

High Country

A special issue on the
**GREATER
 YELLOWSTONE
 ECOSYSTEM**

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The environmental watchdog of the Rockies

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Breaking faith with Old Faithful



Lynne Barua

Roaring Mountain, Yellowstone National Park

by Angus Thuermer, Jr.

When the first explorers brought back their reports of the Yellowstone geysers, mud pots and fumaroles of the Yellowstone country, a number of newspapers refused to print them. Such bizarre geologic carrying on taxed the credulity of a 19th century public that believed phrenology was a science.

It took the careful documentation of the Washburn-Langford-Done expedition in 1870 to convince Americans of Yellowstone's wonders.

This 1870 expedition also named many of the major features in what became the nation's first national park. Old Faithful was one name that stuck and that hot water geyser has lived up to its reputation by erupting 873,569 times since then. It seems willing to continue doing so if left undisturbed.

While the news of Old Faithful's 130-foot plume of water may have met some publishers' resistance over 100 years ago, it is doubtful that today's newspapers would ignore the story if the geyser suddenly stopped erupting. However, 160 applications for drilling for geothermal steam just west of Yellowstone currently threaten to do just that — close down Old Faithful and the park's other, less famous geysers. And legislation pending in Congress does little to ensure that this won't happen.

The drilling applications are pending on a 488,031-acre portion of national forest land just west of Yellowstone National Park known as the Island Park Geothermal Area. Some of these applications have been pending for nine years, awaiting direction from Congress to federal land management agencies regarding what drilling, if any, should be allowed along Yellowstone's western border — 13 miles from Old Faithful.

Island Park is composed principally of Targhee and Gallatin national forest land in Idaho, Montana and Wyoming. It abuts about 40 miles of Yellowstone National Park's west and south borders.

The problem lies in the deep underground labyrinth of subterranean cracks and fissures. Do the geothermal features of the Island Park area connect with Yellowstone's wonders? And, if they do, will drilling and extracting geothermal heat sufficiently reduce thermal pressure within the park to close down Old Faithful and its compatriots?

No one really knows. And no one will ever know unless exploratory drilling takes place. However, the very act of exploratory drilling may be sufficiently harmful to Yellowstone's features to permanently alter them. No one really knows that, either.

Energy companies and other drilling proponents feel that Island Park's resources might be used to generate electricity. By taking precautions, development next to Yellowstone can be compatible, they say. These precautions could include establishing a "no-drilling" buffer zone near the park, injecting water back into the ground after using the heat, and drilling monitoring wells to watch for changes in underground pressure and temperature. Others, like Ralph Maughan, Northwest vice president of the Sierra Club, say, "Why take a chance with the country's oldest national park unless there's a demonstrable need?"

And, said Paul Pritchard, president of the National Parks and Conservation Association, "There are no degrees of adverse effect, significant or otherwise, which should be intentionally imposed on national parks."

The circumstantial evidence indicates that the threat to Yellowstone's thermal features from commercial geothermal exploration and development is very real. Over the last 30 years,

seven of the world's 10 major geyser areas have been "destroyed or damaged by geothermal exploration or development," according to a 1980 environmental impact statement on Island Park's management by the U.S. Forest Service and Bureau of Land Management.

According to NPCA's Destry Jarvis, "Such results are not surprising and should have been expected. We cannot exploit the geothermal energy of an area and also preserve its geysers."

The EIS said, "In New Zealand, for example, the Wairekei (geothermal) plant was installed during the early 1950s. By 1954, the Great Geyser in Geyser Thermal Valley, which ranked fifth among the major geyser areas of the world, became inactive coincident with Wairekei's declining reservoir pressure. All other springs and geysers in the valley were also diminishing in their discharge of hot water and the last known natural geyser eruption occurred in 1965."

Geyser Thermal Valley was closed as a tourist attraction in 1972.

In addition, production from Wairekei affected another thermal area that was "thought to be independent (from Wairekei) with no connection at depth," the EIS said. "Recent drilling nine to 12 miles from Waiotapu, another New Zealand thermal area, may have induced a chemical change or interference with its reservoir." Federal maps prepared for the EIS showed eight Yellowstone National Park ther-

mal springs within five miles of the Island Park boundary. One spring straddles the border. Six more thermal springs are within 10 miles of the border and several major geyser basins — including Old Faithful — are within 13 miles. These include Lower, Midway and Upper geyser basins, the heart of the park.

Destruction of geothermal activity has also occurred in Iceland; Lardarello, Italy; Beowawe, Nevada; and Steamboat Springs, Nevada.

Beowawe was second to Yellowstone on the North American continent in geothermal activity before geothermal exploration began between 1945 and 1958. Wells were drilled and permitted to discharge without commercial use. By 1961, all springs and geysers had ceased flowing.

Currently, the U.S. Senate is considering legislation that might permit commercial drilling and development in Island Park. The bills are in the form of amendments to the 1970 Geothermal Steam Act. Attempts to amend that act have failed in the last two sessions of Congress.

John Pruess, minerals specialist with the Targhee National Forest in St. Anthony, Idaho, said he is "waiting for developments in Congress" before acting on the pending lease applications. "There was some feedback that we ought to protect the park," Pruess said.

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WESTERN ROUNDUP



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Colorado floods Grand Canyon beaches

On the evening of June 6, as white-water rafters scattered along 225 miles of the Colorado River in Grand Canyon National Park began to prepare dinner, a Park Service helicopter hovered and dropped the following note: "Glen Canyon Dam released 60,000 cubic feet per second for one hour, 11:00 a.m., Monday, June 6. Flows will continue over 50,000 cfs through the day. CAMP HIGH. BE CAUTIOUS."

Since early June, river flows through the Grand Canyon have consistently ranged above 50,000 cfs and at times have reached 70,000. The Colorado is currently flowing 61,000 to 63,000 cfs — about three times the normal June flow.

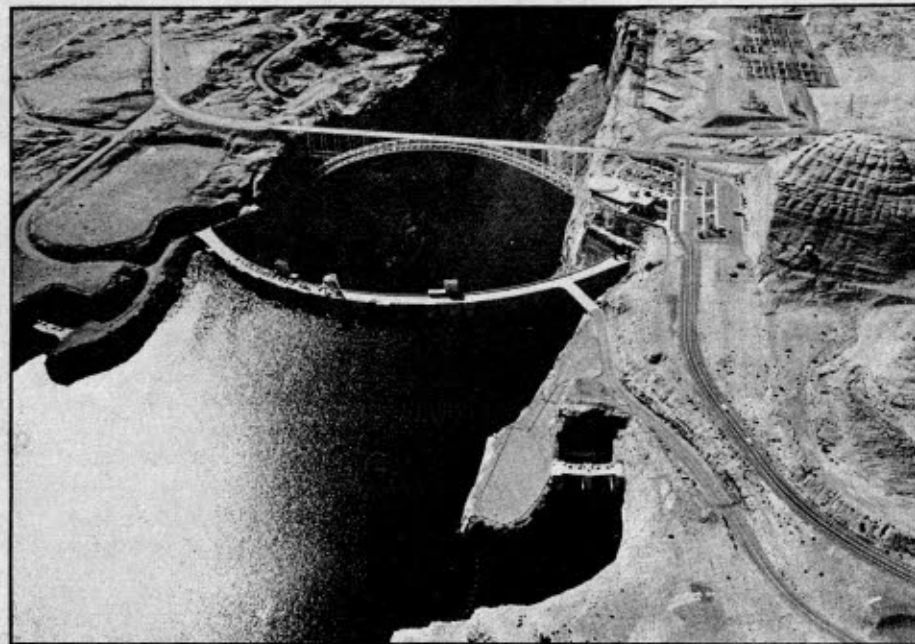
Lake Powell, the 186-mile long lake behind Glen Canyon Dam, is four feet above its "full" level and only seven feet below the maximum capacity of the dam.

