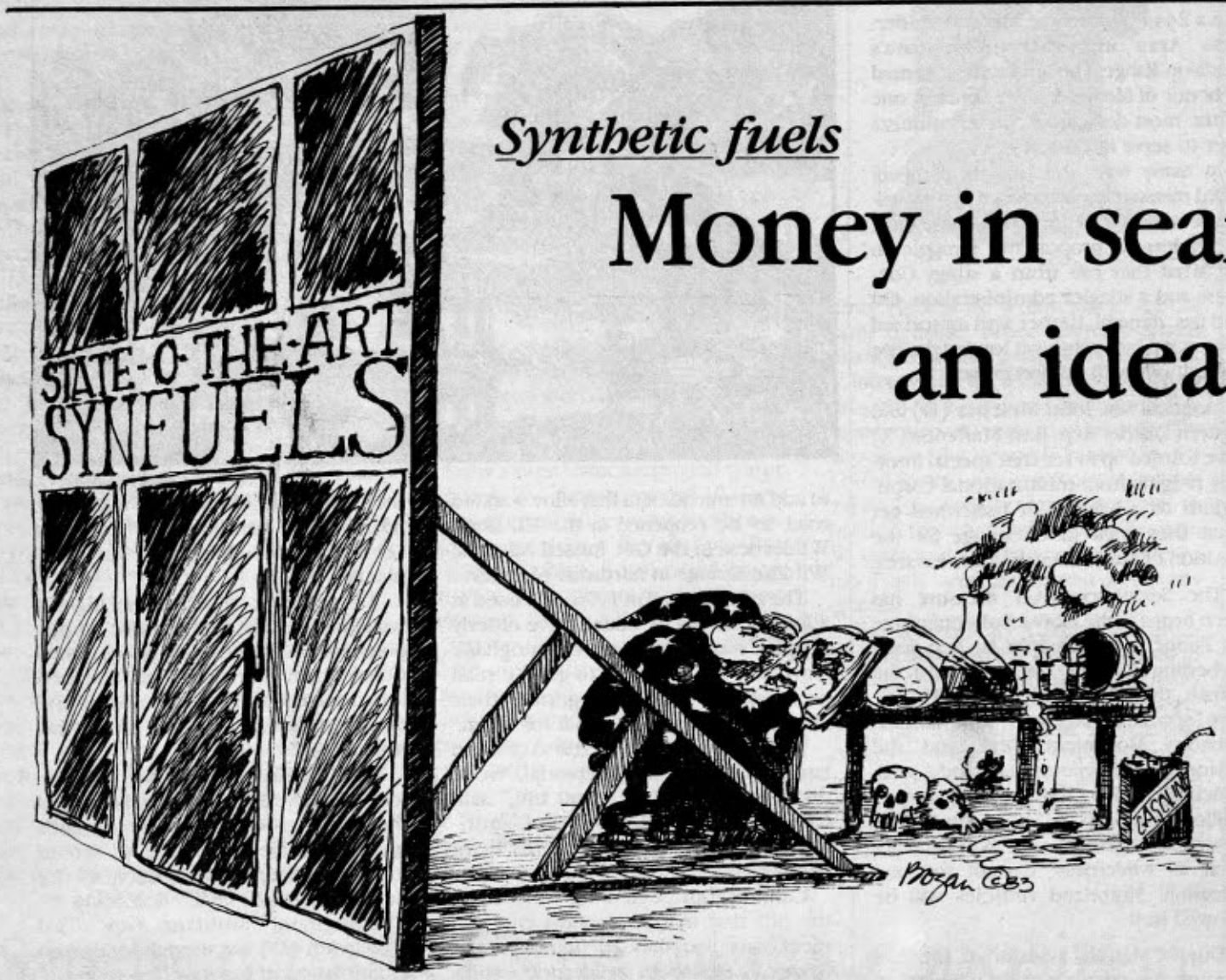
High Country news

Friday, June 10, 1983 Vol. 15 No. 11 The environmental watchdog of the Rockies $1.00



Synthetic fuels

Money in search of an idea

by Dan Gorham

Needing a keynote speaker for a western Colorado oil shale conference, organizer Judy Moffat contacted John Lichtblau, director of the Petroleum Institute Research Foundation. Lichtblau declined.

Curious, Moffat asked why. Was it the money? A conflict of schedule? "Who wants to talk about synfuels? Nobody's even considering them unless things change drastically," Lichtblau replied.

While that may be common knowledge within the industry, nobody has bothered to tell the U.S. Synthetic Fuels Corporation. Created in a crisis and living in a shell, the SFC continues to try to pump a questionable synfuels industry into existence.

Responding to what former President Carter termed "the moral equivalent of war," Congress created the SFC in 1980 as a quasi-governmental agency designed to initiate a domestic energy program capable of relieving the U.S. of its shaky reliance on imported oil. It was a decision made in haste, motivated by skyrocketing oil prices and uncertainty about the future of Persian Gulf supplies. Equipped with an immediate appropriation of $20 billion, the SFC was considered a public insurance policy to assure that private industry began producing synthetic gas and oil from the nation's oil shale, coal and tar sand resources.

Proponents of the SFC boasted that federal funding, in the form of loan guarantees, purchase commitments and price guarantees, would give the private sector the needed incentive to get the synfuels industry rolling. "I would bet this will end up not costing the government a cent because the price of energy by the time these projects come on stream will be higher than the cost of the plants," said a petroleum soothsayer in 1980.

Optimism was in the air. Synfuels were going to be the energy future. America was responding to a crisis in time-honored fashion. Good old Yankee ingenuity would be employed. Lines at the gasoline pumps would be history.

Now, only three years later, declining world oil prices and abundant energy supplies have taken the wind out of the synfuel's sails. Embargo threats from the OPEC cartel are but a historical footnote as industry officials are left to justify the costs of pioneering unproven technologies in an effort to produce a product which will likely be noncompetitive through the remainder of the century.

Six major synfuel projects have suspended operations in the past 18 months. These include Exxon's oil shale venture in Parachute, Colorado, which was terminated last May after the final price was pegged at $5 billion to $6 billion, or twice the original estimate. Sohio withdrew from the Hampshire coal-to-gasoline project near Gillette, Wyoming, in October, 1982, citing "world economic conditions." Ashland canceled plans for a coal liquefaction plant in Addison, Kentucky, last November after determining that it would be at least a $3 billion venture.

In each case the companies had invested millions of their own capital on design and engineering only to conclude that the projects were technologically immature and economically prohibitive. In retrospect, the fervor to create a synfuels program caught industry off guard and underprepared.

"The Energy Security Act of 1980 gave the SFC a mandate to produce two million barrels a day by 1992. They just assumed we had this technology in the wings ready to take off," said Earl Hurst of Chevron Shale Oil. "We need a lot more research done and it needs to go way beyond the laboratory bench."

The most crippling news for synfuels came last month. The Great Plains coal gasification plant in western North Dakota was considered by many to be the jewel of the industry. In January, 1982, the Great Plains Associates told the Department of Energy that they expected to reap $1.2 billion in net income within 10 years of operations. However, on April 1, Great Plains announced a best-case scenario indicating a 10-year loss of $773 million, and if oil prices remain flat the deficit could soar to $1.7 billion.

"Great Plains is the best there is... It's on time and under budget. Their cost per BTU of output is a great deal lower than the competing synfuel technology. If it's not making it, the industry's in trouble," concluded David Maselli of Antaeus Resource Consulting.

The financial problems of Great Plains began with the assumption that oil prices could only rise and therefore consumers would be switching to natural gas fuels as a cheaper substitute. Backers of the project calculated that they would be able to charge $9.50 to $10 per thousand cubic feet (Mcf) of gas. However, if Great Plains went into operation today, it would find a market bringing only $5 to $6.50 per Mcf.

The Department of Energy, which has invested more than $640 million in the Great Plains project, is awaiting a rescue proposal from company officials. The plant is now 50 percent complete and scheduled to go into operation in December, 1984. The options for salvaging the project vary, but if Great Plains is to continue, additional federal aid will be a necessity.

Undaunted by the industry's poor track record, the SFC recently announced plans to commit $13 billion in synfuel subsidies within the next 16 months. The corporation intends to spend $7 billion to stimulate coal projects, $4.8 billion on oil shale and $1.5 billion on tar sands and heavy oils.

Adhering to its founding principle, the SFC continues to justify additional energy subsidies on the basis of national security. "If we can get a synfuels plant up and operating, we will be telling the exporting nations of the world that we have an alternative," stated Misy Malloy of SFC.

A third oil crisis will always be a possibility, but critics of the synfuel program are quick to point out that the entire structure of oil imports has been altered since the late '70s. "Dependence and vulnerability are two different things. Due to conservation, our dependence has dropped to the lowest point since 1975 and, thanks to planning, our vulnerability has dropped to zero," said resource consultant David Maselli. "We saw two wars in the Middle East last year. We took double the import loss of the Khomeini crisis... Fortress America is in outrageously good shape."

Conservation and planning have curtailed U.S. energy needs. Imports have been reduced 51 percent since 1980 and overall consumption has decreased 19 percent. Oil dependence on the OPEC nations has decreased by over 30 percent since 1977, with "friendly nations" as key suppliers now including Canada, Mexico and Great Britain.

While the changing economics of energy have forced industry officials to postpone their synfuel plans, the SFC has continued its search for projects to pump with federal aid. In an effort to attract promoters the SFC has established an "outreach" program to alert

(continued on page 10)

WESTERN ROUNDUP

High Country News

Published biweekly by the High Country Foundation, 331 Main, Lander, Wyoming 82520. Telephone (307) 332-6970. Printed by the *Jackson Hole News*, Jackson, Wyoming. Second class postage paid at Lander (USPS No. 087480).

Articles appearing in *High Country News* are indexed in *Environmental Periodicals Bibliography*, Environmental Studies Institute, 2074 Alameda Padre Serra, Santa Barbara, California 93103.

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Advertising information is available upon request. To have a sample copy sent to a friend, send us his or her address. Write to Box K, Lander, Wyoming 82520. ISSN: 0191-5657.

Subscriptions are $18 per year for individuals, $25 per year for institutions. Single copies $1.00 plus $1.25 postage and handling.

Melcher bill awaits House markup

Montana wilderness proponents are awaiting a U.S. House of Representatives subcommittee markup of a bill to establish a 244,000-acre Lee Metcalf Wilderness Area in western Montana's Madison Range. The area will be named in honor of Montana's late senator, one of the most dedicated conservationists ever to serve in Congress.

In many ways the heavily compromised measure is a barometer of how wilderness proposals are faring these days, as wilderness proponents struggle to get what they can from a stingy Congress and a stingier administration. Oil and gas, mineral, timber and motorized recreation interests have loaded the Lee Metcalf bill with compromises.

Montana Sen. John Melcher (D) and Eastern District Rep. Ron Marlenee (R) have teamed up to see that special interests ranging from multinational corporations to a handful of fishermen get what they want in exchange for the creation of a major new wilderness area.

The Senate-approved measure has been heard in the House Subcommittee on Public Lands, chaired by Rep. John Sieberling (D-Ohio). As amended in the Senate, the bill provides for a 35,000-acre "special management unit" nestled between Monument Peak and the Taylor-Hilgard wilderness study area, which are both included in the quarter-million acre proposed wilderness. The special management unit will be managed as wilderness, except for one intrusion: Motorized vehicles will be allowed in it.

Donna Metcalf, widow of the late senator, has requested in a telegram to Rep. Sieberling that her husband's name be removed from the special management unit. According to Bill Cunningham of the Montana Wilderness Association, she believes that such an "automatic compromise" of wilderness goals will set a precendent that would have been unacceptable to her husband.

But other compromises written into the bill also trouble wilderness proponents. Marlenee and Melcher teamed up to add an amendment that allows an old road to be reopened in the UL Bend Wilderness in the C.M. Russell National Wildlife Refuge in northeast Montana.

Madison Range

The road, closed in 1976, was used as a fishing access by "four or five elderly people," according to Cunningham. Now they are clamoring to get the road back in use and have gotten their elected officials to go to bat for them.

"While we're pleased to be so close to having a Lee Metcalf memorial, we're disappointed in the current bill," said Cunningham. "It's full of anti-wilderness garbage, like the UL Bend exemption."

Cunningham cited other features of the bill that irritate Montana environmentalists. Boundary deletions from the Absaroka-Beartooth wilderness study area, and the non-wilderness release of RARE II lands in the Tongue River Breaks and the Mt. Henry wilderness study area in northwest Montana also bother wilderness proponents.

Cunningham said his organization and other wilderness groups are lobbying to improve the Lee Metcalf proposal. They are trying to achieve wilderness status for the Deep Creek area at the eastern edge of the Bob Marshall Wilderness Area, and Cowboy Heaven in the Madisons. They also want the 35,000-acre "gasoline alley" into the Lee Metcalf closed to non-winter vehicular use.

"Deep Creek received the highest wilderness rating in the nation among potential wilderness inclusions," said Cunningham. "Unfortunately, it's been leased for oil and gas exploration, and development could begin as early as this summer."

The 6,500-acre Cowboy Heaven located between the Spanish Peaks and the Beartrap Canyon areas — both included in the Lee Metcalf — "would make an exceptional addition to the new wilderness area," according to Cunningham. Montana Gov. Ted Schwinden (D) has strongly supported the inclusion of Cowboy Heaven in the Lee Metcalf Wilderness. Beartrap Canyon would be the first BLM wilderness in Montana, if the bill passes.

Subcommittee action on the bill is expected very soon. Cunningham is hopeful that Montana Rep. Pat Williams (D) will work out an acceptable compromise that will give wilderness proponents the same kind of plums that opponents have gotten into the bill.

— Don Snow

Dear friends,

We are pleased to announce the winners of our *HCN* New Subscriber Sweepstakes. The grand prize Zapotec rug goes to Nancy Russell of Eckert, Colorado. Congratulations, Nancy — you are the envy of everyone here at the office, all of whom wanted the rug but were prohibited from entering.

The drawing was done by the most unbiased and fair individual we could find, three-and-a-half year old Kate Hamilton, daughter of former managing editor Joan Nice and Sierra Club representative Bruce Hamilton.

Mike McClure

Kate Hamilton

Other winners and prizes that Kate picked were: Story Clark Resor of Wilson, Wyoming — original Sylvia Long stork painting; Charles Clifton, Colorado Springs, Colorado — Dale Schicketanz Schnebly Hills photo; Gisele Robinson, Devil's Tower, Wyoming — Mike McClure haystacks photo; Pat Musick, Colorado Springs, Colorado — Dale Schicketanz Mt.Baldy Wilderness photo; and Keith Seaburg, Miles City, Montana — Mike McClure Grand Teton photo.

The contest was a middling success, generating about 80 new *HCN* subscribers. Three of every four lottery entrants signed up a new subscriber, once again proving the dedication of our readers. We'd like to thank winners and losers alike for their efforts in our behalf. A special thanks, too, to the generous individuals who donated the prizes.

■

This issue's story presenting more than you'll ever need to know about synthetic fuels was written by our intern Dan Gorham. Originally from Northford, Connecticut, Dan graduated this June from Evergreen State College in Olympia, Washington. In fact, his *HCN* internship was the last course he had to pass before graduating.

Gorham got interested in *HCN* while doing seasonal work for the U.S. Forest Service in Jackson, Wyoming, over a five-year period. When he went to school in Washington, he used *HCN* to keep in touch. Although he has no immediate plans for his post-*HCN* time, he did say, "I'd like to pursue newspaper work." But while he waits for the job offers from the *Washington Post*, he plans to stay in Wyoming for at least the summer.

Of his internship, Dan said, "It was good. There was a proper mix of menial tasks and interesting reporting work." Dan became something of the *HCN* coal leasing expert while he was here and he said, "Just when you're burned out on coal, you get to go into the production room and hold a ruler for two days."

Dan has been a fine addition to the *HCN* staff during his time, as we're sure you'll agree after reading his synfuels story. Our intern for the summer will be Jan Valdez, a graduate student at the University of Wisconsin.

■

In case any of you are still guessing, the cover story in the last issue of *HCN*, "Going from good to better," was written by managing editor Dan Whipple. If you've been withholding your praise 'cause you weren't sure to whom you should send your letters, now you know. Sorry about that, Dan. Love, KB.

■

We had a rush of Colorado Bureau donations during the last couple of weeks — 12, to be precise, bringing in a total of $332.50. And a couple of Montana folks sent in donations totaling $40. Every little bit helps . . .

— the staff

Arsenal clean up still looks messy

The U.S. Army recently released its draft plan for clean up of the highly contaminated Rocky Mountain Arsenal to the Environmental Protection Agency and the Colorado Department of Health. The Health Department said it could not accept the plan as is and both agencies believe other alternatives should be considered.

The 27-square mile aresenal, which borders Stapleton International Airport in Denver, began manufacturing pesticides and nerve gas in 1942. Shell Chemical Company, which contracted with the Army in the 1950s to produce pesticides, closed its plant on the arsenal last summer. The only thing still operating is one Army incinerator.

Long before hazardous waste disposal guidelines came into being, Mary Cervera, engineer with the Waste Management Division of the Health Department, said the Army would toss all of its wastewater into five "natural low spots" on the arsenal. No liners were used then and some of the waste would evaporate, while a great deal leached into the ground.

Now the Army is left with an enormous mess to clean up and it is supposed to release its comprehensive clean up plan by September. The Army is already operating some filter systems that treat ground water in some of the most contaminated areas. However, that is a costly operation and one that Cervera believes must be perpetual if the source of the contamination is not eliminated.

