way" a new uranium mill would be allowed a license to operate where Uravan is today. But once a mill is established, moving it presents serious difficulties, some of them political.

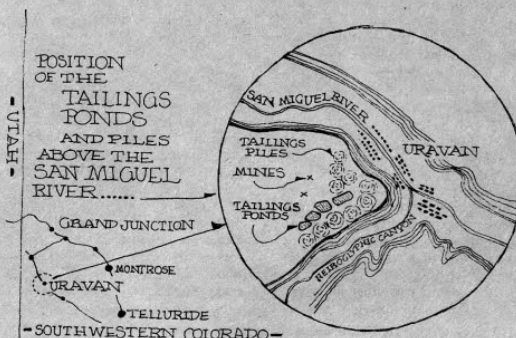
Montrose County Commissioner Neil Reams wrote the health department a year ago, "The economic and social effects that could occur should Union Carbide be forced to shut this plant down or...move the mill to another location...would be an absolute disaster to the people in the West End of Montrose County and a severe setback to the economy of Montrose County as a whole."

Yeagley stressed that, in spite of obvious inadequacies at old mills such as Uravan's, "we need to strike a balance with these kinds of operations. We can't just say, based on today's standards, we're going to shut you down."

Jim Montgomery, who strongly believes the Uravan operation will have to be moved, sympathizes with those who would be affected by such a decision. "We're not interested in throwing people out of work," he said.

He also isn't interested in taking chances. On a wall near his desk, a blow-up of a color slide shows the rising mushroom of a 1950s atomic bomb test in Nevada. Hundreds of American soldiers watch, unprotected. "I like to look at that picture and remember that we don't always know as much as we think we know when we do things," he mused.

Timothy Lange is a correspondent for HCN based in Colorado. Research for this article was paid for by the HCN Research Fund.



6-High Country News — Feb. 22, 1980

by Joan Nice

A tall, stout man with his sleeves rolled up sits at a cafe table in Waltman, Wyo. After some pleasantries, a woman behind the counter shouts, "Got any coyotes, Jim?"

Jim grimaces and nods. "I wish we could make environmentalists eat all them coyotes. I lost near 30 sheep last night."

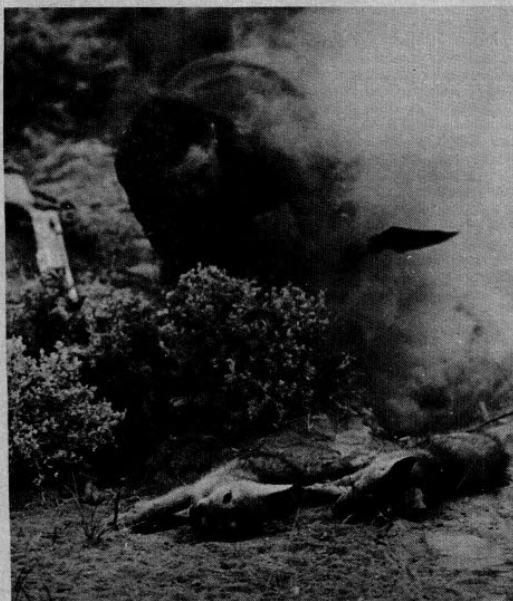
No one in the small cafe seems too surprised. The sheep growers' coyote problem has been around a long time and similar cafe scenes are played out in small towns all over the West. Although the conversational ritual reminds them of painful problems, it's the sheepmen's equivalent of "Have you had a busy day?"

The perennial coyote problem was acknowledged by Congress 49 years ago, when it passed a law that put the federal government in the business of coyote killing to protect the livestock industry, particularly sheep operations. Ranchers, conservationists, the government and the general public have been yapping at each other about how best to keep the coyotes at bay ever since.

A recent policy shift made by the Interior Department in its Animal Damage Control program has raised hackles among sheepmen and generally pleased environmentalists. The sheepmen, who first asked the department to review the program, see the action as a betrayal.

On Nov. 8 Interior Secretary Cecil Andrus ordered that the federal program:

- focus on trying to reduce livestock-coyote conflicts, rather than on killing predators;
- emphasize controls that don't involve killing;
- try to target problem coyotes and leave the others in peace.



KILLING COYOTE PUPS by raiding dens won't be allowed in the new federal animal damage control program. Interior Secretary Cecil Andrus says the practice is inhumane and doesn't pinpoint problem coyotes.

To achieve these goals, Andrus placed restrictions on the federal program's use of certain traditional coyote-killing techniques:

- He banned "denning," that is, killing a litter of coyote pups in the den;
- He reaffirmed a ban on routine use of poisons and halted government research on the controversial poison Compound 1080;
- He decided to allow aerial shooting only where high livestock losses have occurred;
- He required that traps be used "in the most selective and humane manner possible."

Accustomed to a much less cautious approach, sheep ranchers and their supporters around the West are angrily saying it will never work. The new policy, they say, takes away or restricts old killing techniques, such as trapping, aerial gunning, denning and poisoning, while not offering enough assurance that the gentler approach will work.

The decision has "added fuel to the fires of the sagebrush rebellion (an anti-federal movement)," says Idaho sheepman Laird Noh. He expects

"The price of fur has put more people on the trail of the coyote than any federal program."

predator control anarchy to result, with ranchers doing whatever they can to protect their herds.

On the other hand, Dick Randall, a former government trapper who now works for Defenders of Wildlife, says the decision "shows real progress in thinking. They (the federal government) used to say, 'All predators are bad. Let's kill whatever we can until

the money runs out.' Now they are seriously trying to find the best way to solve the problem."

Environmentalists say the result will be more effective predator control, as well as more effective use of taxpayers' money, humaneness to coyotes and better protection for other wildlife species.

Cynthia Wilson, Andrus' staff aide on the issue and a former Audubon Society lobbyist, admits the decision has been highly controversial among sheep growers, but says, "People are misinterpreting Andrus and reacting hysterically."

The volume of the protests does seem out of proportion to the old program's size and the new program's power. In 1979 federal Animal Damage Control agents killed only about a tenth of the 600,000 to 700,000 coyotes that U.S. Fish and Wildlife researcher Don Balser estimates humans kill each year.

"The price of fur has put more people on the trail of the coyote than any federal program," says Jim Posewitz, administrator of ecological services for the Montana Division of Fish, Wildlife and Parks.

Despite these attacks, "The coyote is in no danger," Balser says. "It has increased its numbers and spread its range in spite of man's efforts."

But most surprising to many observers is the realization that Andrus' policy will not affect most non-federal control efforts on federal lands. The new doctrine of humane, non-lethal controls will govern only how federal money and employees' time are spent.

"Nothing in the revised policy prohibits ranchers and herders from carrying out private predator control activities where there is no conflict with state and federal laws already in effect," Andrus told the audience at a recent conference on predator control in Austin, Tex.

Andrus can't control private actions because states have jurisdiction over resident wildlife, even on federal lands. So in most states a rancher on federal land could shoot coyotes from a helicopter without worrying about Andrus' requirement that high losses be shown. He could not use Compound 1080, however, because the Environmental Protection Agency has banned it for use as a predator poison on both public and private lands.

SOFT ON COYOTE CONTROL

What will sheep growers do now that they think the federal government has gone soft on coyote control? Noh, head of the National Wool Growers Association's environmental committee, says several courses of action are being considered. At a meeting in January the association's board of directors decided to look into state, private and county control efforts. Through various mechanisms, ranchers and state and local governments have been paying about a third of the cost of the \$6-million-a-year federal program. Much of that money could be withdrawn to support locally-initiated efforts. In some Wyoming counties, predator control boards have been handling problems locally for years. For counties with plenty of livestock, "money (to support an effective coyote control program) is

no problem," according to Lyle Crosby, predator control administrator for the Wyoming Department of Agriculture.

At the same time, Noh says, ranchers are trying to change the federal policy. Sen. John Tower of Texas (R) has introduced a bill that would include the Department of Agriculture, which ranchers view as more sympathetic than Interior, in the predator control program. It would require the two departments to carry out a program that utilizes both "lethal and non-lethal control measures." It would also permit use of sodium cyanide devices and authorize research on 1080.

The public, as its feelings are reflected in a nationwide poll conducted by Yale University for the U.S. Fish and Wildlife Service, seems to be siding with Andrus on the issue. A majority of the people contacted by the Yale researchers did not object to killing coyotes, but indicated a strong preference for non-lethal methods or hunting only individual coyotes known to have killed livestock. Most people were opposed to shooting and trapping as many

Public to

by Maureen Dempsey

Wild burros in Grand Canyon National Park will be removed this spring by helicopter and herding, according to Park Service officials. Public resistance to Park Service plans to shoot the burros and an offer from the Fund for Animals to pay for the removal led to adoption of the plan.

Park Service officials estimate the removal of over 300 burros will cost \$120,000. If the live removal plan fails, the Park Service will resort to shooting, which is considered a more economical use of taxpayer money.

Jim Walters, a Park Service resource management specialist at Grand Canyon, does not foresee any major changes in the final environmental statement on the plan. However, he does not expect the plan to satisfy those who still think it is unnecessary to remove the burros. "Horse and burro lovers will object the hell out of it," he said, "but people who want us to manage the burros in the park will be happy, happy, happy."

Russel Gaspar, an attorney for the American Horse Protection Association, Inc., confirmed Walter's expectations. He said his organization approves the plan as an alternative to shooting but does not believe removal is necessary at all. The International Society for the Protection of Mustangs and Burros also disapproves of removing the burros. Yet both organizations said that if the plan goes through, they would be willing to help.

