

# High Country News

Friday, November 14, 1980

#### POLL PALL

There were unexpectedly few holdovers - but quite a few hangovers as Republicans took over in ch of the West, and several in itiatives bit the dust.



#### MX MISFIRE?

How do things stand with the MX missile, the Defense Department wunderkind, after a wave of public protest and the election of Ronald Reagan? Michael Moss goes looking for the silos.

#### SYNFUEL GRUEL

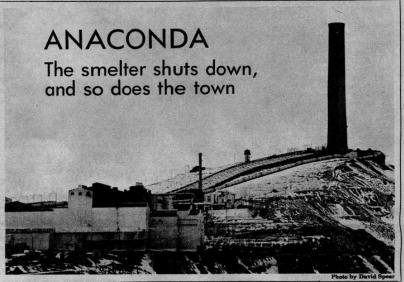
A moratorium has been lifted and ey tar sands are in line to be one of the first synthetic fuels developed. A closer look at "oilimpregnated sandstone:" What is it and how will we use it?

#### WOLF HOME

They call them lobo, loafer or buffalo wolves, and Jack Lynch has made their survival his life's work. Now the controversial Lynch is bringing his pack nearer to their historic home in Montana



Capitol Currents	10
Western Roundup	11
Bulletin Board	18
Opinion	14
Letters	
Books	16



by Geoffrey O'Gara

(Many towns in the Rocky Mountains and Great Plains region are feeling the pains of the energy development boom, and anticipating more rapid growth in the years ahead. Yet in their midst lie a few isolated pockets in which the trend is reversed — towns which have al-ready had their boom, and are now declining. In a two part series, HCN examines two very different examples of boomtowns going bust: Anaconda, Mont., and Jeffrey City, Wyo.)

#### Part one of two parts

ANACONDA, Mont. - Decades ago. if a stranger drove toward the Anaconda Copper Co.'s giant smelter during a strike, chances are he would be flagged down by a couple of burly smelter-workers and told to stay away. If he proceeded, his car might be redesigned.

Even as recently as this summer, strikers at the smelter gate aggressively questioned visitors before letting them pass. But in October, it all

The strikers' little trailer is still parked by the smelter's entrance gate, and the sign lying against it says: "No contract — no work." But you can drive in and out without so much as a wave from the strikers, who chat among themselves without looking up. To find out what their grievance is, you have to walk into their midst and interrupt

The sign, in fact, is now meaningless Contract or no contract, there will be no work for men like picketer Greg Bark-ley. His union and 11 others had been on strike for 90 days when Anaconda Copper and its parent company, the Atlantic Richfield Co., announced September 29 that the smelter would never

Company officials cited antiquated equipment, pollution control problems and foreign competition. The next day, nearly 1,000 workers who had been holding out for better wages and benefits woke up wondering if they had any future at all in Anaconda. After nearly a century of dominating the skyline at the western end of Deer Lodge Valley, the 585-foot stack of the Anaconda smelter had been snuffed.

Now the young, florid-faced Barkley lounges against a friend's battered station wagon, halfheartedly manning the strike-station, which will remain there until the strike — which also affects workers at still-operating open-pit mine and concentrator in nearby Butte is settled. But like the rest of his ome-town, Barkley is only going through the motions.

Like many workers at the smelter, Barkley followed in his father's footsteps when he took a job here. His brothers are employed by Anaconda Copper, too, but family proximity is not the only reason he is reluctant to move on in search of a job. "I'm paying for a nd to buy it or rent it.

Still, he thinks there may be no al-ternative to moving. "Most of the guys! know, they'll stick it out this winter, just to see what happens. Then they'll

#### THE COMPANY MAN

From the strikers' trailer, the pave ment twists up the hill, over, under, and around a Rube Goldberg assemblage of slurry pipes, furnaces, converters, roas-ters, baghouses, precipitators and stacks. In the middle of it all, in an ancient stone office building, sits Mel Stokke. "We were told to tell everyone: 'Don't plan on the place opening again,' "he said.

That's the official word, from the top manager and official voice of the com-pany in Anaconda — a gentle voice from the weary face of a well-groomed man in a plush, wood-paneled office left over from Anaconda's glory days.

Stokke said he knew no more about the shut-down than Barkley before the Sept. 29 announcement. He had had a premonition, though. At a gathering of premontion, though At a gamering with American Mining Congress in San Francisco late last summer, Stokke sensed discomfort when he approached his ARCO superiors. "I felt like I had the plague," he recalled. "No one the plague," he rec.

Despite his fine suit and unweathered hands, Stokke has a lot more in com-mon with workers like Barkley than See next page

### Anaconda...

(continued from page 1) their mutual ignorance of the impending shut-down. He has worked for what Montanans call "the Company" for 32 years, an association that predates ARCO's involvement by more than a quarter-century. Before that his father was a blue-collar employee at the smel-

was a order to ter.

"I was raised with the people that work up here," said Stokke. "I'm involved morally and socially." He thinks ARCO pulled the plug too quickly, "without looking into (alternatives) in depth...It should have been researched

a lot more."

Barkley, Stokke and the rest of the town, are still in shock. The company had reassured them earlier in the year that it planned to keep the smelter open and invest in improvements. "It hit us like somebody had suddenly

died," said Lutheran minister Kirby Nave. "There was an initial reaction of disbelief and numbness.

The surprise announcement set off a flurry of activity to find a quick fix. "A lot of pc ople came in here just before the (Nov.4) election, promising money." said Alberta Kraus, who works for the Anaconda Local Development Corpora-tion. "Then they left after the election.

tion. "Then they left after the election. Now we're having trouble finding any people to come in and invest."

Not surprisingly when over 70 percent of a community's payroll has been wiped out, retail businesses in the town of 9,000 are suffering. "We've lost about four businesses so far. and more are on the brink," said Gene Lutey, owner of the Lutey's Furniture and president of the Anaconda Chamber of Commerce. Two weeks after the closure, a survey

Two weeks after the closure, a survey of local business showed 121 jobs had already been eliminated. A second sur-



vey now under way is expected to show further decline. "Most of what we've got here are family businesses," said Lutey, "which can cut back and survive. But it looks like it's going to be a long.

drawn-out situation."

Lutey noted that Anaconda still owns much of the town — property, mineral rights and water — and might be considering some limited venture in the future, like reprocessing tailings. "But now that ARCO's left," he added, "I don't think anybody's going to want them back."

#### A LONG RELATIONSHIP

Lutev's remark reflects a bitterne towards corporate power that has been aroused often in Montana's past. The state has had a long and ambivalent relationship with Anaconda, dating

back to the 1880s when Marcus Daly

started building his copper empire. In fact, the town endured troubles uncannily similar to today's in the 1890s, when Daly sold his Anaconda Co. to the Amalgamated Copper Co., a subsidiary of the Rockefellers' Stan-dard Oil Trust. At that time, Anaconda owned enormous properties throughout the state and all but one of Montana's daily newspapers. It also controlled most of its legislators. When new-owner Amalgamated desperately wanted a law passed in 1890, it simply shut down everything but the news

That meant 20,000 workers laid offover three-quarters of Montana's wage-earners. To no one's surprise, a special session of the legislature quickly con-vened and passed the desired law. But the ability of an out-of-state corporate

power to toy with Montanans' lives was

ever forgotten. In 1915, Standard Oil relinquished its ownership of Anaconda. Sixty years later. Anaconda's grip on Montana's economy had weakened considerably, as had its internal strength, and it wa bought up by another giant, ARCO.

Montanans blame ARCO, the corporate outsider, for the closing of the smelter. Many say that ARCO's huge earnings in oil made it easy for the parent company to close a marginal smel-ter operation, that a smaller company might not have.

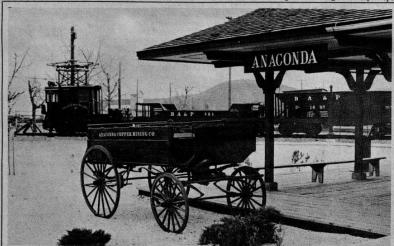
"We didn't buy it originally (in 1976) with the intent of writing it off," said ARCO spokesman Curt Burton. "Even if Anaconda were not a part of ARCO they would have been faced with the same situation ultimately. Anaconda might have sought to keep it open

## High Country News

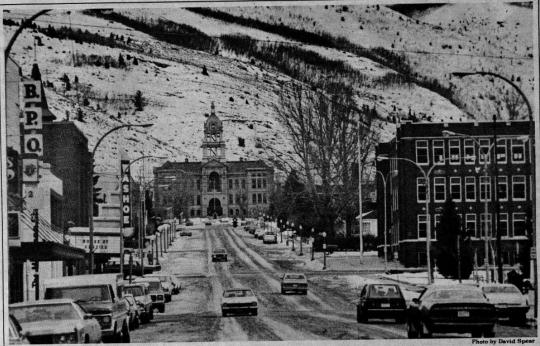
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THE ANACONDA COPPER CO. erected a visitor center, replete with relics from the old days. Then their entire operation in Anaconda became a relic.



DOWNTOWN ANACONDA has quieted since the smelter shut down. The Chamber of Commerce reports that four business and the commerce reports that four business are considered as the commerce of th on the brink of collapse

longer with variances (on pollution laws), but they wouldn't have offered the same benefits (when they shut down)."

Burton called the shutdown "strictly an environmental story." He acknow ledged that federal air quality laws give copper smelters leeway in com-plying with standards, and that the state has been willing to grant com-pliance extensions. Yet Burton insists that ARCO studies show that even with expensive retrofitting, the plant would not be assured of meeting emission standards.

Stokke offers a slightly different interpretation. He noted that the company had invested \$70-80 million in plant improvements since 1971, and that the "heart of the operation" is modern and in good condition. He also takes exception to a study by a German firm indicating that it would cost \$400 million to meet air quality standards — a figure Stokke said was inflated by ARCO's insistence that the firm guarantee full compliance after the re trofitting.

Additional evidence that environmental problems were not the only fac-tor in ARCO's decision came from David Norris, an official with the U.S. Environmental Protection Agency in Denver, who said, "They could operate just the way they are until 1982." And ARCO officials acknowledge they eventually plan to build a new smelter elsewhere that will cost three times the estimated \$400 million it would take to retrofit the existing one

The company clearly wants a new lo-cation and facility. "We don't have enough production in Montana or our other properties to keep the smelter busy," said Burton. Lately about half the ore smelted at Anaconda was brought in from out-of-state. When

ARCO builds a new facility, said Burton, it will be near navigable water, which will sharply cut transportation

But in a move that many Anacondans find difficult to fathom, ARCO has de-cided that until it builds a new smelter, it will ship ore from its Butte mine to modern smelters in Japan. Even considering transportation costs to and from the foreign facilities, this option is cheaper than keeping the Anaconda smelter alive, according to company officials

#### SEVERANCE PAY

Odd though it may seem for unemployed workers to be on strike, the contract dispute between Anaconda and its

due to competition with imports. That program could provide support for over a year and retrain workers for new jobs. ARCO has also given the com-munities of Anaconda and Great Falls

(a larger city to the north where 500 workers were laid off) an outright grant of \$5 million

That kind of economic cushion is not Inat kind of economic cusanisms inde-enough for most Anacondans, however. Joe Pickett, who worked for Anaconda for 15 years, said, "Some of us are really too old to go look for a job somewhere, but you have to. Your home aint worth a dollar. I was thinking of heading out for Minneapolis or Seattle, I don't know. Like a woman in Butte said to me: Butte got the mines, but Anaconda got the shaft."

### Before the election, anything seemed "Butte got the mines, but Anaconda got the shaft."

mions continues because it includes about 1,500 workers at the copper mine and concentrator in Butte who will go back to work when it is settled. The ne contract's provisions on severance pay will be the only ones that matter for the Anaconda smelter workers.

Negotiations are nearing completion, and ARCO-Anaconda Copper spokesand ARCO-Anacona Copper spokes-men say the severance package will provide the equivalent of about six months pay for the workers. It will probably be in the form of a \$3,500 severance benefit and partial pay for a

But that isn't all the workers will get. Right now they receive payments from their unions, food stamps and unemp-loyment benefits. In addition, they hope to qualify for help under the federal Trade Adjustment Assistance program, designed to aid those who jobs are lost

ossible: Pollution standards would be thrown out and the smelter would reopen; new industries would locate in Anaconda's old shell; the state or federal government would provide huge

financial gifts.