The state's biggest complaint about the Army's draft plan is that it does not deal with a permanent solution to the contamination. For example, Cervera said the Army's plan to handle the largest wastewater pit — Basin F, a 100-acre chemical waste lake — is to let it evaporate as much as possible, then excavate the pit and place the waste in another landfill to be located elsewhere on the arsenal. Cervera said that does not get rid of the problem, but places it somewhere else on the property. She said the Army needs to at least consider locating another site for redisposal elsewhere in Colorado.

Both Cervera and the EPA question the Army's time frame for ground water cleansing. The Army suggested 10 years for one site and 30 years for another as sufficient to cleanse the aquifers. But the agencies think it will take longer, even after the source of contamination is removed. And in a Public Broadcasting Service program in Denver, Sandy Graham, energy/science writer for the *Rocky Mountain News*, said the Army has indicated there are some parts of the arsenal where the contamination is so intense that it could never be cleaned up.

EPA's Air and Waste Management Director Robert Duprey said that the Army's plan seems to favor containment rather than removal of the contaminants. He said he would like to see the Army consider other alternatives and provide more documentation and data.

Intertwined with the arsenal clean up program is a proposal to expand Stapleton Airport onto the arsenal. The airport — the seventh busiest in the United States — is in desperate need of expansion. An alternative proposal to build an entirely new airport at Bennett, 30 miles east of Denver, is considered too costly and inconvenient by city officials.

The Denver City Council has given preliminary approval to the proposal to expand onto the arsenal. But the Army has yet to say if it will even consider giving up the land. Both Cervera and Duprey explained that the area the airport would occupy is the least contaminated part of the arsenal and public health threats would probably be minor.

— Carol Jones

San Juan timber sale meets opposition

A U.S. Forest Service proposed timber sale about 25 miles northeast of Durango, Colorado, in the San Juan National Forest has met fierce opposition from the small resort community of Vallecito. The proposed sale would involve acreage just to the east of Vallecito Reservoir, a popular recreation area, and acreage south of the Weminuche Wilderness area and northwest of Piedra wilderness study area.

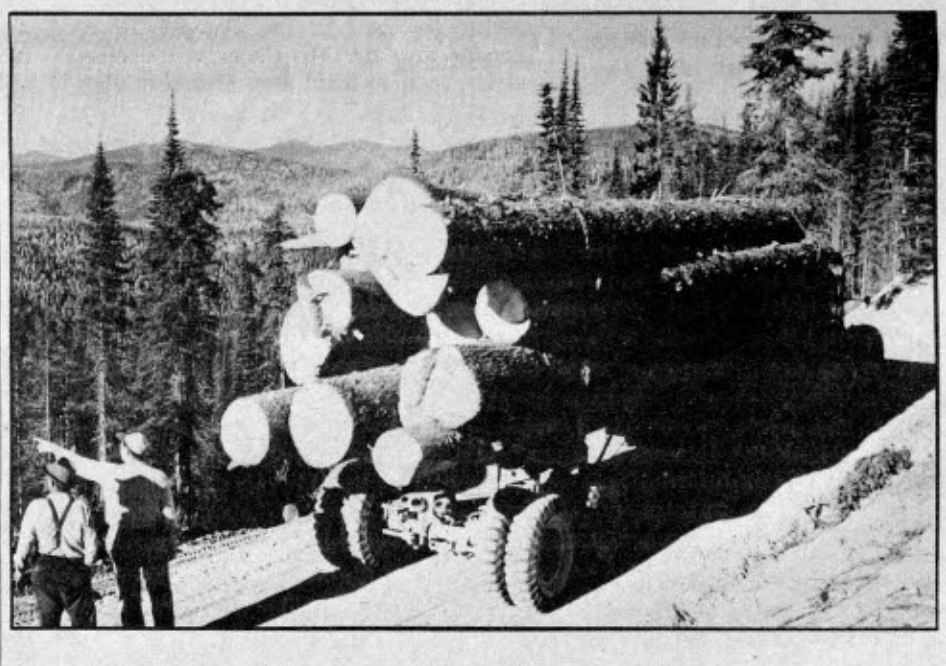
Landowners and Vallecito business interests are afraid the development of roads, heavy logging traffic, heavy stream sediment loading and eyesores from harvested areas would substantially damage the tourist industry, which is the community's economic backbone. The area is popular for boating, hiking, horseback riding, hunting and fishing.

Paul Sweetland, San Juan forest supervisor, said that the Forest Service recently completed a tentative environmental assessment on the transportation network for the area and is now working on a final EA that will reflect the concern voiced at a public meeting held June 2. That meeting, which occurred two weeks after the formal public comment period had ended, resulted from the local community's strong opposition.

Mark Pearson, West Slope field organizer for the Colorado Open Space Council, said about 220 people attended the meeting. "It was about 215 to five against the sale," Pearson said. "People came from all over to attend the meeting. Many were out-of-state landowners."

The Colorado Division of Wildlife also opposes the sale. The area is an important migration route for deer and elk.

Forty square miles of land are in the proposed sale area, said Bob Lillie, program officer for the forest. He said that over a 30- to 50-year harvest period, about 40 or 50 miles of logging roads would be constructed. Although some 10-acre maximum clear cuts of aspen groves might be included in the harvest plan, no massive clear cuts would occur. However, some of the clear cuts could be located above the reservoir, he said.



The sale, which is expected to produce 37 million board feet in the next 10 years, will cost over $7 million in road construction and other expenses over the next 35 years, while it is supposed to produce only $6.8 million in benefits.

Despite the slump in the timber industry, Lillie said the San Juan Forest has never had a "no bid" sale. Already two companies have shown interest in the proposal.

Sweetland pointed out that the environmental assessment deals with the road network that would be put into the area for timbering, range and recreation reasons. He said, however, that the complaints of local residents are really about land allocation. "It's a classic conflict between resources," Sweetland said. "Land allocation should be dealt with in the forest plan, not an environmental assessment." The forest plan is between the draft and final stages.

Sweetland said that the forest plan emphasizes range and timber resource management for this area. He said he heard little opposition to that emphasis during the comment period for the forest plan. COSC's Pearson said despite the strong opposition to the sale, he expects the Forest Service to go ahead with its plans. Gene Roberts, owner of the Wilderness Trails Ranch and member of the Vallecito Chamber of Commerce, said business and homeowner groups are prepared to fight the proposed sale through the courts.

Sweetland is supposed to make a final decision within the next six weeks.

— Carol Jones

BARBS

Gifford Pinchot never had problems like this. Ecologist Bob Ziegler of the Washington Game Department recently denied a request to construct a bulkhead on the shore of Lake Washington. Unfortunately, the applicant was state Sen. George Clark, and Ziegler has since been reassigned as the department's librarian, even though the department doesn't have a library.

HOTLINE

Naturally gassing up

First it was gasohol, next it may be natural gas. Public Service Company of Colorado and six other suppliers of natural gas are hoping natural gas will be the next alternative fuel source for automobiles. The companies are starting a research and development firm in Detroit to study the possibility. A PSC spokesman told the *Denver Post* that natural gas currently costs 60 cents a gallon, compared with the going rate of $1.15 a gallon for gasoline. And although emissions problems would be reduced with natural gas, pressure build-up with the substance could result in an explosive problem.

Another way to clean Denver air

In the ongoing search for a plan that will clean up Denver's brown cloud and satisfy the Environmental Protection Agency, a new proposal has been suggested: asking Denver area residents to leave their cars at home for up to eight days in the winter. The Colorado Air Pollution Control Division suggested assigning each resident eight no-drive days during the carbon monoxide-laden days of winter. Motorists would resort to public transportation or car pooling on no-drive days. The state's plan to clean up Denver's air was rejected by the EPA earlier this year and the state faces sanctions if its air doesn't meet federal standards by 1987. The Denver Regional Council of Governments will consider the Pollution Control suggestion.

Supreme Court upholds windfall tax

The Supreme Court has unanimously upheld the constitutionality of the windfall profit tax on oil producers. The decision reverses a Wyoming judge's decision that the tax was unconstitutional because it exempted certain Alaskan oil. The federal government fought to have the tax reinstated, declaring it is crucial to the U.S. Treasury. The court found that exemption of Alaskan oil was justified by "the disproportionate costs and difficulties . . . associated with extracting oil from this region."

We've heard of red tape, but . . .

An agreement dating back to Utah's statehood in 1896 has moved one step closer to resolution. The controversy involves the transfer of 100,262 acres which the federal government has owed Utah as compensation for school trust lands, homesteads and mining rights obtained by the federal government. Five public hearings have been scheduled to discuss the land transfer between the BLM and the state Board of Lands. The BLM said the majority of comments thus far have been favorable.

Senate Republicans block moratorium

The proposed moratorium on the Interior Department's coal leasing plan passed easily in the House appropriations subcommittee but failed in the Senate. Chairman of the Senate Energy Committee, James McClure (R-Idaho) sided with Interior Secretary James Watt and endorsed the agency's plan for accelerated coal leasing. The moratorium proposal stems from a General Accounting Office report which charged that the Interior lost $100 million on the Powder River coal sale last April. Senate Republican Malcolm Wallop of Wyoming said, "It is unfair to charge that Interior lost $100 million in revenues to the Treasury because they did not use the GAO valuation method."

HOTLINE

Riley Ridge means air, wildlife and boomtown problems

A draft environmental impact statement on the Riley Ridge gas field of western Wyoming has concluded the project will create boomtown conditions in the towns of Big Piney, Marbleton and LaBarge and severely impact the area's wildlife habitat. The project calls for 238 wells and four gas sweetening plants to be located on the nearly 160,000-acre gas field. Residents of the predominantly rural area are concerned over the projected influx of 3,200 workers and the potential impacts on the region's air quality.The report has also concluded that as much as 17 percent of the elk habitat will be lost due to development.

Global 2000 challenged

The Global 2000 Report to the president, which three years ago outlined a gloom and doom scenario of environmental conditions, has been called "dead wrong" by a panel reviewing its conclusions. "Global 2000 Revised," partly financed by the conservative Heritage Foundation, has concluded, "If present trends continue, the world in 2000 will be less crowded, less polluted, more stable ecologically and less vulnerable to resource supply disruption than the world we live in now." However, critics claim the new report is based more on politics than science.

EPA investigation continues

Former EPA official Rita Lavelle, already indicted for contempt of Congress, is now under investigation by the Justice Department for allegedly manipulating federal cleanup funds to the benefit of Republican candidates. The department is also conducting a criminal probe to determine if Miss Lavelle and other former EPA officials committed perjury while working at the agency.

Report ties acid rain and jobs

A study prepared for the Peabody Coal Company claims that if acid rain legislation passes into law, it will result in the loss of 172,000 jobs and $5 billion in annual wages in southern and midwestern states. Bills now in the House and Senate would require annual sulfur dioxide emissions to be reduced. The study claims that 96 percent of the coal mining and mining-related job losses would occur in the Midwest and Appalachia. No unemployment would result in New England, where acid rain is most evident.

Let burn policy

The Flathead National Forest of Montana has announced fire management plans for the Bob Marshall and Great Bear wildernesses. The proposed plan will allow fire to play a more natural role in the wilderness complex. Naturally occurring fires will be allowed to burn unless they threaten human life or property within the wilderness and life, resources and property outside the wilderness border.

Conflicts of interest investigated

The General Accounting Office is conducting an investigation into possible conflict of interest situations among 286 BLM employees. The list ranges from director Robert Burford to staffers in the regional offices, with allegations stemming from their ownership of land and stock holdings. The GAO report is expected to be released in late June.

Wyoming DEQ questions World project

Because of concerns about underground water, the Wyoming Department of Environmental Quality has told World Energy Inc. that more research will probably be necessary before the state could license a commercial underground coal gasification at a site near Evanston, Wyoming.

World Energy and its partner, Extractive Fuels, Inc., are among 14 finalists now negotiating with the U.S. Synthetic Fuels Corporation for price and loan guarantees after convincing the SFC that their projects are mature and strong. World Energy is seeking about $40 million for its Byrne Creek project.

The project involves injecting oxygen into an underground coal seam and burning it in place to produce synthetic gas. A small 25 megawatt power plant would be built on the surface.

Underground or in situ coal gasification has several advantages over coal-fired power plants or gasification plants: Surface impacts are minimal; fewer workers are involved, so there is less social impact; and coal can be used that would not be minable using conventional technology.

However, Gary Beach of the DEQ said there is no evidence that groundwater contaminated by such a process can be restored, as required by state law. Of the seven tests in the state, all but one caused groundwater contamination, in one case raising pollution levels thousands of times above drinking water standards more than 400 feet away from the test.

While the testing started 10 years ago, none of the contaminated sites has been restored. In fact, despite state law, neither the Department of Energy, which conducted most of the tests, nor the private industries involved, have even started to clean up or stop the spread of the contamination, according to Beach.

Mike Boyd, a geologist with World Energy, does not expect water contamination at the Byrne Creek site. He and the other scientists who formed World Energy formerly worked for DOE on its test program, and they believe poor locations were chosen for the tests.

The one test where there has not been groundwater contamination is Gulf Research and Development's site near Rawlins. DEQ now considers that an ideal site because the coal seam was not a water-bearing formation, there was not much water in the area and surrounding rock was relatively impermeable. World Energy hopes for similar conditions at Byrne Creek. Boyd said the firm also hopes that the coal seam is only 20 feet thick and 800 feet below the surface, thus minimizing the potential for surface subsidence.

If exploratory drilling reveals that the Byrne Creek site is not ideal, World Energy would move the project, according to Boyd.

DEQ officials believe a small research and development test is necessary at the Byrne Creek site. In a letter to the company, DEQ Administrator Nancy Freudenthal said that without test gasification at the site, it was "highly unlikely" that World could prove it could restore groundwater, which is required by state regulations before a commercial license can be issued.

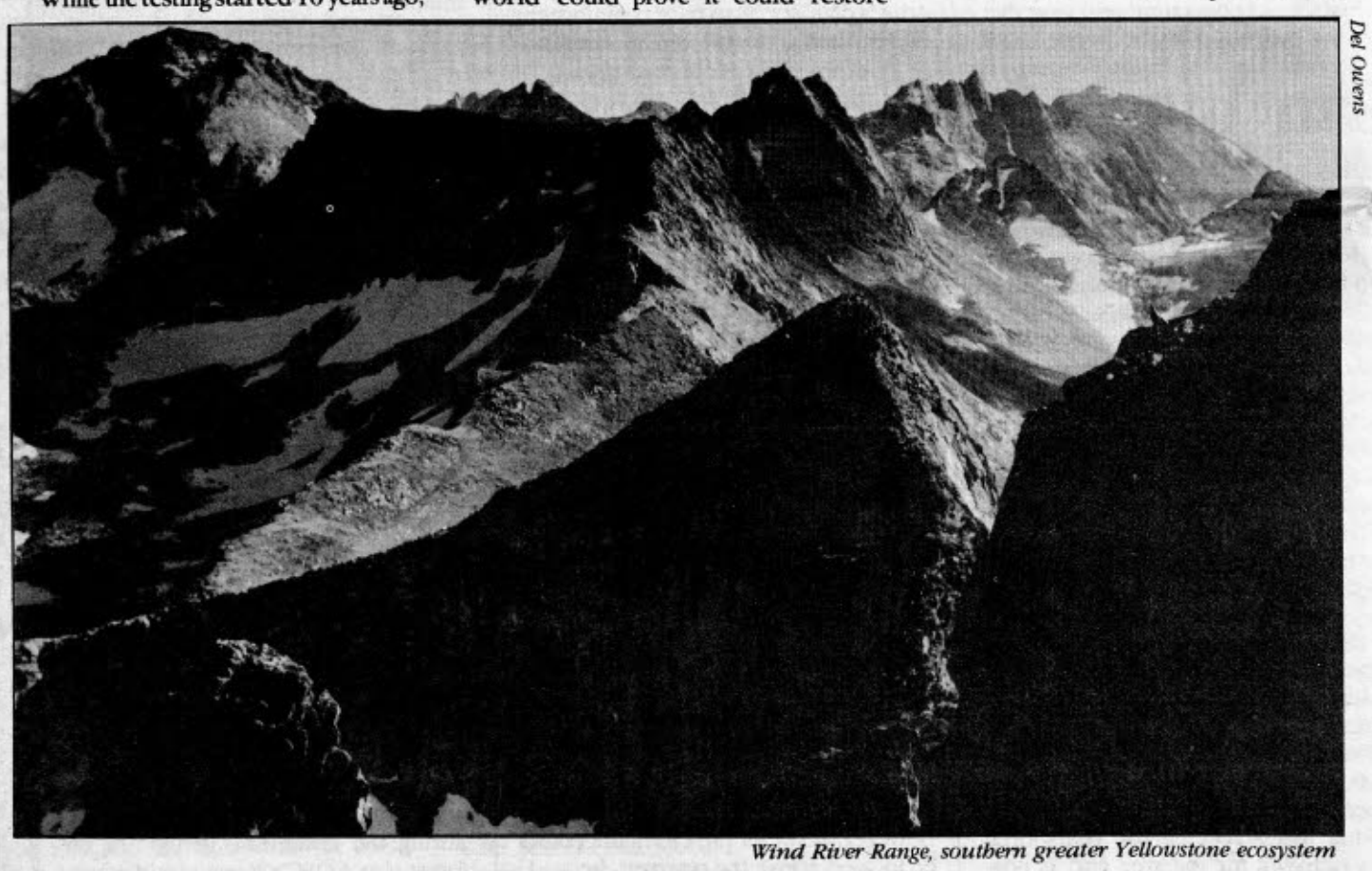
"It is premature to license a commercial size project anywhere in the state," Paula Schmittdiel of DEQ said flatly. A hydrologist with the Land Quality Division, she explained that a research and development license would provide for a smaller project. "Then if we create a blunder we have to live with for a long time, it will not be such a major, major problem," she said.