The question of what to do with the wild burros has been brewing since 1969, when there was a public outcry over killing burros, which had been going on since 1924. A total of 2,800 had been killed when the practice was stopped in 1969.

Many professional and environmental groups think the new plan is overdue. Studies have shown that burros have caused considerable damage to the native flora and fauna in the past 10

mutton-raisers talk mutiny



Cartoon by Monica Cronberg, reprinted with permission from the National Wool Grower.

coyotes as possible and strongly opposed to poisoning.

The study, "Public Attitudes Toward Critical Wildlife and Natural Habitat Issues," was published in October, shortly before Andrus announced his new predator policy.

The sheepmen's main worry seems to be how the Fish and Wildlife Service will implement the program.

At the Austin, Tex., meeting, "Andrus' speech sounded quite good," Noh says. "He said we were going to continue to use lethal techniques until we found some non-lethal methods that work."

But Noh and other sheepmen fear that the FWS will use Andrus' generalities to pull the coyote-protection rug out from under ranchers.

Ranchers are not the only ones worrying about the policy. Montana's Posewitz says he thinks portions of it are impractical. Of Andrus' goal of controlling only offending animals, Posewitz says, "We can't even catch the guy ripping off the 7-11 grocery store red-handed."

The 1080 research ban is particularly offensive to Posewitz. "Prohibiting research is severe. We haven't done that to plutonium." Before the research ban, Posewitz's office had submitted a 1080 research proposal to the federal government for funding, but was turned down.

Andrus thinks his critics are overreacting. At the Austin meeting he said, "Some ranchers are under the impression that under the new policy we will kill a coyote only if we spot it devouring a freshly killed lamb. This is not true." Instead, Andrus said, by controlling "offending animals" he means concentrating federal efforts in areas where losses are highest.

A 'FINANCIAL RATHOLE'

Wilson calls the 1080 research program, which involved toxic sheep collars,

"a financial rathole." She says that even if researchers had found a way to use the poison that didn't kill wildlife other than coyotes, an attempt to re-register it through the EPA would surely have entangled Interior in a lawsuit.

"The Secretary was very pragmatic," Wilson says. "He decided to look for other means that don't carry the baggage of controversy."

Despite Andrus' assurances to the sheep industry, Noh is convinced that the new policy means "the disintegration of a federally-organized program. We may see a hodge-podge of various efforts at state programs, private programs — or whatever can be raked together to try to protect livestock."

The way Noh sees it, that's more of a threat to environmentalists than to sheepmen, because a less humane, less professional effort could result.

While predator control anarchy could make a difference to individual coyotes and to other wildlife, it probably wouldn't affect the coyote population as a whole. According to Balser, "It's too big, too stable, too secure for man to move it much."

take Grand Canyon burros

years, causing soil erosion, trampled vegetation and fouled water sources. Archeological sites have also been damaged, according to the Park Service.

But the Humane Society of the United States and others believe there is not enough data to warrant total elimination of the burros. They are wary of the Park Service's reports, noting that in 1976, officials said there were 2,000 to 3,000 burros living in the Grand Canyon. In 1977, it was discovered there were only 276.

The main argument for total removal of the wild burros is their status as an "exotic" species, introduced into the canyon by prospectors in the 1870s. After mining proved to be unprofitable, the pack animals were left to roam.

Opponents of the burro management plan feel that over the ensuing 100 years, the burro has become a natural part of the desert ecosystem. Others feel it represents a species such as the prehistoric equid, a burro-like animal, which researchers believe was eradicated by aboriginal man 11,500 years ago. They say the burro is simply reoccupying an ecological niche left vacant by a similiar animal.

The Park Service argues it is "highly unlikely that the scientific community could or would come to the conclusion the domestic donkey is native to the United States." The burro was domesticated in Africa 5,000 years ago and introduced to North America during the 16th century by Spanish explorers.

Even when a burro can be seen and heard, steep walls, side canyons and the rugged terrain make capture difficult. The Park Service expects that after the first burros are caught, the task will become increasingly difficult.

Only qualified individuals and groups will be allowed to enter the park to capture and remove the burros. Qualifications will be based on an ability to work within the canyon environment in a safe and productive manner. The superintendent will issue a park permit that outlines collection techniques,

equipment, logistic procedures and disposition of the captured burros. The Fund for Animals and other burro preservation groups will be encouraged to help in the removal program, to insure no harm comes to the animals. The Park Service suggests that professional wranglers be used.

The use of horses and trained dogs will be allowed as long as all feed is carried in and efforts are made to

minimize any impacts caused by their presence.

Helicopters will also be allowed to remove already-captured burros. Immobilizing drugs, shot from a dart gun, will also be permitted, under close supervision from the Park Service.

The burros removed during the adoption program will immediately become the property of the individuals who col-

lect them. The local Indian tribes do not want the burros, and neither does Mexico.

The goal of the Park Service is to remove the burros as quickly as possible when the 30-day comment period on the environmental statement is up, March 10. After the plan becomes effective, a case-by-case evaluation of the removal program will determine whether shooting is necessary.



THE "EXOTIC" BURRO is soon to be exported.

Photo by John Running

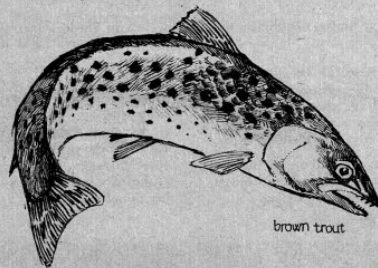
by Vicky Boyd

FORT COLLINS, Colo. — It had been so long since anyone had seen a greenback cutthroat trout in Colorado that most experts thought the fish was extinct.

Then, in 1969, a pure strain of the cutthroat turned up in Como Creek, a small tributary of Boulder Creek. Now the Colorado Division of Wildlife is trying to save the species by tossing fish from Como Creek into other suitable streams around the state. While efforts to raise the fish in hatcheries have failed, the transplants are thriving, Division officials say.

The greenback is the only native game fish on the eastern slope of the Continental Divide in Colorado.

Acidity, rate of flow and temperature are just a few of the factors considered in choosing new homes for the fish, according to Rolf Nittmann, fisheries biology manager for the Division. After



brown trout

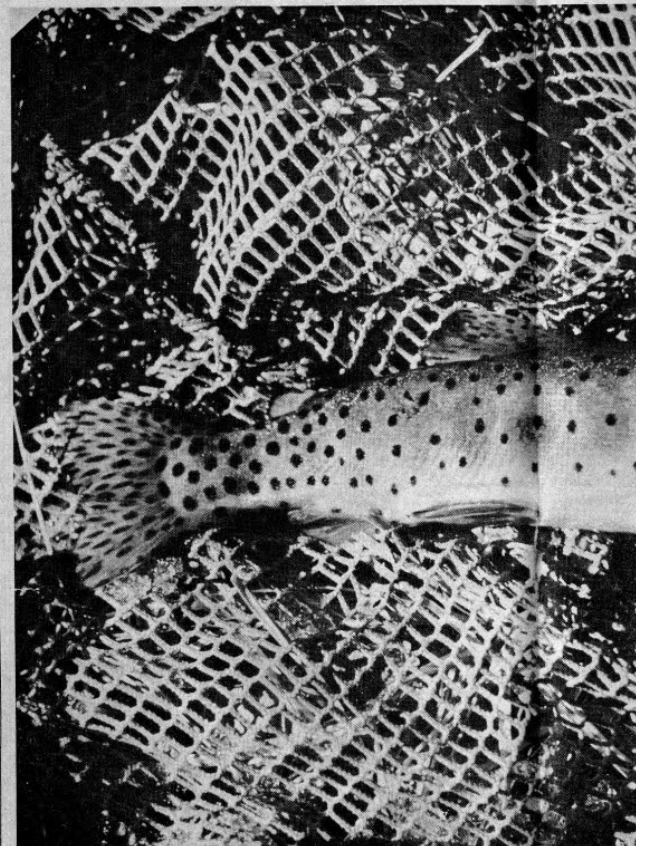
a stream is deemed suitable, the competition — brook, rainbow and brown trout — are killed with a poison called rotenone. Keeping out the competition is simple in lakes, but in streams other species of trout may migrate into the introduction area. So the Division has made the transplants in places with natural barriers, such as waterfalls or steep upstream grades, or it has erected man-made barriers. For added protection the places with greenbacks — Como Creek, Black Hollow, Glass Creek, Bear Lake, Forest Canyon and the South Fork of the Poudre — have been closed completely to fishing.

The greenback's decline was probably caused by the introduction into Colorado's streams of brook, rainbow and brown trout — all "exotic" species, which do not occur naturally.

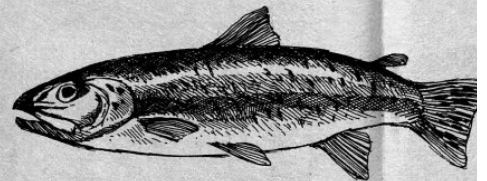
According to Nittmann, brown trout were introduced between 1893 and 1903 and rainbows were introduced in 1886. Some were brought in by the federal government and some were brought in by individuals, probably in an attempt to diversify fishing. Since they've been around so long, Nittmann says, "I don't know if you can call them exotic any more."

