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Lander, Wyoming

Friday, May 2, 1980

Park Service director ousted in continuing policy strife

by Michael Moss

In a move enveloped by political controversy, Secretary of Interior Cecil Andrus has fired the director of the National Park Service, William Whalen.

Andrus cited Whalen's health and dissension among park service staff as the reasons for his decision to dismiss the director. But the manner in which Whalen was fired has sparked speculation that there were political motivations behind the dismissal.

Russell E. Dickenson, a 33-year veteran of the park service and currently the Pacific Northwest Regional Administrator in Seattle, was selected yesterday to replace Whalen.

With the uncertain tenure of the Carter Administration and Andrus' planned resignation early next year, the park service's top post may remain in flux for some time—an administrative uncertainty that could affect several major agency decisions due this year.

CONTROVERSY THROUGHOUT

The directorship of the National Park Service has been fraught with controversy for at least a decade.

Criticism from the agency's staff over the management of the park service surfaced under the directorship of George Hartzog, an appointee of President Nixon and a friend of then-Secretary of the Interior Walter Hickel. Author Michael Frome, writing in *Field and Stream* magazine in 1972, detailed the internal strife, quoting one park service official as saying, "The National Park Service as a conservation organization should be placed at the top of the endangered species list...we are ruled by politics, even at the field level."

Hartzog's successor, Gary Everhardt, continued to receive sharp criticism, most notably from conservationists.

William Whalen, called a "rising young star" by those who knew him then, was passed over in the selection of Everhardt. But Jimmy Carter chose him for the post in the spring of 1977.

Then superintendent of the San Francisco Bay Area national parks, and a former Job Corps instructor, Whalen brought to the directorship a strong urban parks orientation. Whalen was also somewhat of an innovator, taken to looking outside the agency hierarchy

(continued on page 12)



OLD TOMBSTONES AND NEW TRAILERS reside together on the north side of Evanston, Wyo., which has experienced phenomenal growth since oil and gas were discovered in the Overthrust Belt. Now two energy companies plan to build the first of what may be numerous gas "sweetening" plants here. See story page 4.

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2-High Country News — May 2, 1980

Federal water planning sinks in political storm

To most of the Environmental Protection Agency's Denver office staff, it seemed like a logical, straightforward plan: Pull together in one document all of the EPA's policies on water resource development in the Rocky Mountains, solicit comments from the general public and water interests, and develop a consensus on the agency's priorities.

Policies would be clarified on groundwater, salinity, instream flows, and other topics. And the result would be more consistent EPA rulemaking, and a better informed and involved public.

The only hitch is that logic and straightforwardness are not always integral to western water issues. The project, in short, sank in a political storm of protest over states' rights.

The plan, which was begun in March, ran into big trouble almost immediately. A Colorado paper ran a Sunday front-page article headlined "EPA May Commandeer State Water," which quoted a slew of paranoid local officials, one of whom said it was an "ominous EPA power grab that could seriously affect growth and decimate agricultural water holdings in Colorado."

Several western governors, detecting political trouble, announced that they would not participate, and withdrew their representatives on the project's advisory panel. Sen. Gary Hart (D-Colo.), detecting political opportunity for his re-election campaign, took the issue to the EPA director in Washington and threatened to introduce congressional legislation revoking EPA's authority over water development. Water interests, including state and local dam-building agencies, charged that the advisory panel was stacked with environmentalists and that the EPA was trying to use water projects to control urban growth.

The result? EPA canceled the project. "I just got so much flak and so little support that I decided to withdraw it," said EPA Regional Administrator Roger

Williams. Williams says that he made a "tactical error" in not adequately consulting with the region's governors and congressional delegation. But he also insists that his agency does not seek confrontation with regional politicians and water interests. "I was trying to initiate a spirit of compromise, with environmental standards as the bottom line," he said.

What Williams and the EPA fail to realize, however, is that water, in the West, is a polemical affair. In just one example of the issue's volatility, Utah Gov. Scott Matheson (D) commented recently that he thought EPA had no role in negotiations over the instream flow dispute concerning the federally-funded Central Utah Project. "I told the EPA that if they crossed the (state) line, I'd shoot 'em," said Matheson.

Well, EPA does have such a role, mandated by a series of federal laws, including the National Environmental Policy Act, the Clean Water Act and the Clean Air Act. But there's Williams, in his spirit of "compromise," insisting on viewing Western water as a negotiable issue when Matheson and others refuse to acknowledge even the most basic EPA role. That's not good bargaining, it's surrender.

The EPA Rocky Mountain region, to be sure, has some hot issues to handle. Williams, to his credit, has taken some strong stands, including a controversial Colorado Clean Air standard that ruffled almost everyone's feathers.

Canceling the water planning project, however, will at best make meaningful public participation more difficult, and at worst, flood any ground that EPA has just now gained in the Rocky Mountains.

— MM

Guest editorial

Looking back, then forward: Environmentalists in the 80s

by Neal Pearce

ESTES PARK, Colo. — As the jet from Washington, loaded with dozens of environmental leaders, agitators and lobbyists, landed at the Denver airport, one wag was heard to remark: "If that plane had gone down, the stock market would have gone up 20 points."

The environmentalists were on their way to a summit conference in the thin air of Estes Park in the Rockies, to assess their progress since Earth Day '70 and map future strategies to follow Earth Day '80, April 22. And the macabre joke about the plane crash underscored the movement's chief current problem: charges by businessmen and government budget-cutters that environmental regulations feed inflation and cause unemployment.

The Colorado meeting, sponsored by the Conservation Foundation and attended by 275 national and grassroots environmental leaders from 49 states,

did produce a share of hand-wringing. Fears were voiced of "massive rollbacks" of the 1970s' historic body of laws to foster clean air and water, to control toxic chemicals and hazardous wastes and protect natural wilderness.

Noting that he'd recently had to veto several bills repealing conservation statutes the Colorado Legislature passed in the early '70s, Gov. Dick Lamm lamented: "Faceless legislators are dismantling their government in the name of Proposition 13."

And from Washington, the environmentalists heard warnings that the proposed Energy Mobilization Board, fast-track synthetic fuels production and underfunded regulatory enforcement might transform the federal government from protector to exploiter of the environment in the '80s.

Yet as spring snows swirled about their meeting rooms, the Estes Park conferees were able to add up what Conservation Foundation president

William Reilly called an "astonishingly successful" record of national environmental laws passed and enforced in the '70s. Those laws were at least a start in addressing the "silent spring" fears that precipitated Earth Day '70 — steadily escalating air pollution, be-fouled rivers, "dead" lakes, extinct species.

Polls show 60 percent of Americans say they are active supporters or sympathizers with environmental movements, with only six percent overtly hostile. National environmental groups boast some 2 million members; the movement has a vital and increasingly skillful state and local network.

But now environmentalists have to work harder than ever to shake off the image of elitists more interested in saving the wilderness for backpackers than in controlling urban rat populations, more anxious to bar nuclear or coal-burning power plants than to propose alternatives.

With some ardor, the Estes Park conferees answered their critics: Environmental controls save immense health costs and create a new pollution-control industry. Japan and Germany's strong growth and low inflation rates prove it's possible to prosper with rigorous environmental protections.

Plundering and exhausting the world's limited oil, fisheries, forests and soils, asserts Worldwatch Institute President Lester Brown, fuels inflation far more than pollution control. Solar and other renewable energy sources, plus massive conservation efforts, will cost far less and pollute far less than conventional power plants.

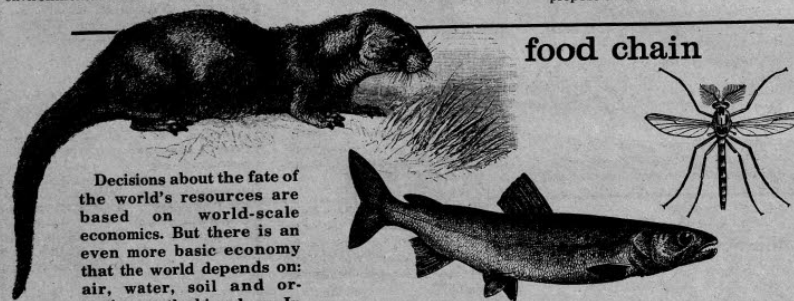
At their most optimistic, the conferees believe the 1980s could become a second environmental decade. They have hopes of solar collectors sprouting on roofs as television antennas did in the 1950s; of a conservation-renewable energy policy that would make America independent of imported oil by 2000.

To broaden their base and image — and because many severe environmental problems are urban-centered — the Estes Park conferees agreed cities should have a central place in the 1980s environmental agenda. But the environmentalists admit it will be hard to get the poor and minorities — conspicuously absent at Estes Park — to join in a broad coalition.

While in 1970 the overwhelming focus of environmentalists was on federal regulation, Estes Park conferees talked about new attention to state and local action to protect the environment. The stated reasons: Federal energy projects may threaten localities; small-scale — not federal — solutions are most appropriate for many problems; savvy local environmental groups are adept at coalition building, and Washington is delegating much environmental enforcement to the states.

Former Oregon Gov. Tom McCall got the warmest applause of the gathering with his concluding counsel to environmentalists for the 80s: "Don't tilt at windmills. Build them."

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food chain

Decisions about the fate of the world's resources are based on world-scale economics. But there is an even more basic economy that the world depends on: air, water, soil and organisms — the biosphere. In the West, right now, these two economies are meeting head on. High Country News reports on what is at stake to make sure all voices are heard when the decisions are made.

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POPULAR REALITIES

Political pressure: last chance for Rocky Flats?

by Michael Moss

DENVER — "There are lots of people who agree with us, but who aren't quite ready to make the commitment to be here," said Lucille Cyphers, a 69-year-old Grey Panther from Boulder.

Sitting on blankets equidistant from the stage and the row of health food

Opinion

vendors to the rear, Cyphers and her friend Mary Sandoe, 55, were two of a handful of older persons attending this year's April 19 demonstration against the Rocky Flats Nuclear Weapons Facility.

"We're here to spread the word and keep the movement going until more people catch on," said Cyphers.

And her optimism, inspired by the year's first warm weekend and the

thousands-strong gathering here, is shared by many in the Denver area's anti-nuclear power and weapons movement.

But for those advocating a shutdown of Rocky Flats and its conversion to peaceful, non-nuclear uses, the rally was a disturbing sign that many of those "uncommitted" will never catch on.

Despite the perfect weather, fewer people turned out for this year's demonstration than came for the 1979 rain-drenched event.

A 9 a.m. pre-rally at the Governor's Mansion in Denver drew only 70 people, 12 of whom were college students from Nebraska.

A series of educational and strategy workshops the following day were even more sparsely attended. And the 10,000 to 15,000 people who did show up at the rally site near Rocky Flats, were sitting targets for all the bad press the local media could muster.

They came to "sunbathe, picnic, throw Frisbees and footballs and protest nuclear power and weapons," one local newspaper reporter observed.

"Basking in the sun," another headline read. And a Denver Post reporter held that "Rock music star Dan Fogelberg (was) considered the biggest draw on the agenda."

To the crowd's disappointment, Fogelberg was a no-show. But they did get Peter Yarrow (from Peter, Paul and Mary), and a roster of well-known activist speakers, including former Pentagon analyst Daniel Ellsberg, and presidential candidate and ecologist Barry Commoner.

The rhetoric flowed freely. The crowd cheered at appropriate buzz words and phrases. But what did it all accomplish?

DEADLY BUSINESS

Since the Rocky Flats plant opened in 1953, it has been turning out plutonium triggers for hydrogen bombs at a rate of three to ten a day.

The facility also does research on the neutron bomb and other nuclear weapons technology.

The facilities are owned by the Department of Energy and managed by Rockwell International (the previous contractor was Dow Chemical).

Rockwell, with total sales of over \$4 billion annually, ranks sixth on a list of 100 Pentagon contractors, and 25 percent of its business is done as a military contractor.

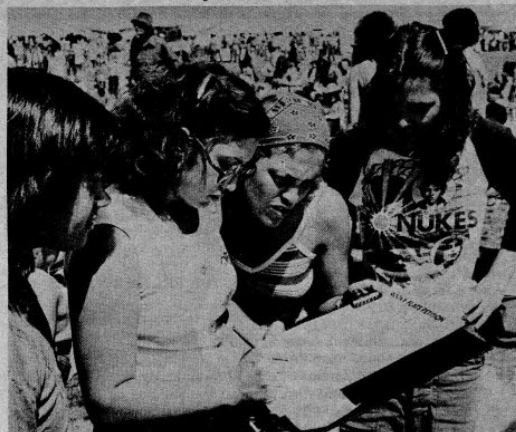
Sixteen miles upwind from downtown Denver, the facility has sparked concern among area residents, who fear air and water contamination from plutonium, worker health and safety problems, and the possibility of a major plutonium spill.

But for many people, including this writer, the prevailing issue at Rocky Flats is war — nuclear war and an arms buildup that threatens the whole world's environment.

'NITTY GRITTY' AHEAD

"The rally was a success," said Pam Solo, co-coordinator of the Rocky Flats-Nuclear Weapons Facilities Project, which is sponsored in part by the American Friends Service Committee. "It was a tremendous morale booster."