DEQ expects blunders. Schmittdiel said that water quality restoration is more difficult with this technology than with any other, including injection uranium mining. Underground coal gasification creates unique pollutants, which are organic. Organic contaminants are extremely expensive to identify and, because the science is so new, chemists don't know how to clean up many of them. Some are probably harmless, according to Beach. Some are toxic; and others, such as the phenols, are known to cause cancer.

"It's like dioxin. Many years ago, it was not considered a problem. We're on the frontier of dealing with many organics; we don't know what effects they would have if they were consumed by the public," Beach said.

World Energy officials said they had always intended to conduct a research and development test and such a requirement from DEQ would not change their timetable.

— Marjane Ambler



Del Owens

Wind River Range, southern greater Yellowstone ecosystem

Greater Yellowstone Coalition formed

About 50 environmentalists from Wyoming, Montana and Idaho met in Jackson Hole over Memorial Day weekend as the founding convention for a new organization, the Greater Yellowstone Coalition.

The new group will be primarily "an organization of organizations" that will help to bring national attention and regional clout to environmental battles now being fought by the many state and local groups active in the area. The Greater Yellowstone Coalition will probably also have its own program, largely an educational one, that will "promote the concept of the Greater Yellowstone Ecosystem and actively seek its preservation."

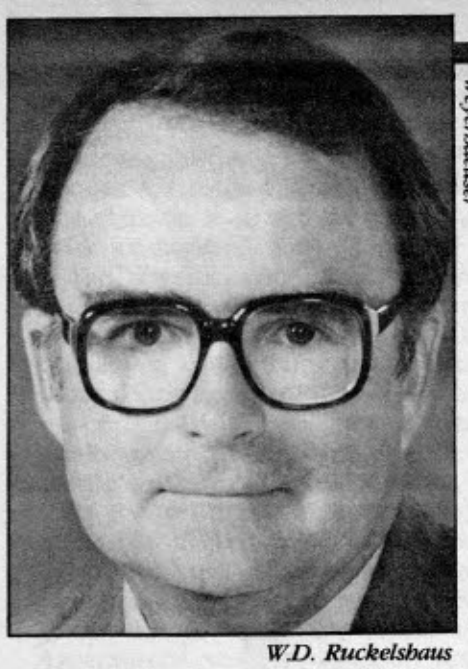
The founding convention deliberately left vague the geographical boundaries of the ecosystem, but an "illustrative map" put together by the session's organizers showed an area with Yellowstone and Grand Teton national parks at its core, surrounded by national forest and private lands extending north to Bozeman and Livingston in Montana, west into Idaho along the Henry's Fork of the Snake River, southward into the Wyoming Range, and east in Wyoming to Cody on the north and Lander on the south.This huge area includes two national parks and two national wildlife refuges, portions of three states, 13 counties, a score of towns and five national forests under three different regional offices.

The point, according to Rick Reese of the Yellowstone Institute, one of the convention organizers, is that "politically and administratively, this area is highly fragmented, but as a biological and ecological unit, it hangs together. In the past, this area has not been managed as an ecological unit, but according to its administrative allocations."

The Greater Yellowstone Coalition hopes to change that. According to Reese, the idea for the group originated over a year ago with Ralph Maughan, a Sierra Club activist in Idaho, who suggested some sort of a Yellowstone alliance that would use the park as a central focus to help gain attention for a number of threats in the region. Montana activists with the Madison-Gallatin Alliance took that idea and ran with it, setting up an all-day forum on Yellowstone in Bozeman last fall. "It was an interesting meeting," said Reese. "We learned a lot and met each other, but we weren't mobilized. After that, we got to thinking how to bring something out of this" and the idea of the coalition was born.

That idea and the enthusiasm generated at the founding convention are now in the hands of a 13-member steering committee that will meet in Bozeman on June 25.

— Jill Bamburg



Weyerhaeuser

W.D. Ruckelshaus

EPA has new approach, new boss

Putting its best foot forward, the Environmental Protection Agency has implemented policy changes which will accelerate emergency clean-up efforts and end the bureaucratic delays that have become associated with the controversial Superfund, the federal fund used to pay for cleaning up hazardous waste sites.

The new policy will transfer more decision-making authority to the EPA's 10 regional offices, enabling them to spend up to $250,000 on emergency toxic waste cleanup without prior approval from Washington. The previous limit was $50,000. In addition, the regulations now eliminate the requirement that states pay 10 percent of the cost for study and design of cleanup at abandoned hazardous waste sites. States will still be charged 10 percent of the actual cleanup costs.

"The people in the regional office are closer to the problems, and therefore more qualified to make the decisions. We are very happy with the changes," said Judy Herb of the EPA in Denver. "We had some cases in the past where states just didn't have the money, and we couldn't act."

The announcement of the new regulations coincided with the confirmation by the U.S. Senate of William Ruckelshaus as the new administrator of the EPA. In an overall effort to improve the EPA's image and restore public confidence, Ruckelshaus has stated that he intends to toughen the agency's stand against industries which cause environmental damage.

The policy changes are based on the recommendations of an internal study at the EPA, which concluded that the Superfund money for emergency clean-up has been "drastically underutilized." Controversy which surrounded the EPA lately stems from delays in cleaning up hazardous waste sites, which critics claim have risked human health for budgetary concerns.

According to the new criteria, the potential for fire, explosions or other direct release of contamination would immediately qualify one-half of the 419 priority waste sites for emergency cleanup funds. Since 1980, when Congress created the Superfund, only 78 of the 419 sites have received cleanup money.

The EPA also issued new guidelines for potentially harmful chemicals and increased the amount of information the government will require before they can be produced or sold in the U.S.

Although the new regulations will give the EPA more legal clout in dealing with offenders, the new rules are still somewhat less stringent than those proposed by the Carter administration in 1979. The EPA internal report also does not address whether cleanup decisions were influenced by politics, nor whether polluting industries obtained favorable agreements with the EPA, as charged by some critics. Those charges led to the ouster of former EPA chief Anne Burford.

— Dan Gorham

Waste plant operator fouls at Lowry

On May 25 the Environmental Protection Agency levied a $193,650 civil fine against Chemical Waste Management, Inc., operator of Lowry Landfill, the Denver area's controversial hazardous waste facility. The fine was the largest ever levied in the Rocky Mountain region under the Resource Conservation and Recovery Act of 1976.

In addition, Chemical Waste, which has operated the landfill since 1980, was fined $48,650 in January because it did not report a leak in a liner at one of the facility's evaporation ponds. The landfill was closed last summer through a Colorado Supreme Court order that required the company to obtain an operating permit from Arapahoe County where the landfill is located. The company was unsuccessful.

Robert Duprey, director of the EPA's air and waste management division in Denver, said the large fine was levied because Chemical Waste violated a consent order issued a year ago. Last summer, EPA and the Colorado Department of Health closed the hazardous waste burial pit on the facility because it had been flooded. At that time, Chemical Waste agreed to pump any excess water out of the pit and into storage tanks. But when the EPA visited the facility in May, it found that the pumping system had been disconnected and the wastewater was flowing over the ground.

Shortly before the fine was levied, the company had reported to both EPA and the Health Department that it was having to pump about 65 times the usual amount of water out of the pit due to heavy runoff from the unusually wet spring. Duprey said that even though the company has not said why the pumping system was disconnected, he thought it was because Chemical Waste would have had to empty the storage container several times a day in order to contain the wastewater.

Duprey said the company was "given 24 hours to correct the problem and that has been done." He said he believes the company will continue to comply with the order to pump the water, but that it may contest the fine. Chemical Waste has 30 days to contest the complaint.

Chemical Waste is also supposed to submit its final plan to EPA to shut down the facility by mid-June. The company will have to address the problem of finding a permanent solution to the water overflow problem at the pit.

— Carol Jones

Hanford dump site gets glowing report

With the search underway in six states for a site for the nation's first high-level nuclear waste repository, the Hanford Nuclear Reservation near Richland, Washington, appears to have caught the favor of Department of Energy officials.

Not only does the 570-square-mile reservation lie on top of the thick Columbia River Basalt layer, but nearby residents aren't protesting DOE's plans.

Last December, Congress set up a schedule for completion of the nation's first burial site for civilian nuclear waste by 1998. The bill requires the president to pick three sites for detailed studies by Jan. 1, 1985. Even before the measure was adopted the Reagan administration stepped into action. As a result, two possible sites have already been selected: one in Nevada, the other at Hanford.

But in Nevada 500 people turned out at hearings in March to protest selection of their state, while no opposition has been voiced to Hanford. Most observers feel that the residents of the Richland-Kennewick-Pasco area have lived with the nuclear reservation so long they fully accept it. Much of the nation's high-level defense nuclear waste has been stored at Hanford since the 1940s.

DOE has proposed construction of a repository 4,000 feet below the surface of the earth in dense basalt rock. Tests are being prepared to determine if the basalt can remain stable for 10,000 years under the intense heat and pressure of the waste. Some 70,000 tons of spent nuclear fuel from commercial nuclear reactors is expected to be stored in the first waste dump when it opens in 1997.

Utilities around the country are already storing some 8,000 tons of waste in pools at reactor sites. DOE officials also say there is no technical reason why high-level nuclear waste from federal weapons programs could not also be deposited in the same site.

— John Soisson

Roll on, Columbia, roll on

The defeat of California's Peripheral Canal could trigger renewed attempts by California and the Colorado River states to take water from the Columbia River to the Southwest, according to a Portland water consultant.

Roy Vernstrom, who recently completed a study of water problems in the West, said that Southern California will probably be short of water after 1985. Without the Peripheral Canal, which would have diverted water from Sacramento to the Southwest, and with mounting water shortages in Arizona and the entire western United States, Vernstrom predicted that politicians will begin to call for a study of Columbia River potential.

Eight western states battle each year over the distribution of the 16 million acre-feet of water that flow through the Colorado River Basin annually. But the Columbia moves more than 10 times that amount.

Getting some of that water has been a dream of dry-state politicians for years, but studies of transbasin diversions from the Columbia have been barred since 1968. The federal government hasn't approved any new Western water projects, let alone one of the magnitude that would be required to move the Columbia, since President Jimmy Carter's water project cutbacks in 1976.

But Vernstrom argued that the absence of a unified national water policy to guide appropriations of surface and ground water will allow political pressures on the Columbia to mount.

"There is a threat," he said. "We have to prepare for it."

— John Soisson

HOTLINE

EPA head leaves early

Steve Durham, regional administrator of the Environmental Protection Agency, resigned from his office at the end of May instead of waiting until June 25 as originally planned. Durham, who was appointed regional administrator in 1981 by former EPA administrator Anne Burford, announced April 25 that he would resign (*HCN*, 4/29/83). Durham was under fire from environmentalists, who were angered by his disapproval of Denver's clean air plan and his association with the troubled Burford reign. Durham said he was leaving his post early to take a job with a private firm in Denver. He will continue as a consultant to the EPA to "ensure a smooth transition" for his successor.

WPPSS there goes another one

The Washington Public Power Supply System ordered a construction halt at its nuclear plant 3 Friday, May 27, because of continuing legal and financial problems which have made it impossible for WPPSS to sell additional bonds for the project. That leaves WPPSS with only one nuclear plant still under construction of five that were started in the 1970s. Plant 3 at Satsop, Washington, is about 75 percent complete and WPPSS has invested about $1.6 billion in the project. Four private utilities own 30 percent of the plant; the other 70 percent is backed by the Bonneville Power Administration. The private utilities oppose mothballing plant 3, but because of the financial and legal problems caused by the termination of plants 4 and 5 WPPSS is blocked from the national bond market. Plants 4 and 5 were terminated in January, 1982. Plant 1 was mothballed shortly after that and plant 2, still under construction at the Hanford Nuclear Reservation in southeast Washington, is 97 percent complete.

Environmental regs not a decisive factor

The National Science Foundation has released a report which concluded that while environmental regulation is considered in industrial siting decisions, labor availability, markets and access to materials are far more important in the location selection. "Environmental regulations have had no systematic effects on either the size of the search or on the number of sites seriously considered," the report stated. The report attributed the growth of industry in the Sunbelt states as being tied to cost advantages and labor availability, rather than just relaxed environmental standards.

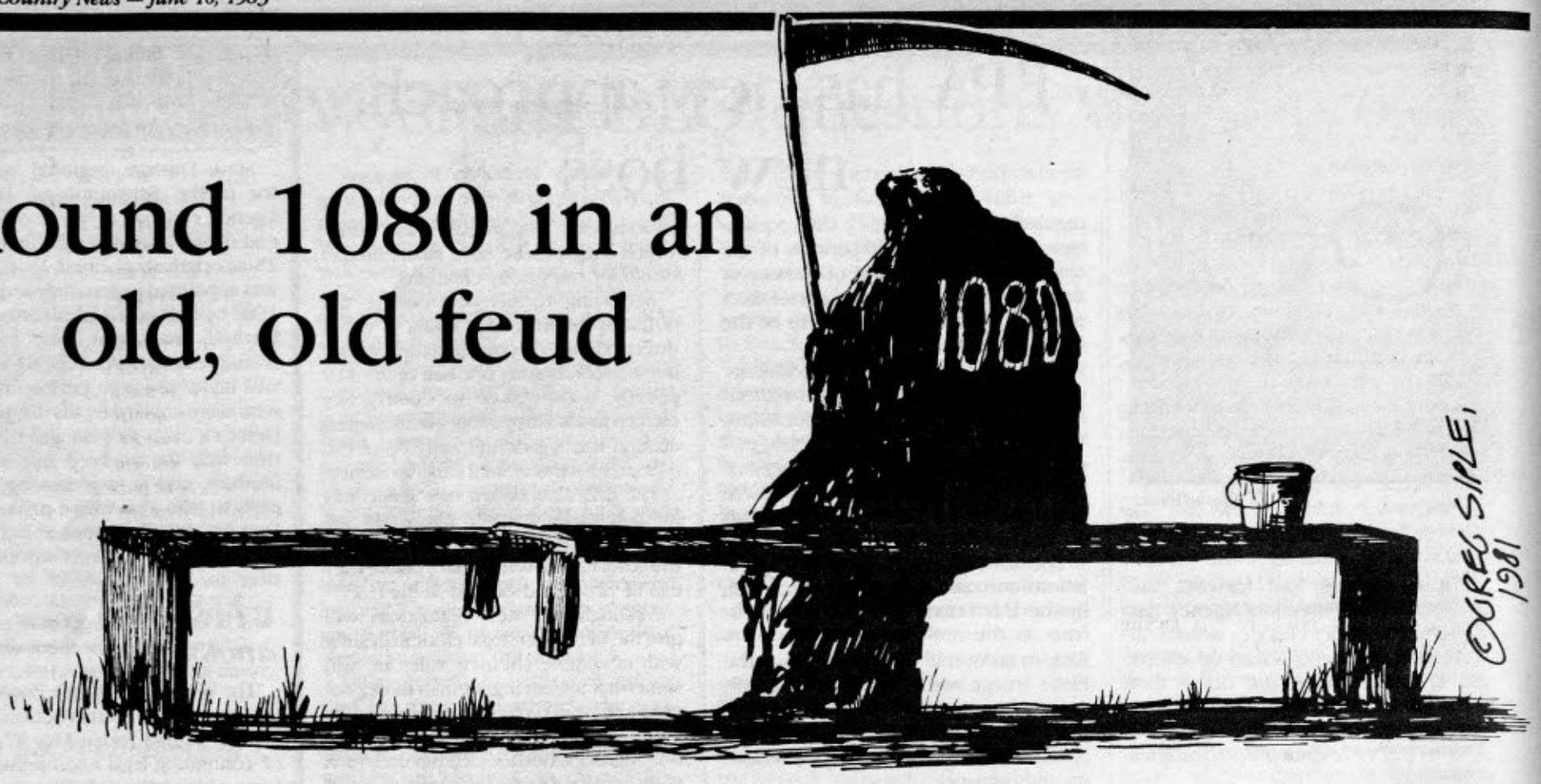
The last leak for Foothills

The Denver Water Board has decided it is tired of paying to repair leaky pipes in its multi-million dollar Foothills Treatment Plant pipeline and has sued contractors responsible for selling the pipe and fixing the leaks. Since 1980, the Foothills pipeline has suffered four cracked pipes, which have cost $7.9 million in repairs. The board is suing for $9.3 million and will seek other firms to plug the leaks. The Foothills Treatment Plant is part of a massive project to supply water to the Denver area.

Stalking the pine beetle

The Flathead National Forest is planning field tests with the pesticide Carbaryl to protect lodgepole pine from the destructive mountain pine beetle. In a series of experiments this summer, forest service personnel will apply Carbaryl to the trunks of 210 trees and monitor its effectiveness and duration. Trees selected for the study are at least 300 feet from streams, ponds or lakes and at least 500 feet from any area of human habitation.

Round 1080 in an old, old feud



by C.L. Rawlins

Spring has come late to the West this year, but some things are the same. Lambing is past and flocks of ewes have new lambs at their sides, wide-eyed, perky, full of bounce. In dens hidden in cutbanks or brush, mother coyotes curl around litters of pups, furry parcels of energy squirming and nipping as they nurse. Life brings forth life. Coyotes and sheep are equally alive, real, undeniable.

Also undeniable is the fact that some coyotes will kill some sheep. The coyote is a predator and predators kill to survive. No morality, no ethics, no qualms.

A process less simple, far from straightforward, is being enacted in the offices of the Environmental Protection Agency in Washington, D.C. It is up to the new EPA administrator, William Ruckelshaus, to decide whether to grant the petitions of the U.S. Fish and Wildlife Service and the states of Montana, South Dakota and Wyoming to relicense compound 1080 as a predator poison.