Interbreeding occurs between rainbow and greenback, leading to hybrid swarms and a loss of the pure parent greenback stock. With brook trout,

Cutthroats make a



greenback cutthroat trout



rainbow trout

make a comeback

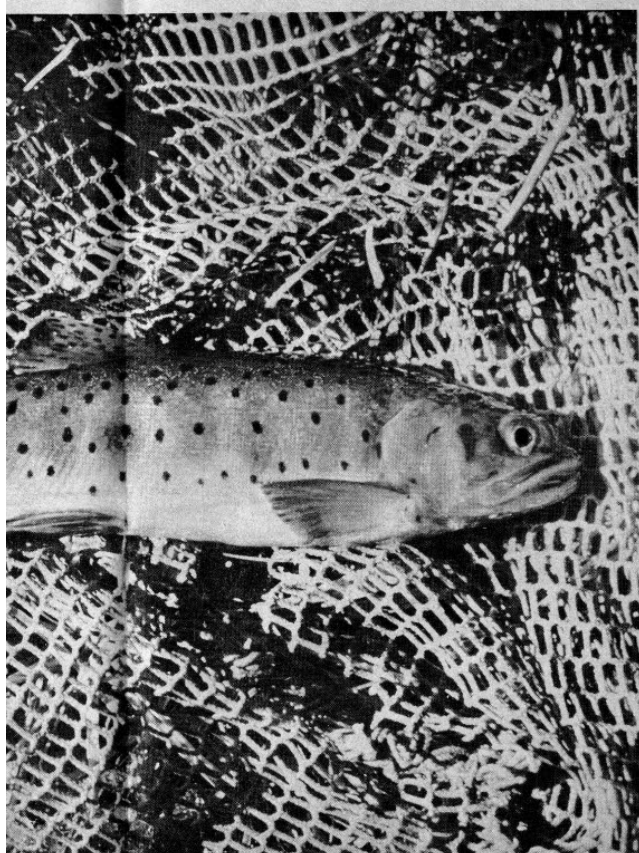


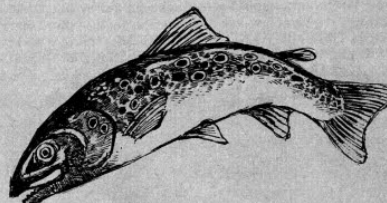
Photo courtesy of the U.S. Fish and Wildlife Service

competition for food is the nemesis, not interbreeding.

And yet the division continues to stock Colorado waterways with exotic species. In 1977 alone, Nittmann says over 10.9 million rainbow trout (the major species used in stocking programs) were released.

In the 1950s, kokanee salmon were introduced to reservoirs in Colorado. One of the Division's more recent projects was the introduction of Sacramento perch to the Great Lakes of the Arkansas River Valley in the southern part of the state. Either an environmental impact statement or an environmental assessment report has to be filed before introduction of the species, and then "they are brought in under very controlled conditions," Nittmann says.

The Division won't allow importation of certain "trash fish" species such as sticklebacks, black carp, white carp, bowfins and walking catfish, however.



brook trout

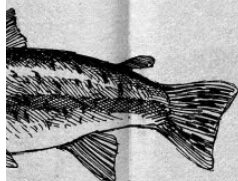
But what about the future of the cutthroat? Its status as one of the 11 fish on the Division's Threatened and Endangered Species list allows the agency to "do more in terms of management," Nittmann says.

"Threatened is defined as any species likely to become an endangered species in the near future. An endangered species is defined as presently being faced with extinction," Nittmann says.

Since greenbacks can be introduced successfully, and there are signs that pure strains might be found elsewhere, the Division classified them as threatened, Nittmann says.

The outlook for greenback cutthroat has improved. For the past two years, funds collected by Colorado's income tax check-off program for non-game wildlife have been used to provide aid to some of the state's imperiled species, including the cutthroat. Also, since it is classified as a threatened species, the federal government provides funds to aid in the restoration program.

Vicky Boyd is a journalism student at Colorado State University in Fort Collins, Colo. She free-lances for the Triangle Review, a Fort Collins weekly.



rainbow trout

While efforts to raise greenbacks in hatcheries have failed, wild transplants are thriving.

Hot Line



Across the nation and around the world

A RABBIT IN EVERY POT? "It would be cheaper," says energy expert Amory Lovins, "to save oil by having the Treasury pay from half to all of the cost of giving people free diesel Rabbits in return for scrapping their Bron-tomobiles" than to have the federal government embark on a crash synthetic fuel production program. In an article in the February issue of *Friends of the Earth's* publication, *Not Man Apart*, Lovins offers a scathing critique of the administration and Congress' approach to energy problems. Their solutions, Lovins says, reflect "a profound misunderstanding of the nature both of the United States energy problem and of our political process."

SABOTAGE MADE EASY. Sabotaging a nuclear power plant wouldn't be too difficult, if Robert Kapler's experience is any indication. Using phony identification, the young newspaper reporter got a job as a power plant security guard. A few days later he was able to wander unchallenged into the plant's unlocked control room and take pictures. Kapler broke the story in *The Guide*, a small Harrisburg, Pa., area weekly newspaper. The plant involved was the infamous Three Mile Island. **PIGS AND COAL.** The federal government's Animal Research Laboratory in Oak Ridge, Tenn., has spent years studying the effects of nuclear radiation on animals and trying to evaluate the dangers of low-level doses to humans. Now, the Associated Press reports the lab will add a new target — coal. "There are a lot of chemicals, most of them organic, in the coal process which can cause cancers," says the lab's director, Dr. H.E. Walburg. Scientists at Oak Ridge are studying how cadmium and benzopyrene, two of the more dangerous byproducts of coal production, affect pigs.

STATE VETO: 'DIVISIVE PAR-OCHIALISM.' States couldn't say "no" to nuclear wastes in a bill sponsored by Sen. Gary Hart (D-Colo.). But they would be able to participate with the federal government in choosing a waste site within their borders. According to the newsletter *NuclearFuel*, Hart's bill is the frontrunner among several pieces of legislation before the Senate Environment and Public Works Subcommittee on Nuclear Regulation. "In my view an absolute state veto gives too little weight to the national interest and too free rein to divisive parochialism." Many state officials feel differently. Nevada Gov. Robert List said that states need "a veto in their arsenal in order to have fully effective negotiations."

RETIREMENT BENEFIT: COAL. The Fort Union Coal Mine, near Gillette, Wyo., is offering free coal to persons over 62. The mine has been distributing coal for heating homes to old folks since Jan. 15, mine superintendent Stu Felde told wire services. The Fort Union Mine, owned by South Dakota construction contractor Melvin Delzer, produces about 1.2 million tons of coal a year.

ENERGY



Photo by Mike McClure

ALLUVIAL VALLEY LANDS in the Gillette area may be a stumbling block to development of federal coal reserves. Pictured above is AMAX's Belle Ayr Mine, the largest coal strip mine in the region.

Finding could snag coal leases

A preliminary Bureau of Land Management survey has designated more than half of the federal coal in the coal-rich Gillette area of Wyoming as potentially exempt from leasing because of sensitive alluvial valley lands.

Wyoming BLM officials noted that the study could be modified considerably in the next few months, when the figures and data are reviewed. The agency's supervisor for leasing in the Eastern Powder River Basin, Glenn Bessinger, called the figures "a little scary," and refused to release the study pending revision. He said only that the study found "over 50 percent" of the area potentially alluvial.

At stake are 20.1 billion tons of presently uncommitted federal coal in the almost 300,000 acre Gillette Review Area. BLM officials are applying vari-

ous "suitability" criteria to the area in preparation for leasing federal coal by mid-1982.

Alluvial valleys, where deposits of sand and clay are left by flowing water, are protected from coal development under the 1977 Surface Mining and Reclamation Act. Industry officials are expected to react angrily to figures indicating a greater amount of alluvial land than previously projected.

Environmentalists expressed fear that such high figures might fuel attempts now afoot in Congress to dismantle the federal strip mine law.

"I didn't expect anything that high," said Sara Gorin Jones of the Powder River Basin Resource Council. A previous BLM estimate of alluvial lands in an area south of Gillette had been much lower, Jones said.

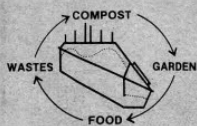
BLM officials in Casper said their agency has not set firm definitions or standards on alluvial valleys for its offices in the West, and cautioned against viewing the figures as final.

BLM's preliminary review found 213,400 acres and 29.4 billion tons of high- and moderate-potential coal in the review area. Of that, 41,600 acres and 5.3 billion tons were already under federal leases to coal companies; 12,800 acres and 1.7 billion tons were state-owned; and 14,100 acres and .9 billion tons could be excluded from consideration because of ongoing gas and oil development.

In deciding that more than half of the remaining unleased 132,900 acres of federal coal could be ruled out because of alluvial lands, BLM officials included a one-fourth mile buffer strip on each side of alluvial valleys.

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Carter approaches hot waste question cautiously

by Dede Feldman

The controversial Waste Isolation Pilot Project (WIPP) in Carlsbad, N.M., has been canceled in the face of President Carter's comprehensive new nuclear waste management policy sent to Congress on Feb. 12. Under the new policy, WIPP, which was to be the nation's first repository for low level defense wastes, will join the ranks of several other potential waste storage sites around the country.

Among the sites are granite beds at the Nevada Test Site, salt domes along the Gulf Coast in Louisiana and basalt and hardrock formations at Hanford, Wash.

Until announcement of the new policy, WIPP was the government's and the nuclear industry's best hope for a quick demonstration that nuclear waste could be stored safely. WIPP had been scheduled to go into operation by the mid- to late-1980s.