Now that all the campaigners are gone, probable solutions seem more mundane. "It's not going to be enough to hold all those workers in town," said to hold all those workers in town, said wike Micone, director of the Montana governor's Office of Commerce and Small Business Development.

The Local Development Corporation is trying to start up a light industrial

park east of the city, but faces two problems: ARCO has so far refused to do-nate the land; and prospective tenants "are leery," which slows federal public works funding, according to the LDC's

Alberta Kraus.

Mel Stokke thinks there is some po-

tential for profit in Anaconda's wastes
— sifting through mill tailings for more - sitting through min taining so move copper; collecting traces of copper, silver, gold and arsenic in dust, or pro-cessing electric slag. Local businessmen talk of a plant to build sewage and air purifying systems

somewhat ironic in view of Anaconda's history of air quality prob-lems — and also of converting the smelter's foundry to produce wood stoves or wind machine

But local officials are still in the planning stages. They have received a \$100,000 grant from the Economic Development Administration to help them. Micone of the governor's office said they are setting up a task force to rejuvenate an area that includes Anaconda, Butte and Deer Lodge to the north

north.

Action in the upcoming legislature is a possibility. Like other solutions, the legislative fix starts at a conceptually grand level but in the end is likely to be fairly minor. Jerry Plunkett, director of Butte's Montana Energy and MHD Research and Development Institute, would like to see the state dip into its growing coal severance tax fund to seed new industry in Anaconda. That's connew industry in Anaconda. That's considered unlikely. Micone said that at best the legislature might create a low-interest loan fund to help businesses and homeowners survive the next year.

Surviving another year in Anaconda will be difficult. But unlike the inhabitants of many boomtowns in de-cline, the people here seem determined to try. A few have left. Most will still be

here this spring.
"You spend the first one or two months just running around in confu-sion," said Alberta Kraus. "But there's a lot of good people in Anaconda, and we'll get something together. You just have to keep them optimistic."

### UTAM

While liberals fell to conservatives all across the country this year, even moderates succumbed in Utah. The most notable casualty was 10-year vet-eran of the House, Democrat eran of the House, Democrat Gunn McKay. He was beaten by Republican James Hansen, a conservative former state legislator.

The Deseret News called McKay "a rate even by Republican stanmoderate even by Republican Stan-dards" with a "long and truly disting-uished career." But, as the paper's col-umnist "Rod Decker put it, "McKay is the Utah incumbent least able to deny partial responsibility for the unpopular

partial responsions, or federal government."

Ronald Reagan's coattails were so long in Utah they even affected popular incumbent Gov. Scott Matheson(D). As incumbent Gov. Scott Matheson(D). he beat Republican challenger Bob Wright, but by a much nar-rower margin than anticipated. Republicans gained six seats in the

state House and three seats in the Se-nate, giving them better than a twothirds majority in both.

The most popular major candidate this year was conservative Republican Sen. Jake Garn, who won over 73 percent of the vote. He also spent more than any other candidate — over \$700,000.

### COLORADO

"Ronald Reagan understands the West ... our environmental our water problems," said state GOP Chairman Phil Winn. "He is a westerner and it will be a great era for Colorado."

Voters here seemed to agree. But

Reagan's 55 percent margin was his slimmest in the Rocky Mountains. Independent John Anderson's 11 percent share was one of the highest third-party votes in the country. And in other state races, Coloradoans cast one of the more progressive ballots in the West.

Democratic Sen. Gary Hart became one of the few survivors of the National Conservative Political Action Commit-tee campaign by edging maverick chal-lenger Mary Estill Buchanan with 50.3 percent of the vote

Hart won only 15 of the state's 63 counties, however, and speculation is that the 43-year-old will try to bail out of Colorado politics by running for the presidency in 1984. Meanwhile, pre-dicts Buchanan, his narrow victory will

make him more conservative.

Democratic Rep. Tim Wirth was comfortably reelected with over 56 percent of the vote. Citizen Party candidate Dr. Robert McFarland, running on a convert Rocky Flats platform, got less than 1 percent and did not play the spoiler role Wirth had feared.

Incumbent Democratic Representa-tives Patricia Schroeder and Ray Kogovsek were also reelected, while the state's other two House seats went to Republicans Ken Kramer and Hank

Brown as expected.

In the state legislature, a Republican veto override majority did not materialize, much to Democratic Gov. Richard Lamm's relief, and the balance of power remained the same. Republi-cans gained only one house seat. Ballot initiative results were mixed

Ballot initiative results were mixed for environmentalists. Denver met-ropolitan voters rejected a proposed sales tax to build a 73-mile light rail transportation system, while Jefferson County voters upheld their open space tax, turning down a bid to use the

Politics 1988 @5 Long 1980

money to build a new jail.

Political Action for Conservation, says spokesman Walter Jessel of Bouler, claims at least partial credit for helping reelect strongly challenged state senators Ron Stewart of Boulder and Barbara Holme of Denver, and state representative Kathleen Sullivan of Meeker — all key environmental leaders in the legislature.

### MAMO

"We are still in a state of shock," said Idaho Conservation League's Pat Ford about the rout of Democrats in Idaho.

Most notably, that included the 4,442-vote defeat of incumbent Sen. Frank Church (D) to Rep. Steve Symms (R). Public opinion polls showed that Church had a slight lead in the last week before the election.

But bang-o - Church and a whole boatload of Democrats sank along with Carter," said environmentalist Se Reed. "In a state which gave Reagan 73 percent of the vote, one of his biggest wins in the nation, few Democrats could

Church said that it was somewhat consoling to go out in such good com-pany, referring to the many Democrats who were washed out in the Reagan

State Sen. Larry Craig and Rep. George Hansen, both Republicans and supporters of the Sagebrush Rebellion, won terms in the House. The loss of four seats in the state senate dashed en vironmentalists' hopes for a Democra tic margin. "The only shining ray in the whole thing was that John Peavey (D) of Carey won a senate seat," said Reed.

Almost two-thirds of Blaine County voters approved a zoning ordinance banning the construction or operation of nuclear power facilities, including uranium mining and waste storage pro-

No nuclear plants are planned for the ounty, but uranium mining claims ave been filed. Enforcing the ordinance, however, may be difficult, says State Attorney Keith Roark. Three quarters of the county is federallyowned and federal law may pre-empt the local ordinance.

### north dakota

With few exceptions, Democratic candidates went down to defeat unde Carter's coattails. The gubernatoria carter's coattails. The gubernatorial race provided the biggest upset in the state, with former attorney general Allen Olsen (R) defeating two-term governor Arthur Link (D), who had led early in the campaign.

Mark Andrews easily retained retiring Milton Young's senatorial seat for the GOP. Republicans gained a larger margin in both houses.

Tax Commissioner Byron Dorgan (D) prevented a Republican shutout by beating state Sen. James Smykowski (R) for Andrews' former House seat. He has supported strict enforcement of environmental regulations and high severence taxes to relieve the impacts

Despite well-heeled opposition from energy interests, voters handily passed a measure that will hike the oil extraction tax in the state to 11½ percent, providing \$241 million of revenue in the next two years. This money will be used for education, property and income tax relief, and an energy conservation trust fund that will help develop alternative forms of energy in the state

### South Dakota

The only surprises in the South Dakota races were the margins of Re-publican victory. Although Sen. George McGovern (D) felt he had closed in on Rep. James Abdnor (R) by election day, he was trounced by 10 percentage

points.
Campaign contributions of \$250,000
Campaign contributions of \$250,000
to Abdnor from the National Conservative Political Action Committee, and
vigorous opposition from right-to-lifers
and the United Family Farmers helped to topple the three-term senator.

"People here were afraid that a lib-eral who had so much clout in the Senate could devastate South Dakota, said Esther Edie of the South Dakota Environmental Coalition. "Though a lot of people know that Abdnor is a big zero, they supported him with the idea that at least he couldn't hurt anything." In the race for Abdnor's House seat,

Marlboro ad star Clint Roberts (R) rode to an easy victory over Public Utility mmissioner Ken Stofferahn. "Next to McGovern, Stofferahn's defeat was one of the most serious blows to environmental interests in the state," said Edie. In the 1st district, though, Rep. Thomas Daschle (D) held onto his se seat by a two-to-one margin. He has supported wilderness preservation measures, strong toxic superfund legis-lation, and funds for alcohol fuel.

An initiative that would have required voter approval of uranium mines and nuclear development pro-jects fizzled, but "We're not going belly-up on the uranium development issue," said Lawrence Perry of the

Black Hills Energy Coalition, a rancher-conservationist group which ran a hard but unsuccessful campaign for the initiative. With support from energy companies, Citizens Against The Ban outspent initiative proponents 30-1 in a successful media campaign aimed at defeating the measure

"Losing by two percent under such a handicap isn't bad at all," said Edie.
"The campaign did successfully stimulate discussion on the issue, woke many state legislators to citizens' concerns about uranium development, and brought people out of the woodwork who had never been involved in environmental issues before."

We're just licking our wounds and planning to tackle the issue at co and state levels next," said Perry. e at county

### MONTAMA

Voters in Montana moved from column to column Nov. 4, electing a Republican president, a Democratic governor, a Republican legislature and a congressman from each party. The state clobbered a once-popular recycl-ing initiative but very nearly passed a measure that would have restricted disposal of radioactive wastes in the

Gov.-elect Ted Schwinden beat Republican hopeful Jack Ramirez with 56 percent of the vote by running a cautious campaign which focused on the "negative" tactics of his opponent. Billings lawyer Ramirez was also hurt when his own party failed to support his call for a special legislative session on the closure of the Anaconda smelter.

The recycling initiative, which seemed likely to pass in late-summer polls, fell to an intensive and expensive campaign by bottling interests. Mike campaign by bottling interests. Mike Males, who headed a citizens group supporting the measure, said opponents of the measure spent as much as half a million dollars and the state, which gave Reagan a landslide, voted down any proposals that would have meant more government programs or regulation.

But Initiative 84, which would have banned disposal of uranium wastes and mill tailings in the state, came within about 2,000 votes of passing, despite a \$100,000 industry campaign against it. Initiative author Ed Dobson, and backers who spent only \$1,000 campaigning for it, expect to use their near-miss to put pressure on the legislature for new radioative waste legislation. Voters also approved a tough lobbyist disclosure law and a state tax indexing initiative. banned disposal of uranium wastes and

initiative.

### Nov. 14 1980 - High Country News-5

## Troubled MX may wait for Reagan review

by Michael Moss

Caught in the presidential transition with its silos down, the proposed MX missile system's future may remain a mystery for several months, if not

Present plans call for hiding sor 200 nuclear missiles in 4,600 horizontal shelters spread out over 46,000 square miles of Nevada and Utah.

Opposition to the plan is intense, however, and the uncertainty still surrounding the MX includes:

The draft environmental impact statement, originally scheduled for re-lease in July, will not be out until De-

cember or early next year;

— U.S. Navy officials are strongly pushing for a sea-based alternative sys-

tem; and

— Key military advisers are reportedly now arguing for a short-term weapons strategy that would place the new MX missiles into existing and new Minuteman III silos in five western

Underscoring this debate is the fact that President-elect Ronald Reagan has yet to take a definitive stand on the

MA. Reagan's only campaign statement on the system, made last January, questioned the original "race track" sch which has since evolved into a grid-work of individual MX silos.

Yet Reagan is likely to have a voice in the project even before taking office next year, especially if the impact

statement is released in the interim.
Observers say Carter will not publish
the document without first consulting
with Reagan, and presumably only

after getting his approval.

Playing a key role in the MX issue is William Van Cleave, Director of De-fense and Strategy Studies at the Uni-versity of Southern California and principle Reagan adviser on military

Van Cleave is reportedly now emphasizing the use of an interim, short-term nuclear strategy before the MX is in place, which at the earliest would be

in five years.

According to a copyright article in the Omaha World-Herald, Pentagon officials are also considering such a

The most talked about plan involves using some 400 to 500 existing Minuteman III silos in western Nebraska, Wyoming, Colorado, Montana and North Dakota.