Lobbying heavily for the re-licensing is the western livestock industry, primarily the National Wool Growers Association, with the tacit support of the Reagan administration and James Watt's Interior Department. Ranged against the petitions are environmental and wildlife groups such as the Defenders of Wildlife, which are calling upon their members to contact EPA and Congress to block the re-registration of 1080 for coyote control.

The process began, this time around, with President Reagan's lifting of the 1972 executive order banning 1080 and other poisons on public land. Hearings were held before EPA Administrative Law Judge Spencer T. Nissen to determine whether there was significant new evidence to warrant consideration of renewed 1080 use. The hearings yielded thousands of pages of testimony, a thick technical review document and a 167-page decision by Nissen, issued October 22, 1982.

Based on his findings, Nissen recommended a decision by the EPA administrator on licensing of 1080 in two forms: toxic collars for sheep and drop baits, called SLD's (single lethal dose). The decision was based largely on the fact that, at the time of the 1972 ban, neither of these means of 1080 delivery had been used and thus had not been covered in the original arguments.

He denied the use of 1080 in carcass baits, a primary method in the banned programs, and on smear posts, citing the 1972 decision as adequate and proper. His decision seemed substantially sound and objective, though it met objections from both sheepmen and environmental groups. Whatever William Ruckelshaus decides, it is likely there will be agonized howls from one or both sides of the issue.

The use of 1080 as a predator poison has come to carry a lot of emotional weight, both for the sheepmen who want it and for those who oppose it in any form. A research scientist involved for years in the issue, who asked not to be identified, spoke to me about what he termed "a problem of data sets." The adversaries seem to be working from different assumptions and finding separate sets of "facts." As a wildlife biologist, he feels caught between warring camps, a situation that makes research difficult. And more research is needed.

For most of this century, predator control programs were pursued by ranchers and agents of the Animal Damage Control branch of the Fish and Wildlife Service on the assumption that reducing the coyote population would reduce predation. Starting with shooting and trapping, they added various poisons and delivery techniques to their arsenal. Strychnine was used in carcasses and drop baits and the M-44 cyanide gun, known as a "getter," was employed widely. Thallium sulfate was tried and discarded as too fiendishly toxic, to be replaced by sodium fluoroacetate: compound 1080.

When first used in the 1950s, 1080 was chosen for its selectivity. It is more poisonous to canids (dogs, coyotes, etc.) than to other non-target species. 1080 was injected into carcasses by ADC agents and also used illegally by ranchers who managed to obtain stocks. The use of all poisons was extensive. According to Dr. Frederick Wagner, director of the Ecology Center at Utah State University, at the height of control programs, two-thirds of the townships in the state of Utah had some form of poison in place. This cost the federal government and the sheep industry a substantial amount of money and, according to the program's opponents, had a disastrous effect on non-target species of wildlife.

Did it work? Dr. Wagner's testimony at the recent EPA hearings indicated that it did not. Figures he compiled from statistics for the period of extensive poison control showed a marked increase in lamb losses from the early '50s until three to five years after the 1080 ban. Since the ban, losses appear to have decreased industrywide, although individual sheepmen testified to increased losses since the ban.

Prior to the 1972 ban, 1080 was used in bait stations, which were the carcasses of animals injected with the poison. One problem with this method was that any predator or scavenger feeding on the carcass would receive a dose of the toxicant: badgers, eagles, foxes, ravens or even sheep dogs. There is a body of evidence that ADC agents, in an effort to please their sheep-raising clients, at times injected larger-than-legal doses, canceling the selectivity of 1080 cited as reason for its use.

Another problem was that coyotes seemed to learn to avoid the baits, a phenomenon called "bait shyness." During the last decade of 1080 use, fewer carcass baits were set out in favor of increased use of drop baits, balls of meat or fat laced with strychnine. In 1970, the FWS recorded the preparation of 821,000 strychnine baits. Coyote getters also declined in effectiveness after several years of use in an area.

Most biologists and some ranchers feel that the population reduction approach may have hurt more than it helped, owing to the characteristics of the coyote as a creature. Hope Ryden, whose book *God's Dog* recounts her field observations of coyotes, testified before the EPA that "predator control programs disrupted the social organization, pack hierarchy and territorial imperatives of coyotes and that, if left alone, coyote populations would likely stabilize at a lower level, with the likely consequence of a lower rate of livestock predation."

Dr. Franz Camenzind testified, "With moderate to heavy control, the social structure becomes disrupted or destroyed, population is in constant flux, territories are not defended and the result may be more prey killed per coyote than in a stable population."

Coyote studies have shown the creatures have a kind of social birth control, with only a single breeding pair in each territorial range. Besides the adult breeders, there may be non-breeding adults, often grown pups from previous litters, living in each grouping. When this structure breaks down, there may be several breeding pairs as younger or less-dominant animals take the opportunity to mate in the absence of a strong pair of breeders to enforce the social hierarchy.

Another effect of extensive poisoning may have been to kill coyotes that were primarily scavengers and select for animals that took a greater proportion of live prey. Ranchers have remarked on this point. In the *Pinedale* (Wyo.) *Roundup*, sheep raiser Larry Lozier of Boulder, Wyoming, said of 1080 baiting, "Not only does that destroy innumerable other wildlife species, but it was instrumental in developing a new breed of coyotes. Now coyotes kill far more than they ever did before." As head of Sublette County's Predator Control Board, Lozier is far from being a coyote lover and encourages control methods such as hunting from snowmobiles. To protect his flock, he uses Komondorok, Hungarian shepherd dogs with the instinct to guard sheep.

This is the essence of predator control: to protect sheep against coyotes, feral dogs, or whatever animal threatens them. According to Dr. Wagner, the new EPA judgment reflected a different focus for predator control than the overall reduction of populations. "The direction is correct," he said. "We should move toward corrective methods of predator control, concentrating on the offending coyote rather than spreading 1080 all over the West."

A "site-specific" approach would apply control methods only where predation is a demonstrated problem. In the past, poison was at times placed far from sheep range, even inside national parks and monuments, in an effort to reduce overall populations. 1080, in the guidelines set down by Judge Nissen, would supplement other means of control, such as guard dogs, and be subject to restrictions on dosages, number of baits per area, and length of exposure.

On paper, such strict regulation is impressive, but far from Washington, D.C., out on the public-domain range grazed by sheep, the rules get a bit hazy. Dick Randall, a representative of Defenders of Wildlife and former ADC agent, cited numerous and disturbing failures of ADC personnel to follow regulations, owing either to personal zeal or to pressure from sheepmen to bend, twist or ignore the rules.

A major motivation for those opposing any use of 1080 is the fear that the proposed regulations will be likewise casually disregarded in the field. Recently, an experimental-use permit for 1080 held by the FWS for studies in Idaho, Texas and Montana was revoked by the EPA. Said EPA spokesman Albert Heier, "It was revoked because the amounts they were using were larger than was granted." According to the EPA statement, the Interior Department had increased dosages from three to five milligrams in at least 1,200 SLD's and expanded a testing site to four times its permitted size.

FWS officials claimed that a "verbal understanding" had been reached with the EPA about the increased dosages and areas and there is speculation that the revocation may signal a policy shift from the "Burford EPA" to the "Ruckelshaus EPA." Former EPA chief Anne Burford insisted in her keynote speech to the National Wool Growers convention

in January that "the decision on 1080 is being made with a high level of independence and integrity, and with an evenhanded, open-minded approach. The chips on 1080 will fall where the evidence dictates."

The "verbal understanding" may have fallen prey to the barrage of allegations which accompanied Burford's resignation as EPA administrator, but undocumented increases in 1080 dosages in an experimental situation cast a long shadow over hopes that the poison's use can be controlled in field conditions.

Of the two forms of 1080 delivery cleared for Ruckelshaus' consideration by Judge Nissen, collars seem to have both less chance of causing environmental damage and a greater amount of experimental evidence to support their specific use against sheep-killing coyotes. Of 28 field tests conducted by the FWS, 17 showed a cessation or decline in sheep predation, with 11 being either inconclusive or lacking coyote attacks on collared animals, fittingly called "sacrificial lambs."

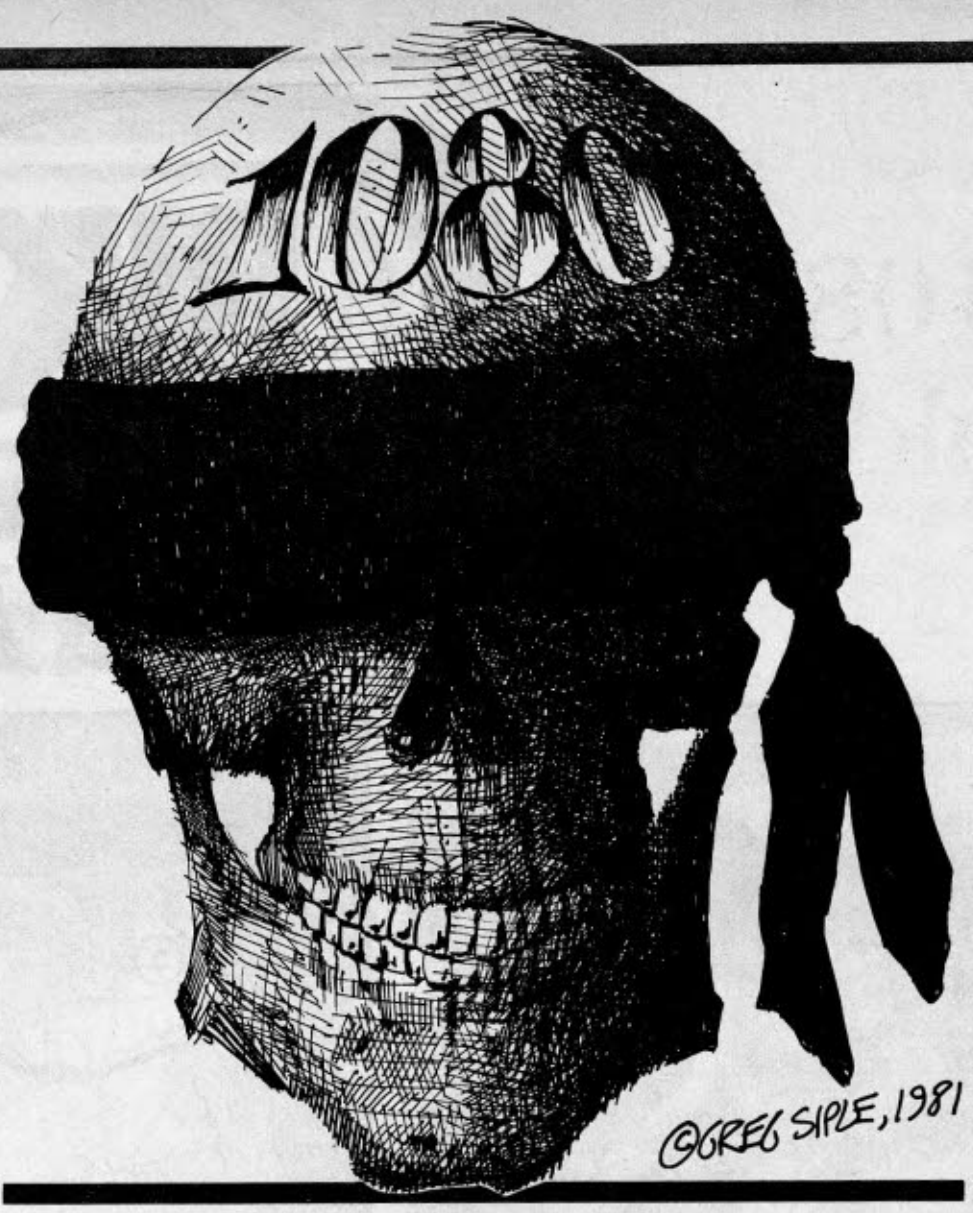
The 1080 collar is a plastic band with two packets filled with an aqueous solution of the poison which is released when the packets are punctured by coyote attacks or, as some ranchers claim, by barbed wire, brush, etc. The collar has lacked enthusiastic support from sheepmen for other reasons. It is successful in fenced pastures rather than in "open range" conditions and most of the heavy lobbyists for 1080 are large, open range sheep raisers. Another reason may be the reluctance of these ranchers to sacrifice any livestock to coyotes. There is a strong instinct among traditional sheep-ranching people to prevent predation at any cost.

Vern Dorn, another ex-ADC agent, was quoted by Hope Ryden as saying, "I got ulcers dealing with a public that never feels there is adequate control. If one coyote is left, they say, 'Kill the son of a bitch.' "

A current FWS official described sheep ranchers "breaking up a $10,000 pickup to run over a coyote and thinking they got a good deal." The antipathy of some sheepmen for the coyote can be deep and ferocious. After the ban on poisons, there were illegal, *laissez faire* control programs carried on by some sheep raisers using 1080, strychnine or whatever could be had.

In western Wyoming there are stories of poisoned jackrabbit carcasses being broadcast through the mountain ranges and poached deer, elk and antelope being used for carcass baits. Several area residents claimed to have packed gasoline into the areas and burned the illegal bait stations. In another recent incident, several dogs — including two small sheepdogs and a large guard dog — were found dead in the Wind River range. Their stomachs tested positive for strychnine, apparently from eating drop baits scattered in the area.

Other sheepmen have obeyed the law and tried guard dogs, repellents, flashing lights, electric fencing and other means to discourage coyotes. While citing expense and the difficulty of training as problems, most operations using guard dogs have enjoyed reduced predation, while those using lights and other methods have been less effective.



One effect of extensive 1080 poisoning may have been to kill coyotes that were primarily scavengers and select for animals that took a greater proportion of live prey.

The other form of 1080 cleared, the SLD drop-bait, is both harder to control than the toxic collar and less supported by experimental evidence. Dr. Wagner calls its possible licensing "half right and half wrong."

Right because the guidelines are oriented to a site-specific use and limited in dosage and time of exposure. Wrong because of the scarce experimental data on 1080 SLD's and a general uncertainty about their application in actual field conditions.

Sodium fluoroacetate — 1080 — has some drawbacks as a means of killing coyotes. The amount needed to achieve a lethal dose for 100 percent of coyotes ingesting the bait can vary with temperature. In winter, when strychnine drop baits were most effective due to lack of rodents and other small prey for coyotes, and in spring when new litters increase food needs of breeding pairs of coyotes, low temperatures can reduce the effectiveness of the 1080 SLD's.

Another significant drawback is that there is no known antidote for compound 1080. In powder or in solution, it is essentially odorless and tasteless. It would be possible to sprinkle a lethal dose on one's fried eggs and notice little effect until it was absorbed. Coyotes experimentally dosed with the poison were said by observers to have exhibited "significant symptoms of distress." In other words, it hurts like hell. EPA spokesman Heier said, "There's been no human effect other than a couple of deaths associated with it when some children got into a pickup and got some cookies that had been laced with it to use as bait. That can happen in a medicine cabinet." The 1080 cookies were for use in rodent poisoning, also known as "gopher choking."

Ironically, some studies suggest that the use of 1080 as a rodent poison may have a greater "overkill" effect on non-target species than its use in predator control programs, due to the cumulative dose to scavenging carnivores from eating a number of 1080-killed gophers. The use of 1080 as rodenticide has gone virtually unchallenged by environmental groups and has been continued during the time of the ban on its use as a predacide.

There is a feeling among biologists studying predator control that other compounds, particularly anticoagulants for which there are antidotes, might be vastly superior to 1080 for drop-bait use. Without further study, it's anybody's guess, but there is a likelihood that 1080's reconsideration may be due at least as much to heavy industry lobbying as to its actual practical effectiveness as a weapon against coyotes.

The primary use of SLD's would be on the minority of sheep operations — mostly large, open-range grazers on western public-domain lands — which report major losses. In the EPA hearings, sheepmen cited a study that identified from 54 percent to 85 percent of lamb loss in Nevada, Colorado, Utah and Wyoming as being due to predators, figures which Judge Nissen termed "difficult to accept."

"It is clear," he wrote, " that high predation losses are suffered by a minority of sheepmen . . . Lamb losses to predators as a percent of losses to all causes have not increased since 1972. In fact, lamb losses appear to have declined since 1978. Individual producers have, however, suffered increased predation losses since 1972 and for some producers it is clear that predation is a very serious problem."

For some sheep operations, the financial margin represented by predator loss is the difference between profit and debt. Agricultural producers are caught in the grip of inflation and rising costs with heavy indebtedness as a result. Sheep ranchers in this bind tend to see coyotes as a threat to their survival, even though other factors may play a greater role.

From a high of over 56 million sheep in 1942, there has been a decline to about 13 million in 1982. Nissen's findings cite reduced demand for lamb and mutton products, wool and a switch to cattle-raising owing to the cost and difficulty of finding skilled herders and other labor for sheep raising. While 1080 proponents claim that 1080 is necessary for good utilization of western ranges and to prevent further decreases in sheep ranching, Nissen said, "The decline cannot be attributed solely or even chiefly to predation . . . It is concluded that although predation may have been a factor in producers discontinuing sheep operations, such discontinuance cannot be related to the suspension of the use of toxicants as a means of predator control."

It seems that a complete ban on toxic predator control may give the sheep industry cause for feeling abandoned by the government, and might spur some ranchers to pursue illicit poisoning as a means of saving their operations, as has been the case since 1972.

It also sets the stage for renewed confrontations between the industry and environmentalists at every shift in the political winds. If a limited, site-specific program of toxic control using a poison proven by experiment were available, legal and supervised, then industry pressure might ease, particularly if there were definitive research to document the effects and results and a commitment by all parties to abide by those findings.