This summer's flooding occurred only six months after the Bureau of Reclamation, which controls Glen Canyon Dam above the canyon, and the National Park Service concluded an agreement to limit releases through the Grand Canyon to 31,000 cfs — about half the current flow.

The increase in water through the canyon may be washing away beaches and vegetation that can never be replaced. "We won't know for sure until the water goes down," said Grand Canyon River Ranger Kim Crumbo, "but there is a possibility of an 80 percent vegetation loss. This is a major screw up. Glen Canyon is primarily a flood control structure — not simply a peaking power, cash generator. Why did they not draw down their reservoirs earlier, rather than sit on so much water until it was too late?"

Bureau of Reclamation spokeswoman Kathy Loveless denied that the bureau is guilty of inadequate anticipation. "In February, the National Weather Service predicted that we would have spring run-off of 6.7 million acre-feet into Lake Powell. As late as May, they predicted eight million acre-feet. It now looks as if the run-off will be at least 12.3 million acre-feet."

Loveless also said, "Glen Canyon Dam was never designed for flood control. It



Glen Canyon Dam

was designed to store water and to generate peaking power." BuRec is legally obligated not to drain water unnecessarily. "We find ourselves in a Catch-22 position."

Ron Everhart, Glen Canyon Recreation Area spokesman, said, "The bureau is in a very difficult position. Somebody is going to get flooded and it comes down to some very hard choices. Who do you flood — those poor folks around Parker, Arizona, or some stuff up here? Somebody is going to get more than they want."

On Monday, June 20, city and county officials in Arizona and California were seeking an injunction against the BuRec to halt the spilling from the dam. But, as one Los Angeles attorney put it, "It's kind of tough to enjoin Mother Nature."

Glen Canyon Dam ultimately regulates the major dams downstream, including Hoover, Davis and Parker. There has already been substantial flooding in parts of Arizona and Arizona Gov. Bruce Babbitt (D) declared a state of emergency in three counties last week.

In addition to breaching the spillways at Glen Canyon Dam, this year's run-off has reopened an old and acrimonious debate between conservationists and the Bureau of Reclamation. For years, environmentalists, river runners and

Grand Canyon National Park officials have contended that BuRec has ecological, as well as economic, obligations.

"I think the bureau has agreed that we do have an ecological responsibility to the canyon," said Loveless. "That is why we planned to spend \$2 million this summer studying beach erosion in the canyon." Because the Colorado drops its silt in Lake Powell, the water released from the lake acts to erode, rather than replenish, the canyon's beaches.

But at the moment, due to what river ranger Crumbo called the "bureau's malfeasance," a good portion of the canyon's beaches — which serve as the base of the existing riparian environment and which provide the only campsites for 15,000 river runners each year — have been inundated. It is ironic that the precarious stability of these same beaches, which are now being carried irrevocably downstream, was to be the focus of the bureau's study.

One bureau official said that he expects as much as 20 million acre-feet of water on the Colorado this year, the highest since 1929. The river will flow into the Gulf of California in Mexico for the first time since Glen Canyon Dam was completed in 1963.

—Randy Udall, Patricia Guthrie and Sandy Tolan

Dear friends,

This special issue on the greater Yellowstone ecosystem is the culmination of an idea that began almost a year ago when we heard the first rumblings about some sort of greater Yellowstone coalition. Gee, we thought, wouldn't it be neat to do a special issue on Yellowstone and its environs and send it out to all the members of all the groups participating in the coalition?

Well, we haven't been able to go quite that far, but we've gone quite a ways. Almost 10,000 new readers (and, hopefully, subscribers) will see this special issue of *High Country News*, thanks to the coalition, some of its cooperating groups and Rick Graetz of *Montana Magazine*.

In exchange, we've given the Greater Yellowstone Coalition a half-page ad in this issue to solicit your support. What will the coalition do? It's really too early to say in any but the most general terms, but it will "promote the concept of the greater Yellowstone ecosystem and actively seek its preservation."

That may mean lobbying or litigating or simply working with the various government agencies that administer a piece of the ecosystem, but the emphasis will be on education — on getting the public and the powers that be to recognize the integrity of the ecosystem

as an ecosystem rather than the patchwork quilt of administrative units that make it up.

This seems like an exciting, worthwhile and essentially new approach for the conservation community. We salute the coalition and hope you'll enjoy this special issue.

The *High Country News* Foot Race was once again a rousing success. We had a total of 84 participants, including 77 runners and seven walkers. The first finisher was Todd Pomeroy of Casper, Wyoming, with a time of 27 minutes, five seconds. Tim Irwin of Riverton finished second in 29:04 and Phil Gilbertson of Lander was third in 29:20.

The first female finisher was HCN's own Colorado bureau chief Carol Jones with a time of 35:28. Carol won her age group — 20 to 29 — followed closely by Sharon Mikol of Lander at 35:29.

The youngest participant was Courtney Gilbertson, age five, who finished third in the walkers category. Amy Campbell, age 12, won that category and second was yet another Gilbertson, Lisa, age eight.

Youngest runners, all age 12, were Jason Wilkes, Karrie DeFrance and Robbie Darr.

Our oldest participant was a regular racer, Bernice Anderson, who at age 79 walked the five-mile course. The oldest runner was another regular, Bill Nice, the father of former managing editor Joan Nice. Bill makes the trip for the race from Newport Beach, California, nearly every year. He won his age group in 39:23.

The race was organized this year by our finance director Betsy Schimelpfenig. She did a great job with help from Karen Garber, Claudia Bonham, Phil Heywood, Cyndy Simer, Ginger Tillemans, Ellen Barnett, Jazmyn McDonald, Lorna Wilkes, Dan Gorham, Tod Schimelpfenig, and the rest of the HCN staff. Oranges for race food were provided by Lander's Superfoods, mugs and trophies for the winners were donated by Cathe Harmon of Cat's Cradle, ribbons for 1st, 2nd and 3d by Ginger Tillemans and bicycles for safety patrol were provided by Bob Moon of Freewheel Sports in Lander. Sam Schimelpfenig and Toby Tillemans helped pick up cups. Our thanks to everyone for making it a successful event.

As usual around this time of year, HCN's new T-shirts have become available. See the ad on page 13 for more details.

— the staff

Denver sues over Lowry Landfill

The city of Denver apparently didn't like the order the Environmental Protection Agency gave it to stop seepage of hazardous wastes from an old section of Lowry Landfill. The city filed suit June 10 in U.S. District Court against the EPA, the state of Colorado, other federal agencies, other cities and hazardous waste generators and transporters that used the landfill. The city contends that it is not solely responsible for the wastes and that others should have to help bear the costs of containment.

Lou Johnson, chief of waste management with the EPA in Denver, said the city was ordered to contain contamination that is leaking northward from Section Six of the landfill. Section Six, Johnson explained, is the older part of the controversial landfill located in Arapahoe County, but was operated by the city of Denver between 1967 and 1980. In 1980, Chemical Waste Management

took over the operation of the landfill, but used another portion of it for dumping. Chemical Waste itself has been cited for several contamination problems by the EPA (HCN, 6/10/83).

Between 1967 and 1980 an estimated 100,000 gallons of liquid wastes of all kinds — including toxic and hazardous wastes — were dumped into unlined trenches in Section Six, Johnson said. It wasn't until the Resource Conservation Recovery Act of 1976 that laws were established for such dumping. Those laws did not go into effect until 1980 when Chemical Waste took over the Lowry operations. However, the cleanup of Section Six does fall under the EPA's recently established Superfund program.

The city, EPA and state officials have been involved in discussions regarding Section Six for a few months, Johnson said. "This order, however, is only talk-

ing about design and containment," he said. Cleanup of the source of contamination will have to come later.

Sharon Metcalf, assistant regional counsel with the EPA, said it is difficult to characterize the lawsuit. But she said the city is basically trying to get the order thrown out or to have other parties it believes were responsible for generating wastes ordered to help in the containment process and to bear a portion of the costs.