Under the president's new, more cautious approach, sites around the country will be studied to determine their suitability for storage of both commercial and military nuclear waste. By 1985, after intensive evaluation of four or five sites, one will be chosen as the first of several regional repositories, with the opening of the initial site sometime after 1990.

The new policy generally follows the recommendations of the Interagency

WIPP was the nuclear industry's best hope for a quick demonstration that nuclear waste could be stored safely. Environmentalists now say that Carter's decision makes WIPP's selection unlikely.

Review Group on Nuclear Waste Management in March 1979. The group recommended the use of regional waste repositories to be licensed by the Nuclear Regulatory Commission for the disposal of both commercial and defense wastes. The Department of Energy, however, which was part of the review group, was the lone dissenter, calling instead for an unlicensed repository for defense wastes only. The repository, which was to store wastes from the Idaho National Engineering Facility, Rocky Flats, Hanford and the Los Alamos Scientific Lab, was WIPP — in the salt beds of Southeastern New Mexico.

DOE has been promoting WIPP for several years. Presidential advisors, however, were known to favor the review group's plan because they thought it was economical and prudent given the technical problems of nuclear waste disposal.

Another group that has pushed for quick construction of WIPP is the

House Armed Services Committee. The committee, and its chairman, Mel Price (D-III.), stirred up controversy in New Mexico several months ago when they refused to give the state a say in the project.

While not giving states the veto over nuclear waste sites within their boundaries, the new policy establishes a State Planning Council that will include state, local and Indian representatives. The council will work with the president and DOE on the question of how states will render "consultation and concurrence" on the location and licensing of waste facilities.

In an initial reaction to the new waste policy, New Mexico Gov. Bruce King said he was pleased and expected the state to have a greater role than it would have under DOE's plan.

One New Mexico environmental group that has been working to defeat WIPP for over five years is also happy with the president's new proposal.

"It's definitely a victory," said Don Hancock of the Southwest Research and Information Center in Albuquerque. "In essence it kills WIPP because the only advantage to WIPP was that it was the most researched and the farthest along."

Hancock said he thought technical problems and transportation difficulties make WIPP's chances of selection unlikely.

Carter has asked Congress for over \$700 million in fiscal year 1981 for the nuclear waste disposal program.

While it is too early to predict congressional reaction to the package, Rep. Price has already moved to challenge the administration's plan to cancel WIPP. Last week he asked that authorization for WIPP be included in the FY 1980 DOE supplemental appropriations bill now before the House Energy and Power appropriations subcommittee.

If Congress backs Price's plan, DOE can proceed with the project. A Budget Impoundment Act passed during the Nixon years requires the executive to spend appropriated money on the project Congress specifies.

In order to successfully challenge Carter, however, Price may need the support of two-thirds of both branches of Congress since the supplemental appropriations bill could be vetoed by Carter.

From the Source



The Rockies and Great Plains

PIPELINE CLOGGED IN WYOMING. Attempts to bring a bill before the Wyoming legislature that would allow export of water from the state in a coal slurry pipeline were defeated earlier this week in both houses. The bill, which would have allowed exportation of 20,000 acre-feet of water from the Little Big Horn River in northeastern Wyoming, required a two-thirds vote for consideration during this year's legislative budget session. Backers of the bill promised to ensure minimum stream flow, protect the Little Bighorn Canyon, and provide higher tax revenues for Sheridan County. Gov. Ed Herschler (D), who killed a similar coal slurry proposal approved by the legislature last year, rallied bill opponents in the legislature to defeat the bill.

RIO PUERCO CLOSES BEFORE OPENING. On the verge of beginning operation, the Rio Puerco uranium mine near Albuquerque, N.M. has been closed down indefinitely by its owner, the Kerr-McGee Nuclear Corp. Despite a considerable investment in building and site-preparation, a Kerr-McGee spokesman said "continuing political and regulatory uncertainty" made the mine's future doubtful. It would have produced 510 tons of uranium ore daily.

SUIT FILED ON EIS COSTS. Six Western utilities have filed a suit against the U.S. Bureau of Land Management claiming they should not be

charged for the cost of preparing environmental impact statements on applications to run power lines across public lands. Idaho Power Co., the Public Service Co. of Colorado, Montana Power Co., and two California utilities say environmental statements on federal rights-of-way are for the public's benefit, not the utilities', and therefore should be paid for by taxpayers.

QUICK SWITCH TO GASIFICATION. With the ink still wet on bills now before Congress to subsidize synthetic fuels development, a Utah group has made a quick switch from a projected coal-fired electrical plant to plans for a massive coal gasification plant. The plant would be built at an estimated cost of up to \$2 billion on state-leased land in Garfield County in southwest Utah and produce 250 million cubic feet of gas daily. "I would favor phasing out government participation as soon as possible," said the president of Utah Resources International, Inc., one of the partners in the project, but, he added, the legislation "does provide the finance and incentive...to get such projects going."

CERT AGREEMENTS UNCERTAIN. Some of the energy development plans announced with great fanfare last December at a Phoenix, Ariz. meeting of the Council of Energy Resource Tribes (CERT) seem to be falling apart. First, there is the unresolved future of Shell Oil Co.'s proposal for a large strip mine on the Crow Reservation in Montana. The on-again, off-again \$12 million project has been buffeted by a tribal power struggle. Now, the Nez Perce tribal council has rejected a low-head hydroelectric project that was planned for the Clearwater River in Idaho. A CERT spokesman said the project was rejected for environmental reasons.

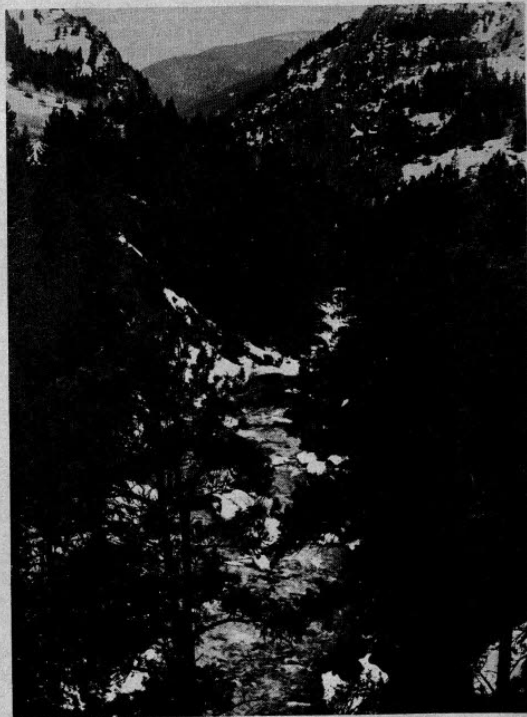


Photo by Bill Ballhorn

WYOMING LEGISLATORS considered a bill this week to take water from the Little Big Horn River to slurry coal out of the state. Proponents of the bill added a provision to protect the Little Big Horn Canyon, pictured above, but the bill was defeated.

12-High Country News — Feb. 22, 1980



Bulletin Board



LOONEY LIMERICKS

by Zane E. Cology

He came East, to the wild, wild West
In his clunker; and to guage by his zest
He ought to go far
(In his job, not his car)
Michael Moss, we all wish you the best

ALCOHOL FUEL INFORMATION

In response to public requests for information about gasohol and other alcohol fuels, the Department of Energy has set up a National Alcohol Information Center. The center will operate Monday-Friday, 8 a.m. to 5 p.m. mountain time, and can be reached by calling toll free (800) 525-5555 or writing the center in care of the Solar Energy Research Institute, 1617 Cole Boulevard, Golden, Colo. 80401.

MONTANA COAL MINE

A draft environmental impact statement discussing the impacts of a coal mine near Colstrip, Mont., is available for public comment. The statement evaluates Western Energy Company's proposal to extend strip mining operations at its Rosebud mine. A copy of the plan can be obtained from the Department of State Lands, Capital Section, Helena, Mont. Comments are due by March 7.

SURFACE MINING

A study by the National Academy of Sciences' Committee on Surface Mining and Reclamation (COSMAR) called **Surface Mining of Non-coal Minerals** has been released. Hearings on the report have been scheduled throughout the West. The study found that environmental problems caused by non-coal mines (such as uranium, phosphates, oil shale, molybdenum, and copper) are in need of attention, and that federal regulation is necessary, particularly in areas such as fugitive dust, radioactivity, water pollution, and social impacts.

The report is available for \$11.50 from NAS's Office of Publications, 2101 Constitution Ave., NW, Washington, D.C. 20418. Separate reports on oil shale and tar sands (\$9.25), uranium (\$12.95) and construction minerals (\$7.50) are also available. Written comments can be submitted through March 21 to Robert B. Smythe, Council on Environmental Quality, 722 Jackson Place, NW, Washington, D.C. 20006. A hearing for public comment will be held Feb. 26, 9 to 5, at the Federal Building, Rm. 239, 1961 Stout St., Denver, Colo.

APPROPRIATE TECHNOLOGY SHOW

A 25-minute slide-tape program exploring the ideas of E.F. Schumacher, author of **Small Is Beautiful**, is available for purchase or rent. For more information, contact Pathways to the Future series, Christensen Associates, Suite 200, Chapel North Building, 62 North Chapel St., Newark, Del. 19711 or call (302) 454-1313.

ENERGY BOOKS

Reaching Up, Reaching Out: A Guide to Organizing Local Solar Events by the Solar Energy Research Institute is available from the Superintendent of Documents, U.S. Printing Office, Washington, D.C. 20402, stock number 061-000-00345-2. Also available is **Jobs and Energy** from the Council on Economic Priorities, 84 Fifth Ave., New York, N.Y. 10011.