An accompanying anti-ballistic mis-sile system called Low Altitude Defense System would be constructed, and the whole scheme could eliminate the need for the proposed MX system in Utah

and Nevada, the paper reported.

Pentagon officials publicly deny that
they are considering such a
Minuteman-based plan. Both administration spokesmen and Reagan-adviser Van Cleave also refrain from saying the short-term strategy would preclude the MX as planned.

prectude the MA as planned.
But another news article in Aviation
Week and Space Technology quotes
an unnamed Defense Department official as saying the proposed MX gridsystem is "in great difficulty" because
of the alternative schemes being considered.

The article's author said that Reagan

aides had offered the Defense Department several alternatives to the basing schemes during briefings on the missile, including the Minuteman and

Sen. Jake Garn (R-Utah), a critic of the MX, told the Deseret News that he



ing at other plans "since Congress has

insisted many times that it be done."
"The Air Force would be acting improperly if it failed to study alternaves," he said. Meanwhile, however, MX opponents

are lying in wait for the expected environmental impact statement.
"We can only assume that the MX

will go forward at some point in time," said Dennis Willigan, the Sierra Club's MX Task Force coordinator in Salt Lake City.

A chorus of opposition to the MX has arisen that is unprecedented in the reg-

There will be a 90-day comment period after the impact statement's re-lease, and official criticism is expected from such diverse interests as Nevada and Utah mining associations, ran-chers, sportsmen's groups, and environmentalists.

Topping the list of strange bedfellows, lawyers for environmental groups and state governments are also repor-tedly comparing notes on legal strategies for attacking the MX project.

### Oil and gas group gets wilderness go ahead

A federal judge in Wyoming ruled this week that the Department of Interior's management of potential wilderness lands has "totally sac-rificed" mineral development and goes against the intent of Congress.

against the intent of Congress U.S. District Judge Ewing T. Kerr ruled in favor of the Rocky Mountain Oil and Gas Association, which had sued Interior Secretary Cecil Andrus and Interior Solicitor Leo Krulitz to open these areas for mineral de-velopment. The suit by the Denverbased oil and gas group was prompted two years ago when Krulitz issued an opinion stating that "wilderness characteristics" in wilderness study areas had to be protected until a deter-mination of wilderness suitability was

Several environmental groups intervened on the side of the Interior Department in the suit. Bruce Hamilton, the Northern Plains representative of the Sierra Club, one of the groups, cal-led Kerr's ruling "disastrous for the months in which a Wyoming judge ruled in favor of greater development of public lands. In an earlier ruling, the Mountain States Legal Foundation successfully brought suit to force In-terior Secretary Andrus to open public lands designated as in need of "further planning" in Wyoming, Montana and Idaho to leasing and exploration.

The Solicitor's Office at the Interior Department in Wookington D.C.

Department in Washington, D.C. was reviewing Kerr's ruling at press time, and a spokesman could not say what the immediate effect would be. An appeal is expected, but it is unclear whether the decision can be stayed pending the out-

decision can be stayed pending the out-come of appeals.

Kerr ruled that the solicitor's opin-ion on wilderness study areas had caused "irreparable financial harm" to RMOGA's 650 member corporations.

Presently, 10.7 million acres of BLM land are classified as wilderness study

areas and another 10 million acres have been proposed for the classification. Hamilton said Kerr's contention that

oil and gas development was at a "virtual halt" in such areas was erroneous. He listed several potential wilderness areas in which BLM was allowing seismic testing, roadbuilding or exp loratory drilling in Wyoming, among them the Honeycomb Buttes and the Lake Mantan Wilderness Study Area.

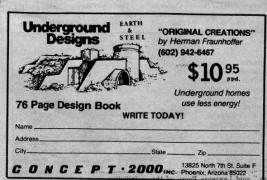
Hamilton also pointed out that of the 17 million acres of BLM land in Wyom-ing, 97 percent has been ruled out for further wilderness study, and the remaining three percent is still open to oil and gas exploration with some restric-

Kerr contended in the ruling that the management standard for potential wilderness was stricter than for wilderness itself. His opinion said Krulitz's 1978 ruling "completely and totally sacrificed (mineral development) for environmental concerns.'

Hamilton responded, "The interim management guidelines (for wilderness study areas) have been extremely lenient...perhaps too flexible.











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### Energy

by Bob Anderson

On a hot day the rocks in Utah's Uinta Basin ooze a gooey substance. These are tar sands, more properly known as oil-impregnated sandstones. Utah has at least 53 deposits of the

stuff, representing 90 to 95 percent of the United States tar sand resource. This totals some 25 to 30 billion barrels of potential crude, three times the re-serve in Alaska's Prudhoe Bay field But Utah's sands are only a 20th the size of Canada's tar sands resource, and



Just what is tar sand? The words evoke an image of saber toothed ti-gers, giant sloths and mastodons vallowing in a black muck toward a

wantowing in a otack muck toward a slow and bituminous death.

We have all seen the artists' conceptions of the Los Angeles La Brea tar pits. But the pools of thick oil which form from the seepage of heavy oil and tar sand deposits are too often confused for the deposits themselves. Just as oil shale should themselves. Just as oil snale should be called organic maristone, tar sand should be called oil-impregnated sandstone. But organic maristone can hardly attract developers, and oil-impregnated sandstone is a simi-larly discouraging mouthful. Indus-

try has settled upon oil sands.

The hydrocarbons in oil sand are for the most part solid. The matrix is usually a sandstone. The substance which fills up to 50 percent of the rock's pores is called bitumen.

The origin of the hydrocarbons in oil, oil shale and oil sands is ultimately the microscopic animal life of a marine or lake environment. Dead organisms sink to the bottom of the organisms sink to the bottom of the water along with sands, silts and clays. As the deposit is buried and taken into regions of higher temper-ature and pressure, the organic mat-erial undergoes a slow metamor-

erial undergoes a slow metamorphosis to oil.

But why is the hydrocarbon in oil
sands solid instead of liquid? The
most common explanation is that tar
sand deposits are oil fields that have
been breached by erosion, allowing
the lighter fractions of the original
oil to evaporate, leaving bitumen
behind as the solid residue.

Oil shale, on the other hand, is
thought to contain organic remains.

thought to contain organic remains that were never graded up to oil. Sufficient heat and pressure were not applied before the formation was uplifted.

## Tar sands: Utah's rocks ooze with oil

slightly more than one hundredth the size of the oil shale reserve in the Green River formation of Colorado, Utah and

Utah officials would like to see their tar sands developed at a rate of 500,000 barrels per day by 1987 and 2 million BPD by 1992.

It won't be easy to meet that goal, however. Some obstacles lie in the physical and chemical makeup of the physical and chemical makeup of the Utah tar sands, others in the availability of efficient technology and of water for processing. And there are legal and political constraints as well, including leasing snarls and the proximity of the southern deposits to some of the most sacred scenery in the nation

#### THE LEASING HURDLE

A major obstacle has been a 15-year A major obstacte has been a 15-year moratorium on federal tar sands leas-ing. But on Aug. 26 the Department of Interior lifted that moratorium, and the Bureau of Land Management is developing rules and regulations to decide which two of five major Utah deposits will be leased first. No one is willing to speculate how long it will take to have the leasing system approved and opera-tive, but it may be at least a year.

In the meantime, the Utah congressional delegation has led a battle to unsnarl leasing with a new law, HR7242
The bill, now snagged in the Senate
Energy and Natural Resources Committee, is considered moot by some. But Utah officials are concerned that with-out a legislative mandate Interior could reinstate the leasing moratorium.

Tar sands have been discovered in all parts of the world, though the Americas, with more than a dozen distinct tar sand regions, seem to have gotten more than their fair share. Euro pean explorers knew about the deposits at the northern tip of South America by the end of the 16th century: Walter Raleigh used the tarry substance from a seep-lake in Trinidad to caulk his ships. There is biblical reference to the use of bitumen, the substance in the sandstone's pores, as mortar in building houses. The Canadian Indians used it to seal their canoes. Perhaps the most common uses of tar sands were for road sphalt and water canals. By far the largest deposit in the

world, and the only one producing crude oil, is in the Athabasca area in north-east Alberta, Canada. With 700 billion barrels of reserve, this dwarfs the Utah

deposits.

The major deposits in the United States are scattered in California, Kentucky, New Mexico, Alabama and Utah. With four deposits containing over a billion barrels apiece, and several more topping 100 million, Utah has perhaps the best chance of initiat-ing a U.S. tar sands industry. Utah's deposits are divided between the Uinta Basin in the northeast and the Tar Sands Triangle, Circle Cliffs and San Raphael Swell in the central southeast.

The physical and chemical characteristic of the northern and southern deposits are significantly different. The southern deposits are much older. They originated in the Pennsylvanian and Permian seas, as did the great coal fields of the eastern U.S. This bitume shares with the eastern coals and the Athabascan oil sands a high sulphur

content, averaging 3.8 percent.

Though the Tar Sand Triangle con tains an estimated reserve of 12 to 16 billion barrels, the deposit is leaner than the Uinta Basin deposits, and one must process a larger volume of sandstone to derive the same amount of

bitumen.

On the plus side, the bitumen in the south is of lower viscosity, meaning it will flow out of the rock at a lower temperature. And it occurs in one major thick sandstone bed of relatively simple structure. This homogeneity may make in situ production, which involves britten the situation of the same structure. inging up the bitumen without mining the rock, more viable here than in the

Unita Basin.
The Unita Basin deposits, in contrast, originated in a lake rather than in a marine environment. This basin, which sprawls across the Colorado-Wyoming-Utah border area, is one of the richest sources of hydrocarbons in the nation, with oil shale and coal as well as tar sands. Like the Western coal beds, the Uinta Basin tar sands have a beds, the Uinta Basin tar sands have a low (0.2-0.3 percent) sulphur content. The three major deposits in the basin are the Asphalt Ridge-White Rocks, with approximately 1 billion barrels, the Sunnyside, with 3.5 to 4.0 billion barrels, and the P.R. Spring-Hill Creek, with 5.2-5.7 billion barrels. In general they are more concentrated than the southern deposits, but the geology is more complex, the deposits less con-tinuous and less predictable. Over the course of extensive laborat-

ory and pilot testing, it has been found that the Utah deposits will not yield

their bitumen with the simple hot water process used in Canada. The primary reason is that the bitumen in Utah is tied directly to the sand, with-out a convenient film of water separating the two as in Canada. The complex chemical bond between the bitumen and the Utah sand must be broken. In the usual approach, a combination of water, heat, and some sort of chemical solvent attack the bond and emulsify

But solvent is expensive, and it has a nasty tendency to stay in the rock once it has kicked out the bitumen. One must then heat the rock to extract the solvent. In so doing, a good fraction of the energy in the original bitumen is

Other approaches to extraction of the Utah reserves involve in situ processes. DOE has been running in situ tests at the northern end of the Asphalt Ridge deposit for a number of years, with less than perfect results.

Dr. James Bunger, Utah's state science adviser, says that we will not see nercial in situ production from tar sands before the year 2000. There are simply too many problems, the largest of which is this lack of homogeneity in the Uinta Basin deposits. So many fissures and fractures traverse the deposit that it becomes impossible to get the steam or fire to go where you want it.

So most production over the next couple of decades will be from mining and surface retorting of the tar sands, a system that may be able to average a production of 90 percent of the bitumen in the rock. In situ methods are considered successful if they get out 25 per-

#### WATER

Bunger says that a small tar sands industry would not be severely limited by water. But several other reports talk about water as the one big bottleneck in

the industry.

No one knows how much water is required for tar sands development. It will depend on the extraction process. But a good guess, says Bunger, is around four barrels of water per barrel of synthetic crude produced. That would be around 10,000 acre-feet per year for every 50,000 BPD plant, about as much as would be required for an oil shale plant of the same scale.

10,000 acre-foot figure does not include the increase in domestic water needs associated with the development.

#### The wild places.

They're littered with question marks

How do we balance the conflicting demands on our lands? How do we harvest minerals without harming next year's trout catch? How do we pump oil without driving wildlife away from their feeding grounds? How do we develop the West without depleting it? These are among the questions the HCN Research

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## Energy

nor the water needed for revegetation of the huge sand disposal sites. A 50,000 BPD plant operating for one day would spew out wastes six to eight stories high on an area the size of a football field.