When asked about the city's stand on the suit, George Cerrone, assistant city attorney, said, "I feel all the rest of my talking should be done in court. I don't want to do it in the papers."

The city will have 60 days after the order goes into effect on June 23 to begin containment procedures. The EPA requested a plan from the city for complete cleanup action.

— Carol Jones

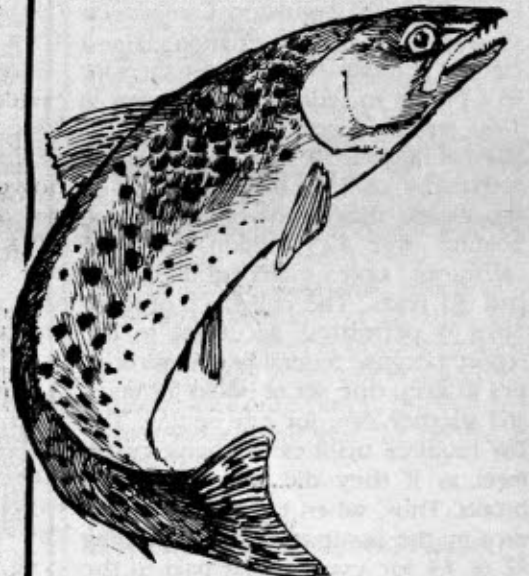
HOTLINE

Nuke plant flunks test

The Fort St. Vrain nuclear plant in Weld County, Colorado, failed its fourth emergency disaster test recently. Apparently, the communication system to notify state and local officials, Public Service Company of Colorado and the U.S. Nuclear Regulatory Commission didn't connect. Communications got bogged down along the network and it wasn't until an hour after the planned emergency test started that the state emergency center at Camp George West was notified. The plant has been tested three other times and has failed each test. The plant has been shut down since March 17 because of a steam valve problem. It is expected to be operating again soon.

Acid rain report finds a problem

The first annual report to the president on acid rain has concluded that pollution from power plants and industrial facilities is the primary cause of acid rain. The report by the National Acid Precitation Assessment Program is the first acknowledgement by the Reagan administration that man-made pollution is the major source of acid rain. The report also acknowledged that acid rain is threatening not only the Northeast, but portions of the Southeast and the West as well. Environmentalists have called the study "a step in the right direction," and are now waiting to see what action will result from it.



High waters kill fish

Swollen river waters are not only spreading the fear of floods this spring, but have claimed the lives of one-half million fingerling trout at a Colorado state fish hatchery near Rifle, Colorado. The hatchery, which is the largest of the Colorado Division of Wildlife's 16 state hatcheries, sits on Rifle Creek, a tributary of the Colorado River. The fish were killed after high waters swept tons of silt and debris into the hatchery's pools. Wildlife officials believe that the number of dead fish may prove to be as high as one million after the cleanup is complete.

San Juan coal lease fight beats up

A scheduled coal leasing sale in the San Juan Basin of New Mexico is causing conflict within the New Mexico congressional delegation. The sale of 900 million to 1.5 billion tons of coal is scheduled for July, according to the *Public Lands News*. Sen. Pete Dominici (R-N.M.) and Rep. Manuel Lujan (R-N.M.) want to designate one of the three wilderness study areas in the basin as wilderness and proceed with leasing. The WSAs are the Bisti, the De-Na-Zin and the Ah-Shi-Sle-Pah. Sen. Jeff Bingaman and Rep. Bill Richardson, both New Mexico Democrats, want to designate all three study areas as wilderness and delay the leasing. The sale is one of five coal sales scheduled in the West in the next 14 months.

— Glenn Oakley

Idaho squares off for wilderness fight

Four public hearings on a yet to be written Idaho wilderness bill have been scheduled by Sen. James McClure (R-Idaho) for August, but conservationists fear the major decision may already be made.

McClure announced earlier this year his intention to resolve the RARE II (second Roadless Area Review and Evaluation) "problem" by introducing a single state wilderness bill that would release or designate as wilderness the remaining Forest Service roadless areas in Idaho. The Idaho Forest Industry Council responded in April with its wilderness proposal, a proposal which excluded any lands with commercial timber. Conservationists, meanwhile, have been protesting the speed with which the bill is being developed. Complained Idaho Conservation League Researcher Bruce Boccard, "He's talking about seven months from the time of broaching the idea to passing the legislation." McClure's office is tentatively looking at a prepared bill ready by September or October of this year.

If that happens, the bill will be introduced before some of the national forests in Idaho have completed their re-evaluation of roadless areas. On the Boise National Forest, for example, thousands of roadless acres — still unmapped — must be added to the roadless areas studied under RARE II. These areas were excluded from the RARE II study because they had previously been studied, and rejected for wilderness, under the Unit Planning Process. "Now we are being directed to re-examine those areas," said Chuck Nelson, land management planning chief for the Boise National Forest. "That adds a lot of areas on the Boise National Forest that a lot of people are not aware of." While only a few hundred thousand acres were considered on the Boise National Forest under RARE II, Nelson said, "In reality we have upwards of a million roadless acres we have to analyze... We, as well as most national forests, are looking at an extended period to study this."

Likewise, the Panhandle National Forest in northern Idaho is not expecting to have comprehensive roadless area maps ready until October — when a wilderness bill may already be working its way through Congress.

Wilderness Society Northern Rockies Regional Director Tom Robinson predicted, "It'll move fast after it's written. After that it'll pass in about two seconds. It's McClure's bill; who's going to oppose it?"

Robinson and other conservationists believe they have a fighting chance. "Basically it's a political issue," Robinson said, "and if we have a lot of grassroots interest we can moderate the

bill." Conservationists may also have non-Idaho friends in the House who could halt or amend a weak wilderness package.

However, national opposition to a weak Idaho wilderness bill could be compromised if the California wilderness bill is combined with Idaho's. Conservationists support the California wilderness bill, which has passed the House twice but has been blocked in the Senate by McClure, who chairs the Senate Energy and Natural Resources Committee.

Would the Sierra Club, with its large California membership, or other national conservation groups be willing to sacrifice Idaho in order to win big in California? That is a question perhaps no one can answer — but it's a question that everyone involved has no doubt pondered.

"It's just too early to say" whether Idaho's bill will be tied to California's, said McClure's legislative assistant for natural resources, Barbara Wise. "It's a possibility, but no plans have been made."

Referring to the California trade-off idea, Robinson said, "That's one likely scenario. Nobody really knows." But, he added, "There's no question they're taking hostages."

Compounding problems for wilderness supporters in Idaho is a general lack of knowledge by the public of the roadless areas in question. Boccard predicted the battleground in the wilderness fight will be over Mallard-Larkin, the Great Burn — both north Idaho forested areas — "and other non-spectacular areas that produce great wildlife habitat." Concurred Robinson, "The people who should be screaming about it, are not" — the hunters, fishermen and others who have traditionally been lukewarm toward wilderness designation. Boccard said conservationists may have something to gain from including in the wilderness bill "a high visibility, sexy area like the White Clouds," a scenic and popular high alpine region close to the Sawtooth Wilderness in central Idaho. The White Clouds have been placed in the further study category, but Wise said it and other further planning areas could be included in the bill — depending on public testimony at the four Idaho hearings.

Inclusion of the White Clouds also poses dangers for conservationists. By including the White Clouds in his wilderness bill, McClure could add significant acreage to his bill and still cut most of the RARE II lands out.

"It's an either/or situation, and that's what people don't understand," said Robinson. He explained that the Reagan administration will likely push for rapid

development of roadless areas that are not included in the bill. And that brings up another major issue in the wilderness battle: release language.

While no formal decision has been made, Wise said "Senator McClure has always felt that release language should be permanent." This would mean that areas not included in the bill would be removed from further wilderness consideration forever. Conservationists are pushing for "soft release" language — meaning areas not included in the bill may be developed, but they may also be considered for wilderness at a later date.