"But what we're faced with now," she conceded, "is how to get those people to the point of recognizing the need for



ROCKY FLATS DEMONSTRATORS signing the first petitions asking Gov. Lamm to press for conversion of the facility to peaceful, non-nuclear uses, while re-employing the plant workers.

nitty-gritty work, such as letter-writing, to get things done."

Solo, with her short, black wispy hair and lean body, is a high-powered worker. She and others working out of the American Friends Service Committee's house-office buildings in Denver are speeding ahead on a number of fronts.

Randy Forsberg, director of the Institute for Defense and Disarmament Studies in Boston, has drafted a detailed nuclear moratorium proposal, "A Call to Halt the Nuclear Arms Race," now circulating among key U.S. decision-makers.

A letter writing campaign by Solo's group, called "The Buck Stops Here," urges people to send Gov. Richard Lamm a dollar bill, asking that he initiate a conversion and safety study independent of a recently initiated DOE study, which many feel is merely a stalling tactic designed to ward off critics.

And petitions calling for conversion of the facility to peaceful uses, with full re-employment of the plant's workers, are being circulated throughout the Front Range.

SOMETHING MORE

These are all good tactics. But the faltering SALT II treaty, the explosive events in the Middle East, and the Carter administration's heavy emphasis on nuclear arms development are putting uncontested pressure on the Rocky Flats facility to proceed with production.

"I bring to you from Washington news of impending nuclear war," Rep. Pat Schroeder (D-Colo.) told the demonstrators this year. "What I would like to see is a consensus to 'draft voters not soldiers.'"

Schroeder is one of the key political players in the Rocky Flats issue. The others are Rep. Tim Wirth (D), Sen. Gary Hart (D) and Gov. Lamm.

All but Lamm are up for re-election this November, and the race facing Hart, who has thus far skirted the Rocky Flats issue, may be very close.

Conversely, Schroeder, who is a vocal advocate of converting the weapons facility, may face a re-election chal-

lenge from a more moderate candidate.

The drama leads one to conclude that involvement in electoral politics may be the answer for those who'd like to change Rocky Flats. Take the names of those signing the petitions, and get them involved in election campaigning.

It's a simple idea, but a difficult task. I can only feel, however, that something new has to be tried. The old tactics just don't make it anymore.

Daniel Ellsberg, wrapping up the April 19 rally, told the crowd he'd "be back next year and the next," and that his youngest son would grow up also to demonstrate at Rocky Flats.

I, for one, am not certain how much longer we'll have that opportunity.

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4-High Country News — May 2, 1980

Workers, plants, confusion come to 'sweeten'

by Geoffrey O'Gara

EVANSTON, Wyo. — Oil and gas development in the Overthrust Belt is just in its infancy, according to hopeful oil company officials planning more and more exploration holes in this rolling sagebrush country.

And while exploration drilling perforates the region, a second phase is beginning, too — in the form of two large facilities, called "sweetening" plants, that are being built to take toxic hydrogen sulfide out of Overthrust Belt natural gas and ready it for marketing.

The two plants, one owned by Amoco (Standard Oil of Indiana) and the other by Chevron, U.S.A., will be built over the next two years just north of this town of 7,500. The plants will clean up natural gas produced by two of the recent big finds in the belt: Whitney Canyon and Carter Creek, respectively.

Amoco has the necessary permits to begin building its plant, which will cost over \$100 million, and sources at the Wyoming Department of Environmental Quality say it will soon okay the pollution control plan for Chevron's equally-expensive facility. The city of Evanston, bolstered by grants from Amoco and a promise of equal largesse from Chevron, is gearing up for an influx of up to 1,500 new workers (see sidebar).

The plans are significant not just for the impact they will have on the Evanston area, but also because they may indicate what is in store for the rest of this vast geological structure running from Canada to Mexico. You cannot ship sour gas out — you have to "sweeten" it where you find it.

REMOVING SULFUR

The plants to be built near Evanston are different from the facilities used to convert natural gas to propane and butane. Whereas the latter primarily heat and compress: a sweetening facility uses complex chemical processes to strip hydrogen sulfide (H₂S) from gas. Given the toxicity of hydrogen sulfide and the pollution problems of sulfur and its compounds produced in the process, cleaning up the gas is an expensive process with noteworthy environmental impacts.

And though sweetening plants have been around for decades in states like Texas, more stringent environmental standards have added to their complexity and cost.

Still, the price is worth paying, apparently, to the companies now exploring in the Overthrust Belt. With the deregulation of natural gas prices, values have skyrocketed. And technological advances in seismic testing and drilling techniques have led companies to drill deeper and deeper into the Rocky Mountain geology, making the likelihood of sulfur-laced gas much greater.

"Most of the gas they have been finding has been sour gas," says Dr. Harry Kent, director of the Potential Gas Committee at the Colorado School of Mines.

According to Milt Hoessel, senior drilling foreman for Amoco in Evanston, the discovery of extensive sour gas fields is the result of improved drilling techniques. Drill bits now cutting through the Overthrust Belt are going

further back in time, boring through geological ages — tertiary first, then cretaceous, jurassic, triassic, and on through many more eons of rock. Many ages contain several formations which may contain oil or gas.

As the oil drillers reach the deeper formations — the Madison, Dinwoody, Darby and Bighorn, to name only a few — any gas they find is likely to contain sulfur. According to Hoessel, "more and more" sour gas will be produced in the future.

THE BELT PRODUCES

Of approximately 45 experimental drilling rigs installed on public and private lands in northeastern Utah and southwestern Wyoming since 1975, 15 have yielded commercial quantities of oil or gas — "a phenomenal rate of recovery," according to James Barlow, a petroleum geologist in Casper, Wyo.

Farther up the belt, in the Bridger-Teton National Forest, two and possibly three wells have shown gas potential, though none are presently being developed commercially. Just recently another find was reported near Livingston, Mont. Energy companies are scrambling for leases, and many

more drill bits will turn this summer.

But only around Evanston has commercial production begun, and only there is the next step — the sweetening plants — being taken.

Without nearby sweetening plants, the sour gas might be useless. "It would be far safer to treat the gas locally than to try and transport it elsewhere," says Kent of the Colorado School of Mines. Hydrogen sulfide is highly corrosive — a pipeline would be a big environmental risk. Over long distances, it has never been tried.

THE PLANTS

The two proposed Evanston plants will handle 770 million cubic feet of natural gas per day. The plants will remove 2,288 short tons (a short ton is 2,000 lbs.) of sulfur a day, which will be shipped out in liquid form by train. The purified natural gas departs by pipeline.

Right now, there are neither pipelines nor railroad tracks to the sweetening plant sites, however. These will have to be built.

The plants will sit on ridges over 8,000 feet in altitude to help disperse

pollutants, but they are well within clean air standards, according to Charles Collins, an air quality engineer with the Wyoming Department of Environmental Quality. This is partly because the scale of the plants, particularly Amoco's, has been kept small.

Chevron's facility is designed so that it can be expanded considerably over the years, and the company is installing "the very best control equipment in the world," says Collins. It will emit primarily a carbon-oxygen-sulfur compound which, while there is not much information available on it, is not considered a dangerous gas. Amoco's plant will release small amounts of sulfur dioxide through an incinerator stack.

Chevron's plant will occupy 477 acres belonging to the U.S. Bureau of Land Management; Amoco's 125 acres are owned by a Union Pacific Railroad subsidiary.

RAILROAD ROUTE

One of the more controversial aspects of the energy companies' proposal is the route they have chosen for the railroad cars carrying liquid sulfur.

The 35.2 mile railroad spur would run south from Sage Junction to the

Another — slightly different — Boomtown Story

EVANSTON, Wyo. — As the editor of *Uinta County Herald* puts it: "There's no real opposition in town... this has to be good for us."

That's generally the attitude in Evanston toward the sudden growth imposed upon it by Overthrust Belt oil and gas development. There are no sit-ins to block the big trucks that clog the town below Main Street, no attempts to topple the oil rigs that are sprouting and spouting ubiquitously (even six wells within city limits) and no "Save Evanston" group fighting two natural gas "sweetening" plants that will soon be built nearby.

The reason is fairly simple.

Evanston has been a town repeatedly on the brink of extinction over the past decade. It used to be a railroad town with a busy repair yard providing most of the employment for its 4,000 citizens. Then the railroads moved their operations to Green River, Wyo., or Ogden, Utah. The town always had a healthy income from tourists stopping on their way to Bear Lake, Flaming Gorge, or Jackson Hole. Then the interstate bypassed it.

With the beautiful Uintas rising to the south and the Bear River coursing through town, a small population held on. Their patience has been rewarded with a boomtown resurgence — the population is up to 7,500 and more workers are waiting in the wings. Town officials say population could triple in the next five years. To many residents, the oil boom is the latest chapter in Evanston's shaky survival saga.

"The economy's never been better," says city administrator Steve Snyder. "You've got your pick of any kind of job you want."

But Snyder and others can recite a litany of the boomtown problems that come with prosperity — a litany so familiar it hardly bears repeating.

— Services are faltering. Snyder says a plan to build a new sewer plant will not become a reality in time to meet growing needs.

— Amoco, one of the two companies planning to build "sweetening" plants, has promised the school system \$400,000 and given \$100,000 to bolster the police force. Yesterday, Chevron announced similar grants. But officials say it won't be enough to cushion the impact of hundreds of workers.

— Housing is short. A worker at the state women's prison said her house had tripled in value in the few years she'd lived in Evanston. If she were buying today, she could not afford it. Trailers abound, and, in a recession-era irony, the local lumber mill is laying off workers.

— Crime is up. "Before I retired I used to work down at Corner Drug," said a woman who now runs an antique store. "I'd get off at 9:30 p.m. sometimes, and I'd walk home without ever looking over my shoulder. Not anymore." The woman and everyone else in town sees the hopped-up trucks and bus bars inhabited by itinerant drill workers. These men earn good money, spend it freely, and party away their loneliness, sometimes violently.

But the real test will come this year, as Amoco and Chevron bring in hundreds of workers to construct their "sweetening" plants. At construction peak, there could be as many as 1,500 new workers at one time, most of them single men living in "bachelor" camps now under construction north of town.

Snyder and others would rather see workers come with their families, though they admit there are no homes available. Chevron is encouraging about half its workers to bring their kin. Amoco is bringing in only single workers for the construction phase. Company officials say they will provide complete services and diversions at the

camp — room and board, medical treatment and recreation.

No one in Evanston expects the workers to spend their free time in camp.

But Evanston residents generally seem ready to take the bad for the good they are getting. Even now, an Evanston homeowner receives hundreds of dollars annually in royalties from the drilling rigs producing oil within the city limits. So do many ranch owners on the outskirts of town. And local merchants are thriving.

Oil company officials say that, despite criticism that they have not offered to do enough, they intend to make Evanston a better place. "We take care of things," said an Amoco drilling foreman. "Hell, we've got to live here, too."

Do they? That's always the question with boomtowns — will they take the resources and run? Locals grudgingly conclude after five busy years that "oil" people can assimilate, given time. And there appears to be lots of that. "They've got enough work now for at least 10 more years, said Snyder. "They don't see the end of it."

Said one city hall employee, a 20-year Evanston resident: "When they closed the railroad shops seven or eight years ago they said the town would dry up and blow away, and it didn't. It's going to be here a while — this is just another way. There'll be some social problems, but it's helping the economy, too."

OIL RIGS within Evanston city limits provide homeowners in town with mineral royalties amounting to hundreds of dollars apiece annually.

[May 2, 1980 — High Country News-5]

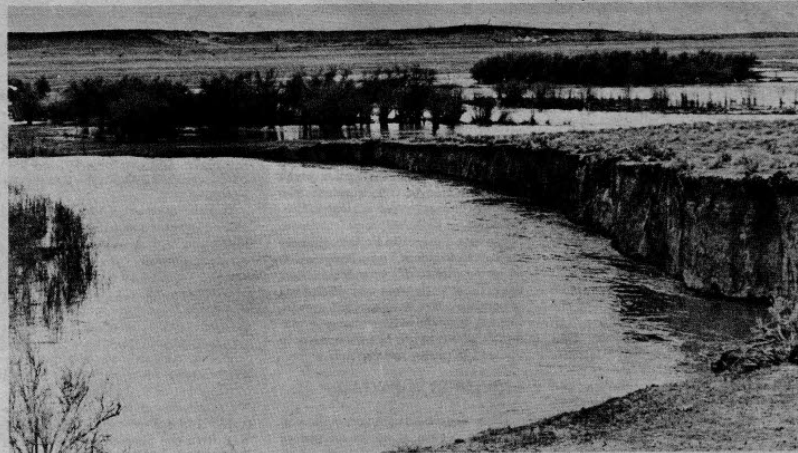
Evanston gas

plants, following, primarily, the Bear River basin. According to a draft environmental assessment published by the BLM, it will pass through the Woodruff Narrows, a winter roosting site for 60 bald eagles, sage grouse nesting and roosting habitat and an area where sightings of the endangered black-footed ferret have been reported. While every project disturbs some habitat, the wildlife of this region has already been much displaced by the increased drilling activity. There would be no easy way out for the animals.