How many spare 10,000 acre-foot parcels of water are there in Utah? A recent DOE report details the water av-ailable for development of each of the major Utah tar sands deposits. The im-portant rivers for the Uinta Basin deposits are the Green, the White, the Uinta, the Duchesne and the Price; those for the Tar Sand Triangle are the Dirty Devil, the Green and the Col-

The Dirty Devil has an annual flow of 73,000 acre-feet, but it is dry for most of the summer. So the industry would need either to build a dam or to pump water up out of the Green or the Colorado rivers. Either option would be expensive and likely to arouse environmental advocates

The water situation in the north seems less problematic. Water for the Asphalt Ridge-White Rock develop-ment would probably come from the Duchesne River, where competition with agricultural water appropriations is lowest. Water for the Sunnyside deis lowest. Water for the Sunnyside de-velopment would come from the Price River, where high salinity may cause a problem, and from the Minnie Maud River, which would require a dam. Though Willow Creek could potentially supply enough water for minimal production from the P.R. Spring-Hill Creek area, the more probable source of water will be from a reservoir and dam planned by Utah's Department of Natural Resources on the White River.

The White River Dam would have a capacity of 118,000 acre-feet, twothirds of which, or 80,000 acre-feet, would be made available for energy de velopment. But competition for this water would be fierce. Two federal oil shale tracts lie nearby. When looking at 10,000 to 20,000 acre-foot chunks, the 80,000 acre-feet won't go far.

In addition, there are rumors of mas sive interbasin transfers of water. Exxon, in recently divulged plans for development of the oil shale in western Colorado, is talking about an 8-foot in diameter pipeline from the Missouri

#### OTHER LIMITS

Water is not the only potential brake on tar sands development. Air quality also may be a serious factor. Here again the problems are similar to those of the oil shale industry. Tar sand processing requires the movement of at least as much material as oil shale does and the

retorting of similar substances.

In addition, getting to the deposits could prove to be difficult. The Tar Sand Triangle is surrounded by cliffs. The Sunnyside deposits, with some of the est and richest veins in Utah, are in rugged mountains. No major road sys-tems serve the areas now, and another pipeline would probably be required to get the crude to the market.

Leasing may prove to be the first of many legal and political snarls. Utah seems eager to develop the sands. But the largest deposit, the Tar Sand Triangle, lies partly within the Glen Canvon National Recreation Area; and viewed from Canyonlands National Park just to the east. Similar problems face anyone who would de-velop the Circle Cliffs deposit, part of which lies within Capitol Reef National

To avoid both political and technical problems, leasing will probably proceed first in the Uinta Basin. With Sohio and the Department of Energy already testing the Asphalt Ridge deposit, there is a good chance it will be the first. It is the best known and the most accessible to major roads. And Sohio already has a tract large enough for a commercial-sized plant there. P.R. Spring-Hill Creek could well be

the other. If the dam on the White River is built, commercial oil shale and oil

JTAH ASPHALT SUNNYSID Care Gree TAR SAND

sands development simultaneously. We may see here mirror of the situation in Colorado's Uravan mineral belt in the '50s, when development of van-adium and uranium together made for a viable industry, while uranium alone would not have been

An evaluation of the prospects is difficult, as everyone has a different idea of what is going to happen to the Utah tar sands. But judging from the respective sizes of the resources, tar sands is likely to play second fiddle to the oil shale industry

Says Gary Baughman, who co Says Gary Baughman, who co-authored a book on tar sands for the Colorado School of Mines Research In-stitute, "It will probably not experience the same kind of boom expected for oil shale, but it will probably make a few wise and small companies rich.

Bob Anderson, a geologist, works for the state of Colorado. Research for this article was paid for by the HCN Re-search Fund.

## Fed. leasing gets under way in fragile Chaco-San Juan

by Jack Kutz

The Chaco-San Juan region of northwestern New Mexico covers an area nearly the size of Rhode Island. Within its arid boundaries lies an estimated 200 billion tons of low-sulphur coal, much of it strippable. Of that, about 28 billion tons is federal coal that the Bureau of Land Management intends to begin leasing to mining companies in 1983.

However, in addition to a wealth of

coal, the Chaco-San Juan area also contains a complex set of problems.

Once, this coal region was the center of the Chaco Anasazi culture; it now contains the widespread archeological ruins of one of the nations's most impressive prehistoric civilizations. Remnants of that civilization, as well as

manats of that civilization, as well as sites of spiritual importance to Navajos, could be destroyed.

The area's paleontological wealth is of international importance; its vast fossil deposits bridge the critical period between the extinction of the dinosaurs and the emergence of mammals.

Also within the Chacc-San Juan lie three widelenses study areas, several

three wilderness study areas, several

bald and golden eagle habitats and many sites sacred to the Navajo people. Water is scarce, and the fragile soils and arid climate make successful re-

clamation difficult.

Within a decade coal mining in the
San Juan Basin could reach 75.4 million
tons annually at a high level rate of production, according to Department of Interior estimates

Currently BLM is inventorying the resources of this desert region. Meetings were held during October throughout the Four Corners area and in Albuquerque to receive public com-ments on the impact of stripmining the Chaco-San Juan

In addition to its inventory, BLM has begun an environmental analysis on a number of preference right lease appli-cations (PRLAs) located in the heart

of the strippable region.

The PRLAs are prospecting permits issued by the federal government to companies to explore for coal in areas where workable deposits are not known to exist. If a company demonstrates the existence of commercially minable coal, it can obtain leases to mine the permit areas. The PRLA process is no longer used in federal coal leasing, but PRLA rights acquired prior to the establish-ment of new coal leasing procedures in 1976 are still valid. The Department of Interior is expected to use various criteria — commercial quantities of coal, market needs and environmental

coal, market needs and environmental impacts — in processing PRLAs.

In Chaco-San Juan, action on 26 PRLAs, covering 75,500 acres, has been pending for more than a decade. According to BLM Public Information Officer Jeff Radford, "The processing of those PRLAs would seem to be the privace that would the critical issue, since that would bypass the normal land use planning system, and would also deny surface owners the right to consent or not con-sent to leasing of their land for coal

development."

A New Mexico citizens' group, the
Mount Taylor Alliance, has objected strongly to the processing of the strongly to the processing of the PRLAs. In a paper prepared for the October meetings, the Alliance noted, "The stripmining of just the PRLAs alone will create a national sacrifice area, but there is no provision in the PRLA leasing process for public participation." The heaviest impact of the proposed mining would be on 1,400 Navajo families living in the coal region, many of whom could be displaced if leases are developed. Although many Navajos support federal coal leasing because it would mean job opportunities in an area of chronic underemployment, opposition has also been expressed. Tribal officials are watching the leasing progressions. officials are watching the leasing prog-ram closely but have not yet taken a position.

Traditional Navajos see mining as a violation of their spiritual philosophy, which views the earth as a living and life-giving entity. They believe the spirit would be disrupted through the destruction of burial sites. They also fear the loss of grazing lands, lowered water tables and forced relocation of

water tubes.

The BLM intends to process all of the PRLAs by August, 1982, and will make decisions on the other federal coal areas

Jack Kutz is a freelance writer based in Albuquerque, N.M. Research for this article was paid for by the HCN Re-search Fund.

## Building a home where the buffalo (wolf) can roan

Story and photos by Roger Case

Jack Lynch is bringing buffalo

It's been 50 years since the last buffalo wolf was seen in the wilds of Mon tana. Now, in the mountains high above the Paradise Valley southwest of Emigrant, it's back in its natural envi-

buffalo wolf, Canis lupis nubilis, also goes by the names lobo, prairie wolf or loafer — the latter because it was known to lull its prey by approaching in a casual and unhurried way. The buffalo wolf's range once extended from Canada as far south as Ok-

For 20 years Lynch has been nurturing these wolves. Recently, he purch ased 160 acres in a remote spot in the Gallatin Range, where he's moving the wolves from a compound on the Olym-pic Peninsula in the state of Washing-

"Their environment is here," Lynch said. "The capabilities of survival are here, not in the state of Washington. They lose the characteristics of the subspecies if they stay out of their envi-

ronment for a long period of time."

With Lynch is Mary Wheeler, a woman Lynch says "does the work of two men." She found him seriously ill in 1976 and nursed him back to health Since then, she has also become "fiercely devoted" to the wolves' wel-

On the property, holding pens are going up with high chain-link fences. These pens are only temporary. Once settled in, Lynch will divide the wooded property into large fenced sections, each with a family of wolves. Lynch has already brought 41 of the wolves here.

There are about twice that many still to come. He's working feverishly to finish the holding pens before winter sets in.

As Lynch walks up to the pens, some of the wolves come to greet him. He touches them at the fence, and may go inside to caress one

"Aren't they beautiful?" he says.
Over the years, Lynch has given up
most of what he owned to take care of the wolves. Twenty years ago he was a superintendent with a construction

"I had my nest made," he said. "I dealt with all the crooks in Chicago and Milwaukee. We were building bridges and highways, and we were cutting up the pie. I had a nice airplane and I had a nice boat and I had a nice pad and I had nvertible '

His life changed in 1960 when he read a magazine article about a physi-cian in Pennsylvania named E.H. McCleery who had been keeping the wolves for 40 years. He set out to see McCleery and his wolves and found the doctor impoverished and in ill health

The wolves' attraction immediately gave Lynch's life a new meaning. McCleery felt he found the right man to carry on his work, and soon Lynch purchased the doctors's farm and the lobos, and took over the job of keeper of the buffalo wolves. A few months later, the doctor died.

The wolves now are the 10th and 11th generation offspring of McCleery's first wolves. One large, beautiful wolf called "Montana" is a direct descendent of a wolf caught in the state and sent to McCleery by Barney Brannin, who still lives in Big Timber.

Later, Lynch moved the wolves to Washington, but he wanted to find a

more secluded spot in the wolves' get away from some of the hassles brought on by people. "We chose the most remote area we

could find, and yet it's beautiful. It's the home range of these animals. We have two thoughts in mind. We don't want to

two thoughts in mind. We don't want to bother people and we don't want people to bother us," Lynch said. For a time, he allowed the public to pay to see the wolves. The money was needed to help feed the animals. But that ended two years ago, not because he no longer needed the financial support, but because it was not what he

"This is not a carnival," Lynch said. "We have done television work in good taste." he adds. "We turned down 'Real

taste. he adds. We turned down Real People. We're not funny." He bristles when he speaks of the "ripoff artists" who have crossed wolves with dogs for the commercial market. Most people don't realize the extent of this crossbreeding, he said, and the problem it creates for the wolfs image. These "damn dog-wolf crosses" are a much more ignoble breed and may very well attack anything that runs.

The wolves are individuals, Lynch aid, each with its own personality. But the wolf society is a structured one, with a definite hierarchy. At the top are the alpha wolves, the leaders. They are followed because of their strength or wisdom or some other, more intangible characteristics. Further down the social order are the betas, gammas and

Lynch's efforts depend on the and food for the wolves. To handle the contributions, the Dr. E.H. McCleery Wolf Foundation, Inc., was established The foundation has an adopt-a-wolf program, with donors from throughout the world contributing \$35 a month to sustain one of the animals.

Getting food for the wolves is the biggest concern. With an adult wolf eating 35-40 pounds of meat a week, Lynch goes through 2½ tons a week. The weekly feeding cost is \$500. He said the wolves can't eat dog food because they don't have enzymes to break down cere

To feed the wolves in Pennsylvania and Washington, Lynch received state permission to pick up animals that had been killed on the highways, and he hopes to get permission to do the same in Montana. In the past, he has had the cooperation of ranchers, who have given him downed animals, and slaugh terhouses which have given him scraps.

Even though money has often been a problem, Lynch is leery of government grants. He's afraid of what might happen to the wolves if some governmen

agency got into the act.

He's fed up with "every little pimplyfaced freak that's on a (government) program telling us how to raise wolves."