Idaho conservationists have already suffered one black eye in their wilderness campaign. After they complained that McClure had met with industry representatives in Idaho three times without once meeting with the environmental community, McClure agreed to meet with them. The conservation leaders scheduled a press conference to follow the meeting, but McClure, much to their surprise and chagrin, had invited the media to the meeting itself.

"We show up at 9:30 and the whole statewide media is there," recalled Robinson. Fearing such coverage would impinge on frank discussion of wilderness issues, the conservation leaders asked the media to leave. "We came out as the heavies," said Boccard, who noted that the media has never been invited to McClure's meetings with industry. The turning away of the media garnered more attention than the meeting itself in the press.

While state conservationists have yet to propose a wilderness bill of their own, they are spending the summer doing field work and studying the areas under contention. But once a bill is prepared, Idahoans will have to travel to Washington, D.C. to testify for or against it.

A June 12 ad run by the Idaho Forest Industry Council in the *Idaho Statesman* exclaimed, "After 12 years, it's time we resolved the wilderness question," and then asked readers to sign and mail a coupon supporting resolution to the Idaho delegation. Mused Robinson, "I thought we should call a press conference and show us both signing coupons and sending them to Washington. We feel it should be resolved too. We disagree on how."

The Idaho hearing locations and dates are: Boise, August 9; Idaho Falls, Aug. 11; Coeur D'Alene, Aug. 16; Lewiston, Aug. 17.

HOTLINE

Supreme Court awards gravel to government

A recent U.S. Supreme Court ruling has left some landowners in the West wondering what exactly they own. The 5-4 decision ruled that gravel is a mineral as defined by the 1916 Stock-Raising Homestead Act. Under the terms of the law, homesteaders were allowed to claim 640 acres for stock grazing, but the federal government reserved ownership "of all the coal and other minerals in the land." The suit was brought by Western Nuclear Inc., which had begun operating a gravel pit on land that was homesteaded in Wyoming under the 1916 law. The decision overturned a lower court ruling that gravel was not intended to be included in the "other minerals" mentioned in the law. Dissenting Justice Lewis F. Powell wondered about the implications for sand, clay and peat and said, "As I read the court's opinion, it could leave Western homesteaders with the dubious assurance that only the dirt itself could not be claimed by the government." The ruling affects approximately 33 million acres homesteaded under the 1916 act.

Group claims \$3.7 billion utility tax overcharge

The Environmental Action Foundation has released a report claiming the major utility companies collected \$3.7 billion from customers in 1981 for federal income taxes that were never paid to the government. The study of recent annual reports filed by utilities with the Federal Energy Regulatory Commission showed that 100 of the nation's largest electric companies billed customers for \$5.4 billion in federal income taxes in 1981 and paid only \$1.7 billion to the Internal Revenue Service, resulting in an overcharge of \$3.7 billion. The study also claims that utility companies are holding over \$25 million in unpaid "phantom" taxes collected during the past 30 years. The collection of these taxes is permitted, according to the report, because federal law allows utilities to keep one set of books for taxes and another one for rate setting. The law requires utilities to charge customers as if they did not receive tax breaks. Thus, when tax breaks are figured in, the company ends up keeping \$2 or \$3 for every dollar paid to the government. Legislation is expected to be introduced soon which would allow state regulators to crack down on tax overcharges by electric utilities.



Buffalo Bill Dam

Dam funds deleted

Plans for expansion of the Buffalo Bill Dam near Cody, Wyoming, received a setback recently when the U.S. House of Representatives deleted funding for the project from a water development appropriations bill before it was sent on to the Senate for approval. According to Sen. Malcolm Wallop (R-Wyo.) the rejection wasn't on the merits of the project, but was based on uncertainty over cost-sharing policies. The state of Wyoming has agreed to spend \$47 million, or about 35 to 40 percent of the total cost to raise the dam to increase its reservoir capacity. Wallop said that the House did not want to "create a precedent" for cost-sharing with the Buffalo Bill Dam before they develop a cost sharing formula for other water projects.

Tightening hazardous waste laws

The disposal of hazardous wastes in Colorado will be subject to tough new regulations if the Environmental Protection Agency approves a set of rules recently approved by the Colorado Department of Health. The new regulations are in many cases more stringent than the existing EPA rules.

In October, 1981, the Colorado legislature passed a bill to allow the state to write its own hazardous waste laws, provided that they were not more stringent than federal standards. The recently approved regulations, which turned out to be more stringent, are the result of that legislation, according to Joan Sowinski, hazardous waste section chief with the Health Department. And, a bill passed in this year's legislative session, explicitly made those more stringent standards legal (HCN 5/27/83).

One of the more important rule changes involves the disposal of liquid hazardous wastes. Under current EPA

guidelines, bulk liquid wastes — those not contained in drums or barrels — can be dumped into a landfill that has proper liners and leaching facilities. Under the proposed rules, no liquid wastes could be disposed of in landfills. The liquid would have to be converted to solids or exposed to evaporation, Sowinski said.

The new rules would also forbid the "disposal of wastes directly under or into surface or ground water that has a potential for beneficial use," Sowinski said. The EPA currently allows for "engineering" around such water resources.

Runoff from precipitation must be managed so that contamination does not leave the facility even in the event of a severe once-every-100-year storm. Current EPA rules accommodate only a once-every-25-year storm.

And, Sowinski said, new hazardous waste landfills will not be located in

flood plains under the proposed rules. Under current EPA rules, flood plains can be used as disposal sites if it is proven that contamination can be cleaned up before it is carried off in a flood. Also, certain engineering solutions to the flood contamination problem are acceptable under current EPA rules.

Sowinski said the state will require permit fees, annual operation fees and waste volume fees under the new laws. Environmental groups strongly favor this proposal as it places the cost of disposal operations on those generating the waste. Currently, the EPA does not require such fees.

The Health Department will probably submit its regulations to the EPA for approval sometime in July. EPA's answer is expected in early 1984.

— Carol Jones

Study sees four Powder River dams

A draft study on the Powder River Basin prepared for the Wyoming Water Development Commission recommends construction of four new water projects.

But at a public hearing in Buffalo, Wyoming, on June 1, it was clear that the study left many questions unanswered. Why build new projects when unsold water sits in several Wyoming reservoirs? Who pays for the projects? And if the state doesn't foot the bill, is it fair that only industry would be able to afford the water?

The study revealed one of the major problems, but left it unsolved. Before any water development can take place on Powder River, the complicated knot of conflicting water rights in the basin must be untangled.

The study prepared by Harza Engineering Co. of Englewood, Colo., recommended four new reservoirs. Top priority would go to the Buffalo Multipurpose Project to provide the city with needed water, and to the Enlarged Middle Fork Project. The other two projects are the Crazy Woman Reservoir and the Mid/Lower Clear Creek Reservoir.

But before any of them go further, State Engineer George Christopulos will have to unravel a snarl of about 21 storage right applications. The Powder River is over-plied — applications are pending on 1.5 million acre-feet of water, but only about 600,000 acre-feet are available for development under the Yellowstone River Compact.

The biggest snag is the massive Pumpkin Reservoir filing, which is senior to a large part of the water. Even the appropriators agree that the Pumpkin is a poor reservoir site, and they would like to transfer 30,000 acre-feet of the rights to



Boysen Reservoir, Wyoming

the Middle Fork, but a recent decision by the Wyoming Supreme Court may prevent Christopulos from doing that.

"Thirty-five years of problems are going to be condensed and come to a head in the next few months and few years," Christopulos said. "It's monumental. They talk about going to the next step; hell, there won't be a Level II unless we resolve the competition among these people who want the water."

The study barely touched the issue of demand, but it came up at the hearing. Only the Buffalo project would really be necessary, unless the state picks up part of the bill, said Mike Saunders, Harza project manager. At \$345 an acre-foot, only industry would be able to afford water from the projects.