A Uinta County planner said that the route was preferred by the companies because the alternative — routing it west of the Bear River basin, would be longer, more expensive, and cross in and out of Utah, which would draw the Interstate Commerce Commission into the permitting process.

The U.S. Fish and Wildlife Service and the Environmental Protection Agency have not yet commented on the draft assessment.

Should there be a spill, a BLM spokesman said, the liquid sulfur from the rail cars would "solidify very quickly" after which it would pose no serious threat to the environment. As for the danger of lethal hydrogen sul-



THE BEAR RIVER, shown here during spring flooding, flows north from Evanston to Bear Lake on the Idaho-Utah border. A railroad spur carrying sulfur from Evanston's gas sweetening plants would follow the Bear River basin.

fide leaks around the plants, the report said it could "not be quantified."

NORTH AND SOUTH

Almost as significant as the immediate impact of the gas sweetening plants on the Evanston area is what they portend for the Overthrust regions north and south.

Evanston has no nascent environ-

mental movement, no vocal opponents of energy development. But as exploration moves into the forested mountains to the north, primarily on public lands managed by the Forest Service, some of it possible or designated wilderness, the players change.

"The geology doesn't change," says oil geologist James Barlow, "only the people who manage the land." And the people who live near it: strong opposition to exploration has been centered in Jackson, Wyo.

In the Bridger-Teton National Forest, the Forest Service has been inundated with lease and exploration applications (see HCN, March 21, 1980, for related story). Wells have been drilled, and, while none has turned up commercial quantities, gas has been found. Discoveries so far appear to be sweet gas found in shallow drilling experiments.

But sour gas may be just around the corner, bringing with it the baggage of potential gas sweetening plants.

Amoco foreman Hoesel says that his company's Evanston plant, typical for its size, can only serve gas finds within a radius of 12 miles. He adds that any hole deeper than 10,000 feet is likely to produce sour gas, if anything.

Much of the drilling in Bridger-Teton is expected to be at least that deep. For example, Reserve Oil Co., a subsidiary of Getty Oil, has applied to drill a 17,000-foot test well in Little Granite Creek, south of Jackson and three miles within the proposed Gros Ventre Wilderness.

Oil companies currently hold 1,500 leases covering about two-thirds of Bridger-Teton, according to the Jackson Hole Guide, and energy companies are busily filing for what's left.

The necessity of building roads is what frightens most opponents of oil and gas exploration in national forests — a road scars the land and invites recreational vehicles. But the spectre of gas sweetening plants may broaden the critics' concerns.

According to Forest Service minerals expert Al Reuter, earlier finds on Forest Service land have been located near private landholdings — potential sites for such plants. The biggest problem for energy companies, Reuter said, might be air quality requirements near wilderness or park areas.

Energy company officials are thinking ahead.

"I don't know which way it might go," said W.B. Jackson, Division Production Manager for the Rocky Mountain Division of Chevron, U.S.A. "The alternative to building plants at the well site is to pipeline highly toxic, high-pressure gas to a more remote, less environmentally-sensitive area. Very expensive, and very risky."

"The best place for a plant is right where the gas is produced."

Wilderness Briefs

With the congressional conference on the River-of-No-Return Wilderness legislation expected shortly, Idaho Governor John Evans (D) has backed the Senate version, which includes West Panther Creek within its wilderness boundaries. That area, excluded in the House version to speed cobalt mining, and the length of the Salmon River to be protected, are the two issues conferees will resolve...

A companion bill to the non-wilderness release legislation being promoted by Rep. Thomas Foley (D-Wash.) has been introduced in the Senate as S. 2568. Sponsored by Sen. Jesse Helms (R-N.C.), it does not include an endorsement of the administration's wilderness recommendation, as Foley II does...

A hot alternative to protecting an area via wilderness designation: have a volcano erupt. The Forest Service has named the Mt. St. Helens area in Washington State a Geological Area, and a management plan is already in the works.

The Forest Service has delayed by two years the deadline for studying nine proposed Montana wilderness areas totalling almost a million acres. The delay was requested by conservationists, and the first draft environmental impact statement is now due this summer...

House Interior Committee action on Montana's West Big Hole Wilderness legislation has also been delayed, at the request of the sponsor, Rep. Pat Williams (D-Mont.). "Some people have gotten the idea I want to close the Big Hole River or something," he said, referring to strong criticism of the wilderness plan at a recent hearing in Dillon...



Cache la Poudre River: last Front Range chance to flow

by Geoffrey O'Gara

Farmers and advocates of Front Range growth in Colorado winced last month when the U.S. Forest Service and state of Colorado recommended that most of the Cache la Poudre River be protected from major development.

Agricultural interests saw at least 180,000 acre-feet of potential irrigation water flowing away unimpeded if the recommendation sticks. And growth advocates saw the irretrievable glimmer of 250 million potential kilowatts in the rushing water.

The report by the Forest Service and State Department of Natural Resources and Water Conservation proposed that 67 miles of the Cache la Poudre be protected under the Wild and Scenic Rivers

Act of 1968 as either "wild" or "recreational." A 90-day public comment period is now underway, after which the report goes to the President, who decides whether to pass it along to Congress.

The battle over the Poudre, the only river on Colorado's Front Range considered for wild and scenic designation, has brought to the fore serious conflicts spawned by the area's rapid growth. The key ingredient is water — a commodity whose value has risen faster in the area than the price of gold.

GREY MOUNTAIN

The most active opponents of the wild and scenic designation are supporters of the Grey Mountain Project, which

would provide irrigation water and electricity from two dams, and two hydroelectric power plants on the Poudre River.

But the river is not just a potential source of water and watts: it is a popular fishing stream, a summer home retreat, a whitewater favorite of kayakers and a habitat for wildlife that both hunters and conservationists value. It is also the last chance conservationists give themselves to preserve a Front Range river in its natural state.

The struggle over the Poudre dates back to 1963, when the federal Bureau of Reclamation first proposed the Grey Mountain Project. It was shelved at the time because of low electricity demand. But with the phenomenal growth of Fort Collins and Larimer County, plus what farmers claim is a looming shortage of irrigation water, proponents are saying the time is now ripe.

The project's pricetag has grown, too: from \$111 million in 1963 to \$337 million or more today.

The river originates in Rocky Mountain National Park and runs north and east through Roosevelt National Forest, lacing steep gorges and gentle meadows before emptying into the South Platte River.

The upper reaches of the river, and the rugged south fork which joins the main stem just above Dutch George flats, would be designated "wild" under the Forest Service proposal. Another 42 miles of the river bordered by Highway 14, an all-year road, was recommended for "recreational" status, which would also protect it from major development.

Only a four-mile section at the mouth of the canyon was not recommended for protection, because, according to the authors of the study, it was already highly developed. The Grey Mountain Dam — part of the larger project — could still be built in this section if the recommendation is approved.

But part of the project is not enough for Grey Mountain proponents. Francis Bee of the Larimer County Farm

Bureau argues that no designation should be made until a proposed \$1 million feasibility and environmental study of the Grey Mountain Project is undertaken. Bee claims there is a "multiple benefit" to the project: power, water, flood control and water storage.

The Bureau of Reclamation study that spawned the project has not been updated since 1959, lending credence to Bee's argument. But county commissioners and the Fort Collins city council decided to take a broader approach: a study of water needs and possible improvements in the Poudre River basin generally, which would omit any mention of the Grey Mountain Project. They will consider conservation measures and improvements to the system already in place.

Local officials may have been treading carefully on what they know is sensitive ground. The project would not only be expensive, it could create difficulties during 20-plus years of construction for many area residents who commute to Fort Collins. And the thought of 21 miles of reservoir has already sparked active opposition among the many enthusiasts of the river's free-flowing floating and fishing qualities.

CONSERVATION CAUSE

The Cache la Poudre has become an important cause to Colorado conservation groups, many of whom see it as their last chance to preserve a Front Range river in its natural state. "This is the only nationally-significant Front Range river left," says Cliff Merritt, director of the American Wilderness Alliance in Denver. "We think they ought to give us this one."

Trout Unlimited has also come to the defense of the Cache la Poudre, citing, in addition to the river's general reputation for good fishing, the presence in one of its tributaries of the greenback cutthroat trout, a species that has all but disappeared on the Front Range.

There is also peregrine falcon habitat and three herds of bighorn sheep that could be disturbed by the massive water and power project.

Opponents of the dam projects think the growing population in the Front Range — the very reason that more power and water storage now seems necessary — may ironically provide key support for preserving the free-flowing river. Thousands of persons from Denver and Fort Collins now use the river for fishing and boating. From 1967 to 1977, boating on the river increased twenty fold, according to the Forest Service. A national kayaking competition takes place annually on the river.

Designation would contribute to increased traffic of outdoor enthusiasts — a fact that frightens private landowners in the area, some of whom object to the designation. On the other hand, said one Forest Service employee, local residents don't want their summer homes or residences inundated by dams, either.

WATER NEEDS

The controversy has placed Larimer County farmers in an odd position: While it is urban development that has drawn away most of their water, they have been forced to ally themselves



Photo courtesy of the U.S. Forest Service
THE SOUTH FORK of the Cache la Poudre, which originates in Rocky Mountain National Park, would be protected as a recreational or a wild river under the Forest Service proposal.

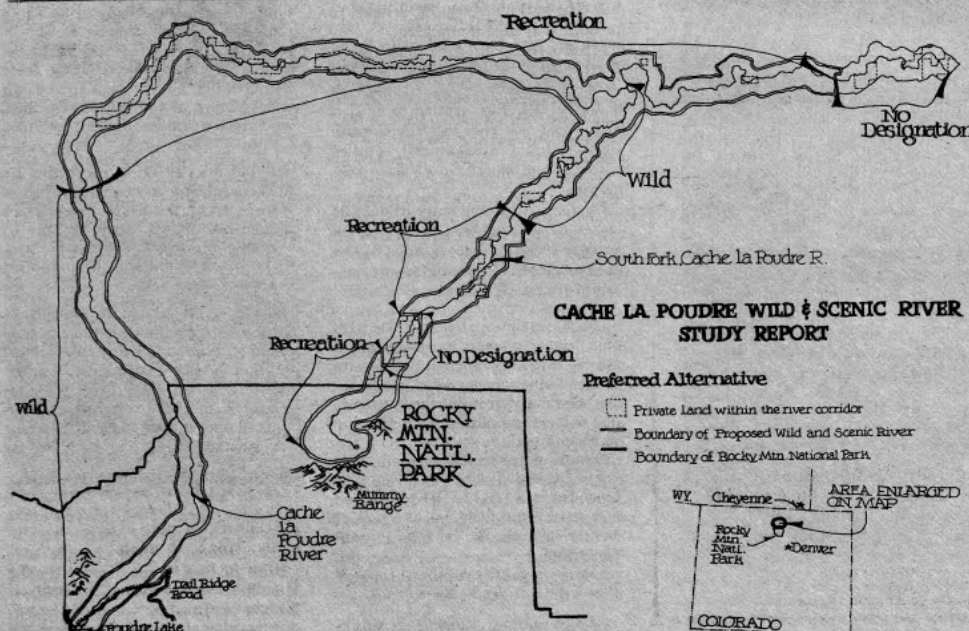




Photo courtesy of the U.S. Forest Service
THE CACHE LA POUDE River, historians say, got its name from French trappers who buried their gunpowder to hide it from Indians or other trappers. "Où on cache la poudre" means "where one hides the powder."

with developers in their quest for more irrigation water.

According to Bee, the cost of water has risen from \$50 per share in 1948 to \$9,500 per share today. A share constitutes about six acre-feet of water, enough to irrigate three acres. Many farmers have sold their water rights to industry and development interests and have gotten by in recent years because of abundant rainfall and plentiful water that they can rent back.

"The day the drought comes," says Bee, "you're going to see a lot of farms go."

Bee nor anybody else can say for sure that the two proposed reservoirs would solve the farmers' problems. But they will, proponents say, serve the area better than the antiquated system of 20 small reservoirs now used by the North Poudre Irrigation Company to hold spring run-off for municipal and agricultural purposes. The reservoirs, northwest of Fort Collins, and their feed channels are troubled by sedimentation and aging dikes.

But Karen Waddell, who heads Preserve Our Poudre, a group advocating protection of the river, thinks that irrigation water is the least of the farmers

problems. Among the nation's metropolitan areas, Fort Collins has the fourth highest growth rate. Farmers have sold more than just water rights in recent years — they are selling land to developers, too.

"By the time this project might come about — 25 years — we're not even sure there will be any farmlands left," says Waddell.

Waddell claims that initial opposition to wild and scenic designation among private landowners in the canyon has softened with reassurances from the Forest Service that their rights will be protected. Her group is planning a survey of landowners in the near future which she hopes will bolster their cause.

Forest Service District Ranger Lou Bertelshofer, who has conducted public meetings for canyon residents, agrees that they are more inclined to accept wild and scenic status once they understand the implications.