And he's suspicious of a lot of socalled academic research. There is a covenant running for the life of the McCleery Foundation stating that the wolves cannot be used for research. He feels too much research is tied to the availability of funds, grants and power and is not in the animals' best interests.

There are no reliable reports of buf-falo wolves in the wild for the past 50 years. There are a few timber wolves in ne parts of the country, but the ex perts agree with Lynch - this is it for the buffalo wolves.
(Ed. note: Some wildlife experts are

skeptical abo

subspecies, he Lynch said too well with ganized to pro ganizations old crocodile

(Ed. note: such groups with Lynch. wolves shou Yellowstone ed to a f Dick Randall should be bro and set free

said. He vow the wolves fo "The only v

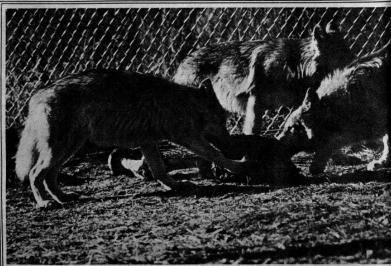
these anima Montana Hi this is Monta ple of Monte

tory. That's European a talk about A tory, this is plucked righ - alive, not they're livin are. And the

journalist b Livingston



JACK LYNCH MOVED his buffalo Pennsylvania to Oregon and now he's brought 41 of them to the Gallatin Mountains in southwestern Mon-



CHAIN-LINK FENCES are all that the wilds they once inhabited. He be in a fenced area.

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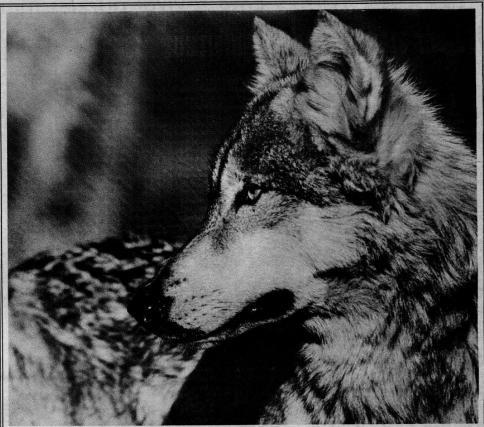
skeptical about the purity of Lynch's subspecies, however.)
Lynch said he also doesn't get along too well with many of the clubs organized to protect wildlife — "those organizations who run around crying big

ganizations who run around crying big old crocodile tears and hollering 'give me your money.' "
(Ed. note. Nor are representatives of such groups altogether comfortable with Lynch. Where Lynch feels captive wolves should be reintroduced to the Yellowstone ecosystem but restricted to a forced area. Defenders ed to a fenced area, Defenders of Wildlife Wyoming representative Dick Randall thinks wild wolf families should be brought down from Canada and set free in the park, unfenced.)

and set free in the park, unfenced.)
"We're just wolf ranchers," Lynch
said. He vows no one will ever exploit
the wolves for profit.
"The only way we would ever exhibit
these animals again would be in the
event we were to work with maybe the
Montana Historical Society, because
this is Montana history. This is the people of Montana's heritage.
"Western history is American history. That's what we have. We're not
European anymore; we're Americans,

tory. That's what we have. We're not European anymore; we're Americans, and this is part of our world. When we talk about American heritage and history, this is il. This is a piece that was plucked righrout of the past and saved—alive, not stuffed. They're breathing, they're living, they're loving, they're dying, they're reproducing, just like we are. And they've carried on."

Roger Case is a photographer and journalist based in Livingston, Mont. This article first appeared in the Livingston Enterprise, and was paid for by the HCN Research Fund.



CANIS LUPIS NUBILIS also known as the buffalo wolf, used to roam North America from Canada south as far as Oklahoma. The wolf got the nickname "loafer" because of its casual way of ap-proaching prey.



NCES are all that separate Jack Lynch's wolves from ce inhabited. He believes they can only be reintroduced



MARY WHEELER WRESTLES with a playful buffalo wolf. She found Jack Lynch ill and nursed him back to health; now she enthusiastically helps him with the wolves.



by Lonnie Rosenwald

It was the kind of last-minute political move that can get a candidate in hot water with some of his most ardent

When Colorado Democrat Tim Wirth sent out a campaign flyer that included an expression of support for the redtape cutting Energy Mobilization
Board, environmental fans of the congressman grumbled loudly. Although
the plug for the EMB — a body that
would speed energy development either
by streamlining regulatory procedures
or by suspending any improved large

or by suspending environmental laws
— was most likely a play for Colorado energy producers' votes, environmen-talists took it to mean Wirth had faltered in his long-standing opposition to the more extreme EMB bills in Con-

"It's more than a little bit shocking," said one supporter, who asked not to be named because his environmental group was campaigning for Wirth.
"He's been our champion on the issue....The only question is, now what will Tim do in the lame duck session?"

will Tim do in the lame duck session?"
The reference was to an unusual six-week session Congress will hold following Election Day. Although the lame duck will focus on unfinished budget business, several environmental issues, including the EMB, could surface, Given the upcoming transfer of power to a Republican president and Senate, the session could be pivotal.

## Wirth's EMB revival puzzles many

Even before the campaign pamphlet appeared, environmentalists had other reasons for fearing the EMB was not completely dead when a compromise between House and Senate EMB legis lation suffered a defeat by a 101-vote margin last summer in the House. The biggest reason was a series of meetings between members of the staffs of Wirth, fellow EMB opponent Mo Udall (D-Ariz.) and EMB proponent John Dingell (D-Mich.). Udall and Dingell also exchanged four letters in which they strove to reach common ground on the EMB matter. Udall sent the first letter in order to show he was not against the concept of the EMB, only the form it had taken

the form it had taken.

But the Udall-Wirth-Dingell exchange, so quiet that some of the EMB's most interested Capitol Hill observers didn't know about it, seemed to reach a dead end. Although Dingell made a simplificant constant. significant concession in agreeing to drop a demand that the EMB be empowered to shortcut laws already on the books, he refused to give up the so-called "grandfather" provision, under which the board could sidestep future

laws.
"If Mr. Dingell really means no change in the 'grandfather,' I don't know whether we could come to an ag-reement," a Udall staff member said. While Udall supports a "bare bones" body to coordinate licensing proce-dures, she said he does not want a "new

entity with powers to override or change state and local laws." Wirth's staff took the same position, and contended that the campaign

waivered in that," aide Dave Aylward declared.

The White House, which had fought hard for the EMB, watched the latest round of negotiations from the sidelines. But the interest remains. "We'd like to have an Energy Mobiliza-tion Board and we'd like to have an Energy Mobilization Board as close to the original concept as possible," a White House staff member said.

Most environmental groups believe

the EMB is dead, at least for now.
"There's a 30 percent chance an effort will be made to revive the (House-Senate) conference report," said a representative of the League of Conserva-tion Voters. "The chances it will be passed are slimmer, but I don't discount

that possibility."

A Sierra Club representative vowed to "make it tough," warning that the coalition of environmental, state and local government groups that helped defeat the bill in the House "could be revitalized at a moment's notice.

There were also unconfirmed rumors that the White House might try to achieve the goals of the EMB through an executive order, perhaps ending the battle before it's renewed.

The enormous changes in the com-

position of Congress in the Nov. 4 elections have made the outcome of the lame duck session unpredictable. Several pivotal pieces of legislation are still

The Alaska Lands Bill - A package amendments is awaiting action in the House. Environmentalists are "reasonably optimistic" the bill will pass, according to Bob Livernash of the Environmental Study Conference, but whether the amendments will clear the Senate is a bigger question, he said. If the amendments die, the House may consider passing the Senate version. which is considerably weaker than the bill they approved earlier.

(Ed. note: The House passed the Senate's version of the Alaska bill this week and sent it to President Carter for

his signature.)

Colorado Wilderness - Stalled behind other wilderness bills in the regular congressional session, this seems a sure bet to come out of conference and be adopted.

Northwest Power - This is item number two on the lame duck agenda.

Lonnie Rosenwald is a reporter for columnist Jack Anderson in Washingpaid for by the HCN Research Fund.



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Give a friend an American Section of 75%	5 mombership this	Christmas.
They will receive a beautiful Christmas ca	ed with your name. A	andwritten .
Do something unique! Brighten a friend s		0
Send Gift To:	The state of the s	otia. V on the Wall
Please Check One:	Name	
□ Full \$25	iddress	Gift Offering From:
□ Household \$30	City ,	James and State
□ Student \$15 Sta	*The	membership is for one year. Please
We also welcome a gift to the Society to continue our work. Remember it's tax deductible.	make	your check payable to AS of ISES send it with this card no later than mber 5th to:
□ \$25 □ \$50 □ \$100 □ \$500		AS of ISES
		Highway 190 West Killeen, Tx. 76541
	TRY	NEHOES!
	the	A perfect gift. Imprinted with the HCN Mountain Goat, see streamlined flyers ionally maneuverable and accurate.
Mail yo Please sendliyer(s) to:	the are except	A perfect gift. Imprinted with the HCN Mountain Goat, see streamlined flyers ionally maneuverable and accurate.
	the are except  MGS  (Wyoming reur order to HCN	A perfect gift. Imprinted with the HCN Mountain Goat, see streamlined flyers ionally maneuverable and accurate.  FLYER  \$3.00 each, postage paid, sidents add 3% sales tay )
Please sendflyer(s) to:	the are except  MGN  (Wyoming re- ur order to HCN	A perfect gift. Imprinted with the HCN Mountain Goat, see streamlined flyers ionally maneuverable and accurate.  FLYER  \$3.00 each, postage paid. sidents add 3% sales lax.) Box K, Lander WY 82520.
Please sendflyer(s) to:	the are except INGS	A perfect gift. Imprinted with the HCN Mountain Goat, see streamlined flyers ionally maneuverable and accurate.  FLYER  \$3.00 each, postage paid. sidents add 3% sales lax.) Box K, Lander WY 82520.

## Western Roundup



NEW POLLUTION controls elimi nated this steel plant plume in Il-

### White River — Utah's Tellico?

Predicting a rerun of the Tellico Dam battle, backers of the White River Dam in Utah are worried that four en-dangered fish may delay or halt con-

struction of the project.

The White River Dam, in northeastern Utah, is being billed by supporters as a necessary water supply for oil shale and synthetic fuels development in the

Environmentalists have attacked the project on economic grounds, arguing that its cost far outweighs any possible

But project defenders say they are most worried about the presence of four species of endangered fish in the river — the Colorado River Squawfish, humped-back chub, bony-tail chub and razorback sucker — and possible at-tempts to use the Endangered Species Act to protect their habitat.

Lynn Ludlow, manager of the Cen-ral Utah Water Conservancy District, predicted a "shutdown of all fu-ture water resource development in the upper regions of the river

Sen. Orrin Hatch (R-Utah) said, "Bad rules are born when good laws are twisted like that," referring to the Tellico Dam in Tennessee, which was held up in deference to the endangered snail darter.

"It would be tragic to let this past error of government stand in the way of a much-needed dam and stand in the way of this nations's energy indepen-

And Daniel Lawrence, head of the And Daniel Lawrence, head of the 'tah Division of Water Resources, told the Osearet News that the endangered specie, issue threatened Utah's lead in showing 'the federal government and other states how to develop oil shale.

The project's backers were reacting, in part, to a recent U.S. Fish & Wildlife ervice statement that further reductions in the river's flow would endanger

### EPA tackles air-water violations in Utah

Utah State officials and U.S. Steel executives have reached an agreement with the U.S. Environmental Protection Agency on new air and water quality controls at the company's Geneva plant, near Salt Lake City.

The compromise, ending a year-long dispute that put EPA to a severe political test, calls for reducing particulates from the 1977 level of 17,000 tons annually to 3,000 tons by 1983.

Best available technology will be used to control water pollution by July, 984. The necessary new equipment is 1984. The necessary new equipment is expected to cost U.S. Steel almost \$100 million.

The U.S. Steel operations in Geneva, which employ 5,000 workers, include an open hearth, three blast furnaces, a sinter plant and a coke plant.

The pollution controls will involve an enclosure to capture fugitive emissions, dust control units, a ninth electrostatic scrubber, and water recycling.