If a national sense of ethics and concern over poisoning programs is sufficient to influence Congress to ban such programs, then sheepmen may have to grin and bear it. But, some compromise between the adversaries on the issue would at least clear the way for better research and a workable approach to the problems of the industry in the context of national concern for the environment.

It's easier to work out such conflicts on paper than in people's minds or hearts. Easier to write solutions than to make them work back at the ranch or up on summer range, where herders explain the loss of 20 sheep by shrugging and saying, "muchos coyotes."

Meanwhile, as the sun sets on a rainy day in May, lambs are nursing at their newly-shorn mothers and coyote pups tumble from dens to get their first lessons in stalking and catching prey, a nip or nudge from a fiercely protective mother who knows only the law in blood and bone: stay alive.

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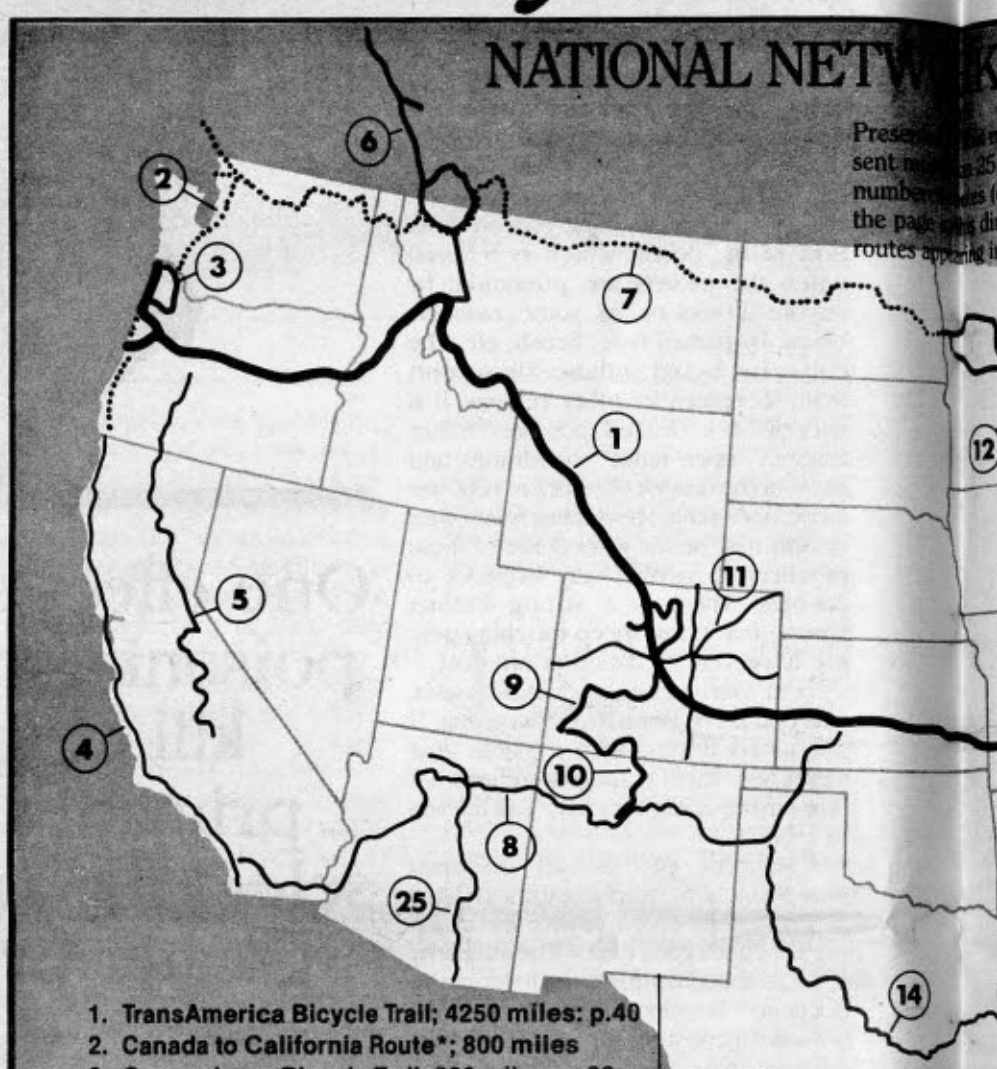
C.L. Rawlins is a freelance writer in Boulder, Wyoming, and a contributing editor of *High Country News*. This article was paid for by the HCN Research Fund.

BIKECENT

The Bicycle Trav



1. **TransAmerica Bicycle Trail; 4250 miles: p.40**
2. **Canada to California Route*; 800 miles**
3. **Oregon Loop Bicycle Trail; 300 miles: p.29**
4. California Pacific Coast Bicycle Route; 1000 miles: p.14
5. Sierra Nevada Mountains to Crater Lake Route; 1080 miles: p.14
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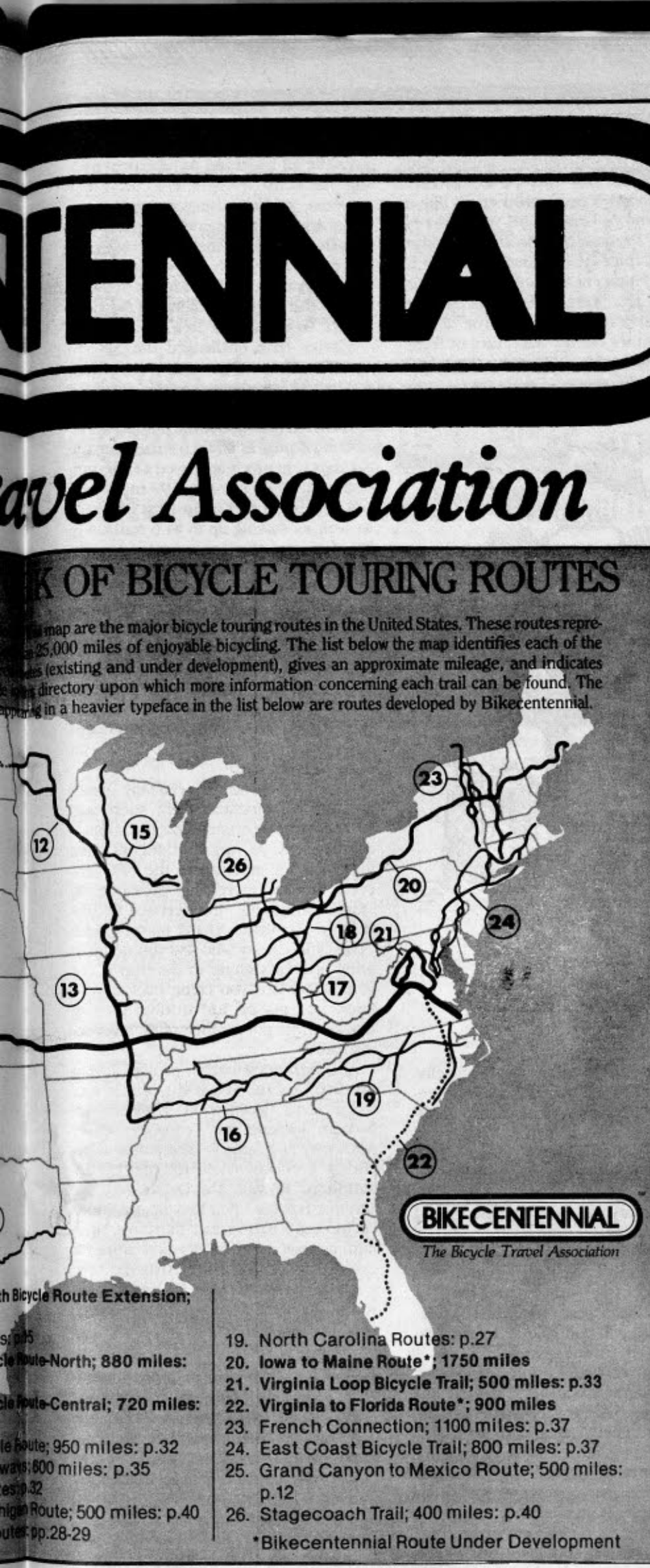
K OF BICYCLE TOURING ROUTES

map are the major bicycle touring routes in the United States. These routes repre-25,000 miles of enjoyable bicycling. The list below the map identifies each of the es (existing and under development), gives an approximate mileage, and indicates directory upon which more information concerning each trail can be found. The ing in a heavier typeface in the list below are routes developed by Bikecentennial.



h Bicycle Route Extension;

s; p.35
cle Route-North; 880 miles:

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19. North Carolina Routes: p.27
20. **Iowa to Maine Route*; 1750 miles**
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22. **Virginia to Florida Route*; 900 miles**
23. French Connection; 1100 miles: p.37
24. East Coast Bicycle Trail; 800 miles: p.37
25. Grand Canyon to Mexico Route; 500 miles: p.12
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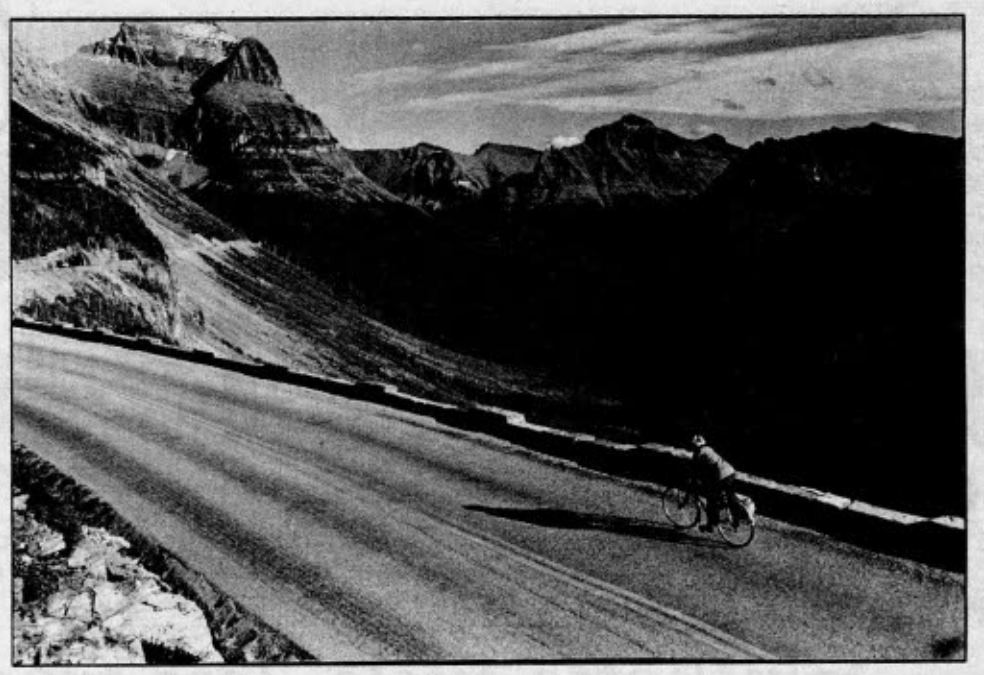
*Bikecentennial Route Under Development



Bikecentennial, based in Missoula, Montana, is a non-profit membership service organization for touring bicyclists. Originally founded to help celebrate the country's 200th birthday in 1976, the organization has since mapped about 10,000 miles of bicycle trails in the lower 48 states.

The first such trail was the 4,450-mile Transamerica Bicycle Trail stretching from Astoria, Oregon to Yorktown, Virginia, though not taking the same route that a flying crow would. Over 4,000 people rode portions of the trail in 1976, with about 2,000 cyclists riding its entire length.

The group has researched a number of routes since then. Michael McCoy, a field researcher with Bikecentennial, said, "The ideal route is rural, has little traffic, especially commercial traffic, is paved and has an unbroken surface." He added, somewhat unnecessarily, "Of course, we don't always get what we want."

After an initial definition of the route, a second field researcher drives it, noting mileages, service information, emergency phone numbers, locations of bike shops and information about points of interest. This researcher may also change some sections of the route. McCoy said, "It's this trail information that really sets us apart from the gas station map. A cyclist can spend more time enjoying the tour and less time worrying about where to camp for the night."

Bikecentennial is a membership organization with about 14,000 members currently. For further information about the organization and its services, contact the group at P.O. Box 3808, Missoula, Montana 59807.

Synfuels . . .

(continued from page 1)

corporations to the subsidies available. Projects are evaluated on a multi-tiered scale of solicitations, with the most advanced qualifying for aid. Thus far, the applicants are less than promising.

SFC's first financial commitment ever went out last month to the First Colony peat-to-methanol project in North Carolina. The project calls for the refining of 663,000 tons of peat per year to make 51.3 million gallons of methanol, which will be sold as a gasoline enhancer.

The decision to help the peat project with up to $820,000 in SFC funds, however, has stirred controversy for both economic and environmental reasons. A House Energy and Commerce subcommittee is investigating the price guarantee granted by SFC, which would pay the project's sponsors double the current market value for methanol. If the peat plant sold a gallon of methanol on the open market for 50 cents, the government would then be obligated to pay the sponsors an additional 55 cents, plus inflation, plus two percent.

This generous deal created suspicion about the possible political leverage the backers of the peat project may have had in obtaining their finance agreement. The company's ownership reads like a who's who on Capitol Hill. The owners include former CIA director William Casey; former Federal Energy Research and Development Agency administrator Robert Fri; former Federal Energy Administration administrator Frank Zarb; former Deputy Secretary of State Charles Robinson; and former Organization for Economic Cooperation and Development ambassador William Turner.

Environmentalists and commercial fishermen are also concerned over the possible air and water damage peat mining may cause. The peat is located on a sensitive coastal plain, containing key tributaries for the region's fishing industry. The Environmental Policy Institute, in cooperation with the National Wildlife Federation, has filed a letter of intent to sue the Corps of Engineers for their failure to classify the area as a wetland.

Critics have challenged the SFC to clarify the connection between methanol production and national security, citing an internal report by the SFC which questioned the limited application of peat as a fuel source. Yet the SFC has tentatively approved a $366 million loan guarantee plus $99 million in price guarantees over the next 20 years, as well as sharing up to $4.6 million in the design costs of an untested gasifer.

The SFC defends its decision based on the established criteria for aid. "The determining factors for a project are readiness and willingness. They passed the strength review and have $150 million in private equity," explained Ralph Bayrer, SFC's vice president for projects. "They may have foreseen the trend of the current energy market. They went with a smaller plant and they can expand later."

Efforts to produce relatively small amounts of methanol from such odd resources as peat symbolize the state of the industry. As major producers have lost interest in synfuels, the SFC has come under increasing pressure to "fund something." In reference to this shift in emphasis, David Maselli said, "This is like a guy who says you need an army and he's going to develop it for you. But when you come back a year later, he says he had trouble finding troops so he got a bunch of tin soldiers instead."

Another questionable project being nurtured by the SFC is the North Alabama coal gasification project. Its owners include the Tennesee Valley Authority and Santa Fe International, an energy company wholly owned by the nation of Kuwait. The Department of Interior has classified Kuwait as a "non-reciprocal" nation and therefore one that cannot hold or develop mineral resources. Yet, the North Alabama project was advanced by the SFC in its latest round of solicitations and stands to gain over $1 billion in federal aid.

The SFC's plan to unload large subsidies has not gone unnoticed by a Congress inundated with budget dilemmas. Sens. William Proxmire (D-Wisc.) and Gary Hart (D-Colo.) have co-sponsored legislation to abolish the SFC.

"It is abundantly clear that large-scale commercial synthetic fuels production is an idea whose time has not yet come," Hart said. "With the staggerng budgetary deficits we're facing, now is the time to retrieve the $15 billion Congress has mistakenly given the SFC to spend."

Another anti-SFC bill, introduced by Rep. Tom Corcoran (R-Ill.) would reduce the SFC to a $3 billion research and development agency. "We feel this is a more acceptable approach. We need to develop this technology and have it on hand, but not at the current price," said a staff aide in Corcoran's office. The bill has attracted 28 co-sponsors, including such conservatives as Reps. Jack Kemp (R-N.Y.) and John Broyhill (R-N.C.).

Whether or not the technology is already available is a matter of debate. Ralph Bayrer of SFC argues that the industry has surpassed the research stage. "A fair number of the technologies have already been through the pilot plant stage. The rest will have to be determined on these first-of-a-kind plants. If you continue to do more research and development, you will leave a lot of these questions unanswered."

With the Reagan administration's rhetoric about the ability of the private sec-

Synthetic fuels: less from more

Synthetic fuels technology can best be described as the process of getting less from more. It's a continuing lesson in subtraction. Less fuel is produced from the use of more land, water and air than in any other known energy source.

Disruption of these resources is unprecedented in scale, yet a lack of continuity exists in the environmental guidelines which will dictate the industry's development. Regulations vary from state to state and industry to industry. While the Synthetic Fuels Corporation is the major promoter of the industry, it prefers the role of banker to administrator. Consequently, under the current guidelines, the majority of environmental enforcement will be left to state and local agencies.

To appreciate the magnitude of the industry's impact, you need only to look at the recipe for synthetically derived fuel. Of the three primary synfuel resources — coal, oil shale, tar sands — oil shale is the best example of the fuel-to-resource equation. One and a half tons of shale must first be mined and then cooked at 900 degrees F. to extract a single barrel of synthetic oil. For each barrel produced, three to five barrels of fresh water are required in the process. Disposal of the spent oil shale is complicated by the so-called "popcorn effect." The shale puffs up when heated, increasing its volume by 20 percent and creating a mammoth disposal problem. A 500,000 barrel per day oil shale industry would produce an excess of 200 million tons of spent, and potentially toxic, waste each year — an amount greater in volume than all the earth moved in the building of the Panama Canal.