WETLAND-RIPARIAN MANAGEMENT

The Bureau of Land Management is developing new guidelines for the protection of wetlands and riparian (stream-side) areas on its public lands. A copy of the guidelines,

which will be published in the **Federal Register**, can be obtained from the Director, Bureau of Land Management, 18th and Ct. Streets, NW, Washington, D.C. 20240.

ENVIRONMENTAL EDUCATION WORKSHOP

The Bureau of Land Management will offer two summer environmental education and natural resources workshops, for three undergraduate or graduate credits each. The June 2-20 course will be at New Mexico State University in Las Cruces. The July 14 to August 1 course will be at the University of New Mexico at Albuquerque. For further information contact the Bureau of Land Management, Public Affairs Office, P.O. Box 1449, Santa Fe, N.M. 87501 or call (505) 988-6316.

WYOMING WILDERNESS ASSOCIATION

A new group is seeking members to work for the protection and wise management of Wyoming's wild land resources. Keith Becker, one of the founders, is a rancher and former executive director of the Wyoming Outdoor Council. For more information contact WWA, P.O. Box 876, Laramie, Wyo. 82070.

LAND STATISTICS

The 1977 edition of "Public Land Statistics" is now available. Information on public land acreages, income and recreational usage is included. The publication can be ordered from any state office of the Bureau of Land Management.

Trackings

followups on previous stories



Consolidation coal plan

(For previous story, see HCN 8-10-79)

The Department of Interior has approved a controversial mining and reclamation plan submitted by Consolidation Coal Co. for mining on the Navajo Reservation.

Interior's Office of Surface Mining had previously hesitated to approve the plan because Consol had not demonstrated in its application that the arid Southwestern site could be reclaimed.

The National Indian Youth Council and 12 individual Navajo Indians are protesting the mine approval, saying the Interior Department did not comply with the National Environmental Policy Act and historic preservation laws. Hearings continue next week on the group's attempt to get a preliminary injunction, according to Richard Hughes, an attorney for NIYC.

To win approval, Consol had to agree to 24 special stipulations, many of them designed to assure reclamation. Within seven years, the company must show a "trend" toward re-establishing different types of vegetation that exist on undisturbed lands in the area. It must also establish experimental plots to try different revegetation techniques.

This is both the first plan approved in an arid area and the first plan approved

on Indian lands since passage of the Surface Mining Reclamation and Control Act in 1977.

Interior sources had told HCN they expected the plan to be approved because of political pressure from New Mexico's two senators and one of its congressmen, and from the Navajo Tribal Council. The council had approved Consol's contract application, with stipulations.

When outgoing Assistant Secretary Forrest Gerard announced the plan's approval, he said, "Our approval of this lease and mining plan was contingent

on the passing of tough tests — tests designed to insure the balance of benefits to the Navajo people."

The mine is expected to produce for 38 years. Consol has agreed to allocate at least 70 percent of the jobs to Navajo tribal members, according to **Sho-Ban News**.

TVA-Wyoming agreement

(for previous story, see HCN 9-21-79)

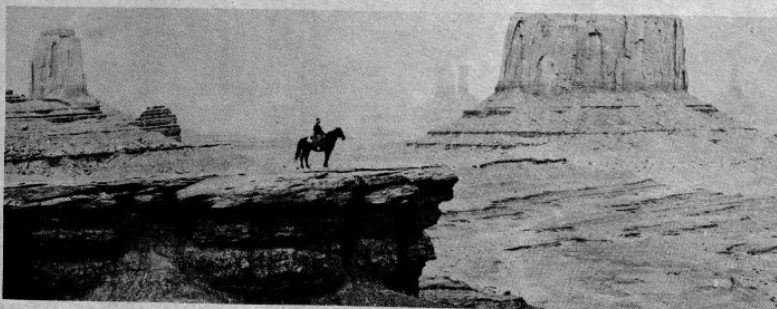
Tennessee Valley Authority Chairman David S. Freeman has agreed to let his agency's uranium project near Douglas, Wyo., be subject to all state laws. Wyoming state attorneys drew up a contract after Freeman met with Wyoming Gov. Ed Herschler recently

and sent it to the TVA board for approval this month.

The contract stipulates that TVA must meet all state law requirements, including the industrial siting act, and make payments in lieu of taxes. As a federal agency, TVA could claim immunity to local taxes and possibly state laws without such an agreement. Local officials estimated they would lose as much as \$1 million a year in taxes.

Wyoming Attorney General John Troughton said a response from TVA is expected soon.

Wyoming had threatened to withhold state leases from TVA unless it signed a cooperative agreement. However, Gary Harmon of TVA's Casper, Wyo., office said the state leases involved only about 800 acres of the total 27,000 acres TVA plans to mine. "I don't think that (loss of the state leases) would hurt the overall picture," he said.



LIMITED RAINFALL on Navajo Nation land limits the potential for reclamation, so Consolidation Coal Co. will have to meet special criteria.

Photo copyright 1980 by Ann and Myron Sutton

Western Roundup

High Country News-13

Feb. 22, 1980

Toxic herbicides blamed in Montana miscarriages case

by Michael Moss

Women living in the forested Swan Valley in western Montana are suffering an unusually high rate of miscarriage, and, while no laboratory tests have been done, residents think herbicide spraying may be the cause.

Nine often pregnant women living in a stretch of the valley north of Missoula had miscarriages during a one year period ending last fall, according to the **Missoulian**. The one woman who had a child that year lived out of state during most of her pregnancy.

The cause has not been documented, but residents are blaming the widespread use of 2,4-D and other herbicides in the area.

Six of the affected women have filed a class-action suit in district court against the herbicide manufacturers

and the companies and government agencies that use them.

The suit charges the defendants, which include Dow Chemical Co. and Burlington Northern, with making and using the herbicides "in a negligent and reckless manner, with little or no concern for the effect of these products on the health of individuals directly or indirectly exposed to them."

Ironically, the women and their families moved to Swan Valley to avoid the dangers of urban living.

"We found these people to be living the pristine life, growing their own food and watching their eating habits," said county health officer Dr. Ralph Campbell, who is investigating the case.

Facing another spring spraying season, the women say they don't want compensation, but rather answers to

their questions: Who is spraying what, where and when, and what health effects is it having.

The chemical 2,4-D is being used in Montana and throughout the forested West in place of a more controversial herbicide, 2,4,5-T. 2,4,5-T was temporarily banned by the Environmental Protection Agency after studies linked its use to a similarly high rate of miscarriages and other health problems among residents of Alsea Basin, Ore.

While officials say 2,4,5-T is not being used in the Swan Valley area, the Forest Service, the state highway department, Burlington Northern, area farmers and the general public are using 2,4-D.

A member of the phenoxy chemical family, the herbicide was a component of Agent Orange, the defoliant used in Vietnam that is now being intensively studied for possible long-term health problems in veterans exposed to it.

2,4-D may contain a contaminant called dioxin, a severely toxic chemical that has been proven to cause cancer in animals.

Scientific studies on the health effects of 2,4,5-T and 2,4-D are only now being done by EPA and other agencies.

The lack of scientific evidence is aiding manufacturers in their fight to get the temporary ban on the use of 2,4,5-T lifted. EPA is now holding hearings on the issue. Political pressure, as well as scientific evidence, may determine the outcome.

Voters in northern California's Mendocino County last summer banned the aerial application of phenoxy herbicides in areas of the county not controlled by state or federal agencies. Petitions are circulating in Oregon to get a measure on the fall ballot calling for a statewide ban.

Alsea Basin residents also resorted to demonstrations and threats of violence to air their fears, a tactic that the Swan Valley residents say they may take up if spraying is resumed this spring.

Unlike 2,4,5-T, the chemical 2,4-D is an unrestricted toxic substance, and is used widely in everything from lawn fertilizer to roadside weed control, as well as forestry.

"Until there is adequate documentation, we would be very hesitant to propose any ban on the use of 2,4-D," Lou Johnson, chief of the toxic substances branch of the EPA in Region VIII told **HCN**.

Environmental groups in the Northwest have proposed the replacement of chemical weed and brush control with manual, hand-release methods.

Idaho House rejects Symms' wilds bill

In a vote wedded to electoral politics, the full House Interior panel has rejected the compromise River of No Return Wilderness bill advanced by Rep. Steve Symms (R-Idaho).

The Symms bill was offered as a substitute to the subcommittee-passed version, which closely resembles the measure passed by the Senate in November. The Senate bill was sponsored by Sen. Frank Church (D-Idaho).

Symms, who is opposing Church in the senator's re-election bid this fall, was voted down 25 to 15.

"It came as no surprise to us," said Chris Lay, administrative assistant to Symms. "The vote was a strict party line-up — democrats for Church and republicans for the congressman."

The Symms substitute would preserve 0.6 million acres less than the 2.4 million acre subcommittee-Church bill. Several areas considered high quality wildlands by conservationists were also omitted in the Symms bill.

At press time, weakening amendments to the Church measure were being offered by both Symms and Rep. James Santini (D-Nev.).

Alaska lands withdrawn by Andrus

The U.S. Senate has again delayed consideration of the Alaska lands legislation, and, in retaliation, Secretary of Interior Cecil Andrus has withdrawn from commercial exploitation some 40 million acres of the disputed federal wildlands in Alaska.