Bertelshofer says the response to the proposed designation has not been overwhelming, despite a supportive editorial in the *Denver Post*, but, "The biggest consensus I've heard is for designation."

FICTION: States whose water might be used in coal slurry pipelines have been negligent in asserting their right to control their water.

FACT: Those states which have the most potential have very aggressively, and properly, asserted their water rights. Wyoming has been particularly vigilant through specific legislative action which allocated enough water to ETSI to export coal (along with socio-economic problems) to areas that need the energy.

"Slurry Pipelines — Moving The Nation's Coal Safely, Cleanly, Silently, Cheaply"



Energy Transportation Systems, Inc.
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No bombing in Montana's Bob

by Joan Nice

Grassroots protest may have influenced Regional Forester Tom Coston's decision to turn away a request to detonate some 5,400 explosive charges in three Montana wilderness areas, according to one Forest Service official. Environmentalists, elated by the move, say it's only the beginning of their battle to keep oil and gas companies out of wilderness areas.

In an April 17 statement, Coston decided to ignore Consolidated Georex Geophysics' application for a permit to do seismic work in the Bob Marshall, Lincoln-Sagegoat and Great Bear wildernesses. CGG planned to sell its data to companies interested in oil and gas development.

"It is my policy not to consider any proposal for mineral activities within a national forest wilderness unless the proposal is being specifically applied for under the United States mining laws or law pertaining to mineral leasing," Coston said.

Buster Lamoure, director of minerals and geology for the Forest Service's Northern Region, which includes public lands in North Dakota and part of Idaho, speculated that "social conflict" caused by protesting wilderness users and others had prompted Coston's action. "The environmental assessment indicated that seismic work could be done in a manner that would not degrade wilderness values," Lamoure said.

Coston, who said his decision was based on a legal concept, not environmental concerns, cited possible conflicts among "competing interests of multiple resources" if the permit were approved. "It seems only prudent when discretion rests with the agency, that the conflict should be avoided," he said.

On national forest lands outside the wilderness boundary Coston ruled that seismic work could go ahead because "there would be no physical effects of consequence." But too small a portion of Consolidated Georex Geophysics' work was planned outside the wilderness to make it worthwhile to proceed, according to CGG spokesman Johan Stokstad.

Under the Wilderness Act, the agency may permit oil and gas activities in wilderness areas, but it isn't required to do so. And it is required to protect wilderness values. Coston was being watched closely on the Bob Marshall decision because if he gave CGG a go-ahead, it would have been the first official indication that the agency felt wilderness and seismic work were compatible. Since Coston didn't rule, all eyes have shifted to the Forest Service chief, who will decide whether to allow oil and gas leasing in wilderness sometime before October 1981.

Environmentalists called Coston's non-decision a victory for wilderness. Bill Cunningham, a representative of the Wilderness Society in Helena, Mont., who supported a save-the-Bob-Marshall protest march of some 250 wilderness advocates in Missoula in early April, said, "Coston deserves praise for what he has done."

But he added that this was only a temporary reprieve. "We're pleased, but we have no false illusions that we don't have a long fight ahead," Cunningham said.

Convincing Forest Service Chief R. Max Peterson not to allow oil and gas

leasing in wilderness areas is next on the environmentalists' agenda, Cunningham says. Much of the area covered by the CGG prospecting permit application also has lease applications pending.

The Bob Marshall ecosystem, which includes lands in the three wildernesses, spans a 150-mile-long stretch of the Continental Divide. "A wilderness traveler could wander for years through the rugged region without retracing his steps," according to the American Wilderness Alliance. It is "one of the extremely few large, wildlife-rich primeval places on the continent."

Conservationists interested in protecting the area have formed a group called the Bob Marshall Alliance, led by Bill Bishop of Polson, Mont.

If the area is dear to recreationists, it is also of interest to the oil and gas industry. Part of the potentially fuel-rich Overthrust Belt, it is an area where time is running out for industry. Under the terms of the Wilderness Act, mineral leasing is allowed in wilderness areas only through 1983.

Essentially no oil and gas leasing has occurred in wilderness yet, though it is allowed by law.

The Forest Service must continue to ignore pressure from the oil and gas industry "if an enduring wilderness resource is to be maintained," Cunningham said. "And what if there is some oil and gas under these wilderness areas? It's a drop in the bucket that is not going to satisfy the gluttonous appetite of an overly consumptive society."

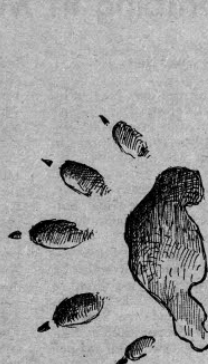
CGG's Stokstad said that his firm was disappointed by the Forest Service decision, but has not decided whether to appeal it.



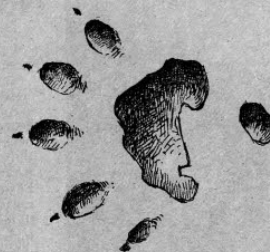
Photo by David J. Spear
PROTESTERS marched in Missoula, Mont., to protest proposed seismic testing in the Bob Marshall Wilderness. The testing proposal was not approved.



tracks of a
wolverine walking



Wolverine
tracks
one-half
actual size



Lynx linger — but for

Colo. It was overwhelmingly reaf-
firmed this February on the slopes of
Mount Evans, when Halfpenny and his
companions found six separate sets of
lynx tracks.

"There are probably two to four ani-
mals in this particular population,"
said an elated Halfpenny. "This is our
biggest break yet."

What Halfpenny believes is adequate
proof of wolverines in Colorado also
came in 1979, after over 3,000 "wanted"
posters requesting wolverine and lynx
sighting information were distributed
statewide to wildlife agents, trappers,
outfitters, taxidermists and others.
Two photographs mailed to the division
office in Denver provided the evidence.
One, of a wolverine track in the
Weminuche Wilderness Area in the

by Jim Scott

High in the remote spruce-fir forests
of the Rocky Mountains, where sub-
zero temperatures and howling ground
blizzards dominate the environment
much of the year, two of Colorado's en-
dangered mammal species, the Canada
lynx and the wolverine, apparently still
linger.

This is the conclusion of Colorado Di-
vision of Wildlife researchers, who have
been investigating the status of these
creatures since 1978 as part of an en-
dangered mammal survey in the state.

Evidence of these secretive animals
is scarce. It consists almost exclusively
of tracks left in the sub-alpine snow-
fields. Although both the lynx and the
wolverine were shot and trapped in
Colorado prior to the turn of the cen-

tury, there have been no confirmed
sightings of either in the state within
the past several years.

Division researchers Jim Halfpenny
and David Nead have skied, snowshoed
and driven snow machines almost 3,000
miles during the last two years through
some of the most frigid and inhospitable
areas in the state in search of the lynx
and wolverine.

What have they found? "There are
definitely Canada lynx still in Col-
orado," said the 32-year-old Halfpenny,
the Ph.D. candidate in mammal ecology
who heads up the search. "And there
are wolverine too."

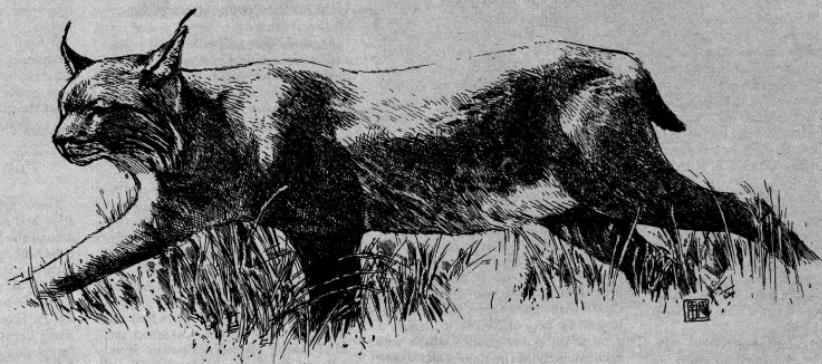
The presence of lynx in the state was
confirmed last year, when Halfpenny
and retired division employee Pete
Shearwood tracked three separate lynx
along the Frying Pan River near Aspen.



Wolverine (*Gulo luscus*)

lynx, wolverine in Colorado for how long?

Colorado Division of Wildlife researchers have traveled 3,000 inhospitable miles in search of the lynx and the wolverine.



Lynx (*Lynx Canadensis*)

San Juan Mountains, is almost certainly genuine.

The other, a photograph taken by a hiker with a 230 millimeter lens in the Sangre de Cristo Mountains in southern Colorado, is of a medium-sized brown animal leaping across a snowfield of Trinchera Peak. From the hiker's description and the actual photograph, I would have to say it is a wolverine," Halfpenny said.

Last year a Utah hunter shot and killed a wolverine in the vicinity of Dinosaur National Monument on the Colorado-Utah border. Division officials believe that at least part if not all of this wolverine's range — which may have been hundreds of square miles — was in Colorado.

Neither the wolverine nor the lynx has ever been common in Colorado. At

present, the lynx appears to be the more abundant of the two. Four lynx have been trapped in the state during the past decade, and more than a dozen reliable track sightings have been reported in that time.

The curious tracks of the lynx are most often found on high, north-facing slopes, where the cats pursue their primary quarry, the snowshoe hare. Aided by their enormous feet — almost twice the size of bobcats' — lynx are able to negotiate deep snowfields. "They can travel over six feet of powder," said Chris Moser, an area supervisor for the division, "and make tracks just like a lion's over packed snow."

Scientific studies have shown that snowshoe hare populations periodically suffer severe crashes every 7 to 10 years, triggering a similar nosedive in lynx numbers. During the 1940s, when

lynx populations were unusually low in Canada, corresponding lynx populations in Colorado also declined. But while Canada's lynx population recovered, Colorado's population remains depressed, the victim of a deteriorating environment.

The division's lynx-wolverine researchers are using hair snags in their search. The snags, two-foot-long tubes of hardware cloth criss-crossed at each end with barbed wire, are baited in the middle with meat and hung from trees along 10-mile transects through some of Colorado's most rugged country — including the Flat Tops Wilderness Area. It is hoped that the animals will crawl into the tube after the bait, snagging telltale clumps of hair on the barbed wire in the process.

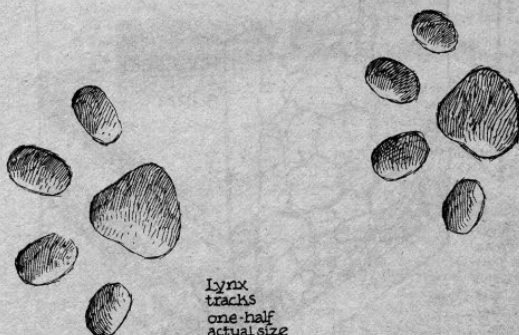
Habitat for the lynx and wolverine is fast evaporating in Colorado. One of the

most serious concerns of the division is the current ski boom, which is devouring substantial chunks of prime wilderness. "One lynx taken in 1974 was trapped beside a ski run at Vail," said Moser. "If it were not for that recreation area, that animal would have gone undiscovered."

"People are getting into the wilderness like never before," said John Torres, the division's nongame and endangered species manager. "These animals simply cannot tolerate harassment."

Somehow the lynx and wolverine have managed to endure. But the isolated sanctuaries of the state are rapidly shrinking.

Jim Scott works for the Colorado Division of Wildlife.



10-High Country News — May 2, 1980

ENERGY

Hoe Creek experiment

'In situ' mining: gasified coal and an unexpected hole

by Bob Anderson

GILLETTE, Wyo. — The idea is simple. You drill a couple of holes into a coal seam, then ignite the coal in one well and collect the partially-combusted gases from the other, hoping the gas has a high enough energy content to justify the expense.

For nine weeks last fall, California's Lawrence Livermore Laboratories and the Department of Energy jointly conducted the last of three such experiments at their Hoe Creek site, 15 miles southeast of here.

In a month and a half the small in situ coal gasification experiment incinerated about half a trainload of coal, 3,900 tons. But it also left behind a correspondingly large cavity into which the weak rocks that once comprised the overburden collapsed, leaving an unplanned crater nine feet deep and 30 by 60 feet.

At the Hoe Creek experiment site, scientists tried two injection gases — air, and a mixture of oxygen and steam — various well spacings, and various procedures for connecting the injection and production wells. This third experiment was designed to test oxygen-steam injection down wells spaced between one and 200 feet, connected by a horizontal 'link' well.

The geologic layer-cake of the site is simple: below 140 feet of sedimentary rock — sandstones, siltstones and shales — lies the 10 foot thick Felix number 1 coal seam, then another 15 feet of sediments before its 25 foot thick cousin, Felix number 2.

After drilling a slightly angled hole curved to run horizontally near the base of Felix number 2, the experimenters drilled three connecting process wells, and another set down which they could monitor temperature, water level, and ground motion.

The seam was then ignited, using air injection for the first week and oxygen-steam for the remainder of the experiment. When the burn reached the base of the production well, the flow of oxygen and steam was cut off, and the fire was supposed to go out.