Oil shale is neither oil nor shale. It is a limestone formation containing kerogen — the remains of dead plants and animals. Left untouched for another 20 to 40 million years, kerogen would eventually become conventional crude oil. The largest concentration of kerogen is found in the Piceance Basin of northwestern Colorado. The basin, formed by a prehistoric lake that covered parts of Utah and Colorado, reportedly contains the equivalent of 1.2 trillion barrels of oil in its 1,500 square mile area.

Along the southern edge of the Piceance Basin are 20,000 acres owned by the Union Oil Company and home to its nearly complete oil shale plant. Although the site is water-poor, the shale can be easily reached by mining directly into the surrounding cliffs. From the underground chambers, the shale can be ground into chunks and transferred to a retort, or heating facility, on the surface, where the kerogen is extracted and collected as a vapor or liquid.

Techniques vary depending on the size and location of the shale deposit. Retorting is either conducted underground — known as "in situ" retorting — or with a surface operation. Each method generates certain environmental concerns. While the underground retort produces less air pollution than surface retorts, it generates toxic water wastes which may contaminate underlying aquifers. A surface retort produces 2.5 pounds of polluting gas and one-third of a pound of air-borne dust per barrel, yet is more efficient in extracting the kerogen.

Environmentally, oil shale technology is still in its earliest stages. The industry is continuing research on ways to reclaim water, improve emission standards and dispose of spent shale waste. All of which makes oil shale an expensive, and possibly prohibitively expensive, industry.

Coal gasification sounds like a new and sophisticated process, but its basic principles have been around since the early 19th century. A combination of coal gas and steam was used to light the London Bridge in 1813 and provided street lighting to the eastern U.S. by 1850. During the 1920's nine million homes and businesses used coal-derived gas for heating and lighting. However, with the discovery of natural gas as a cleaner and cheaper substitute, synthetic gas was eventually phased out.

As in oil shale processing, gasification of coal can be either conducted above or below ground. Coal is burned in a "gasifer" and mixed with oxygen and steam to produce products ranging from home heating gas to electricity. Although less is known about the potential air quality impacts of surface gasifers, the underground process poses real risks of contaminating ground water. Research at pilot projects has indicated that toxic elements such as arsenic, lead, mercury and nickel are generated in the refining.

The process of coal liquefaction is more complex. Neither of the two major processes — direct and indirect — is new. Both were pioneered by Germany during World War II to provide fuel for their armed forces.

In the direct liquefaction process, the coal is ground into a slurry, heated and pressurized. Usable fuel is then separated either chemically or through additional refining into fuel oils. During the indirect process, the coal is gasified and then chemically converted into products ranging from methanol to agricultural chemicals. A chief environmental concern of coal liquefaction is the danger to human health. At a small liquefaction plant in West Virginia, workers experienced 20 times the normal rate of skin cancer.

The third major synfuel resource — tar sands — has many of the same environmental problems as oil shale. Five tons of sand and five barrels of water are required to produce each barrel of oil. At Syncrude's tar sands plant in Canada, officials report a 40 percent expansion in the tar sands once processed, resulting in the largest earth moving operation in the world. 600,000 tons of waste are moved each day in connection with the production of 125,000 barrels.

In the U.S., geologists have labeled an area in southeastern Utah as the "Tar Sands Triangle." Exploratory drilling has just begun, but industry officials estimate that the area contains 12 billion to 16 billion barrels of oil.

Overall, there is very little known about the potential impacts of a thriving synfuels industry. Research and pilot plants have provided some insight into the potential hazards. Yet the simple mathematics of displacing vast amounts of land and water indicate there will be no easy solutions.

— *DJG*

The SFC is exempt from the Freedom of Information Act and other sunshine and conflict of interest laws. In addition, the salaries of SFC personnel are exempt from all federal pay scales. Of the 177 employees, 55 earn more than $50,000 per year and 13 make equal to or more than the $69,000 salary afforded Cabinet secretaries.

tor and the President's campaign pledge to eliminate the SFC, one would assume the corporation is hanging on by its teeth. Such is not the case. The SFC enjoys an off-budget status which is not subject to annual appropriations from Congress. It received $20 billion when created in 1980 and must submit a progress report to Congress in June, 1984, for up to $68 billion in additional funds. The management decisions of this agency are equally difficult to monitor. The SFC is exempt from the Freedom of Information Act, and other sunshine and conflict of interest laws. In addition, the salaries of SFC personnel are exempt from all federal pay scales. Of the 177 employees, 55 earn more than $50,000 per year and 13 make equal to or more than the $69,000 salary afforded Cabinet secretaries.

Blessed by the Reagan administration and insulated from congressional attacks by its prominent supporters, the SFC has a unique status. Its continued existence is a classic tale of Washington politics and pet projects. Sen. William Proxmire (D-Wisc.) made an initial attempt to abolish the SFC last year but was stopped by Sen. James McClure (R-Idaho), chairman of the Energy and Environment Committee. Frustrated, Proxmire told the *Chicago Tribune*, "I introduced a bill to kill it last year . . . I couldn't even get a hearing before the energy committee. You're talking about real pork — fat, juicy pork just waiting to be barbecued."

The vast majority of synthetic fuel sources are located in the Rocky Mountain region. Geologists estimate 1.2 trillion barrels of oil lie in the shale deposits of Colorado's Piceance Basin. Another 12 billion to 16 billion barrels could eventually be extracted from the "Tar Sands Triangle" in southeastern Utah. Of the 10 regional projects currently under consideration by SFC, seven are shale plants. The ultimate development of these resources is now, more than ever, tied to federal aid from the SFC.

"Even small projects will need to be heavily subsidized," said Kevin Markey of Friends of the Earth in Denver. "In the future you're likely to see a lot of shale and maybe some gas. Shale is the best understood technology amongst the companies that are interested and the Synfuels Corporation seems to be headed in that direction."

While the future of large-scale synfuels production is gloomy, it is not to be counted out. Private industry is continuing to work on new technologies which would improve efficiency and reduce costs. Yet, industry officials concede that projects of this scale are still 20 to 40 years away and are dependent upon improved techniques.

"The jury is still out," said Bob Shelton of Shale Energy of America. "The technical aspects, economic process, environmental controls, deployment techniques are still in their earliest stage. A lot of field work still needs to be done. This is the school of hard knocks."

"The industry doesn't do it today because we don't have the technology nor see the market," concluded Earl Hurst of Chevron. "You can see by the projects that folded, they didn't have the technology right. Demonstration-size research and development projects are a must before you move into full-scale operation."

The only commercial synfuel project near completion is Union Oil's 10,000 barrel per day shale plant in northwestern Colorado. Scheduled for completion later this year, the project has been 20 years in the making. Union has a $400 million price guarantee with the Department of Energy to supply diesel and jet fuel to the Defense Department at $42.50 per barrel or the market price if higher.

While the federal subsidies were viewed as being instrumental in getting the project off the ground, Union has now applied for additional aid to finance an expansion. The Phase II plan calls for construction of four 20,000 barrel-per-day modules to begin operation between 1990 and 1994. Union's proposal was advanced by the SFC in the latest round of solicitations, raising the question among critics of when and whether synfuel sponsors will move out on their own. The inital Phase I plant, now nearing completion, can be justified as a pioneer research project. However, for the government to finance an expansion scheduled to use the same technology leaves the question of self-sufficiency unanswered.

"If the stimulus and subsidies are too great, you run the risk of setting up a boom and bust cycle, which has always plagued energy development," said David Jansen, staff aide to Sen. William Armstrong (R-Colo.). "If the government has to build the entire industry, it's only made out of paper. It defies market realities."

The economic impacts of SFC subsidies go far beyond the synfuels industry. Since federal price and loan guarantees are not recorded in either the budget or the national debt until the agency makes good on the guarantee, their impact on current interest rates is temporarily obscured. However, if included, SFC's planned expenditures would increase the national debt by seven to nine percent through 1984. If SFC appropriation is fully increased to the maximum $88 billion next year, the potential outlays will be equivalent to 35 percent of the national defense budget or nearly 10 times the budget of the Energy Department.

Proponents of the synfuel industry justify these expenditures as an insurance policy for the future. Yet this gamble on a centralized energy source brings into question the prudence of investing in one unproven technology.

"If you're really interested in energy security you have to develop a viable program," said Robert Roach of the Environmental Policy Institute. "Industries which exist off federal subsidies do nothing for energy security. We need to develop a mixture of strategies that ensure our energy future. They have to be reliable, environmentally sound and technically and economically feasible."

The Synthetic Fuels Corporation was established in response to a crisis. It was designed to fulfill lofty goals and represent long-term energy planning. But as recent events have shown, the economics of energy are unpredictable at best. Whether the product be oil or synfuels, specialized energy sources are only as reliable as the market which controls them.

‡‡‡

Dan Gorham is the current *High Country News* intern.

BOOKS

One species a day

A Wealth of Wild Species: Storehouses for Human Welfare

Norman Myers. Boulder, Colorado: Westview Press, 1983. $22.50, hardcover; $10.00, paper. 274 pages.

Review by Peter Wild

Tell an African that he should save the cheetah because of its elegance and he'll probably stare at you in wonder. Try to convince a Brazilian bureaucrat trumpeting the glories of expanding agriculture to stop cutting down the rain forest. Or for that matter, talk to a U.S. congressman fuming that a shoebox full of pupfish living all but unseen in desert caves are preventing his constituents from sinking wells.

You and I, nature lovers that we are, cherish cheetahs and rain forests for their own sakes. It's calming to think of the pupfish, one of earth's tiniest vertebrates, ticking time away in the saline waters of Nevada caverns. But the peoples of the Third World need food and hard currency — right now. As for congressmen, some of them delight in making political hay out of our misty-eyed concern for the yellow-bellied sapsucker.

Norman Myers is a preservationist who has lived in Africa for the past 25 years. The author of *The Sinking Ark* shares our noble sentiments, but he knows first hand that for most people economic value, not altruism, makes the best case for preserving nature.

He offers *A Wealth of Wild Species* as hardheaded proof that in practical terms alone, nations are enriched by protecting their flora and fauna. For instance:

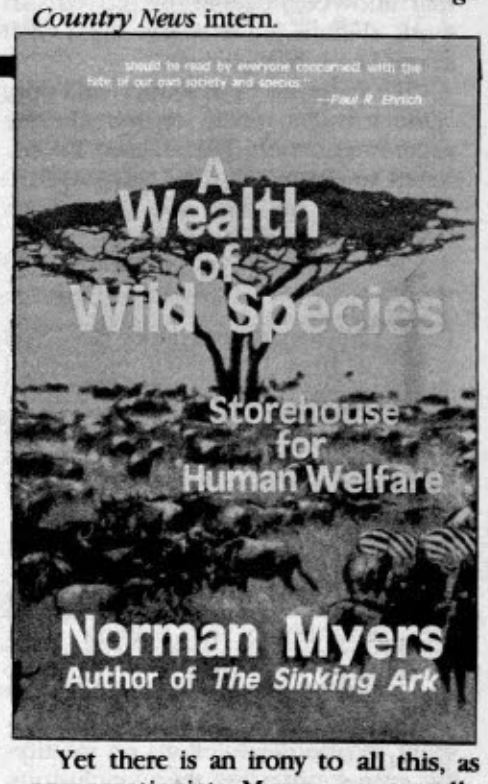
Twenty years ago a child with leukemia had one chance in five for survival. Now his chances are four out of five, due to a new drug extracted from the rosy periwinkle. Sales amount to $100 million a year.

In 1930, corn fields yielded about 25 bushels per hectare. Now, thanks largely to genetic engineering with wild species of corn, the rate is over four times that figure. But those precious wild relatives of modern corn are giving way to asphalt and concrete in Third World countries.

Thank goodness, we didn't slaughter all the buffalo. For some strange reason, they are cancer free. And from those few remaining herds immunologists may learn how to prevent the disease in humans.

Likewise, researchers think that the cheetah may provide a keyhole for insights into coronary and respiratory health. The pupfish, with its high tolerance for saline water, is throwing light on human kidney failures. So the shoebox full of the pop-eyed little critters is turning out to be far more valuable than some Congressmen have thought.

As to industry, woodpeckers are helping to design better crash helmets, beech trees are cleaning the air of particulate pollution, and in a few years bacteria may be mining copper. The mind-boggling applications of nature make mind-boggling reading, while the extensive bibliography in Myers' study will be useful to scientists.



Yet there is an irony to all this, as preservationist Myers repeatedly reminds his readers. At the very time when societies are reaping unexpected profits from research into nature, they are pushing at least one species a day into extinction. Their benefits, whatever they might have been, are being lost forever. Even hardhearted industrialists and politicians, especially those with kidney or coronary troubles, might take note of that.

As lieutenant governor, Schwinden seized the responsibility for shaping state energy policies during the tumultuous late 1970s. He surrounded himself with young, knowledgeable staffers, then spent extraordinary efforts on modifying, even suppressing, their conclusions about the state's role in utility siting and energy forecasting.

DNRC . .

(continued from page 16)

pany complied and paid the department $1 million to perform an environmental impact statement on the project.

But Doney's concern with his department's image started a trend that has since become a landslide. Said a former DNRC employee, "Doney took overt steps to keep known environmentalists out of his agency. His chiefs were instructed to hire people who did not give the appearance of working for 'them.' He maybe went overboard in his insistence on neutrality and objectivity among the staff, but there's nothing wrong with that."

Wilbur Rehmann, who directed the department's review of the Kootenai Falls project, said that Doney once supported him when Northern Lights' manager Bill Nordeen tried to have Rehmann fired.

"Nordeen thought I was out to get them," said Rehmann. "He put the pinch on Ted to fire me, but Doney backed him down."

Nevertheless, Rehmann had to live with a perpetual double standard while working on Kootenai Falls. On one hand, his immediate chief advised him to have lunch regularly and be friendly with officials from Northern Lights, but on the other hand, he was chastised for keeping a dinner engagement with leaders of an environmental group called Save the Kootenai.

"It's a small example, but it's indicative of the attitude at DNRC after Colstrip," said Rehmann.

Rehmann and others who worked for Doney defended his management at DNRC as at least an open-door policy that allowed freedom for the staff to work, debate and exchange ideas with upper-level management.

"We were taken seriously," said one. "Doney might modify or overrule our recommendation, but at least he listened to them."

Virtually no one says that about DNRC's current administrator.

The department under Gov. Ted Schwinden (D) is a transformed agency. Schwinden, the former chief of the Montana Department of State Lands, the agency that regulates coal surface mining in Montana, was a long-time veteran of the Helena bureaucracy before Tom Judge picked him as a running mate.

As Lt. Governor, Schwinden seized the responsibility for shaping state energy policies during the tumultuous late 1970s. He surrounded himself with young, knowledgeable staffers, then spent extraordinary efforts on modifying, even suppressing, their conclusions about the state's role in utility siting and energy forecasting.

Following him at State Lands was his arch-loyalist, Leo Berry. When Schwinden became governor in 1980, Berry was the logical choice to head DNRC, Montana's second largest agency.

DNRC is a hydra-headed creature with responsibilities ranging from water rights adjudication to energy planning, conservation and facility siting. When Berry took over, the agency also managed the state forests — a program that the governor transferred to State Lands as part of an effort to reorganize the government.

Berry quickly set about tightening the management of this renegade department that had once battled Colstrip. The results have been less than pleasing to Montana environmentalists, who played wait-and-see during the first years of the Schwinden administration. They have now waited and seen, and their patience is growing thin.

"In the last few years, we've seen an alarming trend at DNRC away from truly representing facts about the environmental consequences of certain decisions," said Tom Daubert of the Helena-based Montana Environmental Information Center. "Instead, DNRC has worked most effectively in promoting development. That's part of their mandate, but one would expect them to represent both sides adequately and simultaneously."

Daubert is ready to remind all listeners that DNRC lobbied heavily in favor of water marketing and coal slurry legislation during the 1983 legislature.

"In the slurry debate, DNRC neglected to tell legislators some important information," Daubert charged. "They didn't tell people that the amount of surplus water available for slurry included all kinds of water that would never be useable. They failed to focus attention on water availability in the Yellowstone Basin and Powder River Basin where slurry lines would originate. They misrepresented the findings of their own study."

While DNRC's role in the slurry debate alarmed environmentalists, Berry's decision to suspend staff review of the Kootenai Falls project positively enraged them. After more than a year of study and the issuance of a draft environmental impact statement on the project, Berry shelved preparation of the final EIS, citing a request by Northern Lights, Inc. to do so until the federal review of the project is finished.

High Country News has learned that Berry himself asked the power company to make its request, then honored it. Previously, Berry asked both the Montana Power Company and Northern Lights to sue his agency over the issue of state jurisdiction. They refused because of the public relations fallout that such a suit would bring.

Kootenai Falls is too hot politically for the Schwinden administration, according to informed sources in Helena. Lincoln County, where the project would be built, vacillates between 20 and 35 percent unemployment. When it became clear that the DNRC staff was leaning in the direction of denying the Kootenai Falls permit, Berry looked for an expedient out to avoid the inevitably bad publicity. He called everyone's bluff by merely suspending work on the project, claiming that the final EIS could proceed after the Federal Energy Regulatory Commission completes its contested hearings on the project.

But Berry has also raised the question of state jurisdiction over Kootenai Falls, and he has a strong enough point that environmentalists have so far been afraid to challenge his decisions. The project licensing proceedings are still underway at FERC. A court ruling that Montana has no business conducting a siting act review of the project would remove a potential source of pressure from FERC officials, who have never denied a permit. So far, Berry's tactics have succeeded in stymieing his environmental opponents.