Industry means synthetic fuels. Most of those who hold permit applications have been waiting years for planned coal gasification plants to be built. But those hopes have been fading lately.

Agriculture, which would like more water for year-round irrigation and new

land, won't be able to afford the water. State Sen. Charlie Scott (R-Natrona) said he was disappointed in the study for failing to address the potential for new agricultural land, and for assuming that users would have to pay for development with no help from the state.

Jon Huss, director of the Powder River Basin Resource Council, said the study ignores the two most important issues — need and financing. "The real questions are, should more water be developed when there is an adequate, available water supply, and should the state be subsidizing water development for industry?" he said.

Excess water is sitting unsold in the Boysen, Fontenelle, and Yellowtail reservoirs, while Lake DeSmet, the major reservoir in the basin, has 51,000 acre-feet of unused water.

The WWDC has set June 15 as the last date for public comment on the study. After it reviews the study, it will send it, along with recommendations, to the 1984 legislature.

— Susan Harlow

Water policy drains public use

Recent changes in water policy narrowing federal control of water on Bureau of Land Management lands may have serious implications in the struggle between private control and public use on federal lands.

Two opinions issued by Interior Department Solicitor William H. Coldiron dramatically alter BLM authority over the rights to springs and waterholes on BLM acreage, and make private control through state permitting processes more feasible.

Coldiron's most recent opinion, issued in April, said that the right to use water for any purpose other than human and animal consumption must be obtained under state water law. His ruling limits the previous federal policy reserving water rights for a broader range of purposes such as wildlife,

flood, soil, fire and erosion control, and crop growing.

In December, 1981, Coldiron issued an opinion establishing a policy allowing ranchers to acquire private rights for use of water holes on public land for watering livestock. The two rulings will put BLM in the position of competing with other users for water rights not specifically reserved by the federal government.

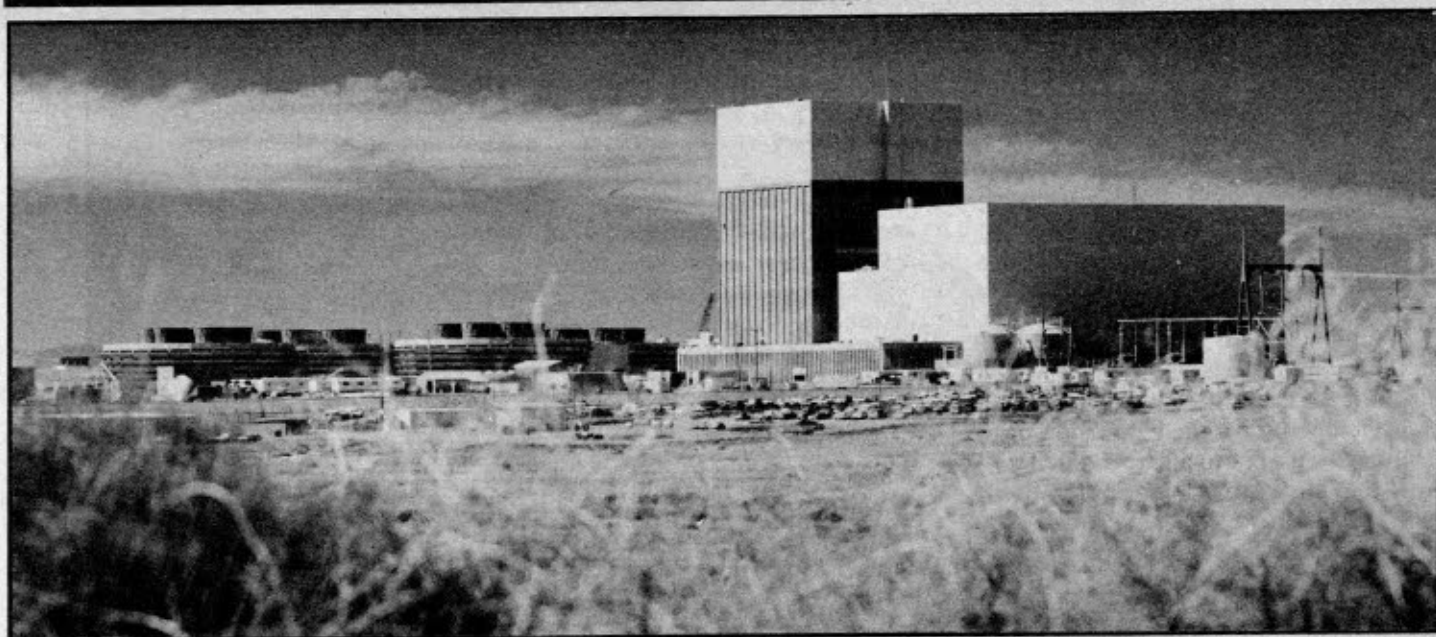
Water use will now be determined on a case-by-case basis. Since water law differs by state, the policy means the priorities for water use on public land may vary widely. Some states — like Montana and Wyoming — have public interest considerations written into the state water law which may protect or continue some of the uses included in previous federal water policy. Other

states, such as Colorado, view water more as a commodity resource, making protection of public interests more in doubt under the new policy.

Conservationists and others see the policy change as a "giveaway," fearing that, in some cases, ranchers or others holding private title to water on BLM land might have the right to pipe the water off and sell it to water-poor energy companies or thirsty municipalities.

Further, groups such as the National Audubon Society see the policy shift as a way of giving public lands to private control without actually giving up direct ownership. BLM readily admits that its ability to manage arid lands for multiple use is greatly impaired if the right to develop and use water is in private hands.

— Jess Funk



WPPSS power plant no. 2, Hanford, Washington

Washington court kayos WPPSS

The Washington State Supreme Court released 29 Washington utilities on June 16 from the multi-billion dollar debt that they incurred when two nuclear power plants were canceled in mid-construction a year and a half ago.

In a 6-to-2 decision, the court said the utilities, all members of the Washington Public Power Supply System consortium that began construction of five nuclear plants early in the 1970s, lacked legal authority to sign the contracts in which they backed WPPSS plants 4 and 5. The decision reversed a finding by a lower court several months ago which had said that the utilities had to repay the \$2.25 billion in bonds outstanding on the two terminated plants. With interest, the total debt amounts to roughly \$7 billion over 30 years. The 29 utilities would have shouldered the biggest share of the debt.

The supreme court ruling, called "devastating" by WPPSS managing director Don Mazur, makes the biggest

municipal bond default in U.S. history almost a certainty. WPPSS has been unable to make its monthly interest payments for plants 4 and 5 since May 31.

Lawyers for Chemical Bank of New York, the bond fund trustee for the two plants, said soon after the decision they would immediately initiate legal suits charging the utilities that signed the contracts with fraud. In addition, they said, they would sue individuals who approved the agreements and those who advised the signatories.

Under the terms of their contracts with WPPSS, the 88 original participants did not actually own the plants but agreed to purchase power generated by them and to back bonds issued to finance construction.

The court determined that Washington law authorizes public utilities to purchase power or to own generating plants. But, the court said, "The participants are simply not authorized to guarantee another party's ownership of a

generating facility in exchange for a possible share of any electricity generated."

The ruling leaves 43 electrical cooperatives still responsible for their share of the debt — about 20 percent. An Oregon court ruled last year that 11 Oregon public utilities lacked authority to sign their contracts with WPPSS. The Idaho Supreme Court is considering a similar case involving five municipal utilities in that state.

Two other WPPSS facilities — plants 1 and 3 — although not terminated, have been delayed indefinitely. Plant 3 was the most recent to be mothballed and efforts to find financing to finish it were made virtually impossible by the Washington ruling. The remaining plant, number 2, is 97 percent complete, and needs about \$150 million to finish.

Chemical Bank will probably appeal the Washington decision through the federal courts.