The negotiations were often heated - the company threatened to shut down the operation if EPA insisted on strict controls. In light of that, most observers say EPA got a surprisingly

Don Black, president of local 2701, United Steelworkers of America, called the agreement good news, saying, "we have just been working from day to day under this (closure) threat."

under this (closure) threat."
Clouding the agreement, however,
was news that the steel industry is still
in poor economic shape and may face
cut backs regardless of environmental
standards. Local officials in Utah County said they will continue investigating ways to diversify their

#### Kennecott next?

Perhaps inspired by the Geneva agreement, EPA Administrator Roger Williams in Denver is pressing Kennecott Minerals Co. to further control

its air emissions in the Salt Lake area.

The company's copper smelter at
Magna is within eight percent of the
national primary air standards for sulfur dioxide, but new equipment is needed to bring it up to par, Williams

Kennecott officials disagree with EPA's monitoring equipment and blame the region's sulfur dioxide problem on other sources.

EPA also believes that Kennecott

may be responsible for newly discovered traces of heavy metals in Salt Lake County groundwater.

The dissolved minerals, which have shown up in irrigation water, include

arsenic, mercury, selenium and thal-

They may be naturally occuring. But if they are contaminants, Williams said, Kennecott's copper leaching operations could be to blame. "It's a logical place to look," he said.

### Unwanted PCBs at Rocky Flats may burn onsite

Operators of the Rocky Flats nuclear weapons plant near Denver, frustrated by unsuccessful efforts to dispose of a highly toxic chemical, have applied for permission to incinerate the chemical

About 10,000 gallons of PCB, or polychlorinated biphenyl, is now stored at Rocky Flats. The U.S. Department of Energy, which owns the plant, has proposed to destroy at least some of the chemical on site in a pilot-scale incinerator.

A test burn is required under the Toxic Substances Control Act, and the U.S. Environmental Protection Agency

U.S. Environmental Protection Agency is holding a public hearing November 19 on whether to permit the test. Area officials and residents are worried that the limited incineration plan could lead to a larger program, with Pack Platter with Rocky Flats emerging as a major hazardous waste disposal site.

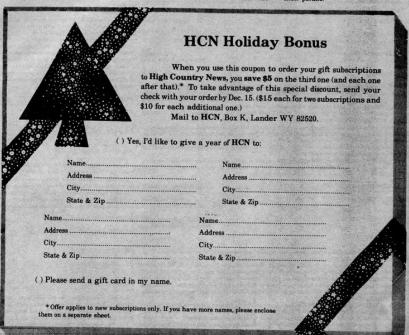
Before being banned for its high human health and environmental

hazard, PCB was extensively used in machine lubricants and electric transformers.

problem. To date, no facility in the U.S. has an incineration permit.

A shipment of the Rocky Flats PCB

stock went to Arkansas last month, where a facility has a permit pending. But it was sent back by disposal company officials who were worried the Rocky Flats PCBs would jeopardize



12-High Country News - Nov. 14, 1980

State of Wyoming Public Notice

Toco Corporation P.O. Box 338 Newcastle, Wyoming 82701

Wv-0028983

Wade Unit, SE4, SE4, Section 18, T44N, R63W Weston County, Wyoming

PURPOSE OF PUBLIC NOTICE

T"'E PURPOSE OF THIS PUBLIC NOTICE IS TO STATE THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS UNDER THE FEDERAL WATER POLLUTION CON-TROL ACT AMENDMENTS OF 19172 (FWPCAA), PL. 92-50 AND THE WYOMING ENVIRONMENTAL QUALITY ACT (35-11-101 et. seq., WYOMING STATUTES 1957, CUMULATIVE SUPPLEMENT 1973).

IT IS THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS TO (1) OIL TREATER FACILITY, TO MODIFY (1) MUNICIPAL PERMIT, TO RENEW (2) INDUSTRIAL PERMITS, (1) STATE GOVERNMENT PERMIT, (3) MUNICIPAL PERMITS, (1) COMMERCIAL PERMIT AND (15) OIL TREATER PERMITS.

FACILITY LOCATION:

Facility is a typical oil treater located in Weston County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to Mush Creek (Class II), via an unnamed drainage.

The discharge must meet Wyoming's Produced Water Criteria effective immediately. Chapter VII of the Wyoming Water Quality Rules and Regulations infers that as long as the Produced Criteria is met, the water is satiable for heneficial use. There is no evidence to indicate that limitations more stringent than the Produced Water Criteria are needed to meet Wyoming's Water Quality Standards. The Department will continue to evaluate the discharge and, if necessary, will modify the permit if evidence indicate 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, 1981.

Town of Midwest - Wa n of Midwest — Wastewater P.O. Box 190 Midwest, Wyoming 82643

FACILITY LOCATION:

Town of Midwest Natrona County, Wyoming

PERMIT NUMBER:

Wy-0020273

The Town of Midwest is divided into two district areas, the main part and the "gas plant camp" area. The wastewates treatment facility serving the main part (discharge point 001) is a recently enlarged single cell non-marging and the property of the prop

interest immensions.

Self-monitoring requirements in the proposed permit require the monitoring of all limited parameters on a Self-monitoring requirements in the proposed permit is scheduled to expire on December 31, requirements in the proposed permit is scheduled to expire on December 31, requirements.

1985.
The Town of Midwest has been exempted from meeting federal effluent requirements by July 1, 1977 since, in accordance with federal requirements, it specifically be town to the previous unavailable type of federal construction grant minds. In addition, the town has requested and received less stringent effluent limitations for the parameter total suppended solids at its lagoon system as authorized by federal regulations for stabilization pod systems with design flow of less language Months.

(3) APPLICANT NAME:

CF&I Steel Corporation

Star Route Hartville, Wyoming 82215

FACILITY LOCATION:

Sunrise Mine Platte County, Wyoming

PERMIT NUMBER:

Wy-0020800

The CF&I Steel Corporation operates an iron ore and ore upgrading plant at Sunrise, Wyoning. Water which is pumped from the mine is routed to two concrete settling ponds which are operated in series. During weekdays when the mill is in operation, water is pumped from the settling ponds for use in the mill. During weekdays when the mill is not in operation, the settling ponds overflow into a series of three small settling ponds which are constructed in the Hartville Canyon Creek drainage (Class IV stream). The final settling pond say in the settling pond settled produced by the settled by the s

U.S. Steel Corporation

MAILING ADDRESS:

600 Grant Street is require Pittsburgh, Pennnsylvania 15230 monitoria

FACILITY LOCATION:

Wy-0003174

The United States Steel Corporation operates an open-pit iron ore (taconite) mine near Atlantic City, Wyoming. The Corporation also operates an ore concentrating plant which is located at the mine site. There are two wasterwater discharge points associated with the state of the spenge and overflow from the recivolation (redefine) are several to the spenge and overflow from the recivolation (redefine) security and the tailings point as weren years the Corporation has improved the operation of its meaning plant that all the properties of the spenge water in of high quality. Discharge 901 has consisted only of esepage through the tailings of the spenge water in of high quality. Discharge 901 has consisted only of esepage through the tailings dam. This sepage water in of high quality. Discharge 901 has consisted only of esepage through the tailings dam. This sepage water in of high quality. Discharge 901 has consisted only of esepage through the tailings dam. This sepage water in of high quality. Discharge 901 has consisted only of esepage through the tailings dam. This sepage water in of high quality. Discharge 901 has consisted only of esepage through the tailings dam. This sepage water in of high quality. Discharge 901 has consisted only of esepage through the tailings dam. This sepage water in of high quality. Discharge 901 has consisted only of esepage through the tailings dam. This sepage water in of high quality. Discharge 901 has consisted only of esepage through the tailings dam. This sepage water in of high quality. Discharge 901 has consisted only of esepage through the tailings dam. This sepage water in of high quality. Discharge 901 has consisted only of esepage through the tailings dam. This sepage water in of high quality. Discharge 901 has consisted only of esepage through the tailings dam. This sepage water in of high quality. Discharge 901 has consisted only of esepage through the tailings post of the tailings post

State of Wyoming to represent "best available treatment." However the permit also contains a "reopener" clause which requires that the permit be modified if more stringent limitations are developed at the federal level. Discharge point 001 contains a limitation not urbidity which requires that the permit be modified if more stringent limitations are developed at the federal level. Discharge point 001 contains a limitation on turbidity which allows an increase of 10 NTUs above the level of turbidity in Rock Creek Reservoir. This limitation is excessary to insure compliance with Wyoming Water Quality Standards for turbidity. Discharge point 001 also contains a requirement that Total Zinc monitored on a regular basis. This requirement is included because a zinc based compound is used as a corrosion inhibitor within the system. Discharge point 002 contains additional limitations on BODS, fecal coliform bacteria, and total residual chlorine since these pollutants are associated with the sanitary waste treatment plant.

The proposed permit requires monitoring of all limited parameters on a regular basis with reporting of results quarterly. The proposed permit also includes standard language requiring control of runoff from disturbed areas and contains an exemption from effluent limitations in the event of a ten-year 24 hour precipitation event. The permit is scheduled to expire December 31, 1985.

(5) APPLICANT NAME:

Wyoming Highway Department

FACILITY LOCATION:

PERMIT NUMBER:

Wy-0020982 The Summit Rest Area is located on Interstate Highway 80 seven miles east of the City of Laramie. Sewage treatment at the rest stop consists of an extended aeration package plant with chlorination. The effluent rune down the side of a hill into the Middle Crow Creek (Class II water) drainage basin but does not reach a define channel.

channel
The proposed permit requires that the existing system be operated at maximum capability and efficiency
until January 1, 1982 at which time the effluent must achieve compliance with National Secondary Treatment
Schadards and Wyoming 4. In Stram Water Quality Standards. A schedule of compliance for achieving the
January 1, 1982 deadline is included as an enforceable part of the permit.

Effluent quality and quantity must be monitored on a regular basis with reporting of results quarterly. The
permit is scheduled to expire December 31, 1982.

(6) APPLICANT NAME:

MAILING ADDRESS:

FACILITY LOCATION:

PERMIT NUMBER:

Wy-0021881

The wastewater treatment facilities serving the Town of Evansville, Wyoming consist of a three-cell non-aertated lagoon with an aerated inlet sump. The discharge from the lagoon enters the North Platte River (Class II water).

The Town of Evansville is included in the Casper Area 201 Plan. The preliminary draft of that plan will require regionalization of the sewage collection and treatment systems in the Casper area and eventual elimination of the Evansville treatment facilities.

Therefore, the proposed permit simply requires that the town continue to operate its existing facilities at maximum efficiency until such time a connection to the regionalization becomes possible. The proposed permit requires the town to enter into a formal agreement with the other applicable legal entities in the Casper area. The town must sign such an agreement on or before danuary 29, 1981. In the interrin, the town is required to monitor the quality and quantity of its discharge on a regular basis and to report the results quarterly. The permit is scheduled to expire December 31, 1985.

MAILING ADDRESS:

FACILITY LOCATION:

Fort Washakie, Wyoming 82514

P.O. Box 1708 Cheyenne, Wyoming 82001

seven miles east of Laramie Albany County, Wyoming

Town of Evansville - Wastewater P.O. Drawer 158 Evansville, Wyoming 82636

Town of Evansville — Wastewater Natrona County, Wyoming

Fort Washakie Water Treatment Plant Fremont County, Wyoming

PERMIT NUMBER:

Wy-0029041

shoni Utility Company

The Shoshoni Utility Company operates Standard Water Treatment Plant (alum and lime feed, and filters, chlorination) which provides potable water to the Town of Fort Washakie, Wyoming, Backwash water from the sand filters is normally routed to two settling ponds which overflow into a sump from which the water is routed back to the plant as raw water. As such, under normal circumstances, there is no wastewater discharges at this facility. However, there are two bypasses which could result in discharges to the South Fork of the Wind River (Class II water) via an unamed drainage. Discharge point 601 is the bypass located at the plant and discharge point 002 is the bypass located at the plant and discharge point 002 is the bypass located at the plant and discharge point 002 is the bypass located at the plant and discharge point 002 is the bypass located at the plant and discharge point 002 is the bypass located at the plant and discharge point 002 is the bypasse may be used. The permit requires the utility company to report the cause and duration of any discharge, but there are no other self-monitoring or reporting requirements. The permit is scheduled to expire December 31, 1965.