"The whole situation is ludicrous," said a former DNRC staff member. "The department's own attorneys produced a long legal brief arguing that DNRC has authority over the project. The company agreed that they did by spending a million bucks on compliance. Now Berry has made a one-man decision to stop the process midstream, and the environmental groups are too afraid to sue him."

Said another, "The staff would have been unanimous in its decision not to build Kootenai Falls. The project is a turkey no matter how you look at it. But it doesn't matter what the staff does because Leo has said that he'll make the final decision anyway. Period. It's all politics."

Berry denied that he asked Northern Lights to make its request to stop work on the Kootenai Falls EIS.

"Once the final EIS is issued, the Board (of Natural Resources and Conservation) has 90 or 120 days to start formal hearings. We were already involved in making our presentation at the FERC hearings, and we were concerned about staffing requirements if two Kootenai Falls hearings were going on simultaneously," Berry said.

"I called Northern Lights and they weren't interested in having hearings going on simultaneously. They were concerned for the same reasons we were. I didn't ask them (to request halting the EIS). It was mutually agreed," he said.

Berry acknowledged that he is interested in a possible lawsuit by Montana Power to "clarify" the state's authority over hydropower facilities, but denied that he asked MPC or anyone else to sue his agency. Montana Power is currently upgrading its Thompson Falls hydropower dam and has submitted a letter to DNRC challenging the state's authority to review the new facility.

Berry said that until the issue of state jurisdiction is settled, "I couldn't see going through a long hearing process and spending all that money" on the Kootenai Falls proceedings.

"We have two options. We can ask for an attorney general's opinion. We can also discuss it with MPC's counsel, because they want the issue clarified, too. If the timing is right to bring it before the court, I would encourage Montana Power to sue us."

Berry's management of DNRC has driven several senior staff members away from their jobs to find more rewarding work elsewhere. Morale in the agency is low, largely because the staff feels ignored. Many staff members have been appalled at Berry's choices for middle-level managers within the agency — "Schwinden clones," as one staffer characterized them.

But even more alarming to some are Schwinden's tendencies to try to control virtually every policy-level position in state government and his fondness for listening to the recommendations of special blue-ribbon committees comprised exclusively of business executives.

At the 1981 legislature the Schwinden troops introduced a bill that would have allowed the governor to appoint all state officials down to the level of bureau chiefs. The bill died after numerous public interest groups decried it.

The last time a governor asked a Montana legislature for such powers was in 1937, when Democratic Gov. Roy Ayers received sweeping powers to hire and fire agency employees. Some wit nicknamed the 1937 version "the Hitler bill," a name that stuck until the legislature later repealed it.

But some observers believe that under current management at DNRC the bureau chief appointments are political anyway." The agency is accomplishing administratively what the environmentalists feared would happen legislatively," said one former DNRC employee. "The environmental community is fast asleep. They went rushing into the 1983 legislature to 'save the siting act,' but nothing was going to happen to it. It's too hot for the legislature to tackle openly. Instead, Berry and Schwinden are tearing into it administratively by whom they hire to enforce it and how they interpret the law."

Meanwhile, the governor's business executive Council on Management has recommended sweeping changes in state government that would further consolidate policy-making power into fewer hands. One of its recommendations, unrelated to DNRC, was to eliminate the Ecological Services Division from the Department of Fish, Wildlife and Parks.

Schwinden accepted the recommendation, then faced the wrath of dozens of conservation and wildlife groups that feared that division administrator Jim Pozewitz was about to lose his job. The recipient of numerous state and national conservation awards for his lifelong dedication to habitat preservation, Pozewitz is easily the most effective conservationist in Montana government. Schwinden and DFW&P administrator Jim Flynn responded to the outcry by creating for "Poz" and one other staff member a special advisory position within the agency.

Others who have stuck with their jobs in state government are optimistic about the future of the agencies that enforce environmental laws. "State government is not Mr. Schwinden," said one. "It is the institution, the process, and the law. These are things that will outlive the governor. I'm sticking around until I can be useful again."

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Don Snow is the HCN bureau chief in Montana.

BULLETIN BOARD

HYDROPOWER — WATER WORKING

"Hydropower - Water at Work," a new Bureau of Reclamation booklet on hydroelectric power is now available. It explains how electricity is generated without causing pollution and discusses innovative concepts such as integrating hydro, solar and wind power generating systems and using the same water several times through pumped-storage systems. The booklet also looks at new ways of developing partnerships with the states for the construction of future BuRec projects. For your copy contact BuRec, Engineering and Research Center, Code D-922, P.O. Box 25007, Denver, Colo. 80225; phone (303) 234-3000.

USGS YEARBOOK

A complete description of the accomplishments of the U.S. Geological Survey during 1982 is now available. The 99-page illustrated publication summarizes the agency's progress in earth science, environmental activities and the national mapping program, and offers an assessment of the nation's energy and mineral resources. Copies can be purchased from the USGS Branch of Distribution, 604 South Pickett St., Alexandria, Va. 22306.

DANGER IN THE BACKYARD

America's Poisoned Playgrounds: Children and Toxic Chemicals is the result of a six-month survey of parks and playgrounds in major urban areas. It documents the potential health hazards which now exist due to poor planning, and provides sobering insights for parents, making them aware of the problem in their city. *America's Poisoned Playgrounds* is available for $6.95 plus postage from the Conference on Alternative State and Local Policies, 2000 Florida Avenue, N.W., Washington, D.C. 20009, 202/387-6030.

WILDFIRE TRAINING OFFERED

The Salmon National Forest and the BLM in Idaho will hold a Basic Fire Training Course from June 21 to 24, to train people how to fight forest and range fires. Those who pass the physical test, the four-day training program and have the required footwear will be eligible to be called on to fight forest and range fires on an as-needed basis this year. To register for the free course, call the Forest Supervisor's Office at 208/756-2215.

HOLY CROSS GUIDES

Visitors to the Holy Cross Wilderness in Colo. this summer have the opportunity to be accompanied by a guide knowledgeable about the area's ecosystem. The program is offered by the Holy Cross Wilderness Defense Fund, which hopes to raise public awareness about a water diversion project that threatens the area. Interested groups may contact Dr. Jack Holmes, 1219 Gold Park Rd., Redcliff, Colo. 81649, 303/827-5207.

SOLAR ELECTRICITY WORKSHOP

A workshop on solar electricity will be offered Aug. 13 in Ft. Collins, Colo. Topics to be covered include solar cell theory, application and design of systems and electrical storage techniques. Registration for the one-day workshop is $25 and enrollment is limited. For more information, contact Jim Welch, 318 Whedbee, Ft. Collins, Colo. 80524; 303/482-9507.

FORESTRY LITERATURE

Resources for the Future, Inc., has announced the publication of two new forestry books. *The Comparative Economics of Plantation Forestry* is a 192-page paperback which studies plantation forestry in 12 regions of the world and outlines the global benefits from regional planning. *Government Interventions, Social Needs, and the Management of U.S. Forests* is a 520-page guide to managing forest land for public and private interests. Additional information is available from Resources for the Future, Inc., 1755 Massachusetts Ave. N.W., Washington, D.C. 20036, 202/328-5025.

BLM INVITES OIL SHALE INTEREST

The Craig District of the BLM has issued a "call for expressions of interest" in a request for public comment on possible future oil shale leasing in the Piceance Basin of northwestern Colorado. The information received will be incorporated into the Resource Management Plan currently being prepared. The management plan will outline which areas should and should not be leased in the future. Comments should be submitted to John Singlaub, BLM, 317 E. Market Street, P.O. Box 928, Meeker, Colo. 81641, 303/878-3601.

WOODSY LOOKS FOR HELP

The Bridger-Teton National Forest is looking for volunteers to serve as wilderness trailhead hosts this summer. Volunteers will assist the Forest Service in providing information on wilderness camping sites, horse use, ways to avoid grizzly bear-human conflicts and trail conditions. Participants must provide their own trailer or camper. Further information is available through the Buffalo Ranger District, Box 278, Moran, Wyo. 83013, 307/543-2386.

MT. ST. HELENS JOURNAL

Volcanic Eruptions of 1980 at Mount St. Helens, the First 100 Days, is a field journal published by the U.S. Government Printing Office which recounts the events before and after the May 18 eruption. It describes the unprecedented volcanic activity in non-technical terms and details the scientific and human reaction. Copies are available for $8.50 from Superintendent of Documents, Dept. 36-BH, Washington, D.C. 20402, 202/783-3238.

FLOCK TOGETHER

The 1983 biennial National Audubon Convention will be held August 20 through Sept. 2 in Estes Park, Colo. Convention activities will orbit around the theme, "Think globally, act locally." The event is billed as the greatest collection ever of life-listers, eco-activists, suburban naturalists, hard-core environmentalists, neo-Malthusians, deep ecologists, arm-chair ornithologists, druids, do-gooders, troublemakers and assorted rare birds to descend on the east slope of the Colo. Rockies. If you care to join, send a $35 registration fee to National Audubon Society Convention, 4150 Darley Avenue, Suite 5, Boulder, Colo. 80303, 303/499-0219.

SOLAR TECHNOLOGY CONFERENCE

The fifth annual Iowa Solar Operational Results and Appropriate Technology Conference will be held in West Des Moines, Iowa, June 16-17. The conference is sponsored by the Iowa Energy Policy Council, the U.S. Department of Energy and the Iowa Solar Energy Association. Registration is $20 for one day and $35 for both. For further information, contact Solar and A.T. Conference, Iowa Energy Policy Council, Capital Complex, Des Moines, Iowa 50319.

BOATERS TAKE NOTE

Private boaters who want to float the main stretch of the Salmon River between June 20 and Sept. 7 are reminded they need a Forest Service permit. The segment of the river on which permits are required is from Corn Creek to Long Tom Bar. For further information on boat permits, contact the Salmon National Forest's North Fork Ranger District at 208/865-2383.

RECYCLERS CONVENTION

Focusing on a theme of "Expanding Recycling and Market Development," the National Recycling Coalition will sponsor its second annual recycling congress, August 16-19 in Boulder, Colo. All community members, industrial, and municipal recyclers and waste water managers are invited to attend. General session will feature leaders in municipal, industrial, and community recycling efforts from across the U.S. and Canada. More information is available from the congress office Environmental Center, UMC 331, Campus Box 207, Boulder, Colorado 80309, 303/492-8308.

JUGGIES IN THE CANYONS?

The Bureau of Land Management in Price, Utah, is requesting public comment on a proposal by Rocky Mountain Geophysical to conduct seismic testing in Desolation Canyon and Turtle Canyon wilderness study areas. The search for gas and oil will include 70 miles of seismograph line, helicopters and above ground explosives. Comments on the proposal will be accepted until June 27 at BLM, P.O. Drawer AB, Price, Utah 84501.

DRAFT WILDERNESS EIS

The Bureau of Land Management has released a draft environmental impact statement on the proposed wilderness for the Safford District in southeastern Ariz. and southwestern N. M. The document recommends that portions of four wilderness study areas, totalling 34,881 acres, be designated as wilderness. Public comment on the draft EIS will be accepted until Aug. 31. Written comments should be sent to the district manager, BLM, Safford District, 425 E. 4th St., Safford, Ariz. 85546.

DATELINE

June 21	***POWDER RIVER COAL TEAM MEETING*** Ramada Inn, Billings, Mont. 9 a.m.-5 p.m. Contact Stan Mckee, Project Manager, 307/772-2295.
June 16	***RAWLINS (WYO.) DISTRICT, BLM, ADVISORY COUNCIL*** Rawlins District office, 9 a.m., 1300 N. Third Street. 307/324-7171
June 21	***BUFFALO (WYO.) DISTRICT, BLM, RESOURCE MANAGEMENT PLAN*** Public hearing, 7 p.m., Meadowlark School, 550 Burritt, Buffalo, Wyo. 307/261-5593.

OPINION

Unflinching and unthinking

When I talked with Interior Secretary James Watt last September, he said, "We will not allow any mining or drilling activities on federal lands in the national park system. That's the law. That's the policy."

It seemed to me like a straightforward enough statement. Except that apparently, once again, Watt didn't mean what he said. Asked by Utah KUTV reporter Bob Loy about the possibility of allowing drilling inside Canyonlands National Park in southeastern Utah, Watt said, "I've never flinched from being exposed to truth or science or fact. If we can drill a well to help us understand that, we ought to do it.

"Let's go for fact and establish a scientific basis for a decision. So I think I would encourage (drilling in Canyonlands)."

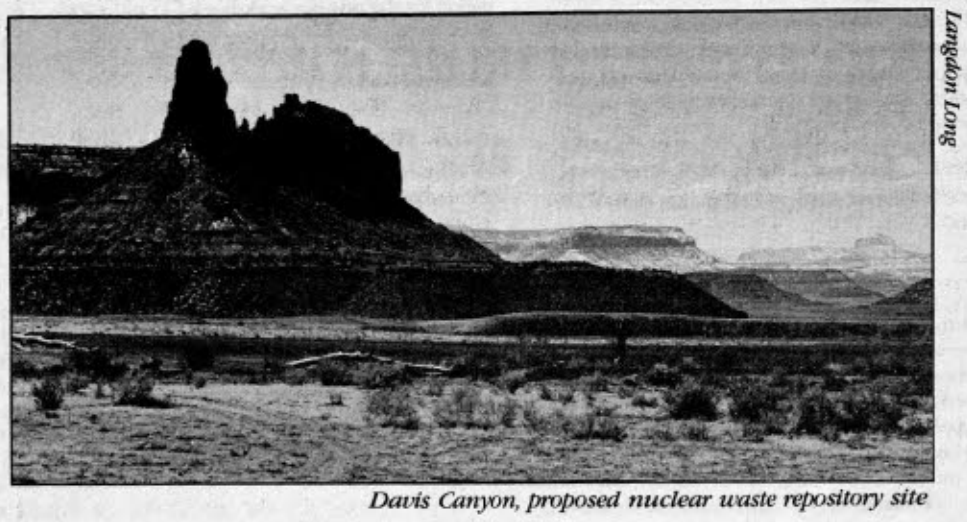
Not as straightforward, maybe, but the meaning was clear. Watt will allow drilling in the parks — in the name of science.

The drilling under discussion here is geologic test drilling to learn more about the salt beds underlying Canyonlands. The Department of Energy is considering a site in Davis Canyon, a mile and a half from the border ot the park (*HCN*, 2/19/82) for the disposal of high-level nuclear waste.

The implication is that Watt is not only encouraging the test drilling, but would not object to the placement of the dump in such close proximity to the park. In fact, Watt told Loy, "A nuclear waste facility will always be close to something by definition. Let's make a good judgment based on the facts we can put together. I wouldn't flinch at anything."

The secretary may be unflinching, but he's also unthinking. First of all, as steward of the nation's resources, he has a duty to protect the integrity of the parks. Instead, he is serving as a stalking horse for every harebrained idea that the Department of Energy comes up with. Watt has acted more like an auctioneer than a resource manager and he is merely taking the first steps to put the national parks on the block as well.

Watt is also wrapping his most recent deception in the cloak of "science." Science has little or nothing to do with it. The real issue is the future of the nuclear energy industry and the disposal of nuclear waste. This is a political question, not a scientific one. The Reagan administration is a strong supporter of nuclear power. As that unfortunate energy source rushes headlong into its fourth decade of existence, it is an



Langdon Long

Davis Canyon, proposed nuclear waste repository site

acute embarrassment that the collective genius of the industry has been unable to find a satisfactory permanent solution to the waste disposal problem. The materials are extremely long-lived — the radiation may be hazardous for about 10,000 years — and extremely dangerous.

The dangers are so great in this matter that extreme caution must be exercised in the choice of a site. Watt, by ignoring the obvious impacts on one of the nation's most spectacular national parks, is bowing to the industry's rush to solve its most nagging headache. In fact, however, according to *Science*, a publication of the American Academy for the Advancement of Science, "Public health and safety does not require early disposal: indeed, with the passage of time the radioactive decay of the shorter lived fission products reduces the waste's heat and makes ultimate disposal easier."

There are a number of other potential sites besides the one near Canyonlands. It should be the last one tested. And under no circumstance should test drilling be allowed in the park.

— *DSW*

LETTERS

GRIZZLIES

Dear *HCN*,

The article on grizzlies by Joan Nice (*HCN*, 3/18/83) was very well done. I always gasp slightly when I see a front page article about grizzlies. I suspect, immediately, that the bears will be hurt again by sensational journalism. That, pleasantly, was not the case this time.

There are a few slight misconceptions which I would like to address, however. She implies that grizzlies merely "disappeared" in other states. In fact, they were *purposely* eliminated, with poisons and professional hunters/trappers employed by government agencies and stock companies. Grizzlies could have been eliminated in Montana the same way (and could now) except for two things: (1) Glacier and Yellowstone parks, where they were (are) favored; and (2) Montana has long managed the grizzly as a game species. In both cases, this gave the grizzlies "a public that cared" and funds.

The estimate of 10 to 12 grizzlies left in the Cabinet Mountains was not mine — it was an estimate "bought" by the U.S. Forest Service with an eight-day, "quick and dirty" study, the kind I warned them not to do. It should rightly be reflected in F.S. planning, nonetheless, since it is the only printed estimate. What bothers me most about the Cabinet Mountains grizzlies, however, is the fact that no study funds have been available for the past three years, despite every indication of a desperate need for information. People should ask why. A new research effort being initiated this year will be paid for by U.S. Borax, who wants *into* the Cabinets to search for minerals.