— John Soisson

Courts set new pesticide rules

A series of far-reaching decisions by civil courts in the Northwest over the last two years has significantly toughened pesticide regulations. The courts have generally ruled in favor of citizens' contentions that public and private agencies applying pesticides have illegally ignored the implications, especially to human health, of those chemicals. Those agencies have been ordered to publicly detail, as best they can, the potential hazards of their projects.

Member groups and associates of the Northwest Coalition for Alternatives to Pesticides (NCAP) of Eugene, Oregon, were plaintiffs in many of those suits. Fred Miller, NCAP coordinator, called the cases "very important regionally and nationally in building a decision record." The decisions can be used, Miller explained, as precedents in other cases nationwide to produce pesticide reform. However, Miller stressed, the legal situation is still murky. The government agencies involved have appealed all the cases to higher courts. Also, the ramifications are not clearly defined and won't be until still more cases test the limits of the new mandates.

In an Alaska case — *Alaska vs. Weeks*, decided on August 6, 1982 — the judge ruled that any pesticide applicator, whether federal, state or private, if it is financed, assisted, conducted, regulated or approved by a federal agency is subject to the disclosure requirements of the National Environmental Policy Act. NEPA guidelines require public involvement, but it is still unclear how much public comment is mandated by this decision.

In a similar case — *SOCATS vs. Watt* in Oregon, decided on September 9, 1982 — the judge ruled that the Bureau of Land Management was required by

NEPA disclosure requirements to reveal all gaps in existing relevant scientific data and to include a worst case analysis in its environmental documents.

Another Oregon case — *OEC vs. Kunzman*, decided on December 10, 1982 — involved a citizens' group suing a state agency for violating the application requirements of a product label. In that case the judge upheld the principle of private right of action, the citizens' right to sue to force public agencies to comply with stated regulations.

A California judge, in *Sierra Club et al. vs. Peterson*, decided April 13, 1983, found for three environmental groups, agreeing that the U.S. Forest Service had to comply with state-ordered spray permits and regulations, even on federal land. Also, the court held that intensive timber management did not require herbicide applications, as the USFS claimed.

In Oregon, in a suit brought by a private individual — *Merrills vs. Block*, decided April 19, 1983 — the judge ruled that the USFS "abdicated its responsibility" to do research into the health effects of chemicals it intended to apply and could not merely rely on EPA registration or EPA data. Whether that research would entail actual laboratory investigations and studies or would be just an up-to-date literature survey is in dispute and more cases will be required to settle that point.

In another Oregon case, *SOS vs. Watt*, decided May 6, 1983, the jury found that the BLM could not just add analysis to an existing environmental statement without a public comment period and without consideration of the worst possible consequences of the action.

To consolidate and delineate these decisions, at least two other suits are likely to be filed. In California, the

Friends of the Plumas Forest and the Salmon River Concerned Citizens are expected to sue the USFS for using an old environmental statement that does not include the recently mandated information. Also, the Northwest Coalition for Alternatives to Pesticides is considering suing the USFS and the BLM in Oregon to force them to adopt those rules throughout the entire state. And nationally, the Natural Resources Defense Council and the labor organization AFL-CIO joined in a suit against the EPA to overturn all the pesticide regulation decisions made during the tenure of Ann Gorsuch Burford because of suspected government-industry collusion.

— Bill London

BARBS

Won't melt in your hand, but it won't melt in your mouth either. According to *Climbing* magazine, a climber once bit into a pair of sunglasses because he mistook them for a frozen chocolate bar that he had stashed in the same pocket.

The more things change... Burlington Northern Railroad and several other companies are trying to develop a coal-fired locomotive.

"The prisoner is sentenced to watch 300 consecutive showings of Gandhi." Speaking to the Montana Mining Association, Ron Arnold, described as a former environmentalist turned anti-environmentalist, urged "shooting" environmentalists. Butte's *Montana Standard* reported, however, that Arnold backed away from that position, saying he couldn't recommend doing anything illegal.

HOTLINE

Uranium mill tailings regulations criticized

Dr. Edward Martell of the National Center for Atmospheric Research in Boulder, Colorado, said that the Environmental Protection Agency has greatly underrated the danger posed by uranium mill tailings. Martell made his statement at the final public hearing on the EPA's proposed new regulations for disposal of tailings at active uranium mills. The EPA estimated that there are about 170 million tons of uranium mill tailings at 26 sites in the West, mainly in New Mexico, Colorado, Wyoming and Texas. The new rules would limit the release of radioactive radon gas at 10 to 50 times less than current levels. Dr. Martell published a report in March which concluded that indoor radon decay products bind themselves to cigarette smoke and are thus brought into the body of both smokers and non-smokers who inhale smoky air. His findings indicate that exposure to radon decay products "are a contributing factor in most and perhaps all human lung cancers." Martell criticized the new rules as being based on inadequate research, and said the danger of radon gas from uranium tailings cannot be overrated.

The bear facts

It seems that even though grizzly bears dislike drilling sites they have an even stronger dislike of roads. These are the tentative conclusions of Keith Aune, biologist for the Montana Department of Fish, Wildlife and Parks, after a three year study of Montana's grizzly bears. Bears tended to stay about a half-mile away from a natural gas well drilled at Cow Creek, north of the Blackleaf Game Range. Readings from radio-collared grizzlies showed that they stay an average of one mile from roads. Although Aune plans to continue the study to determine the long-term effects of oil and gas exploration on grizzlies, funding for the project is becoming uncertain. Past support has come mainly from the Nature Conservancy, the Bureau of Land Management and the oil and gas industry.

Floating the Colorado River

It's hard to tell what might be floating down high river waters after the heavy spring rains and snowmelt. But the Colorado State patrol has asked river rafters to watch for three barrels of hazardous chemicals floating somewhere along the Colorado River. The three barrels contain quatrene, a highly concentrated cleaning solvent, and were accidentally lost in the Colorado waters after a truck overturned on the curving road through Glenwood Canyon. The chemical is sealed in plastic drums and labeled flammable, and could cause extreme irritation to human skin. Both the Colorado Department of Health and the Environmental Protection Agency have been notified of the river-riding barrels.

EPA may get a raise

The House of Representatives has passed an amendment to increase the Environmental Protection Agency's operating budget by \$220 million. The amendment was proposed by Rep. Tim Wirth (D-Colo.). It passed, 200 to 167, bringing the budget for the coming fiscal year to \$1.3 billion, which was approximately the agency's fiscal 1980-81 budget, before the Reagan administration took office. The administration had requested a cut which would have reduced the budget to \$949 million. The measure now awaits Senate action.



USDA Forest Service

Granite Peak, Absaroka-Beartooth Wilderness

Stillwater's platinum runs deep

by Don Snow

Mining in Montana's Beartooth Range north of Yellowstone National Park has been a history of headaches ever since creation of the preserve in 1872. It was concern over what the park would do to the mining industry that led to furious discussions in Congress about how to manage this prized patch of parkland. Today, Yellowstone area residents, mining proponents, and state and federal agencies are still quarreling over how much protection to give to the park's rich boundary lands. Given their history, it's no wonder that the struggle rages on.

Congress in 1872 also granted formal rights to mine on federal lands through passage of the General Mining Law. Few people then quibbled about this landmark act, because it formalized a system of claims and patents that had once caused bloodshed in the West's mining frontier.

But when Congress also moved to create a national land preserve in northwest Wyoming territory, the mining industry cast wary eyes toward a plan that appeared to contradict the federal goal of disposing of the public domain. Railroad financier Jay Cooke approved of the new park, and numerous congressmen, aware that Yellowstone had become a weird pet of the national press, rose in support of the nation's first non-Indian preserve.

One senator proclaimed the park "a great breathing-place for the national lungs," where citizens wearied by crowds and industry might repair for refreshment. It sounded good, and the park bill passed handily.