MAILING ADDRESS:

Town of Glendo - Wastewater P.O. Box 396 Glendo, Wyoming 82213

FACILITY LOCATION:

Wy-0020842

PERMIT NUMBER:

The wastewater treatment facilities serving the Town of Glendo consist of an Imhoff tank followed by a fixed nozzle rock filter followed by final clarifier. The discharge flows to Whiskey Guich (Class IV water). The Town of Glendo is now in the process of designing a non-discharging lagoon system, and the proposed permit contains a schedule of compliance which requires completion of that system by February 1, 1982. In the interim, the town is required to operate the existing system at maximum capability and efficiency and is required to monitor the quality and quantity of the discharge on a regular bais. Submission of self-monitoring data is required to a proper form of self-monitoring data is required to the control of the form of self-monitoring data is required quarterly and the permit is scheduled to expire December 31, 1982.

Atlantic City Mine and Mill (9) APPLICANT NAME: Fremont County, Wyoming

Paul K. Ely

MAILING ADDRESS:

507 Rohan Avenue Gillette, Wyoming 82716

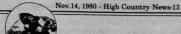
Rawhide Village I & II, northwest side of the City of Gillette, Wyor ag Campbell County, Woming ~y-0024881

Rawhide Village I and II is subdivision located on the northwest side of the City of Gilless, Wyoming, The rillage is served by an extended aeration package plant followed by a two cell non-as sted lagoon, Under normal circumstances the lagoon does not discharge, however, if a discharge did occur it would be to Little Rawhide Creek (Class Pittram) via unamed d'arinage.

The proposed permit requires compliance with National Secondary Treatment Standards and Wyoming's



## Bulletin Board



#### COMPUTERS ON WHEELS

COMPUTERS ON WHEELS

Having trouble analyzing your local
Landast satellite imagery? The MATE Van
could be just for you. A modified 30-foot
motor coach, the computer on wheels is
sponsored by NASA's remote sensing program. It is touring the 14 western states to
encourage potential users to take advantage
of the Landsat technology. Cropland or
forestland inventories, land use planning
and weed control are just some of the natural
resource assessments being promoted by
NASA through its satellite imagery. The
program is targeted for government and industry users. But why not others? Contact:
MATE Facility Manager, NASA Ames Research Center, Mail Stop 242-4, Moffett
Field, Calif. 94035.

#### INSIDE NEW MEXICO

INSIDE NEW MEXICO
A series of 32 detailed reports and 23 corporate profiles of the powers-that-be in New
Mexico has been published by New Mexico
People and Energy. The categories include
land, industry, the upper class, and natural
resources. A 52-page summary entitled
"Who Runs New Mexico" is available for
\$2.50. Contact NMPE, Box 4726, Albuquerque. New Mexico 87196. que, New Mexico 87196.

#### SAGE REBELS

SAGE REBELS
Join the League for the Advancement of
States' Equal Rights (LASER) and other
promoters of the Sagebrush Rebellion for a
Nov.20-22 conference in Salt Lake City. Billed, 'Agenda for the '80s: A New Federal
Land Policy', the affair is strategy session
for managing the public domain. For more
information: LASER, Suite 996, Kennecott
Bldg, Salt Lake City, Utah 84133.



#### EYEING THE LEGISLATURE

EYEING THE LEGISLATURE
Legislative analyses of the 1980 Colorado
and Wyoming legislatures are now available. For Colorado, contact the Colorado Open
Space Council, 2239 East Colfax Avenue,
Denver, Colo. 80206 (85 for the analysis, or
\$10 for a subscription to the 1981 legislative
bulletin and analysis). For Wyoming, contact the Wyoming Outdoor Council, Box
1184, Cheyenne, Wyo. 82001 (\$2 donation for
the analysis, or \$7 for a subscription to the
1981 legislative bulletin and analysis).

#### LET'S RECREATE

LET'S RECREATE

How to expand recreation opportunities is the focus of a new Heritage Conservation and Recreation Service program, and they would like your advice. Improving programs for the disabled and elderly, emphasizing public transportation and increasing the availability of land are some of the agency's 12 new proposals, published in the October 31 Federal Register. To comment (by December 1), or for more information, contact: Division of Nationwide Recreation Planing, HCRS, 440 G. Street, N.W., Room 204, Washington, D.C. 20243.

#### HOMESTAKE HEARING

HOMESTAKE HEARING
Homestake Mining Company's uranium
mill and tailings disposal site in Gunnison,
Colo., is the subject of a Dec. 10-12 public
hearing. The state Department of Health
will be considering evidence for issuing or
denying a radioactive materials license and
a sub-surface disposal system permit. For
more information, to review a copy of the
license request, or to sign up to testify, contact: Dr. Robert Arnott, Colorado Department of Health, 4210 E. 11th Ave., Denver,
Colo. 80220.

#### WILD MONTANA

WILD MONTANA
The Montana Wilderness Association is holding its 1980 Convention December 5 and 6 in Helena. On the agenda is a sagebrush rebellion debate, a discussion of prairie wilderness, strategies for alliances, and, of course, a happy hour. Contact by Nov. 28: MWA, Box 635, Helena, Mont. 59624.

#### PUBLICITY POWER

PUBLICITY POWER

A public relations-media handbook for energy activists has been published by the Center for Renewable Resources. Its 30 pages contain notes on news releases, media access, hot tips, and cable television. The pamphlet, "Publicity is Power," can be obtained for \$2 from the group at 1001 Connecticut Ave. NW, Suite 510, Washington, D.C. 20036.

WIND II

The Solar Energy Research Institute is hosting its second wind energy conference in Colorado Springs on December 3-5. The meeting is for investors, manufacturers, innovators and researchers in the wind energy field. For more information: Conferences Group, SERI, 1617 Cole Blvd., Golden, Colo. 80401; (303) 231-7361.

In-Stream Water Quality Standards effective immediately. In addition, the proposed permit requires self-monitoring of efflent quality and quantity on a regular basis with reporting of results quarterly. The permit is scheduled to expire December 31, 1985.

FACILITY LOCATION:

PERMIT NUMBER:

(11) APPLICANT NAME

MAILING ADDRESS

FACILITY LOCATION:

(12) APPLICANT NAME:

MAILING ADDRESS

FACILITY LOCATION

PERMIT NUMBER:

MAILING ADDRESS:

PERMIT NUMBER

(13) APPLICANT NAME:

Koch Production Company MAILING ADDRESS:

P.O. Box 850 Worland, Wyoming 82401 FACILITY LOCATION:

Nowood Lease NW4, NE4, Section 8, T48N, R90W, Washakie County, Wyoming

PERMIT NUMBER-

(16) APPLICANT NAME-

FACILITY LOCATION:

with meany are permitted in the proposed spring of all parameters with the exception of oil and grease, which must onitored quarterly. The proposed expiration date for the permit is December 31, 1984. (18) APPLICANT NAME: Ajax Oil Company MAILING ADDRESS-

> P.O. Box 1584 Billings, Montana 59100 Ajax State Lease, SE%, Section 16, T49N, R91W, Big Horn County, Wyoming

Wy-0026417 American Beryllium & Oil Corporation

865 South State Street Salt Lake City, Utah 84111

Wildhorse Butte Field, NE%, SW%, Section2, T42N,R93W, Hot Springs County, Wyoming

Wy-0228291

Amoco Production Company P.O. Box 569

Powell, Wyoming 82435 Pan American Pond, NE%, Section23, T51N, R93W, Big Horn County, Wyoming

Wy-0025003

Conoco, Inc. 907 Rancho Road Casper, Wyoming 82061

Wy-0000965

Cork Petroleum, an operating company of Agnew-Sullivan Enterprizes, Inc.

P.O. Box 826 Cody, Wyoming 82414

Freudenthal Lease, SW4, Section 35, T43N, R94W, Springs County, Wyoming

Wy-0028070

Getty Oil Company

P.O. Box 3360 Casper, Wyoming 82602

Lake Creek Well No. 22, Section 14, T43N, R92W, Hot Springs County, Wyoming Wy-0024830

Koch Production Company

P.O. Box 850 Worland, Wyoming 82401

Spence Dome Unit, SE4, SE4, Section 5, T54N, R94W Big Horn County, Wyoming

Wy-0026123

1643 Lewis Avenue — Suite 202 Billings, Montana 59102

Wy-0025011

Wyoming B0299 Lease, ection 17, T49N, R91W, Horn County, Wyoming

Marathon Oil Company P.O. Box 120 yoming 82602 Casper, Wyon

Hidden Dome Field ection 31, T48N, R90W, hakie County, Wyoming

Wy-0000761

Petro-Lewis Corporation

P.O. Box 73

(10) APPLICANT NAME.

MAILING ADDRESS

Pacility is a typical oil treater located in Washakie County, Wyoming. The produced water is separated from the petroleum product through the use of heeter treaters and skim ponds. The discharge is to Cottonwood Creek (Class IV) 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.) and pH (6.5.—8.5). This is due to the extreme archines 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 ad-finantiorine is equative facility alternative with the accoration of oil and greases, which must

Wy-0026140 (17) APPLICANT NAME:

PERMIT NUMBER:

FACILITY LOCATION:

PERMIT NUMBER:

(19) APPLICANT NAME: MAILING ADDRESS:

FACILITY LOCATION:

PERMIT NUMBER:

(20) FACILITY LOCATION

(21) APPLICANT NAME: MAILING ADDRESS

FACILITY LOCATION:

PERMIT NUMBER

(22) APPLICANT NAME: MAILING ADDRESS

FACILITY LOCATION

PERMIT NUMBER:

(continued on page 14)

FACILITY LOCATION (14) APPLICANT NAME MAILING ADDRESS: FACILITY LOCATION: PERMIT NUMBER-(15) FACILITY LOCATION:

anza State B Battery, tion 35, T49N, R91W, orn County, Wyoming

## Opinion



## A hardrock tax for today's ills, tomorrow's impacts

The town of Anaconda, has lived for years in the craggy shadow of the smelterworks sprawling on the nillside above it; for generations, the smelter has provided the community's lifeblood. Now it is only a lifeless shade.

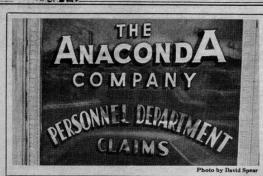
It seems particularly ironic that in a state which has been accused of salting away too much money to soften the impact of the current coal boom, little is being done to help Anaconda. The town is a remnant of another era — the last drop of blood from the copper wound slashed by Marcus Daly across Deer Lodge County.

Some are campaigning for big bucks to rejuvenate Anaconda (see Jerry Plunkett's guest editorial). But there is no indication that the Republican legislature will dip into coal tax revenues, or take other radical steps. At most, legislators are likely to offer low interest loans to businesses and homeowner

State Sen. Tom Towe (D-Billings), who made a name for himself as the architect of Montana's coal severance tax, intends to introduce a bill to subject hardrock mining to a similar tax — 30 percent of the mineral's value. The bill would cover copper, silver, platinum and other hard-rock minerals (but not, perhaps, uranium). It would set up a hardrock fund which could borrow income from the state's swelling coal-funded constitutional trust fund in its early years, so it could become useful immediately. Eventually, the trust fund would be paid back from hard-

Towe is looking ahead to the likely development of platinum deposits in the Stillwater Complex, that beautiful blanket of ranchland that is nestled in the mounded pillows of the Absarokas. Ironically, a corporate relative of the Anaconda Copper Co. is one of two companies busily exploring mineral claims in the Stillwater. Towe would also like to use the hardrock tax to revive Anaconda.

The senator's proposal is joined by another, now circulating in initiative form, to set up a Community Readjustment Fund, paid for by industry, that would provide relief for workers laid off in large-scale shut-downs. Both proposals should get a serious look from legislators, if the shadow of the Anaconda smelter stack reaches



as far north as Helena. Towe's proposal would lessen the chances of mor shadows in Montana's future. And we would like to see it used today, to help Anaconda

Anaconda should not be written off as a shade from the old days. The workers there don't want to leave, and they will get enough assistance to stick it out this year. That is time enough — if there is money enough — to start building a new and renewable industrial base.