Within three weeks the Wyoming state Department of Environmental Quality reported the appearance of a crater on the surface between the injection and production wells. It was small at first, some four-by-five feet, but the depth was hard to gauge through vapors wafting from the depression. DEQ inspectors believed the coal fire was continuing out beyond the intended burn site. Subsequent investigation, however, revealed the vapors were just steam resulting from the quenching of the fire by groundwater.

At depths between 130 and 180 feet, the Felix seams are the area's major aquifers. The experiment's design recognized this, and called for the pressurization of the process wells to keep groundwater away from the burn area during combustion. At the end of the burn groundwater was to reinvade the burn site, quenching the fire.

A SURPRISE

Neither the extent nor the rapidity of the project's roof collapse were foreseen by the experimenters, who had tried to simulate the overburden behavior with a computer model.

According to a report by the federally-funded Livermore Lab and

the Energy Department on the experiment, this is the first case of significant ground subsidence over an in situ coal burn in the United States. Larger experiments in the USSR, however, have frequently resulted in subsidence. Experiments at sites one and two, which also utilized the Felix number 2 seam, have produced no substantial caving at the surface. They were smaller, though; site one representing a 120 ton burn, site two, 1,950 tons.

The same bedrock section may have behaved very differently in three cases. The variable here is what is called the "bulking capacity," a measure of the ability of the overburden to fill extra space as it breaks up. (As a rule of thumb, the smaller the chunks, the more volume the rubble will fill.) Bulking capacity at site two appeared to be higher than at site three. Scientists say it will be very difficult to design a generic computer model which will take into account the apparently subtle local variations in the bedrock.

The role of the Energy Department, said Chuck Brandenburg at the agency's Laramie office, is to learn how to analyze all these variables so that subsidence becomes predictable — something he feels is possible, given enough money.

One solution is to burn seams at greater depths, where even overburden with low bulking capacity would expand enough to fill in the void before the surface was affected. However, control over the fire will decrease, the economics of going deeper are unfavorable, and the flexibility of such an operation to innovations like horizontal linking will be vastly reduced. And no

matter how deep, the probability of some subsidence is still unpredictable.

WATER CONTAMINATION

Another problem, potentially serious, is groundwater contamination. According to Bob Kirkham, formerly of the Colorado Geological Survey, there may be organic water pollution from the burn itself. In addition, the ashes from the burn may leach, said Kirkham.

In the first case, the organic compounds being released as gasses can become dissolved in the groundwater nearby, either those surrounding the burn area, or those in higher aquifer systems which may become connected through subsidence fracturing.

The second case is more serious. Ash contains all the noncombustible mineral residues of the coal — not just sulfur, but also uranium, selenium and other heavy elements. Powder River coals are not alone in having significant uranium content. The lignites of Montana were at one time mined for their uranium rather than their combustion value, and coals of the Great Divide Basin are presently under study for uranium ore.

Groundwater warmed by the surrounding hot rock will be even more efficient than normal water at leaching out heavy metals in the ashes.

DOE's Brandenburg contends that there will not be significant pollution outside of a few tens of feet from the burn site. As in the Hoe Creek case, where the coal seam is the aquifer, the unburned coal, he says, will clean up the water by acting as a low grade charcoal filter. Kirkham, however, argues that while organic pollutants would be

absorbed on the surfaces of the coal, the metals will slip by. And any sandstone aquifers which become hydraulically connected will have no such cleansing power.

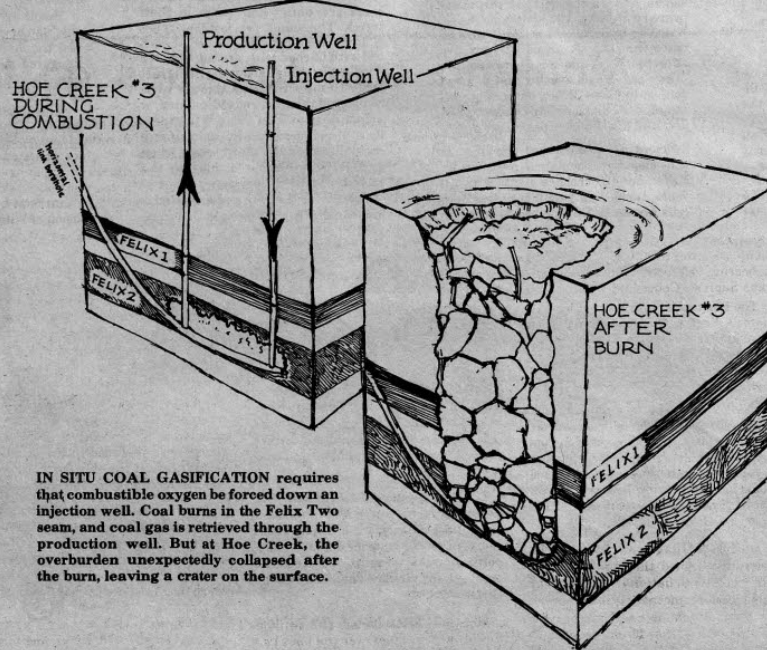
A final uncertainty is the effect of subsidence interconnecting aquifers at different levels that had previously not been connected. Scientists are unsure what the effect may be on aquifer storage capacity.

OIL SHALE FIRST

The burning underground of inaccessible and steeply dipping coal seams around the West is becoming more and more economically viable and industry experts are watching experiments like Hoe Creek with interest.

But Dennis Morrow of Wyoming DEQ's Sheridan office says this is partly because the costs of reclamation for subsidence and water quality problems are not considered in the accounting.

DOE's Brandenburg admits there were problems with the Hoe Creek site, and says they should have found a site that was deeper, stronger, and drier. But Hoe Creek was a small project; even site three burned at less than commercial rates for only eight weeks. The implication is that subsidence and groundwater contamination will force the bigger projects into much deeper, much stronger, and much drier rock. Commercial production is not imminent. "You'll see oil shale first," says Brandenburg. And in fact Bill Noll, project coordinator for the Hoe Creek experiment, is now working full time on oil shale development in western Colorado.



IN SITU COAL GASIFICATION requires that combustible oxygen be forced down an injection well. Coal burns in the Felix Two seam, and coal gas is retrieved through the production well. But at Hoe Creek, the overburden unexpectedly collapsed after the burn, leaving a crater on the surface.

Hot Line



IN SITU URANIUM. Wyoming Minerals Corp. was forced last month to shut down the first commercial in situ uranium mining operation in Wyoming, following indications that groundwater near the mine was being contaminated. The U.S. Nuclear Regulatory Commission, noting that the underground operation had released ammonia leaching solution into groundwater tables above the uranium deposits, announced that the operation would be shut down while further tests were conducted to determine the extent of the contamination. A spokesman for the NRC told the *Casper Star-Tribune* he was not sure whether the affected aquifers near Buffalo, Wyo., could be cleaned up. A spokesman for Wyoming Minerals, a subsidiary of the Westinghouse Corp., called the order "unwarranted."

PAYING FOR SINS. Federal Judge Frederick Winner promised a few weeks ago to come up with something special when he sentenced Eason Oil Co., a part of International Telephone and Telegraph, for fraud in obtaining oil and gas leases in Wyoming. He did. The Denver judge ordered ITT to donate \$25,000 to Denver's "Safehouse" for mistreated wives and children. Because Safehouse has been in financial trouble, Winner also told ITT to give the facility's operators bookkeeping aid. Eason was convicted of filing numerous bogus applications in order to better its chances of winning leases in an oil lease lottery. Winner felt the maximum fraud fine — \$10,000 — was not adequate punishment.

CAN REFUGE REFUSE? The Charles M. Russell National Wildlife Refuge in northeastern Montana shelters paddlefish, elk, bighorn sheep, coal, oil and bentonite, among other things. While most visitors go there to view wildlife, the U.S. Geological Survey recently went on a mineral hunt, and found a likelihood of small but commercial amounts of oil and gas, about 100 million short tons of coal beneath 250 feet of overburden, and bentonite deposits. Though most refuges are closed to mining, and though 161,000 acres of the Charles Russell are being considered for wilderness, the Secretary of Interior can, under certain circumstances, elect to allow mineral development.

CAPPING GEOTHERMAL. A geothermal energy project in Sevier County, Utah, has been plugged by the federal government. The feds, who had committed over \$400,000 to the project since its inception, decided it wasn't going to be competitive with coal-fired power, according to the *Deseret News*. The U.S. Department of Energy is withdrawing another \$500,000 it was expected to commit to the \$1.5 million project, which would have served as the utility for the town of Monroe. Town officials blamed interference from the Environmental Protection Agency and the Utah Water Quality Board for delaying the project and allowing prices to escalate.

COAL USE UP. The National Coal Association has revised production forecasts for 1980 upward, citing greater industry coal use and more exports than previously predicted. The NCA now thinks production will top 800 million tons, almost 25 million more than it predicted last December. The bulk of that coal (555 million tons) will go to utilities. Industry will use 77 million tons, and 69 million tons will be exported.

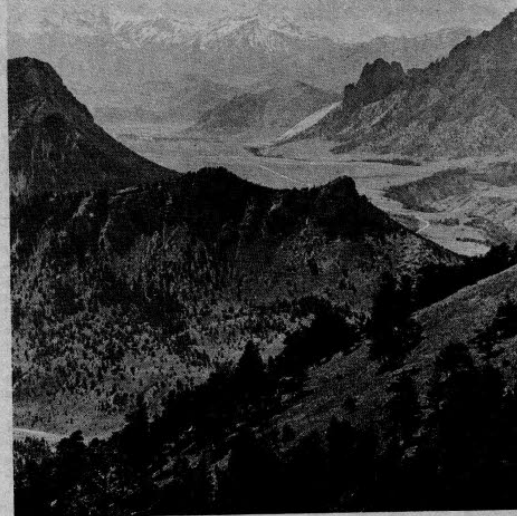


Photo by Lynne Bama

EXXON CORPORATION began drilling in the Sunlight Basin of Wyoming last month in a search for possible uranium deposits. The drilling of 19 test holes was under way two months ahead of schedule. Though officials at Shoshone National Forest say impact will be minute, residents and others who want to protect the area's natural qualities fear that if Exxon finds anything, fullscale mining operations would be next.

NEW APPROACH. Saying there were "great risks" to the approach, the Idaho Public Utilities Commission nevertheless announced last month it would move the state's utilities away from fossil fuels and towards renewable alternative energy sources. PUC President Conley Ward, Jr., told wire services that utilities will have to exhaust all the possibilities in conservation, solar, wind, cogeneration, and geothermal power before they will be allowed to burn fossil fuels.

COAL GOAL ROLLS. Interior Secretary Cecil D. Andrus, thinking about the appetite of the recently-approved Intermountain Power Project in Utah, decided recently that there wouldn't be enough coal coming out of the federal kitchen. So he upped an earlier goal for federal coal production in the Uinta-Southwestern Utah district, from a lease target of 109 million tons to a target of 322 million tons. Lease sales are expected to begin in the region in 1981.

Montana coal tax foes go to court

by Ken Western

HELENA, Mont. — High-powered attorneys for a group of midwestern utilities and energy corporations attacked Montana's 30 percent coal severance tax — the highest in the nation — as "exorbitant and excessive" in a hearing before the five-judge Montana Supreme Court last week.

The companies, represented by William P. Rogers, former U.S. Attorney General and Secretary of State, are appealing a 1979 ruling by State District Judge Peter G. Moley which upheld the controversial tax.

Neither side expects a quick resolution in the case — a decision either way is likely to be appealed to the U.S. Supreme Court. It is, however, the first court test of state severance taxes and could have serious implications for coal producing states — in terms of both tax dollars and states' rights.

During the day-long hearing the companies argued that the severance tax clashes with national energy policy and places an unconstitutional burden on interstate commerce. The companies further contend that Montana is ignoring its responsibilities to the nation to fairly share its coal — of which approx-

imately 75 percent belongs to the federal government.

Montana's team of attorneys, headed by State Attorney General Mike Greely maintained that the tax does not violate federal law and that, in any case, the state has the power to impose what it sees as a fair tax. Defenders of Montana's tax say it amounts to no more than a few cents a day on electricity consumers' bills. Most of Montana's coal goes to utilities in the Midwest and Texas.

The tax, which amounts to between \$1.50 and \$3 per ton depending on the energy content of the coal, was approved in 1975 by the Montana legislature. The tax requires coal companies to pay the state 30 percent of the contracted mine price, and applies whether the coal is shipped out of Montana or is used in the state.

The tax is intended in part to help communities in eastern Montana offset the impact of coal-related development, compensate the state for depletion of a non-renewable resource, and provide a nest egg for the day when the energy boom collapses.

Montana has collected \$87 million from coal companies over the past two years. Coal production is expected to reach 30 million tons this year, up from

one million tons a decade ago. Production could hit 50 million tons by 1985.

Half of the revenues collected by Montana are placed in a permanent trust fund with the remainder tabbed for such areas as local impact aid, an educational trust fund, alternative energy research and the state's general fund.

The utilities and energy companies also argue that the tax frustrates a national energy policy intended to encourage the use of coal over imported oil. The charge prompted Montana Gov. Thomas Judge to comment: "I've waited seven years to find out what the national energy policy is."