Fourteen years later, angry miners

It was inconceivable to the mining industry that Congress would "favor the retention of a few buffaloes over the development of mining interests amounting to millions of dollars."

complained to Congress that the big park had become an impediment to progress. The Cinnabar and Clark's Fork Railroad wanted a right-of-way across Yellowstone so that gold ores high up in the Beartooths, near Cooke City, might be shipped economically to a railhead in the Yellowstone Valley.

It was inconceivable to the companies that Congress would "favor the retention of a few buffaloes over the development of mining interests amounting to millions of dollars." But Congress voted for the buffaloes and effectively shut off mining ventures just north of the park.

Three years later, in 1889, the federal government again offended mining companies by ordering closure and evacuation of metal mines near the town of Nye in the Beartooth's Stillwater Valley. It was not the presence of the park, but the boundaries of the old Crow Indian Reservation that caused the closure of Nye.

Early miners seeking gold in the Stillwater Basin had used an erroneous 1882 Army boundary survey to prove that their claims rested on public domain and not on Indian lands. They built the town of Nye, and a few years later the Minneapolis Mining and Smelting Company invested heavily in the promising Stillwater claims.

Five hundred settlers later, the Interior Department confirmed the boundary encroachment and ordered immediate evacuation of the Stillwater Valley. Miners left their equipment on the spot, and Minneapolis Mining and Smelting walked away from a \$200,000 investment.

It's kind of been like that ever since — boundary-area mines living or dying on the basis of governmental decisions. Today's tune has changed, however, and while federal officials are contemplating whether to subsidize mining on the Beartooth Plateau, state officials are apparently high-stepping to get out of

the way of miners in the Yellowstone Valley.

Ralph Dricar, environmental administrator for the Montana Department of State Lands, shocked a few residents of Montana's Yellowstone Valley last month. Speaking at a public meeting in Gardiner, just a few miles north of the park boundary, Dricar outlined his agency's attitude toward the new Homestake Mining Company proposal to re-open abandoned gold mines at Jardine, five miles west of Gardiner.

Dricar told the 100 valley residents gathered at the meeting that his agency had called the "scoping session" to decide whether the department should prepare an environmental impact statement on the Homestake plan.

One Corwin Springs resident asked Dricar, "If you don't do an EIS for a proposal to mine adjacent to a designated wilderness area and the nation's oldest national park, when do you do one?"

Dricar replied that his department believed the Homestake permit does not involve a major state decision and would create no significant environmental impacts — the two principal criteria that trigger an EIS.

His response left a lot of people scratching their heads. When State Lands staff asked for a straw poll to determine how the crowd felt about an EIS, two people raised their hands against doing the study. The overwhelming majority wanted one.

Some Yellowstone Valley residents remembered the old Jardine mine, where in 1922 the Jardine Mining Company, interested primarily in gold, discovered a vein of arsenopyrite averaging 38 percent arsenic trioxide. Investors

rushed in with \$125,000 for a full-scale arsenic recovery plant to get the most out of their gold ores. Then during the Second World War the federal Metals Reserve Company paid to renovate the dilapidated arsenic mill and revived mining at Jardine until 1948 when a fire destroyed the property. It never operated again.

As some valley residents attest, toxic metals from the abandoned arsenic tailings, located in Bear Gulch some five miles from the Yellowstone River occasionally reached the river years after the mine closed. The evidence showed up in the form of dead trout floating toward fabled Yankee Jim Canyon near Gardiner.

Driear's remarks also surprised managers of the Homestake exploration crew. After the state employee had his say, Homestake's environmental affairs manager Jerry Danni told the crowd that his company had every intention of preparing an adequate impact statement, since they needed the data to help plan the mine. Homestake officials recognized that their proposal involves an environmentally sensitive region, just a few miles from the park boundary, and they have pledged to clean up the old mining site while keeping their own impacts within the boundaries of their claims.

Said one person who attended the scoping meeting, "These Homestake people are pretty slick. They tried to answer people's questions. You usually don't see that from a mining company."

It is the relatively small size of the proposed mine — 750 tons of ore per day — that has led State Lands officials to doubt whether a full-scale EIS is needed for the project. Homestake told the crowd that the mine would employ between 100 and 200 workers, 80 percent of them from local communities, and would last for 20 years if gold prices don't collapse. The mine would produce one-fifth Troy-ounce of gold per ton of ore at a profit of \$40 per ton. The company has not yet determined whether ore will be processed on-site or shipped to the company's large facilities at Lead, South Dakota.

Officials from the Montana Department of Fish, Wildlife and Parks, who manage the esteemed Yellowstone fishery, have no comment on the proposal until mining and processing plans are more firm.

"We have no data on arsenic contamination from the old mine," said regional fisheries biologist Jerry Wells. "Lots of the old-timers talk about it, but it's nothing we've studied."

Jardine is not the only mine, historic or current, that stirred up controversy around the northern boundary of the park, nor was it the first to have received federal subsidies for commodities needed during the war effort.

Between 1941 and 1943, the Metals Reserve Company poured \$12 million into the abandoned Benbow chromite mine on the Beartooth Plateau near Nye. Government funds built a large mining camp, ore concentrators and mining equipment to help the Anaconda Company produce chromium during the war years. Ten years later, the government again subsidized chromium contracts, this time for the American Chrome Company, which produced nearly a million tons of iron-rich chromite ores.

Low-cost imports stilled mining on the Beartooth Plateau until 1967 when the Johns-Manville Sales Corporation identified several ore-zones rich in platinum-group metals. While J-M worked one side of the geologically famous Stillwater Complex of the Plateau, the Anaconda Company explored the other side near the historic Mouat chromite mine.

Anaconda also found platinum-palladium ore, and by 1979 Stillwater Valley residents believed that their quiet ranching communities would be

overrun by miners and ore-trucks working for the two large companies.

But last year, Johns-Manville, now in partnership with Chevron Petroleum, ceased work on their difficult platinum claims. The Big Timber, Montana, *Pioneer* announced that the partnership, called PGM Resources, had begun negotiations with Anaconda's parent company ARCO to buy out the PGM claims.

Meanwhile, Anaconda continued exploration and environmental data-gathering on its Stillwater Project, leading to the publication of a draft environmental impact statement by the Forest Service and the Montana Department of State Lands.

Development of the Stillwater, however, remains cloudy. Last year no exploratory drilling occurred at either site, and Anaconda removed its equipment from the proposed mining area. Publication of the final EIS has been delayed as state and company officials try to respond to numerous citizen comments on the draft statement.

The proposed mine is located at the edge of the Absaroka-Beartooth Wilderness Area, a north-pointing finger of the greater Yellowstone ecosystem. The Beartooths are Montana's tallest mountains, with the state's highest point, Granite Peak, towering 12,800 feet above the park.

Members of the Stillwater Protective Association, an affiliate of the Northern Plains Resource Council, a rancher-conservation group, have repeatedly expressed concern over the influx of 600 new residents and the vastly expanded use of local roads for ore-hauling that the new mine will bring.

Under current plans, Anaconda would build a mill and tailings pond on the Hertzler Ranch near Nye, six miles from the mine. One thousand tons of ore each day would come rumbling down Federal Aid Secondary Road 419, more or less a paved cow-track, to feed the big mill. That amounts to a semi-truck every 12 minutes. A 600-acre tailings pond would result from depositing the seven million tons of crushed rock left over from platinum extraction during the life of the mine.

The government took care of the "Indian problem" at Nye years ago when the boundaries of the Crow Reservation were reduced to an area along the Big Horn River. Today, the Stillwater is something of a cowboy reservation, where ranchers in the quiet valley raise beef cattle and fishermen try the rich waters of the river. Dude ranching also thrives in the valley but nobody says just how many head of dudes seek solace on the rugged Beartooth slopes.

The draft EIS for the Stillwater Project tries to address local concerns about the mine, especially legitimate fears of what a large influx of new residents will do to the quiet valley. Anaconda estimates that little Absarokee will nearly double in size, and that 600 new residents will create definite impacts among the county's scattered population of 5,500.