Of course, to take money from the constitutional trust fund, or even from a new hardrock fund, and use it for Anaconda, would violate one of the "rules" of wise severance taxes: Apply the revenues to the location that generated them. But forget the rules. They only govern the "responsible" approach to severance taxation. The truth is, nobody knows how much revenue is needed to repair the damage of mining a particular ore, and nobody knows how ultimately the presently ac cumulating constitutional trust fund revenues will be spent. This is a good time to be more than responsible — helping Anaconda requires that we be imaginative and



NO HANNAH, BUT FINCHES!

Have been wanting to write to say "we miss you Hannah" — talented Hannah! Is her artwork ever for sale?

But - nice to hear from pinch-hitters like Mary Back, Joan, and Lousia Will-

A pair of black rosy finches was seen at the very top of Clouds Peak, 13,175

feet, on July 6 — or the female was — the male was a little lower...reported by Tony Povlitis and Louis Hanebury.

Sheridan, Wy

JUST PLAIN R.B.

Dear HCN.

On page 2 of the Oct. 17th issue you twice misspelled my name as John.

Robert Bruce McFarland Robert McFarland Bob McFarland or just plain R.B. Boulder, Colorado

(Citizens Party candidate for

Colorado's 2nd congressional district)

P.S. The Citizens Party will rise again. Don't be so quick to chide Barry Commoner. How many times do under-dogs snap at each other when self proclaimed leaders get uppity and run for office? By the next election there should be Citizens Party candidates running

RADIOACTIVE WASTE

One small correction to your article about Montana's Initiative 84, which would have forbidden disposal of most radioactive waste in Montana, includ-

ing uranium mill tailings.

Existing Montana law, which prohibits such disposal by out-of-state operations, and is therefore discriminatory under the U.S. Constitutions's 14th Amendment Equal Protection Clause, does not apply to uranium mill tailings. Such tailings would have been included under I-84 because we adopted the federal defini-tion of radioactive byproduct material.

Opponents of I-84 advertised heavily that it was a ban on uranium mining, which is not true. However, since we lost a 40-point lead (66-27) between the early October poll and election, one must assume that people believed the

But, it is not encouraging to the nuc lear industry that 49.7 percent of the Montana voters voted to ban uranium mining. And of course, with that close a margin, we have a moral obligation to put the issue back on the ballot in 1982.

Ed Dobson Billings, Mont. (Dobson authored Initiative 84.)

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

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

STATE-EPA TENTATIVE DETERMINATIONS

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

PUBLIC COMMENTS

Public comments are invited any-time prior to December 15, 1980. Comments may be directed to the Wyoming Department of Environments 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 Steet, Denver, Colorado 80298. All comments received prior to December 15, 1980 will be considered in the formulation of final determinations to be imposed on the permits.

ADDITIONAL INFORMATION

onal information may be obtained upon request by calling the State of Wyoming, (307) 777-7781, or 33) 327-3874, or by writing to the aforementioned addresses.

Public Notice No: Wy-80-011

STATE OF WYOMING PUBLIC NOTICE (continued from page 12)

(23) APPLICANT NAME MAILING ADDRES

SACILITY LOCATION

(24) APPLICANT NAME MAILING ADDRESS

P.O. Box 2100 er, Colorado 80201

Lake Creek Field, USH B Lease Section 34, IT43N R91W, Hot Springs County, Wyoming

PERMIT NUMBER

## Opinion



### Montanans could save copper communities with coal bucks

by Jerry Plunkett

(Ed. Note: Jerry Plunkett, director of the Montana Energy and MHD Research Institute, gave the luncheon speech at the Nov. 8 annual meeting in speech at the Nov. 8 annual meeting in Billings of the Northern Plains Re-source Council. The group, composed mainly of ranchers from southeastern Montana, has fought strip mining and other coal development activities in the other coal development activities in the region. Though Plunkett was assigned to speak on the topic, "The Good News About Energy," he instead chose to focus on the plight of the copper-producing western part of the state. Excerpts from his speech follow.)

You realize that a few months ago the closing of the Anaconda smelter and refineries terminated approximately 1,500 jobs. That nearly brings to an end the era of copper smelting and mining in the state on a large scale and that may be a good thing.

On the other hand, let's not be so

heartless or careless as to ignore the people in Great Falls and Anaconda and Butte, who have been hit very hard. For us to idly sit by or to cheer at the closing of this plant is to overlook some of the human dimensions of the prob-lem. People have moved to these communities and they have lived there for years — in fact for generations. We see now that big government is combining with big industry to create big problems. But when it comes time to solve those problems or to lay out the money required for a transition, neither one of them seems to have stepped up to bat very quickly. It's up to us, I believe, and organizations like this to take positive action.

Now I realize that copper and coal are two very different things, but they're both resources, they're both depletable, and the example of copper I think has done much to prepare this state in a

rational and reasonable manner for the coal development that may be required. I would urge that money either from the state severance tax trust fund or in the coal tax fund be made available to these communities so that they might undergo an economic renaissance. I'm suggesting that a specific plan be put together to attract industry to these areas. Otherwise the losses are going to be enormous.

The reason that the people of the state of Montana, particularly in the eastern part of the state, have fought against large scale energy development has been to prevent the destruction of their lifestyle. For the very same reasons, I would urge you to support the people in Anaconda, Butte and Great Falls in their efforts to attract the kind of industry and activity that seem important to them, so that they may preserve their communities in the same way that you desire to preserve your

community here.

I think that in doing so this organization could give the lie once and for all to the charges that are leveled that you are extremists or radicals. Because are extremists or radicals. Because while you attempt to prevent the destabilization of your social order here by preventing "x" amount of development, at the same time the western part of the state is realizing that there has to the same of realizement economy ne sort of replacement econo ne some sort of replacement economy and industrial activity for that which is declining. In both cases you are trying to do the same thing — trying to preserve the values of the community. That is the key to the state of Montana — the fact that communities here do well.

here do work.

It's a value not always weighed on the scale, but it increasingly must be. For instance, if there are 4,000 homes in the city of Anaconda on the average worth \$50,000 apiece; that's \$200,000,000 worth of homes that are going to be considered surplus. If you also consider the value of all the public services in that community — the schools, the roads, the hospitals, the churches and all the other public buildings and facilities and the industrial and commercial establishments they're probamercial establishments, they're proba-bly worth as much as the homes — so

you're talking nearly half a billion dol-lars that has been essentially made ob-

I would urge that we preserve these I would urge that we preserve these communities and we preserve the peo-ple in them by providing them with op-portunity. I don't know what these op-portunities should be, but I do know portunities should be, but I do know that we have the human resources, the capital resources and the intellectual resources to rebuild those communities. I think that now is the time for this organization to be as supportive as possible. Not just in Butte and Anaconda but in any other impacted community. The fact is that economic activity and jobs are important to people. They can be provided.





6-High Country News - Nov. 14, 1980



# THENEXT Whole Earth

Edited by Stewart Brand, Point, Random House, New York, 1980, paperback, \$12.50, 608 pages.

Review by Joan Nice

Though duct tape, Sears Catalog, bag balm, High Country News, and books about space colonies are all worth knowing about, we never expected to find them displayed in the same place.

But the Next Whole Earth Catalog escribes and evaluates the lot — and er 2,650 other items of both greater and lesser utility, depending upon what your interests are.

The scope of the offerings is impres-The scope of the offerings is impressive: 63 pages of solar items, 12 pages on computers, plus sections on trees, eco-ethics, underground architecture, old building preservation, urban homesteading, medical care and fitness, care of the dying, hang gliding, wind surfing and video

A vague sense of mission holds the diverse subjects together. In the introduction, Editor Stewart Brand reveals at least two ways of looking at the book's purpose, "I'm editing the Next Catalog because I think people have Catalog because I think people nave the affluence and time to use the book to refine their lives. Jason (Jason Epstein of Random House) is distributing it be-cause he thinks people will need it to save their lives. What's your excuse?"

The book is clearly a product of some with-it Californians, and that may turn off people who have had enough of hang gliding and hot tubs. But on the other hand, the book is not all soaring and soaking. Its thoughtful attempts to elevate everyday living may prove at-tractive to many readers — especially those who live in communities that are intellectually set in their ways.

Taken together, the catalog items re veal an age that is obsessed with "per-sonal power: the power of individuals to P. C. Herwig Co

Calls itself Square Kno buckles, rings, beads.

P.C. Herwig \$1.00 from: P.C. Herwig Compa Route 2 Milaca, MN 56353 BL W 16



conduct their own education, find their own inspiration, shape their own envi-ronment and share the advantages with whoever is interested.'

The introduction points out that some of the categories have changed since the first Whole Earth Catalog since the first whole Earth Catalog was published 12 years ago. Domes and free schools have almost disappeared, and black culture "seems to be getting a deserved rest these days." While previous versions of the catalog were linked by reviewers to the back-to-the-land movement, Brand is careful to aim at a broader audience for this publication "Back-to-Basics certainly is a major point we make, but so is Onward-and-Upward (space, computers, electronic music), and Outward-in-all-Directions So-Long-As-It-Doesn't-Hurt-Anybody-Probably."

In an undertaking this large, it's not hard to find blind spots. For one thing, the catalog includes three pages on the political left, but only a single item on

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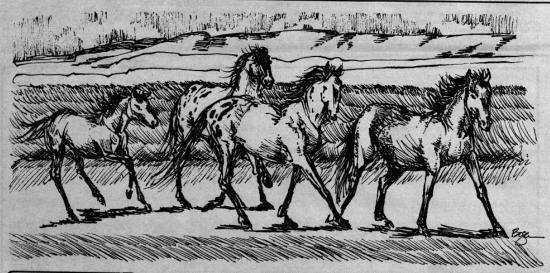
\$ .50 from





the right. In view of the last election, that imbalance may be extremely short-sighted.

The compilers, in their self-conscious way, tell us that it took some 14 acres of trees to provide the paper for the first 140,000-copy printing of this huge paperback. When they are not feeling such guilt pangs, they are opinionated arrogant, conscientious, thoughtful and full of joie de vivre. For that, a grove of trees seems a small price to pay.





by Lousia Willcox

The Little Fork is as low as I've seen the Little For a is as low as I've seen it, but there is still no dry crossing. No matter. I am walking to sweat out a fever, and the sharp cold feels good on the ankles. On the other side, there are hollow stalks of hay to wade through on my way to the hoodoos, wind-carved

my way to the nooncos, wind-carved turrets of red rock.

Bunched at one end of this small meadow, cattle and three fat-haunched buckskin horses stand belly-deep in the brittle grass, eating, and twitching their tails though there are no flies. A small dark pony raises his fuzzy head to stare at me, chewing. Hoofprints lead to a leaning cottonwood, whose underside is coated with multi-colored bits of hair.

The itching post.
Signs of stock and sounds from the gravel-rolling river fade as I angle up a steep dry creekbed, filled with fine sand. A dead hush fills the afternoon. Two magpies dip nimbly out of sight through juniper bushes that create a latticework of sunlight on the rust

colored ground. Their dry branches have dropped heavy silver-blue berries at their feet. I crush some in my fingers

and rub the scent on my nose.
On drunken feet I reach the base of a rock ramp that forms an easy route up to the hoodoos. Next to the burnt red of the Chugwater sandstone, the pines and juniper look ridiculously green. A fever can heighten strange aspects of familiar sights.

On top of the ramp are rows of rock

shapes facing west, rising in a series of white arcs like cresting waves. Some of the hoodoos are haphazard cones, others are squat and textured like dried cow dung. Their sides have been scratched with broad parallel strokes by the wind.

Wedged behind a boulder lies a jumble of coyote bones, and a few grey tufts of fur. Some rodent bones are scattered of its mandible, forming a tiny half circle like the rim of a shell.

The wind picks up with a rumble like a river. I head back down to the still creek that winds down to the meadow. Two men on horses have urged the angus to a trot, and are driving them to the river. "Bringing the strays back home," one says, jerking his skinnyhome," one says, jerking his skinny-necked horse after a straggler. I watch the herd plunge belly-deep into the icy water. A tawny dog leaps in after them. Lined up on the bank are the three buckskins and the pony, ears pricked, still shewing.