Perhaps the most significant issue is whether the tax impedes interstate commerce. The so-called "commerce clause" was included in the Constitution to prevent the erection of commercial barriers between the states.

Rogers, in prefiled documents, warned that Montana's determination to impose the severance tax and its will on the nation "would lead to a Balkanization of the commerce of our country which the Constitution was designed to prevent."

"While the states have wide latitude to control their own affairs and to set their own taxation policies, their powers are not without limit. The 30 per-

cent tax goes well beyond what should be permitted," he said.

Another argument of the companies has been that the federal Mineral Lands Leasing Act of 1920 prevents Montana from taxing mining activity on federal land. The state has repeatedly maintained that under the act states retain the authority to tax the output of mines subject to federal leases.

Gov. Thomas Judge has termed the suit "probably the most important legal action ever brought against the state." Final resolution of the case will have significant implications for other states with high severance taxes, such as North Dakota (20.5 percent) and Wyoming (16.9 percent).

Filing suit against the state are the energy companies Decker Coal Co., Peabody Coal Co., Westmoreland Resources, and Western Energy Co., a mining subsidiary of Montana Power Co. The 11 utilities joining the suit serve customers in such states as Illinois, Iowa, Minnesota, Wisconsin, Michigan, South Dakota, North Dakota and Texas.

Ken Western is a freelance writer from Bozeman, Mont.

12-High Country News — May 2, 1980

Whalen dismissal...

(continued from page 1)

to fill vacant posts, and to choosing women and minorities.

He appointed Robert Binniewies, then an officer of the National Audubon Society, as superintendent of Yosemite National Park. He appointed the first woman regional director, Lauretta Mintzmyer, to head the Southwest Region. And he filled the assistant director slot in Washington with its first black man, Ira Hutchison, who brought with him both strong urban and minority interests.

The appointments bristled the hairs of old guard park service personnel, accustomed to more bureaucratic nepotism than Whalen was granting. And a small core of park service staff quietly lobbied for Whalen's dismissal.

PROFESSIONAL RIVALRY

The second split in Whalen's constituency came in the conservation community. Some conservationists were displeased with his Yosemite National Park master plan, with his slowness in decision-making on the Grand Canyon Colorado River management plan, and with his perceived softness on concessionaire issues.

These criticisms were assembled into an explosive package by William Turnage, director of The Wilderness Society, a former friend and candidate for Whalen's job. Turnage led an emotionally charged campaign to oust Whalen, charging that the director was "over his head" and unable to effectively manage the agency.

Many other conservation groups, however, have generally supported Whalen.

Representatives from the Audubon Society, the National Wildlife Federation, the Izaak Walton League, and the National Parks and Conservation Association met recently with Assistant Secretary Bob Herbst to discuss the prospects for a new director.

"And the consensus that emerged was that, while we all had problems with some of Whalen's stands, we were more than pleased with his general policies on public involvement, open decisionmaking, and his recognition that the agency and the conservation community have kindred spirits," said Dentry Jarvis of the National Parks and Conservation Association.

A CAPITOL ENEMY

A third split came on Capitol Hill, where Whalen made a formidable enemy of Rep. Morris Udall (D-Ariz.), chairman of the House panel on parks. Their falling out came over Whalen's policies on national park concessionaires.

"The trend during the past several years in the park service has been to reduce the security of the small national park concessionaires," said Don Hummel, who runs the concession in Glacier National Park, Montana, and is the former head of the Conference of National Park Concessionaires, a lobbying group with a representative in Washington, D.C.

"The key issue as far as we're concerned is over what is known as possessory interests—a right the federal government has given us in lieu of not having title to any structures we may build in national parks, such as hotels," he said.

"Without these interests, we can't borrow money. And new contracts in-

itiated by Whalen have been slowly watering those interests down," he said.

Udall was involved after a heated meeting last October between Whalen and Hummel's group. Hummel sent Udall an excerpted transcript of that all day meeting, and Udall fired off a letter to Andrus demanding Whalen's dismissal.

In a statement issued by Udall after Whalen's dismissal, Udall said, "In a time when small businessmen need help and not hostility, I think Andrus acted very wisely in asking for Bill Whalen's resignation. I urged this move some months ago and I see it as a victory for the little guy."

Hummel, who says he has been in the concession business for 50 years, was the former mayor of Tucson, Arizona, and by his own admission a personal friend of Udall's. Hummel denies charges that their friendship, or Udall's close re-election campaign, has anything to do with the congressman's strong stand.

Other members of Congress close to national park issues, particularly Representatives Phillip Burton (D-Calif.) and Sidney Yates (D-Ill.) have remained largely silent on Whalen's dismissal.

WITHOUT WARNING

Whalen had been on leave for four weeks prior to his dismissal, settling marital and other family problems. On April 24, back on the job for four days, Whalen and Herbst met with Andrus.

According to an aide to Whalen, the director believed he was walking into a planning session for upcoming agency issues. Instead, Andrus promptly informed Whalen he was fired.

Andrus publicly cited Whalen's health and internal staff dissensions as the reasons for Whalen's dismissal.

Whalen, in a phone interview from his home earlier this week, declined to comment on the details of the firing. "I knew the job was politics coming into it, and I certainly know it is going out. The only reason given to me by the Secretary was that morale was low in the agency. I do not agree. And my health is fine," he said.

"The people who visit Yellowstone National Park for vacation do not realize the behind-the-scenes pressure involved in managing that and other national parks. Some of the decisions I had to make have affected some pretty heavy interests, including coal developers and the concessionaires. And sometimes you just have to say no," he said.

WHO'S NEXT?

Dickenson, termed a "popular choice" by one park service official, has spent 33 years in the agency, working, among

other posts, as a ranger and supervisor in Grand Canyon, Glacier, Grand Teton, Zion and Flaming Gorge national parks. He comes to the job as an uncontroversial insider.

"Dickenson would be a good choice," Jarvis of the parks association said before his selection was made, "and he has a good feel for the agency's budget."

"But whoever the new director is," he added, "he'll have to hit the ground running."

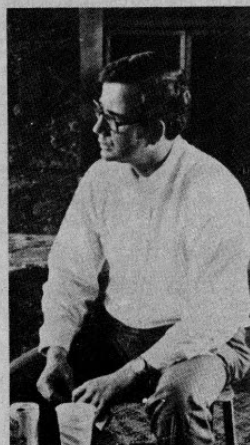


Photo by Phil White

William Whalen

A CROWDED AGENDA

Many key park service issues are pressing the agency's agenda. Heading the list are congressional budget hearings the first week in May—the park service has taken a big cut in budget resolutions just passed by congressional budget committees.

Other upcoming events include a final Yosemite master plan, management of the Alaska monuments and possibly d-2 lands if Congress acts this summer; the Jackson Hole airport and Yellowstone geothermal leasing issues; and a first-of-its-kind park service "state of the national parks" report, due out in May.

The future for Bill Whalen—forty years old, a father of four sons, and out of a job—is uncertain.

"For the first time in my life, I'm going to sit down and involve my whole family in this decision-making process. I'm looking both in the private and public sectors and will have to make some hard choices."

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Western Roundup

[May 2, 1980
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Rockwell seeks permit to burn PCBs at Rocky Flats

DENVER—Rockwell International, operator of the Rocky Flats Nuclear Weapons Center just east of here, has applied for a permit to incinerate some 10,000 gallons of the highly toxic chemical PCB.

Rockwell is proposing to burn the liquid chemical in a pilot-scale incinerator already used for disposing of other chlorinated carbon compounds and radioactive wastes.

The permit for disposing of the PCBs must be obtained from the U.S. Environmental Protection Agency's Denver office. The permit process requires a test burn with incinerator temperatures of a minimum of 1200 degrees C.

In an internal briefing memo, however, EPA staff in Denver noted that, "The Regional Administrator may waive the temperature requirement or

any other operational requirement if the incinerator performs adequately and there will be no unreasonable risk of injury to health or the environment."

Rockwell applied for the permit on March 7. According to EPA's Lou Johnson, head of the Denver office's toxic substances division, that application was deficient in several respects, and Rockwell was asked to submit additional information.

That data, including who will monitor the test burn and what their qualifications are, is still forthcoming.

If Rockwell receives the permit, it will become the third company in the U.S. to legally incinerate PCBs, presently the only legal means of disposing of the chemical. The other two disposal sites are in the East.

There are presently no commercial

PCB disposal operations, wherein wastes from another site are disposed in a commercial incinerator. Rockwell, except for a few hundred gallons of PCB it voluntarily accepted from a neighboring farm, would only be disposing its own wastes.

The manufacture of PCBs is no longer allowed under federal law due to the chemical's highly toxic nature. But millions of pounds of PCBs are being temporarily stored or are in use in electrical transformers across the country.

"It's a serious situation," said Johnson. "As we found out with the Pierce Packing plant incident in Montana, it doesn't take much of a spill or leak to cause a very big problem." (Pierce was recently fined \$40,000 by EPA for violating the agency's Toxic Substances Control Act.)

"Most power companies and coal mines have large amounts of PCBs they can't get rid of," Johnson added.

Some 15 percent of the PCBs at Rocky Flats are being stored in protective containers. The rest remain in 22 transformers on the plant site.

Rockwell is conducting both onsite and offsite daily water quality inspec-

tions to monitor for possible PCB leaks, company representatives say.

Only two applications for commercial disposal have been received by the agency—in Arkansas and Houston, Texas. And although the applicants met EPA's technical requirements, they ran into local zoning and political problems, says Johnson, and did not receive EPA permits.

Rockwell representatives have said that they have no plans for a commercial PCB disposal operation at Rocky Flats.

Court voids EIS compliance

Although federal agencies may have to do environmental impact statements on proposed projects, the National Environmental Policy Act does not require an agency to abide by the terms of that statement, a federal district court ruled recently.

The ruling came on a case involving the Metropolitan Atlanta Rapid Transit Authority, and noise levels allegedly exceeded by the project. The court held that neither the federal Department of Transportation nor the contractors constructing the transit system had to conform with the particulars of the impact statement.

"It's not an encouraging precedent," commented an environmental lawyer in Denver working on Forest Service policy issues. "It could affect the legal handles conservationists might use in forcing the Forest Service to comply with statements in the RARE II EIS regarding the purposes of leasing in forest planning areas."

Alaska mounts mega media blitz

The state of Alaska is about to launch a multi-million dollar nationwide advertising campaign to spread its view on the Alaska lands debate, according to the *Anchorage Daily News*.

The state legislature is being asked to put up as much as \$10 million from the general fund to fuel the campaign. The state's goal is to line up support for its position on the Alaska lands legislation before the bill comes to the Senate floor in late summer.

The campaign, to be limited to newspaper advertisements, will bill Alaska as America's solution to the energy crisis. It will be aimed at the home states of 30 key senators still undecided on the issue, according to the *Anchorage* paper.

"It is likely that as with the earlier ads," the Alaska Coalition, a conservation group, told its members recently, "this campaign will ignore the fact that under both the House-passed Udall-Anderson bill and the Tsongas-Roth Substitute (in the Senate), 95 percent of the Alaska's onshore lands with a 'high' or 'favorable' potential for oil and gas could be open to exploration and development."

Budget balancers miss dams

Federal water development projects trying to duck the budget balancing axe have fared well in resolutions reported out of the congressional budget committees.

Under the House panel's version, the water resources budgets of the Army Corps of Engineers, the Water and Power Resources Service, and the Soil Conservation Service were cut by only 2.5 percent (\$100 million) in their \$4.2 billion budget allotments.

The Senate panel made an eight percent cut. President Carter had proposed a five percent cut. All three compare to 50-100 percent cuts in the Land and Water Conservation Fund and other conservation programs.

Amendments were to be offered on the House and Senate floors early this month to amend what environmentalists are calling "gross inequities" in the budget balancing.

On the Senate side, Sen. William Cohen (R-Maine) is pushing an

amendment to up the water project cuts to \$500 million. And in the House, Rep. David Obey (D-Wis.) will be offering an amendment to put money back into the budgets of various environmental programs, including mass transit and the conservation fund.



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

THE GRACEFUL WHOOPING CRANES are migrating northward through the Rocky Mountain-Missouri Basin region in record numbers this year. Seventy-six whooping cranes are en route from the Texas Gulf Coast to Canada's Wood Buffalo National Park, a number the U.S. Fish and Wildlife Service says is the largest in at least half a century. Fifteen additional whoopers are taking the shorter route from New Mexico to Idaho. Including the 24 cranes in the Patuxent captive flock, the total known world population of the endangered bird is 119. Reestablishing the bird, which was critically close to extinction in 1941 with only 15 of its species left, has been touch and go. But the captive breeding program at Patuxent and habitat preservation along the flyway are credited for the recent population boosts.

Dakotans divided on Garrison

In one of the first professional public opinion surveys on the controversial Garrison Diversion project, residents of North Dakota responded almost evenly in favor of, and against, the project.

Some 32 percent of the 2,000 polled North Dakotans said they favored completion of the project without delay, while 36 percent said they favored a complete halt to the project or a halt in construction until all lands affected by the project are identified.