My earlier point, that part of the reason Montana has grizzly bears is because they have been actively managed as a game species, leads to another point Nice makes, e.g., "that grizzlies and people are basically incompatible." Montanans and grizzlies *are* compatible, as are people in Hokkaido, Poland, Yugoslavia, Norway, Bulgaria, etc., with the Yezo and European brown bears (same species as the grizzly). To "live with grizzlies" takes time, understanding, and a will to do it. The bears, especially, need time to "learn how," and we, too, need time to learn how, but also the will and understanding to allow for it.

Unfortunately, the pace of living, of development, of exploiting resources, is too rapid in most areas of North America for certain animals to adapt. Without taking time to think, without being "close to the land," people lose their will and understanding, and the bears are not given time to learn and adjust. Montana, partly because the pace of life and development is slower here, but partly by will, has allowed the grizzly a "place." Carefully planned management (e.g. hunting by quota) has placated the landowner, has kept the bears wary of people, and has kept up a public interest in the bear. This situation was *caused* by the early bear studies here, and by the foresight of a few key people. It didn't just happen.

If grizzlies and people were, irrevocably, not compatible, we would have no choice but to eliminate the bears. We can live with them, but it will cost a lot in research and management dollars, and it will cost a lot in legal and self-discipline by people who live with the bears. Local people can do the latter, but *all* Americans should help with the research and management costs. Because of federal neglect, they are not, at the present time. And the few people who care, who see the whole problem, and who try to fill the gaps, are strained to the limit.

I commend Nice for covering both aspects of the Yellowstone controversy (which, unfortunately, Alston Chase, in the *Atlantic* article, did not do), and for pointing out the fallacies in "feeding the bears." The latter is a "quick fix" approach, not worthy of serious consideration.

The most serious, current problems for the grizzly, as I see it, are: (1) the reluctance of agencies to use existing data in such things as forest plans, subdivision planning, etc.; (2) the backing off from research support by federal agencies (e.g. the loss in long-term research continuity, and money from *all* the people of America); (3) the lack of coordination in land use practices and research; (4) the over-emphasis on numbers, and the under-emphasis on habitat research/management (because grizzlies "get in the way" of the land managers and the resource exploiters); and (5) the recent decline in cooperation between the principal agencies and key people (e.g. backbiting, interagency conflicts). A repeat of the "Yellowstone controversy" appears to be developing, and could even spread to the Border Grizzly Area, if the present feuding over management, and the grizzly-related ego trips do not abate.

Chas. Jonkel
Missoula, Montana

Ed. note: Charles Jonkel is a professor at the University of Montana and director of the Border Grizzly Project.

"NO" TO WATER-GRABBERS

Dear *HCN*,

I was most impressed with the copy of *High Country News* recently sent me by the president of the Montana Wilderness Association, of which I am a member. I greatly admire Rep. Daniel Kemmis of Missoula who did not wish to sell Montana's water "down the river" for so-called "progress." He, at least, is not out for greed.

Right now in this era of "bigger is better," where population is running rampant, unchecked, and where James Watt runs tyrant over our natural resources (as if he owned them personally), exploiting all he can without control, it really made me feel great to know there was one strong-minded representative who could say "no" to the big "water-grabbers." We need more of the quality of Daniel Kemmis in office today.

I also agree with all three letter writers in your "Letters" column. Kathleene Parker spoke of the disaster created in Colorado's scenic West Slope by the oil shale industry. The American public should think twice before sacrificing beautiful scenic areas for money, big industry.

Dan Brecht from Alaska raises the question: grizzly bears or population? We have to choose. The grizzly needs wilderness. Why can't we preserve this land, this necessary habitat for the grizzly before it's too late? It behooves all of us to work hard to save the wilderness and add to it *now*.

Which brings us to James Watt. I read the letter by Mae Urbanek with interest but liked the last sentence the best. "He (Watt) would sell the priceless wilderness and off-shore heritage of the U.S. to the highest bidder to exploit." Everyone opposes him except President Reagan, who appointed him, and the industrialists who surround him in his office. It is high time we ask for his resignation or retirement. He is harming our country much more than we ever realize. He is plundering America!

Gretchen Stevenson
Angola, New York

WATT AND PARK VANDALS

Dear *HCN*,

On May 21 on the 10:00 television news, I watched James Watt stand in front of a sign in Arches National Park that had been vandalized with an anti-Watt slogan and give an emotional denunciation of people who would vandalize a national park sign for political reasons.

On the same program, Watt stated he would support the vandalism of Canyonlands National Park by drilling test holes *inside* the park to help determine the feasibility of locating a high level nuclear waste dump just outside the park boundary.

Unfortunately, *both* types of vandalism are politically motivated; but the effect of destroying a sign is insignificant compared to what the Department of Energy, apparently with Watt's blessing, wants to do to Canyonlands National Park. It is difficult for me to understand why the secretary of the interior, who is supposed to protect our national parks, can be so willing to undermine the basic philosophy behind our national park system.

The letter in the May 13 issue of *HCN* helps shed some light on Watt's misguided actions. I just hope *HCN* readers will write to their congressmen to object to Watt's cavalier attitude toward Canyonlands National Park and urge them to prevent the high level nuclear waste dump from being located next to Canyonlands National Park.

Owen Severance
Monticello, Utah

LETTERS

STRAIGHTEN THE RECORD

Dear *HCN*,

"Cut urged in Colorado wildlife research" (*HCN*, 5/27/83) was well-written and fair. However, it contained some inaccurate and misleading material. I would like to set the record straight. In your article you indicated Mr. Prenzlow said, "Of the 85 research employees, only 33 held advanced degrees in biology. He argued that by 'redirecting' about 22 of those employees to other departments within the Division, research can become more productive, along with other departments."

Mr. Prenzlow's statement is both false and misleading. The facts are:

1. Fifty-five of the 85 research employees are full-time employees with advanced degrees in wildlife biology.

2. Many of the 22 employees who would be redirected to other departments presumably are part-time seasonal employees. If those part-time employees are removed from the research section, studies of black bear, mountain lions, sharptailed grouse, sage grouse, mule deer, elk, and all ongoing nongame programs would have to be discontinued.

3. Prenzlow's contention that the Research Section "is top-heavy with administrators who are doing things that management should handle" is simply untrue. There are only two full-time administrators with research and eight wildlife research leaders who have some administrative responsibilities. Two full-time administrators and eight part-time administrators supervising the work of 75 employees hardly seems "top heavy."

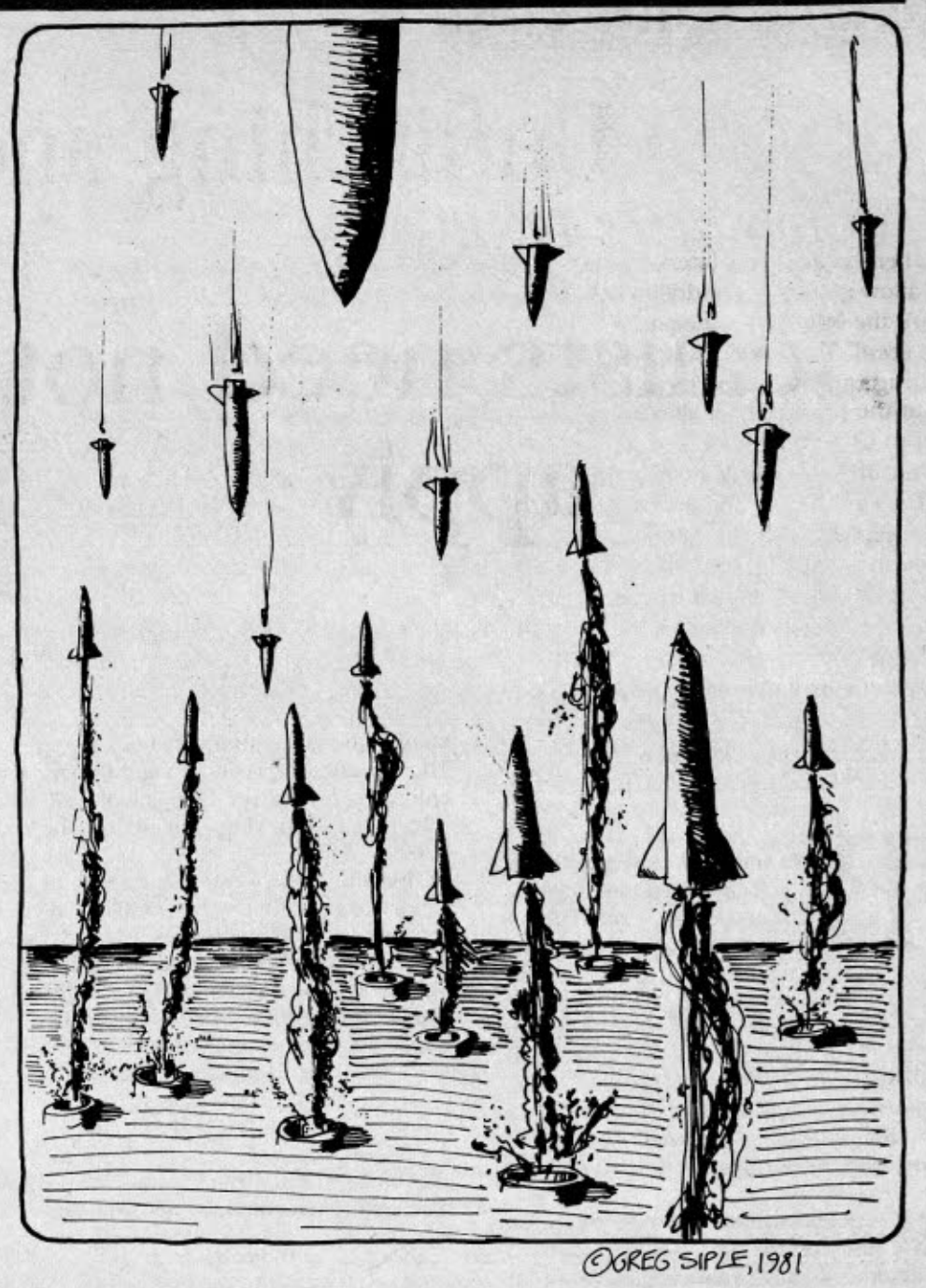
4. Mr. Prenzlow implies that the Research Section has not been productive. A recent survey conducted by Colorado State University's Department of Fishery and Wildlife Biology revealed that for the period 1978-83 the Colorado Division of Wildlife's Research Section was the most productive state wildlife research agency in the nation and was among the leading wildlife research agencies internationally.

5. The "anonymous letter" was prepared because after Mr. Prenzlow released the audit recommendations to the public via the Nongame Advisory Council several members of the research section received inquiries about those recommendations. The "anonymous letter" was prepared to provide a succinct statement of what would happen to the research section if all the recommendations were implemented.

Director Grieb and Mr. Prenzlow did not encourage hope that major changes would be made before Grieb was to make his decisions on the recommendations on June 2, 1983. Director Grieb and Mr. Prenzlow apparently think that the value of the research section is primarily internal to the Division of Wildlife. Several members of the general public have expressed a different opinion. They regard the research section and its products as primarily a public resource.

R. Bruce Gill
Ft. Collins, Colorado

Editor's note: Division of Wildlife Director Jack Grieb has postponed making a decision about the research division audit recommendations until after the June 10 Colorado Wildlife Commission meeting.



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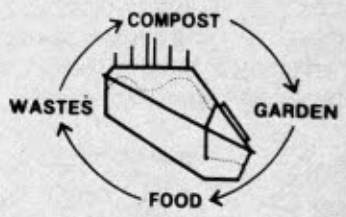

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Schwinden's DNRC

Idealists need not apply

Montana environmentalists played wait-and-see during the first years of the Schwinden administration. They have now waited and seen, and their patience is growing thin.

by Don Snow

Bob Anderson's last months in the Schwinden administration must have seemed like a scene from Kafka. An articulate, charismatic technician, Anderson had been the administrator of the Energy Division in the Montana Department of Natural Resources and Conservation when Tom Judge (D) was governor. Then when Lt. Governor Ted Schwinden (D) whipped his boss in the primary, Anderson saw a brighter future for himself.

Troubled by the aloofness of Judge and impressed with the warmth and candor of the incoming Schwinden, Anderson was one of the first middle-level DNRC managers to hitch his horse to the Schwinden wagon. For his loyalty he was placed in a special position as the new governor's chief energy advisor, a big order in a state like Montana.

A few months later he found himself at the end of a gangplank that the state legislature was busily sawing off. Legislators had reviewed his position — somewhere between the department staff and the governor's staff — and couldn't figure out what Anderson was doing there. Then when Republican House Speaker Bob Marks made a special appearance at a 1981 budget hearing to urge the elimination of Anderson's job, the analyst-turned-policy-advisor knew his number had come up.

Neither Ted Schwinden nor DNRC director Leo Berry lifted a finger to save him. By all accounts they were pleased to see him go.

Anderson was a bright young man in an administration that places little value on innovation and thorough analysis of complex environmental problems, and tries to minimize controversy at any cost. By nature Anderson is a boat-rocker. As a private consultant before he worked at DNRC, he performed the substantive analysis that helped defeat plans to dam the Yellowstone River at a bottleneck called the Allenspur near Livingston. As a professional energy analyst in state government, he believed in vigorous debate and tended to encourage staff both above and below his office to challenge each other's assumptions and conclusions.

In Schwinden's DNRC, such managers are apparently considered liabilities. They simply aren't worth fighting for.

It usually takes a scandal for the press to pay much attention to the inner workings of regulatory agencies. The accident at Pennsylvania's Three Mile Island nuclear power plant taught the public a great deal about the Nuclear Regulatory Commission. EPA was just another acronym until network television discovered hazardous waste boondoggles.

But every environmental activist knows where the statutory buck stops. The law, after all, is no stronger than its enforcers, no matter how much well-intentioned lobbying put it on the books.

Montana is one western state with an annotated code that's chock-full of conservation, and its record as a national leader in environmental legislation has been much discussed, if only in the rarified atmosphere of environmental in-clubs. Much less discussed is the role of the state's major regulatory agencies in enforcing those prized laws.

Enforcement at DNRC is, in a word, diminishing, but for a variety of reasons. The Anderson incident demonstrates that, under Schwinden, one of Montana's central environmental enforcement agencies, DNRC, is gradually becoming demoralized. One former DNRC employee said it well: "This is an agency that has lost its sense of history."

Not knowing where it has been, DNRC has forgotten where it is going.

In 1974, the department took the brand-new Montana Utility Siting Act seriously — so seriously that because of its actions following the Colstrip power plant review, the agency's director lost his job and the state began to be known as "anti-business."

Armed with a tough new law that regulated the environmental siting of new energy facilities and allowed the DNRC staff to make determinations of need, the department dug into plans for Colstrip units 3 and 4 — its first major siting act review.

The first two units of the 2,100 megawatt project in southeastern Montana had already been "grandfathered" out of compliance because they were under construction when the act passed. But the final two units, twice as big and intended to produce power for an out-of-state market, led Montanans to believe that the fuse for then President Richard Nixon's Project Independence would be lit with Montana coal.

Colstrip 3 and 5 meant that twin 500-kilovolt power lines would march across the landscapes of western Montana to feed the enormous system controlled by the Bonneville Power Administration. Montanans were concerned with the increased mining, aquifer disturbance and water consumption, as well as the air, water, and social pollution that came with the complex.

Less than two years after the act passed, DNRC shocked utilities all over the country with the official pronouncement that units 3 and 4 should not be built. Under the direction of administrator Gary Wicks, the department concluded that the units were not needed and would be excessive pollutors.

It was as close to a scandal as the department ever came, and the media lapped it up. Governor Judge did not. After the appointed Board of Natural Resources and Conservation overruled the staff's recommendation on a 4-3 vote, the embarrassed Judge failed to re-hire Wicks for a second term at DNRC. The gutsy administrator went to work for the federal Bureau of Land Management in Utah.

The staff's decision proved prophetic. One of the four Colstrip partners is now pleading to sell its share of the project because of overcapacity. The doomed nuclear park under construction by the Washington Public Power Supply System was planned during these same years that Montana Power teamed up with BPA to forecast massive power shortages in the Northwest by the mid-1980s. Now Montanans are chafing against the 175-foot-tall powerlines that BPA is pushing across the land.

Former staff members at DNRC who helped make the Colstrip decision remember it as if it happened last Thursday. Said one, "That was an exciting time to work for state government. Everything we did was brand new to Montana. We felt we had in the siting act a mandate from the legislature and we were determined to do the best job we could. The (Colstrip) issue was debated exhaustively and we felt we made the best decision."

The governor and the board felt differently.

After Wicks left and the next administrator, John Orth, decided in nine months that he couldn't stomach state government, Tom Judge appointed an attorney named Ted Doney to rule the agency. Things began to change at DNRC. "Doney was a heavy-handed administrator," said Gail Kuntz, who worked eight years in the department's Facility Siting Division. "He insisted on an intimate involvement in the staff's work."

Unlike Wicks and Orth, Doney acted as if he knew his job hung from a thread at DNRC. He gradually became concerned with the image of his department, and took steps to clean it up in the eyes of industry.

"We were young, many of us fresh out of degree programs," remembered one former staffer. "I suppose from a certain perspective we looked like a bunch of environmentalists. Well, hell, a lot of us *were* environmentalists. It made sense that the siting act would be enforced by people who cared about it."

Doney cared, too. He was aggressive when it came to federal-state clashes over jurisdiction, which the siting act has tended to inspire. As passed and amended by the legislature, the act got the state into the business of siting hydropower stations, transmission lines, uranium enrichment plants — the kinds of facilities that are normally reviewed by federal regulators. Most of these jurisdictional overlaps had never been tested in court, but that didn't bother Doney.

He told the Northern Lights power company from Sandpoint, Idaho, that the proposed hydropower plant on Montana's Kootenai Falls would be reviewed under the siting act. The com-

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