A dozen wildlife-rich areas in the state, including additions to the existing Arctic National Wildlife Range and 14 million acres in the Yukon Delta, a renowned waterfowl staging area, are to be managed as wildlife refuges or conservation areas (the equivalent of national parks).

New mining and other development will be banned for 20 years, although many observers are considering the withdrawals permanent, since it would take an act of Congress to reverse them.

The Secretary's action follows an even larger land withdrawal made by President Carter in late 1978. In that move, some 56 million acres were protected as national monuments.

Combined with the latest withdrawals, and an additional 12 million acres slated for future withdrawal, almost 110 million acres of federal wildlands in Alaska will be protected by administrative action.

Conservationists emphasized that their fight is far from over. Monument and wildlife refuge status, while providing considerable natural resource protection, are not as thorough as wilderness designation, which only Congress can provide.

Legislation passed by the House last May would put 128 million acres of land into conservation system units, with some 67 million acres protected as wilderness.

Prospects for Senate action on the legislation this year are dim, however. In a late night session on February 7, senators representing both sides of the issue agreed to delay consideration of the bill until after the Republican Convention in July at the earliest. Congressional recesses planned in August and September may postpone it further.

The agreement caught everyone by surprise, as action on the legislation was expected by March, in part because of floor time freed up by the stalled

SALT II ratification.

Both Alaska senators, Mike Gravel (D) and Ted Stevens (R), were decidedly pleased with the delay. In a joint press conference held the same night, the senators acceded that they pushed the postponement to allow the energy crisis to worsen and thus put more development pressure on such areas as the arctic range.

The reaction to Andrus' decision from conservationists, shocked by the Senate delay earlier in the week, was jubilant. Chuck Clusen, head of the conservationist-backed Alaska Coalition, said Andrus' action ranks with the "courageous" move taken by Carter in creating the national monuments.

"For the Senate to put off this vote until late summer, while there are large blocks of time available in its schedule in March, is incomprehensible to us," Clusen said. "It can only be interpreted as a move by Alaska development interests fearing a conservation victory now."



Photo copyright by Boyd Norton

THE YUKON RIVER DELTA, the staging area for millions of waterfowl, is one of the twelve new wildlife refuges in Alaska established by Secretary Andrus.

14-High Country News — Feb. 22, 1980

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 PERMIT 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 (2) TWO OIL TREATER FACILITIES AND (1) ONE COMMERCIAL FACILITY, TO MODIFY (2) OIL TREATER PERMITS, (1) MUNICIPAL PERMIT AND (1) ONE INDUSTRIAL PERMIT, AND TO RENEW (9) NINE OIL TREATER PERMITS, (1) ONE INDUSTRIAL PERMIT, (1) COMMERCIAL PERMIT, (1) ONE MUNICIPAL PERMIT, AND (1) ONE FEEDLOT DISCHARGE PERMIT WITHIN THE STATE OF WYOMING.

APPLICANT INFORMATION ATLANTIC RICHFIELD COMPANY

(1) **APPLICANT NAME:** 1860 LINCOLN STREET, SUITE 501
DENVER, COLORADO 80295

MAILING ADDRESS: RECLUSE NORTH UNIT, BATTERY
NO. 1, SW¼, SECTION 25, T57N,
R75W, CAMPBELL COUNTY, WYOMING

FACILITY LOCATION:

PERMIT NUMBER: Wy-0028509

(2) **APPLICANT NAME:** E. DOYLE HUCKABAY, LTD.

MAILING ADDRESS: 1706 SECURITY LIFE BUILDING
DENVER, COLORADO 80202

FACILITY LOCATION: NO. 1-13 FEDERAL-KREJCI, NE
¼, SW¼, SECTION 13, T36N,
R64W, NIOBRARA COUNTY, WYOMING

PERMIT NUMBER: Wy-0028517

Facilities are typical oil treaters located in Campbell and Niobrara Counties, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharges are to Class IV waters, Dead Horse Creek and Crazy Woman Creek, respectively, via unnamed drainages.

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 Atlantic Richfield permit is December 31, 1984, and for the Huckabay permit is December 31, 1982.

(3) **APPLICANT NAME:** MARGARET A. MINER

MAILING ADDRESS: P.O. BOX 80
POWDER RIVER, WYOMING 82648

FACILITY LOCATION: HELL'S HALF ACRE,
NATRONA COUNTY, WYOMING

PERMIT NUMBER: Wy-0028444

Hell's Half Acre is a small commercial development consisting of a store, filling station, bar motel and campground, located in western Natrona County on U.S. Highway 20-26. The wastewater treatment facility serving the development is a small case-cotter package plant. The plant discharges to an unnamed drainage which is a tributary of the South Fork of the Powder River (Class IV water).

The proposed permit simply requires that the existing treatment plant be operated at maximum efficiency until July 1, 1980, at which time compliance with National Secondary Treatment Standards must be achieved. It is expected that compliance will be achieved by compliance of a septic tank and leach field system. After July 1, 1980, the permittee must begin monitoring of any discharge with reporting of results quarterly. The permit is scheduled to expire on December 31, 1984.

(4) **PERMIT NAME:** TEXACO, INC.

MAILING ADDRESS: P.O. BOX 2100
DENVER, COLORADO 80201

FACILITY LOCATION: GWEN KNAPP BATTERY, WEST OREGON
BASIN FIELD, NW¼, SECTION 35,
T51N, R101W, PARK COUNTY, WYOMING

PERMIT NUMBER: Wy-0002241

FACILITY LOCATION: STATE D BATTERY, WEST OREGON
BASIN FIELD, NW¼, SECTION 36,
T51N, R101W, PARK COUNTY, WYOMING

PERMIT NUMBER: Wy-0002356

Facilities are typical oil treaters located in Park County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharges are to Oregon Coulee, a Class IV water, via an unnamed drainage.

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 6.0-9.0). This is due to the extreme aridity of the area 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, 1983.

(5) **PERMIT NAME:** CITY OF POWELL, WYOMING

MAILING ADDRESS: P.O. BOX 1008
POWELL, WYOMING 82435

FACILITY LOCATION: CITY OF POWELL,
PARK COUNTY, WYOMING

PERMIT NUMBER: Wy-0020648

The wastewater treatment facilities serving the City of Powell, Wyoming consist of a three cell non-aerated lagoon system which is operated in parallel. The discharge from cells number 1 and number 2 is from one pipe and the discharge from cell number 3 is from another pipe. Both discharges are to Bitter Creek (Class II water).

The proposed permit for this facility requires that the existing system be operated at maximum efficiency until January 1, 1982. At that time, an upgraded treatment system must be on line and that system must meet National Secondary Treatment Standards and Wyoming's in-stream water quality standards. The proposed permit includes limits on BOD5, total suspended solids, fecal coliform bacteria, pH, and a prohibition against the discharge of total residual chlorine. Since there is no evidence that ammonia is a significant water quality problem in the receiving stream, the proposed permit contains no limitations on that parameter, however, it is required that ammonia be monitored and reported on a regular basis.

The proposed permit contains a section which requires the City to begin planning for expansion of the wastewater treatment facilities once 80 percent of the design flow is reached.

Self-monitoring requirements in the proposed permit require the monitoring of all limited parameters on a routine basis with reporting of results quarterly. The proposed permit is scheduled to expire on January 31, 1985.

(6) **PERMIT NAME:** BIG HORN COAL COMPANY

MAILING ADDRESS: P.O. BOX 724
SHERIDAN, WYOMING 82801

FACILITY LOCATION: SHERIDAN COUNTY, WYOMING

PERMIT NUMBER: Wy-0022519

The Big Horn Coal Company operates a large, open pit coal mine at the junction of Goose Creek and the Tongue River, approximately 10 miles north of Sheridan, Wyoming. The existing discharge permit for this coal mine allows for the discharge of pit and surface runoff water from a total of 5 locations to the Tongue River and Goose Creek (both Class II waters).

The Company has now requested that the location of discharge point 004 be changed. This change in location is not considered to be significant and the proposed permit grants the requested change. Also, it was requested and granted that discharge point 005 be eliminated, as there has been no discharge for some time now. The proposed permit contains effluent limitations which reflect the most recent Federal "best practicable treatment" standards for the coal mining industry. These standards are being met presently. No evidence indicates that more stringent requirements are necessary to comply with Wyoming's in-stream water quality standards. However, the situation will continue to be monitored and, if necessary, the permit may be modified to include more stringent requirements.

In addition, the permittee must control runoff from disturbed areas, monitor the quality of effluent discharged and report results to DEQ on a monthly basis.

The proposed expiration date of the permit is December 31, 1984.

(7) **PERMIT NAME:** AMOCO PRODUCTION COMPANY

MAILING ADDRESS: P.O. BOX 1400
RIVERTON, WYOMING 82601

FACILITY LOCATION: CROOKS GAP UNIT, SW¼, NW
¼, SECTION 18, T28N, R92W,
FREMONT COUNTY, WYOMING

PERMIT NUMBER: Wy-0002224

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 discharge is to Crooks Creek (Class II stream) via an unnamed drainage.

The discharge must meet Wyoming's Produced Water Criteria effective immediately. No chemical limitations have been imposed on this facility except for oil and grease (10 mg/l and pH 6.5-8.5). This is due to the extreme aridity of the area 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 discharge and, if necessary, will modify the permit 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 permit is December 31, 1983.