The poll was conducted by the *Jamestown Sun*, and the results were released in early April. The lowest support for the project (20 percent) came from persons living on farms.

"If project promoters were willing to release the full description of all land to be taken for the project, which they are still not willing to do, we believe the project support would be diminishing even faster," a group of North Dakota environmentalists wrote Rep. Tom Bevil (D-Ala.), chairman of the House panel on water project appropriations, which is currently considering funding levels for Garrison.

14-High Country News — May 2, 1980

PURPOSE OF PUBLIC NOTICE

THE PURPOSE OF THIS PUBLIC NOTICE IS TO STATE THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMIT UNDER THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972 (FWPCA), P.L. 92-500 AND THE WYOMING ENVIRONMENTAL QUALITY ACT 35-11-101 et. seq., WYOMING STATUTES 1957, CUMULATIVE SUPPLEMENT 1973.

IT IS THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS TO (1) ONE INDUSTRIAL FACILITY AND (2) TWO OIL TREATER FACILITIES; TO MODIFY (1) ONE INDUSTRIAL PERMIT, AND TO RENEW (6) COMMERCIAL PERMITS WITHIN THE STATE OF WYOMING.

APPLICANT INFORMATION

(1) APPLICANT NAME: NALCO CHEMICAL COMPANY
MAILING ADDRESS: ALLEN STREET, NATRONA COUNTY AIR TERMINAL CASPER, WYOMING 82601
PERMIT NUMBER: Wy-0028622
FACILITY LOCATION: EVANSVILLE, NATRONA COUNTY, WYOMING

The Nalco Chemical Company is planning to move its blending and storage facilities from the Casper Airport to Evansville, Wyoming. The plant will be used to mix and store chemicals and materials used in the oil drilling and oil production industry.

The plant will have 3 wastewater streams. One will consist of floor, plant, vessel and loading area wash water, in addition to a waste line from the plant's laboratory. This stream will be contaminated and will be treated in a clarification and oil removal tank prior to discharge to a lined evaporation pond. Periodically, water from the evaporation pond will be sprayed over the pond to enhance evaporation or will be sprayed over the plant's grassed areas. The second waste stream consists of sanitary waste and boiler blowdown water which will be discharged to the Town of Evansville's sewage collection system. The final waste stream consists of non-contact cooling water and natural runoff from the tank farm. This water should be relatively uncontaminated and will be discharged to the ditch along the Burlington Northern Railroad right-of-way. This water could eventually reach the North Platte River (Class II stream), and it is this discharge point which is addressed in the proposed permit.

The proposed permit for this facility contains effluent limitations which reflect the State of Wyoming's judgment of best available treatment for this type of industry. Monitoring of effluent quality and quantity is required whenever a discharge occurs and reporting of results is required quarterly. The permit is required quarterly. The permit is scheduled to expire on May 31, 1985.

(2) APPLICANT NAME: HUSKY OIL COMPANY
MAILING ADDRESS: P.O. BOX 380 CODY, WYOMING 82414
FACILITY LOCATION: BENEDUM NO. 1 GOVERNMENT, NE 1/4, SECTION 24, T50N, R105W, PARK COUNTY, WYOMING
PERMIT NUMBER: Wy-0028606
(3) APPLICATION NAME: OLDS OIL COMPANY
MAILING ADDRESS: P.O. BOX 4300 CASPER, WYOMING 82604
FACILITY LOCATION: LEVINSON-PAYNE NO. 1, SE 1/4, NW 1/4, NE 1/4, SECTION 15, T49N, R65W, CROOK COUNTY, WYOMING
PERMIT NUMBER: Wy-0028614

Facilities are typical oil treaters located in Park and Crook Counties, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skin ponds. The discharges are to a Class II water (South Fork of the Shoshone River) and a Class IV water (Teton Creek), respectively.

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

Semi-annual self-monitoring is required for all parameters with the exception of oil and grease, which must be monitored quarterly. The proposed expiration date for the Husky permit is December 31, 1983, and for the Olds permit is December 31, 1984.

(4) PERMIT NAME: THE CARTER MINING COMPANY
MAILING ADDRESS: P.O. BOX 3007 GILLETTE, WYOMING 82716
FACILITY LOCATION: CABALLO MINE, CAMPBELL COUNTY, WYOMING
PERMIT NUMBER: Wy-0025755

The Carter Mining Company is the operator of a large open-pit coal mine located in Campbell County, Wyoming. The existing permit for this facility regulates wastewater discharge from two points (the outfall from a runoff control and pit water settling pond — 001 and the effluent from a dewatering well — 002). The Company has now requested that the permit be modified to include a third and fourth point of discharge.

The proposed permit authorizes the new discharge points, which are (1) a drain out of a line which carries water from dewatering well No. 3 to the storage-out take pond for dewatering well No. 2 (point 003) and (2) the outfall from Horse Head Reservoir which will receive pit and surface runoff water (point 004). The proposed permit requires all discharge points to meet effluent limitations which are considered by the State of Wyoming to constitute best available treatment for the coal mining industry. However, the proposed permit also contains a "re-opener" clause which allows the permit to be modified if Federal effluent standards are developed which are more stringent.

In addition, the proposed permit contains provisions which require control of runoff from disturbed areas, monitoring of effluent quality on a regular basis and reporting of monitoring results quarterly. The proposed permit is scheduled to expire on May 31, 1985.

(5) PERMIT NAME: VILLAGE SEWER COMPANY
MAILING ADDRESS: P.O. BOX 506 TETON VILLAGE, WYOMING 83025
FACILITY LOCATION: SEWAGE FACILITIES SERVING TETON VILLAGE, TETON COUNTY, WYOMING
PERMIT NUMBER: Wy-0020087

The Village Sewer Company is the owner and operator of the wastewater treatment facilities serving Teton Village, Wyoming, which consist of an activated sludge package plant followed by a chlorinator and a polishing pond. For approximately the past year, there has been no discharge out of the polishing pond due to the pond's high rate of infiltration, however, if the pond did discharge, it would flow into the upper Fish Creek

State of Wyoming Public Notice

drainage via an unnamed ditch. All surface waters within the Fish Creek drainage have been designated as Class I waters.

Because the discharge addressed in this permit flows into a Class I water, as defined in Wyoming's in-stream water quality standards, it was necessary to limit the permittee to the same quantity of pollutants which were being discharged at the time the water was designated as Class I. This necessitated the determination of (1) effluent concentrations and (2) effluent volumes.

Since the Fish Creek drainage was designated a Class I water after July 1, 1977, it was determined that the National Secondary Treatment Standards for BOD-5, TSS and pH would be used for the concentration values. In addition, concentration values for total residual chlorine and fecal coliform bacteria were established based on in-stream water quality standards and immediate receiving water characteristics (intermittent channel with no fishing potential).

Effluent volumes were established based upon past data submitted on self-monitoring reports and "corrected" data based upon a report prepared by Culp, Wesner and Culp Engineering. All aspects of the basis for the limitations were discussed and ultimately agreed upon by the parties principally concerned with this permit (Snake River Ranch Associates and the Village Sewer Company).

Because of the large variations in population at the Village during the various seasons of the year, it was determined that seasonal effluent limitations were necessary. Flow volumes for the various seasons were determined to be as follows:

Monthly Avg (MGD)	"Ski Season" (Dec., Jan., Feb. and March)	
	Weekly Avg (MGD)	Instantaneous Max (MGD)
.14	.161	.228
"Summer Season" (June, July and Aug.)		
.145	.167	.2
"Off Season" (Sept., Oct., Nov., April and May)		
.067	.052	.08

Weight limitations (kg-day) for the parameters BOD-5, total residual chlorine and TSS, and number-day limitations for fecal coliform bacteria were calculated by multiplying concentration limits and the above referenced flow volumes.

In addition to the quantity effluent limitations discussed above, the proposed permit also contains concentration effluent limitations based on National Secondary Treatment Standards and Wyoming's in-stream water quality standards. The proposed permit requires regularly scheduled self-monitoring of effluent quality and quantity and the reporting of results on a monthly basis. The permit is scheduled to expire on May 31, 1985.

(6) PERMIT NAME: WILLIAM ALBERT VOISIC
MAILING ADDRESS: STAR ROUTE, NO. 2 ROCK SPRINGS, WYOMING 82901
FACILITY LOCATION: W-K TRAILER COURT SWEETWATER COUNTY, WYOMING
PERMIT NUMBER: Wy-0023809

The W-K Trailer Court is a residential mobile home park located west of the City of Rock Springs, Wyoming. The wastewater treatment facilities serving the court consist of a package treatment plant followed by a large polishing pond. The discharge from the pond is intermittent and flows to Bitter Creek (Class IV water) via an unnamed drainage.

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

(7) PERMIT NAME: D.L. SLAGLE
MAILING ADDRESS: OSAGE, WYOMING 82723
FACILITY LOCATION: OSAGE MOBILE HOME RANCH WESTON COUNTY, WYOMING
PERMIT NUMBER: Wy-0023850

The Osage Mobile Home Ranch is served by wastewater treatment facilities which consist of an aerated lagoon followed by a second, non-aerated lagoon. The treatment facilities have been in place since 1975, and to date, there has never been a discharge from the second cell to waters of the state.

The proposed permit allows a discharge from the second cell to Turner Creek (Class III water) via an unnamed drainage. The proposed permit requires immediate compliance with National Secondary Treatment Standards and Wyoming's in-stream water quality standards. Periodic self-monitoring of effluent quality and quantity is required with reporting of results quarterly. The permit is scheduled to expire June 30, 1985.

(8) PERMIT NAME: CODY ATHLETIC CLUB
MAILING ADDRESS: WEST CODY STRIP CODY, WYOMING 82414
FACILITY LOCATION: POOL, PARK COUNTY, WYOMING

PERMIT NUMBER: Wy-0022152

(9) PERMIT NAME: JAMES MECCA
MAILING ADDRESS: P.O. BOX 70 THERMOPOLIS, WYOMING 82443
FACILITY LOCATION: TEEPEE SWIMMING POOLS, HOT SPRINGS STATE PARK, HOT SPRINGS COUNTY, WYOMING

PERMIT NUMBER: Wy-0022586

(10) PERMIT NAME: SCOTT TAYLOR
MAILING ADDRESS: P.O. BOX 72 THERMOPOLIS, WYOMING 82443
FACILITY LOCATION: STAR PLUNGE SWIMMING POOL, HOT SPRINGS STATE PARK, HOT SPRINGS COUNTY, WYOMING

PERMIT NUMBER: Wy-0022331

All of these facilities are flow-through swimming pools which are fed by natural hot springs. The Teepee Pools and Star Plunge are located in Hot Springs State Park and discharge to the Big Horn River (Class II stream) via unnamed ditches. The Cody Athletic Club Pool is located west of Cody and was previously known as the Bronze Boot Pool. This pool discharges to the Shoshone River (Class II water).

Because the pools are not chlorinated, and due to the fact that the natural spring water flowing through the pools will receive only minor degradation in the pools, the proposed permits do not contain any effluent limitations or self-monitoring requirements. The permits are scheduled to expire on June 30, 1985.



Bulletin Board

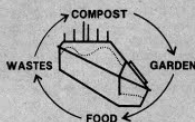


High Country News-15

[May 2, 1980]

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Looney Limericks

by Zane E. Cology

It would not be unfair to surmise
That to head up the NPS guys
One has to be healthy
— (It don't hurt to be wealthy)
But at least you don't have to be wise...

JACKSON LAKE DAM

The Water and Power Resources Service is proposing to modify the Jackson Lake Dam in Grand Teton National Park, Wyo. And while it's not yet clear what the agency's intentions are, there is some indication that local ranchers may want an expansion of the reservoir. The agency is now soliciting public input to determine the scope of the project. A public meeting in Jackson will be held May 13. Contact: Office of Environment, WPRS, Box 043-550 West Fort Street, Boise, Idaho 83724.

GRAZING CUT PROPOSED

The Department of Interior has released a Draft Environmental Impact Statement that proposes a 20 percent cut in livestock grazing in the Bannock-Oneside Resource Area in southeastern Idaho. Modest increases in grazing would be allowed later. Written comments on the statement will be accepted until May 5 at BLM's Burley District Office, Route 3, Box 1, Burley, Idaho 83318.

CLEAN AIR

The Sierra Club and Friends of the Earth have launched a campaign to protect the air quality of national parks and wilderness areas. The focus is on maintaining Class I status for parks under the Clean Air Act's Prevention of Significant Deterioration program. The groups are seeking persons who have visited Class I areas and can help with the grassroots campaign. Contact: Nancy Harney, Visibility Campaign, Sierra Club, 530 Bush St., San Francisco, Calif. 94108; (415) 981-8634.

SOLAR JUBILEE

"The Solar Jubilee," the 25th annual meeting of the American Section of the International Solar Energy Society, will be in Phoenix, Ariz., June 2-6. Technical papers, an exhibition and tours are slated. Registration is \$70 for members and \$100 for nonmembers. A \$10 discount is offered for those who register before May 1. For more information, write the Arizona Solar Energy Commission, Room 502, 1700 W. Washington, Phoenix, Ariz. 85007.

TETON MANAGEMENT

Noxious weed control, watershed management, and oil leasing are among the proposed activities in Wyoming's Bridger-Teton National Forest that are included in a new forest planning guide. The guide lists statement under NEPA. Entitled "Public Notice of Environmental Assessments, Plans and Special Studies Currently Under Preparation," it is available from the Forest Supervisor's Office, B-T National Forest, P.O. Box 1888, Jackson, Wyo. 83001.



Trackings

followups on previous stories

uranium

(see HCN 8-10-79 for previous story)

"You're going to see a lot more fall away in production; inflation and regulatory costs are squeezing everyone to death," a United Nuclear Corporation official told NuclearFuel last month.

UNC has decided to cut its uranium production by one-fifth this year and is moving its headquarters from Al-

buquerque to Gallup, N.M., to consolidate its operations. Some 350 workers will be laid off.

Company officials say the situation will soon turn around and production will be up to previous levels within six months. But uranium prices have been going down for the past four years, and industry confidence that demand for uranium is due to rise is speculation at best.

CLASSIFIEDS

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

HELP WANTED: Get away from it all. Live by yourself. Remote area — S. Wyoming. Tree cutting, log construction & upkeep. Starting date and duration open. Prefer mature individual with chainsaw experience. Salary, Board, Room, Benefits. Apply: Cloud Nine Ranch, c/o 1241 Palisades Ave., Rock Springs, Wyo.

I HAVE made the team, fighting back memories, pitching for the Minnesota Twins under an assumed name. What of pennants, though, with Cumquat gone? That night in the Taroko Gorge, Bok Chow on our lips, the drip of high rainwater down limestone cliffs, and Cumquat said: "On the other side of the globe, the mountain quail are saying, 'Took, took, took.'" I am collecting testimonials and memories of her. Send contributions to Blackie, c/o HCN, Box K, Lander, Wyo. 82820.

EXPLORER: I want an independent and adventuresome woman to join me in exploring several proposed BLM Wilderness Study Areas during August or September. Call Dick, 1-419-845-2742.

WILD HORIZONS EXPEDITIONS, Box 2348-H, Jackson, Wyo. 83001 (307) 733-5343. Guided backpacking, mountaineering, ski touring, field seminars in conservation. Emphasis on all aspects of conservation and wilderness education. Custom and family trips, small groups, free brochure.

"WIND RIVER TRAILS" by Finis Mitchell. Backpacking and fishing guide to the Wind River Mountains of Wyoming. Wilderness area of peaks, glaciers, forests, and lakes. \$3.50 postpaid. Wasatch Publishers, 4647 Idelwild Road, Salt Lake City, Utah 84117.

HAWAII VACATION: Kona Coast, Old Hawaiian rural resort, health resort, Bed-Brkt, \$88-134. wk., sl-db, 415-221-2121 1588 Fell St., Ca 94117.

INTERNSHIPS. Applications are now being considered for summer and fall internships at HCN. Applicants should have some experience in either journalism or the environmental-energy field. The position is unpaid, and provides experience in writing, production and research.

FOURTH FOOTRACE. The Fourth Annual High Country News 5-mile Citizens Footrace will begin June 14 at 6 p.m. in City Park in Lander. The route hasn't changed, but we've added more classes this year. Ribbons will be awarded to the first three men and the first three women finishers in each of following age categories: 18 and under, 19-29, 30-39, 40-49, 50 and over. There will also be an open walkers class. Entry fee is one dollar. Registration for the race will begin in the Park at 5:15 p.m. A potluck picnic will follow.

FIELD BIOLOGY: Several extended field trips provide practical experience with various field-study techniques and equipment; observation, sampling, handling, and identification of terrestrial organisms. Lectures and discussions provide a conceptual model for interpreting field observations; emphasis on morphological, physiological, and behavioral adaptations to arid environments. Designed for (but not limited to) teachers. June 16-July 5, 4 sem. hrs. credit; \$370 covers all; contact Stuart Croghan, c/o Malheur Field Station, Box 260 E, Princeton, Oregon. 97721 (503) 493-2629 by May 20.

JOB OPENING. Production manager, half or full time. Half-time position includes proofreading, designing and pasting-up pages and ads, choosing photos and illustrations, supervising paste-up crew and printing process. Full-time position includes above plus some typesetting and circulation. Candidates should be familiar with graphic design, able to work under deadlines and interested in life in a small Wyoming town. Salary \$260 or \$533 per month. Health insurance provided. Send resumes to High Country News, Box K, Lander WY 82520.

POSITION: The Powder River Basin Resource Council, an agricultural-conservation group working on energy development issues in eastern Wyoming, seeks a staff coordinator and field organizer. Self-motivated, dedicated, and enthusiastic individuals desired. Send resume immediately to PRBRC, 48 N. Main, Sheridan, WY 82801; (307) 672-5809.

PUBLIC NOTICE ON AVAILABILITY OF RESUME OF ENVIRONMENTAL ASSESSMENTS, PLANS AND SPECIAL STUDIES CURRENTLY UNDER PREPARATION BY THE U.S. FOREST SERVICE BRIDGER-TETON NATIONAL FOREST

To assist public participation and awareness of the Bridger-Teton National Forest program of work, the Forest has prepared a listing of Environmental Assessments, special studies, and other plans under production for 1980. Because of costs this list is not printed here, but a copy is available upon request from the Forest headquarters in Jackson, P.O. Box 1888, Jackson, Wyoming 83001, or the District Offices in Jackson, Kemmerer, Big Piney, Afton, Moran, and Pinedale, Wyoming.

Public Notice... (continued from page 14)

STATE-EPA TENTATIVE DETERMINATIONS

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

PUBLIC COMMENTS

Public comments are invited any time prior to June 2, 1980. Comments may be directed to the Wyoming Department of Environmental Quality, Water Quality Division, Permits Section, Hathaway Building, Cheyenne, Wyoming 82002, or the U.S. Environmental Protection Agency, Region VIII, Enforcement Division, Permits Administration and Compliance Branch, 1860 Lincoln Street, Denver, Colorado 80295. All comments received prior to June 2, 1980 will be considered in the formulation of final determinations to be imposed on the permits.

ADDITIONAL INFORMATION

Additional information may be obtained upon request by calling the State of Wyoming, (307) 777-7781, or EPA, (303) 327-3874, or by writing to the aforementioned address. The complete applications, draft permits and related documents are available for review and reproduction at the aforementioned addresses.

Public Notice No.: Wy-80-004

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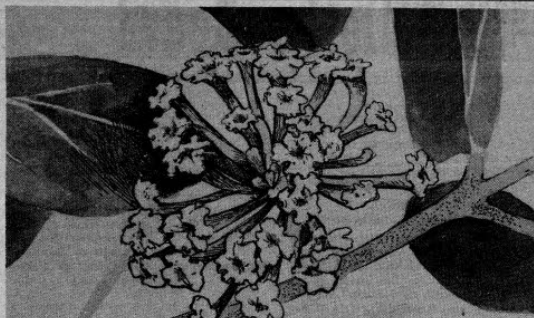


by Hannah Hinchman

Our mountain range veils itself with clouds like a magician. When they lift, the blinding snow glare is gone, the mountains look thawed, sodden, dark. I empathize with the lower slopes in the season of relief and growth that comes with rain. Tender plants appear everywhere now, before the summer sun can fry them.

Spring was taking hold in Utah some weeks ago. Our friend Don Snow wrote to us about what he found:

"We scrambled over the canyon rim and immediately found two ruins, one with a pit house shaped like a primitive kiva, at the heel of a well-stuccoed grain cyst. Small red handprints stylized the cliff, and two angular red lines zig-zagged nearby. The Anasazi took great care to seal the grain cysts against moisture and rodents, but left



the dwellings loose-stacked and holey. Clearly, they did not spend their days inside.

"We bottomed out at a sandy confluence of canyons and a cheerful new rush of water. Those ancient jointed plants, whose name I can't recall, formed a thicket among bent cottonwoods and alders. Sexy little catkins on the willows caught our eye. Looking closer, we saw the brilliant reds and yellows of awakening, rejoice. We stopped to drink new water at a pool rimmed with shining catkins.

"A few bends later we came across the

second major ruins. This one, like most, is not on the map: It became visible only because we stopped at an inviting rock the size of a department store to shop for crackers in our packs. I scanned the base of cliffs behind us and finally saw the suspicious vertical edge of stone. Binoculars proved it. We abandoned packs and scrambled up talus and bedrock, to find an extensive system of dwellings, cysts, and kivas — two of them, one still buried, forever I hope, in sand. Previous hikers with European fastidiousness had stacked dozens of pot shards on the rocks. Many pieces were

quite large, all of them decorated in black-on-gray designs or corrugated to perform as cookware. The design we saw on a slab of sandstone looked like a



bird's footprint carefully grooved into the rock. Jan found a second one printed into the cliff behind a dwelling, same design but smaller. We agreed, European style, on a name for the place: Birdfoot Ruin.

"On a rock face above a ledge I discovered more images: Two bighorn rams dash heads. A serpent slithers south. Two humans face me, their heads adorned with rams' horns. They are five-fingered like everyone else in our genus, but they assume the powers of another creature. Living on these narrow ledges, they had to. Beside them, the spirals one sees all over the South-



west: On pottery, on desert varnish, on hand-held tools, on natural stone features. Spirals. The eye of the storm. The course of a life and many lives. The curl of an old ram's horns."

Beyond Geography

Against the Wilderness

The Western Spirit

Frederick Turner

by Frederick Turner, Viking Press, New York, 1980. \$16.95, cloth, 329 pages.

Review by Peter Wild

Writing of the Crusaders assailing Jerusalem in 1099, the Archbishop of Tyre described the victors at last "dripping with blood from head to foot" as they stood dazed among the "heaps of severed heads." As to booty, the Europeans "agreed that whatever each man might win for himself should be his by right of possession." The words might have come from the mouths of our own pioneers.

To Frederick Turner the parallel is clear. What the militant Christians perpetrated on the infidels, they repeated several hundred years later on the two continents of the New World. The author points to a restless Columbus, whose name means Christ-bearer, sailing off across the Atlantic, to the toppling of the towers of Tenochtitlán, the enslaving of natives, the forests recklessly cut down, and, lastly, to North and South America stripped of wealth and polluted as a result of the invaders' havoc.

Why did Europeans become the destroyers of the New World? To answer

the question, Turner draws heavily on Freud, Jung, and to a lesser degree on such various thinkers as D.H. Lawrence, Max Weber, and E.R. Dodds. He pins the answer to religion. Because mythic peoples view themselves as at one with nature, they have little urge to destroy it. In contrast, Christianity, in achieving great institutional power, left its adherents with a gnawing spiritual void, a "savage hunger" that turned itself outward on the natural world.

The observation has been made before. What distinguishes *Beyond Geography* is the wide sweep of evidence it brings to bear — from Paleolithic cave art to the modern dance of Martha Graham, from Old Testament fears of wildness to the wars waged by whites against natives on America's high plains — in making it. The book offers a fascinating panoply to support its explanation for our present environmental cul-de-sac.

Yet for all that, the arguments are not wholly convincing. For one thing, Turner is too eager to believe his own thesis. He must go further than he has to persuade this reader that the primitive cultures were in reality as parasitical as depicted in poetry and song.

Then, too, in places the author is too



ready to shape history to his book's ends. Cabeza de Vaca, for example, found himself marooned on the Gulf Coast. In one of those near-miraculous escapades of early Spanish exploration, he and his companions walked hundreds of miles overland to safety in Mexico. They survived largely because of strange curative powers they developed, which eased their passage through hostile tribes. Yet whether the desperate band of Europeans had hit upon an effective brand of hocus-pocus or "had discovered the vast untapped spiritual reservoir" of primitive peoples is a question that remains open to speculation. Turner assumes the latter.

Other historians have settled upon economics, technology, politics, population pressures — or a combination of these — to explain the world's largest recorded migration. As if they were outer reefs surrounding the mainland of his own theory Turner glides quickly

around them. One is left wondering, for instance, why the mythic peoples so enthusiastically embraced the glitter of technology, why they willingly gave up bows and pemmican for muskets and overprocessed hamburgers. Turner devotes only a few pages to this essential problem.

His book ends with the Ghost Dance. The phenomenon at the end of the 1880s marked the last frantic gasp of native cultures deprived of mythic traditions. In counterpoint, we see "the heroic killer," the "romantic mortician," Buffalo Bill. As he rounds the corner into old age and constant debt, the frontiersman-turned-showman contemplates the destruction of the wilderness he loved. He drifts off into madness and alcoholism.

However, Turner has cut off his study too soon. What about Thoreau, John Muir, Robert Marshall, Rachel Carson? — all also products of an admittedly shortsighted and consumptive society. Were they mere voices in the wilderness of human errors? Given Turner's thesis of psychic deprivation, we need to ponder whether or not our culture can rejuvenate from within. Whatever has led our world to its present fearsome state, that is after all the real issue for us.