(8) **PERMIT NAME:** C.E. BREHM DRILLING COMPANY

MAILING ADDRESS: P.O. BOX 4088
CASPER, WYOMING 82601

FACILITY LOCATION: C.E. BREHM NO. 1 DOVE, SW¼,
SE¼, SECTION 19, T57N,
R97W, BIG HORN COUNTY, WYOMING

PERMIT NUMBER: Wy-0001333

(9) **PERMIT NAME:** M & K OIL OPERATIONS

MAILING ADDRESS: P.O. BOX 1487
CASPER, WYOMING 82602

FACILITY LOCATION: HUNT NO. 12 LEASE, SW¼,
NW¼, SECTION 26, T50N,
R102W, PARK COUNTY, WYOMING

PERMIT NUMBER: Wy-0027774

(10) **PERMIT NAME:** MARATHON OIL COMPANY

MAILING ADDRESS: P.O. BOX 120
CASPER, WYOMING 82601

FACILITY LOCATION: GARLAND FIELD, KENNEY COASTAL
BATTERY, NE¼, SECTION 19, T56N,
R97W, BIG HORN COUNTY, WYOMING

PERMIT NUMBER: Wy-0025631

(11) **PERMIT NAME:** TEXACO, INC.

MAILING ADDRESS: P.O. BOX 2100
DENVER, COLORADO 80201

FACILITY LOCATION: WHISTLE CREEK FIELD, SW
¼, SECTION 16, T56N,
R98W, PARK COUNTY, WYOMING

PERMIT NUMBER: Wy-0002429

(12) **PERMIT NAME:** UNION OIL COMPANY OF CALIFORNIA

MAILING ADDRESS: P.O. BOX 2620
CASPER, WYOMING 82601

FACILITY LOCATION: RICHARDS LEASE, NW¼, NE
¼, SECTION 19, T57N, R97W,
R97W, BIG HORN COUNTY, WYOMING

PERMIT NUMBER: Wy-0023922

Facilities are typical oil treaters located in Big Horn and Park Counties, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The Brehm and Union facilities discharge to Sage Creek, a Class II water. The Marathon facility discharges to Arnoldus Lake, a Class III water. The M & K and Texaco facilities discharge to Class IV waters, those being the South Fork of Sage Creek and Mantua Draw, respectively.

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 permits is December 31, 1983.

(13) PERMIT NAME: SOHIO PETROLEUM
MAILING ADDRESS: P.O. BOX 873
RUSSELL, KANSAS 67665
FACILITY LOCATION: GOVERNMENT MOORE LEASE, EAST
TISDALE FIELD, NE⁴, SECTION 27,
T41N, R81W, JOHNSON COUNTY, WYOMING

PERMIT NUMBER: Wy-0006531
(14) PERMIT NAME: TERRA RESOURCES, INC.
MAILING ADDRESS: P.O. BOX 2500
CASPER, WYOMING 82601

FACILITY LOCATION: TEXAS N BATTERY, SALT CREEK
FIELD, SECTION 19, T78N, R39W,
NATRONA COUNTY, WYOMING

PERMIT NUMBER: Wy-0024252
(15) PERMIT NAME: WALTER DUNCAN OIL PROPERTIES
MAILING ADDRESS: 1300 WRITERS CENTER IV
DENVER, COLORADO 80222

FACILITY LOCATION: REYNOLDS FEDERAL NO. 1-FEDERAL NO. W-
24753, NE⁴, NE⁴, SECTION 1, T52N, R68W,
CROOK COUNTY, WYOMING

PERMIT NUMBER: Wy-0026921

Facilities are typical oil treaters located in Johnson, Natrona and Crook Counties, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharges are all received by Class IV waters, those being Wall Creek, Castle Creek and Thompson Creek, respectively.

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 permits is December 31, 1981, except for the Duncan permit which will expire on December 31, 1983.

(16) PERMIT NAME: BUFFALO SAND AND GRAVEL, INC.
MAILING ADDRESS: P.O. BOX 912
BUFFALO, WYOMING 82834
FACILITY LOCATION: 4 MILES SOUTH OF THE
TOWN OF BUFFALO, WYOMING

PERMIT NUMBER: Wy-0022811

Facility is a small sand and gravel washing operation which lies approximately 4 miles south of Buffalo, Wyoming on an intermittent stream (Bull Creek — Class IV). Bull Creek flows very rarely and only during periods of flash flood and heavy runoff. The stream bed is made up of loose sand. The point of discharge is approximately 6 miles from the nearest permanent stream (Clear Creek — Class II).

According to the owner and employees, discharge to the stream bed occurs very rarely and only when excess water occurs in the extraction operation. From visual appearance, the water seems to sink into the stream bottom within 50 feet of the point of discharge. Under normal operations the gravel wash water is recycled.

Due to the nature of the effluent and condition of the receiving channel, the proposed permit will allow gravel wash water to be discharged with no effluent limitations or monitoring requirements. The permit is scheduled to expire March 31, 1985.

(17) PERMIT NAME: JOHN E. SCOTT, JR.
MAILING ADDRESS: BOX K
EVANSVILLE, WYOMING 82636
FACILITY LOCATION: SCOTT HILL HOUSING DEVELOPMENT,
NATRONA COUNTY, WYOMING
PERMIT NUMBER: Wy-0023698

Scott Hill is a small, private housing area located east of the City of Casper, Wyoming. Wastewater treatment for the area is provided by a small package plant which discharges to Sandy Draw (Class II water). Under normal circumstances the discharge does not reach the River.

The proposed permit requires compliance with National Secondary Treatment Standards effective immediately. In addition, the proposed permit contains a strict limitation on fecal coliform bacteria and a liberal limitation on total residual chlorine based on the State's in-stream water quality standards.

The proposed permit requires monitoring of effluent quality on a regular basis with reporting of results quarterly. The permit is scheduled to expire on March 31, 1985.

(18) PERMIT NAME: TOWN OF EDGERTON, WYOMING
MAILING ADDRESS: P.O. BOX 407
EDGERTON, WYOMING 82635
FACILITY LOCATION: TOWN OF EDGERTON,
NATRONA COUNTY, WYOMING
PERMIT NUMBER: Wy-0020621

The wastewater treatment facilities serving the Town of Edgerton, Wyoming consist of a small single cell non-aerated lagoon. In the past, this lagoon did not discharge, however, now, due to population

increases, the lagoon is beginning to discharge a small amount to Salt Creek (Class IV water) via an unnamed drainage.

The proposed permit requires only that the existing facility be operated at maximum efficiency. However, the proposed permit also requires the Town to submit a Schedule of Compliance to meet Federal effluent standards and Wyoming's in-stream water quality standards once Federal grant funds are offered. The standards, which will eventually have to be met, include effluent limitations on BOD₅, total suspended solids, fecal coliform bacteria, pH and total residual chlorine.

The proposed permit contains a section which requires the Town to begin planning for expansion of the wastewater treatment facilities once 80 percent of the design flow is reached.

Self-monitoring requirements in the proposed permit require the monitoring of all limited parameters on a routine basis, with reporting of results quarterly. The proposed permit is scheduled to expire on March 31, 1985.

(19) PERMIT NAME: BARD RANCH COMPANY
MAILING ADDRESS: P.O. BOX 1048
WHEATLAND, WYOMING 82201
FACILITY LOCATION: NW⁴, SECTION 29, T24N,
R67W, PLATTE COUNTY, WYOMING
PERMIT NUMBER: Wy-0022314

The Bard Ranch Company operates a cattle feedlot of approximately 800 animal capacity on the banks of Chugwater Creek (Class II water), approximately 3 miles southeast of the Town of Wheatland, Wyoming. The feedlot is uncovered and there is significant pollution danger to Chugwater Creek both from runoff from the feedlot and animal activity within the creek bed.

Runoff control consists of an intercept ditch on the east side of the Creek and a collection sump. In general these controls are inadequate and the following improvements are needed: (1) The control ditch needs to be enlarged and the dike on the west side of the ditch needs to be protected from cattle which tend to trample it down; (2) Methods to prevent or control the access of cattle to the stream must be employed; and, (3) There are currently no controls at all on the west side of the Creek, which must be corrected.

The proposed permit requires that, immediately, all runoff from the feedlot be eliminated except that excess runoff which would result from a 25 year-24 hour precipitation event (2.7 inches). In addition, the permittee must eliminate those pens which are built out into the Creek and thus limit the direct access of the cattle to the stream. The proposed permit is scheduled to expire on March 31, 1985.

STATE-EPA TENTATIVE DETERMINATIONS

Tentative determinations have been made by the State of Wyoming in cooperation with the EPA staff relative to effluent limitations and conditions to be imposed on the permits. These limitations and conditions will assure that State water quality standards and applicable provisions of the FWPCA will be protected.

PUBLIC COMMENTS

Public comments are invited any time prior to March 23, 1980. Comments may be directed to the Wyoming Department of Environmental Quality, Water Quality Division, Permits Section, Hathaway Building, Cheyenne, Wyoming 82002, or the U.S. Environmental Protection Agency, Region VIII, Enforcement Division, Permits Administration and Compliance Branch, 1860 Lincoln Street, Denver, Colorado 80295. All comments received prior to March 23, 1980 will be considered in the formulation of final determinations to be imposed on the permit.

ADDITIONAL INFORMATION

Additional information may be obtained upon request by calling the State of Wyoming, (307) 777-7781, or EPA, (303) 327-3874, or by writing to the aforementioned addresses.

The complete applications, draft permits and related documents are available for review and reproduction at the aforementioned addresses.

Public Notice No. Wy-80-002

CLASSIFIEDS

NIGHT MOON — the elephants are singing, and they do make frightening sounds. But whatever shall be next, in our acoustic monoliths. — little bear.

WILD HORIZONS EXPEDITIONS, Box 2348-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.

THE MONTANA WILDERNESS FEDERATION is seeking an Executive Director. Candidates should have strong backgrounds in organizational management and natural resource issues, along with public speaking, writing and editing skills. Duties include developing conservation strategies, coordinating activities of volunteers, maintaining organizational records, producing a monthly newspaper and fundraising. To apply, or for more information, contact MWF, Box 4373, Missoula, MT 59806. Applications accepted through April 25.

PUBLIC NOTICE U.S. ENVIRONMENTAL PROTECTION AGENCY

The U.S. Environmental Protection Agency (EPA), Region VIII is requesting public comment on a population projection variance request submitted by the State of Wyoming. The State has requested that a total of 812,246 people be approved for the year 2000. This figure is 328,246 higher than a projection made by the Bureau of Economic Analysis (BEA), U.S. Department of Commerce. The State's projection was developed to fulfill the requirements of the EPA regulations on Municipal Wastewater Treatment Works (40 CFR Part 35, Appendix A, September 27, 1978). Statewide population projections, once approved by the EPA Administrator and disaggregated to the regional level, will be used for: (1) Areawide Water Quality Management Planning; (2) sizing of municipal wastewater treatment plants; and, (3) the facility needs survey under Section 516(b) of the Clean Water Act. A copy of the variance request can be obtained from Mr. Phil Kiner, Division of Research and Statistics, Department of Administration and Fiscal Control, Room 302 Emerson Building, Cheyenne, Wyoming 82002, phone 777-7504. The comment period will be open until March 31, 1980. Forward comments to Mr. Mike Strieby, Water Planning and Management Branch (8W-PM), U.S. EPA, Region VIII, 1860 Lincoln Street, Suite 103, Denver, Colorado, phone (303) 837-4963.

16-High Country News — Feb. 22, 1980

Accidents Will Happen

The Case Against Nuclear Power

Lee Stephenson and George R. Zachar, eds., Harper and Row, New York, 1979. \$12.50, cloth; \$5.95, paper, 339 pages. Illustrations.

Review by Peter Wild

Atomic power plants for hobbyists, automobile engines no bigger than fists, energy so cheap it wouldn't have

to be metered — such were the fantasies that leaders in government and industry used to promote a nuclear future. Years before Three Mile Island, Ralph Nader was denouncing the nuclear path as a "technological Vietnam." As a whole, the nation preferred the rosy imaginings of the "experts" to activists' warnings.

Now, with all the fateful irony of a Greek tragedy, the public is beginning

to question its former wisdom. Yet even before the potentially deadly drama recently played out in rural Pennsylvania, promoters of atomic power were having second thoughts. In 1978 General Electric, along with other reactor manufacturers, was secretly trying to slip out of the nuclear noose.

The corporation's change of heart had little if anything to do with concerns about sick cows, increasing rates of skin and lung cancers in humans, birth defects or other nightmares being passed on to generations to come. Instead, its board of directors realized that, despite billions of dollars in taxpayer subsidy, the nuclear reactor business was turning into a financial rat hole.

How did a nation that prides itself on its practicality get into such a mess? That's the basic question that *Accidents Will Happen* attempts to answer with a selection of 20 essays. The writers include a lawyer, a U.S. senator, a friend of Karen Silkwood (who was allegedly murdered in 1974 for her anti-nuclear activism) and a medical doctor. The various backgrounds and approaches to the question liven the book, despite some overlap of material. The editors provide a short

course on basic atomic physics, a discussion of why insurance companies don't care to take on nuclear industries as clients, and chapters concerning the dangers of shipping and storing radioactive substances.

The book ends on a prolonged upbeat. Nearly a third of its pages argue in favor of economically sane and environmentally safe alternatives to the nuclear madness.

Accidents Will Happen, an updated edition of *Countdown to a Nuclear Moratorium*, is an unabashed polemic, a thorough and accessible primer for the general reader.

Charts and diagrams illustrate the more technical chapters, while newspaper cartoons sprinkled throughout the text maintain a sense of humor despite the book's earnestness.

Books



OLD YELLOWSTONE DAYS

edited by Paul Schullery, Colorado Associated University Press, Boulder, 1979. \$12.50, cloth; \$5.95, paper, 250 pages. Photographs.

Review by Peter Wild

In the summer of 1877, nine vacationers romped about Yellowstone National Park. Exploring the sights by day, at night they entertained each other with impromptu performances around the campfire. Unbeknownst to them, a band of Indians dogged their tracks. Each evening the Nez

Perce lurked in the bushes, puzzling over the antics of the white people.

One morning the renegades materialized from the forest. With whoops of glee, they plundered the wagon of the stupefied tourists, beat the sightseers, and carried them off in several directions to wilderness strongholds.

This account of the famous attack, written by one of its woman survivors, is the first and most dramatic selection in *Old Yellowstone Days*, and it immediately establishes the wild and woolly flavor of the Yellowstone of a hundred years ago.

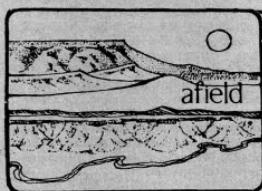
when it was the nation's only national park.

Even under more civilized circumstances, not everyone praised the famed preserve — nor the rubbernecks it attracted. On his way from India to England, Rudyard Kipling made an obligatory visit to the attractions and sniffed, "To-day I am in the Yellowstone Park, and I wish I were dead."

Nevertheless, Kipling probes further, deftly turning his writer's scalpel on nature and its admirers. He looks down his nose at the wonders: "The Park is just a

howling wilderness of three thousand square miles full of all imaginable freaks of a fiery nature." As for the naive Americans he encounters: "En route we passed other carriages full of trippers, who had done their appointed five days in the Park, and yelped at us fraternally...." His acid rendition of the Fourth-of-July celebration he chances upon is best left to be savored in toto.

Other chroniclers took the park more seriously. George Anderson, third military superintendent, brought order to the poachers' haven. In an 1897 reminiscence excerpted from the *Journal of the United States Cavalry Association* the Army officer bemoans Congress' neglect of park affairs. With good reason: he had to fund



by Maureen Dempsey

The headlights illuminate something white moving in the middle of the road. Stunned, it moves slowly out of the way. The car swerves as the outline of wings opens up in front of the windshield. Then another set, more visible. Great horned owls, as startled as we were.

The pair flies off into the security of the morning darkness. Five a.m. and we have three hours more of driving. Our destination is the Barcross Ranch, eight miles outside of Cora, Wyo. We are hoping to make it in time to join John Barlow for the morning feed run.

The sun begins to light up the northwestern flank of the Wind River Range. Rolling terrain greets us on both sides of the highway as the fog dissipates.

Arriving at the ranch, we join John in the barn where he keeps his Belgians, the breed of draft horse he uses to pull the sleigh that carries feed for the cattle.

They are large, sturdy-looking horses, but gentle, John tells us. They

weigh around 1,700 pounds. You wouldn't want to put your foot underneath one of those hooves. As he says this, one of the horses steps lightly on his foot. Laughing, he leads two of the Belgians out toward the sleigh.

He harnesses two in front, pointing out the leader, and puts the other two behind. The sleigh is like a flatbed wagon, 12 feet long or so. Bales of hay are piled on top of each other, leaving a seat for the driver. John has the reins in his hands: come on, hop on.

The cold morning air whips around us as the horses move along at a steady trot towards the pasture. The mountains are behind us, blue sky overhead. I ask John if these are the same kind of horses they use on the Budweiser commercial. The Budweiser horses are



Clydesdales, he tells us, and he does have a team of them that are younger, in training. He says his don't do any fancy high-stepping moves, they have a more practical use. He wonders how they ever trained those horses to step to the music.

Dancing horses or not, his are beautiful. Proudly-held heads, hooves that almost look too heavy for their legs. When asked why he uses them, he says simply that he prefers them. Not as noisy as a machine, no fumes from the gasoline, and when you get stuck in the snow all that is required is some coaxing. He mentions perseverance. Plus he's been around Belgians and Clydesdales all his life, growing up on the ranch he now runs.

We visit, watch, photograph as he makes his rounds; then head back to the house around noon. His wife, Elaine, treats us to biscuits, butter and meat from their cows, vegetables, cake for dessert. I'm ready for a nap, but we have to drive home to Lander.

Walking out the front hall, I notice something by Aldous Huxley taped to the wall: "Perhaps the most valuable result of all education is to make you do the thing you have to do, when it ought to be done, whether you like it or not; it is the first lesson that ought to be learned: however early a man's training begins, it is probably the last lesson that he learns thoroughly."

John notices me nodding my head and says it is a good thing for a rancher to remember.

"The Park is just a howling wilderness of three thousand square miles full of all imaginable freaks of a fiery nature."

— Rudyard Kipling

patrols against lawbreakers from his own slim purse.

Elsewhere we meet Owen Wister recording impressions of geysers and peaks long before he wrote *The Virginian*; and we catch glimpses of wilder park days through the eyes of renowned Western artist Frederic Remington.

Of more curious note is the contribution of William Owen. In 1883 Owen made the first bicycle tour of Yellowstone, on a high-wheeled "ordinary." John Muir,

Theodore Roosevelt, John Burroughs and several worthy but less familiar writers round out the anthology.

Scholars acquainted with the park's history will find little new in the collection. Yet editor Schullery has selected pieces spanning the years 1877 to 1903 which give the lay reader 11 piquant views of what remains the foremost jewel in our national park system.