But Anaconda has dismissed as uneconomical the request that the company change its underground mining methods so that tailings can be returned to the mine. Anaconda sees nothing wrong with a square-mile tailings pond nestled at the edge of a tiny ranching town, especially since leachates from the pond should have "negligible" effects on local water resources.

Some residents fear that Anaconda is stubbornly holding onto its original mill and tailings design down on the flat land because the Hertzler Ranch offers opportunities to expand milling and tailings pond capacities in the event that the PGM buy-out occurs. While residents might be willing to live with one large mine in the neighborhood, the image of a second mine and perhaps later on a smelter or more Stillwater mines is too reminiscent of Butte-Anaconda to please.

That scenario is not likely in the near

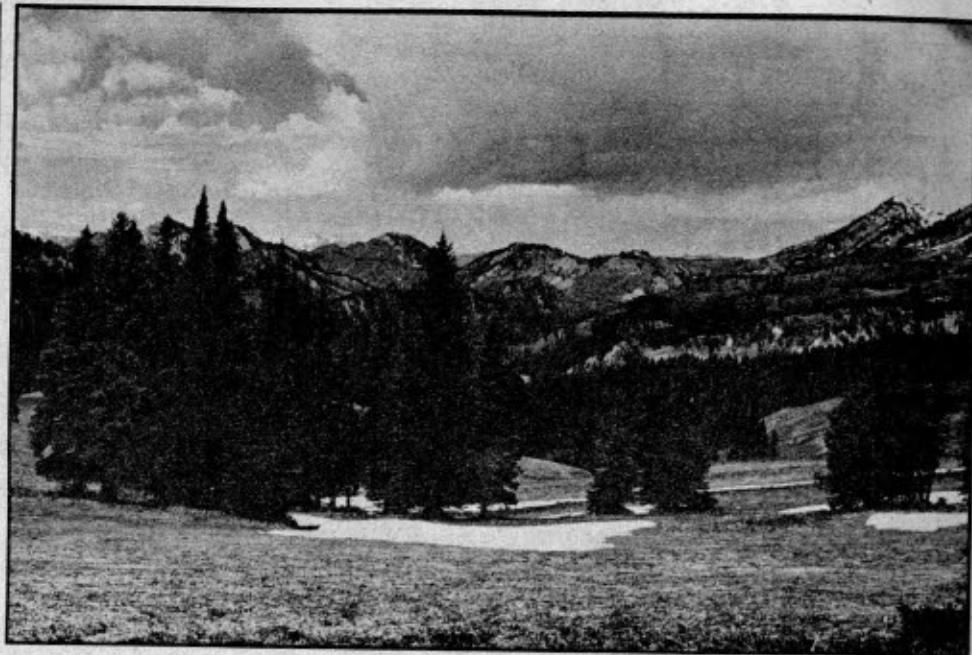
future, as Anaconda struggles with the international platinum market just to open its first Stillwater mine.

Platinum, considered a strategic mineral by the federal government, enjoyed a boom in demand during the early 1970s as U.S. automakers began installing catalytic converters in new cars. Minute amounts of the rare metal provide the catalyst in the converter, and as

long as the Clean Air Act remains intact and converters are the best technology known for cleaning up auto emissions, platinum demand will continue to grow.

The United States imports 90 percent of its platinum from South Africa and the U.S.S.R. — a fact that makes planners of strategic mineral supplies nervous. Only

(continued on page 13)



Little Granite Creek well site

Mixing oil and woods in the Yellowstone

While the mining activity north of Yellowstone National Park presents the most serious immediate threat to the ecosystem, the interest in oil and gas potential throughout the area has increased dramatically since 1974. Most of the activity has been in the form of oil and gas leasing, but a number of wells have been drilled and seismic activity is on the upswing.

There are five national forests that immediately surround Yellowstone National Park — Targhee, Bridger-Teton, Caribou, Gallatin and part of the Shoshone. They total about 8.8 million acres of national forest land within the Yellowstone ecosystem — depending upon where you draw the boundary line. About 4.8 million acres of that land, about 44 percent, has already been leased for oil and gas activity. After subtracting existing wilderness and recommended wilderness areas, this means that virtually every eligible acre of forest land has been leased for possible oil and gas development.

However, because of the relatively low price of petroleum, there is currently only one rig operating on any of the five forests. That rig is on the Bridger-Teton Forest, which is also where most of the industry interest is expressed. A year ago, there were 15 rigs operating on Bridger-Teton. The first well on that forest was drilled in 1928 and about 135 wells have been drilled since then, most of them since 1974.

The forests differ considerably individually regarding how much of each has been leased. Of the 3.4 million acre Bridger-Teton, between 2.5 million and 2.6 million acres, about 75 percent, has been leased. The Gallatin Forest in Montana, on the other hand, has only about 16 percent of its land leased. The 1.1 million acre Caribou Forest is about 94 percent leased.

The Forest Service's attitude about this onslaught of oil company interest has been somewhat schizophrenic. Officially, leases are actually issued by the Bureau of Land Management, an agency of the Interior Department. The Forest Service, an agency of the Agriculture Department, has taken the position that there is nothing it can do to prevent leasing. So, the Forest Service requires that BLM attach stipulations restricting the types of activity that can occur on environmentally-sensitive tracts of

forest land. These usually take the form of "no surface occupancy" stipulations, which prohibit the lessee from actually setting up a drilling rig on the lease tract. This type of "stip" puts the lessee in a sort of limbo, with the BLM giving a lease with one hand and the Forest Service taking away the value of the lease with the other. The legality of these stipulations is an open question. The oil and gas industry does not like them, but so far has not filed a legal challenge to them. Environmentalists fear that, if challenged, the courts will not uphold them.

There is one particularly controversial lease that is bringing environmentalists face-to-face with industry — the Little Granite Creek tract near Jackson, Wyoming. Getty Oil wants to put a rig on Little Granite, an area that was recommended for wilderness in RARE II (second Roadless Area Review and Evaluation) but excluded from the wilderness bill currently before the U.S. House and already passed by the Senate. The Wyoming Wilderness Bill is supported by all three members of the state's delegation.

Little Granite is a favorite site of Jackson residents and local opposition to the well is strong. The Forest Service has issued a permit to drill to Getty, but it has been challenged in court and the outcome is still uncertain.

On the Shoshone National Forest near Cody, Wyoming, Marathon Oil has said it wants to drill up the North Fork of the Shoshone River in the scenic Sunlight Basin. Marathon said it would helicopter in the rig and crew, a concession no other company has been willing to make. However, Shoshone Forest officials said that Marathon had not yet applied for a drilling permit, although their intentions have been discussed in the local media.

The main environmental threat from drilling is the construction of roads for access to the site. In addition to the disturbance of land, this provides access to vehicles and nearly always leads to an increase in poaching and disruption of wildlife.

If oil and gas are found, the problems associated with full-scale production facilities could be quite great, with construction of additional roads, pipelines, increased truck traffic and additional population influx.

— Dan Whipple



WYOMING YESTERDAY

A pictorial history



The photos on this page are originals from the settlement of Sublette County, Wyoming. In an attempt to preserve the historical photography of the county, the local museum board and the library obtained a grant from the Wyoming Council for the Humanities to copy and reproduce photos from county residents that portrayed the people and places that figured in the county's history.

A call went out to local residents to bring in their old pictures. The response was large. Originally, the sponsors obtained 1,500 35-millimeter slides and 600 4-by-5 negatives for reproduction. Editing reduced the total to a representative 360 shots, which were converted to 4-by-5 negatives, from which pictures were selected for a traveling exhibit.

The exhibit covers a period of photography from 1878 to 1945. Entirely "Wyoming Yesterday: A Pictorial History of Sublette County," it will appear in several Wyoming libraries this fall.



G YESTERDAY

torial history



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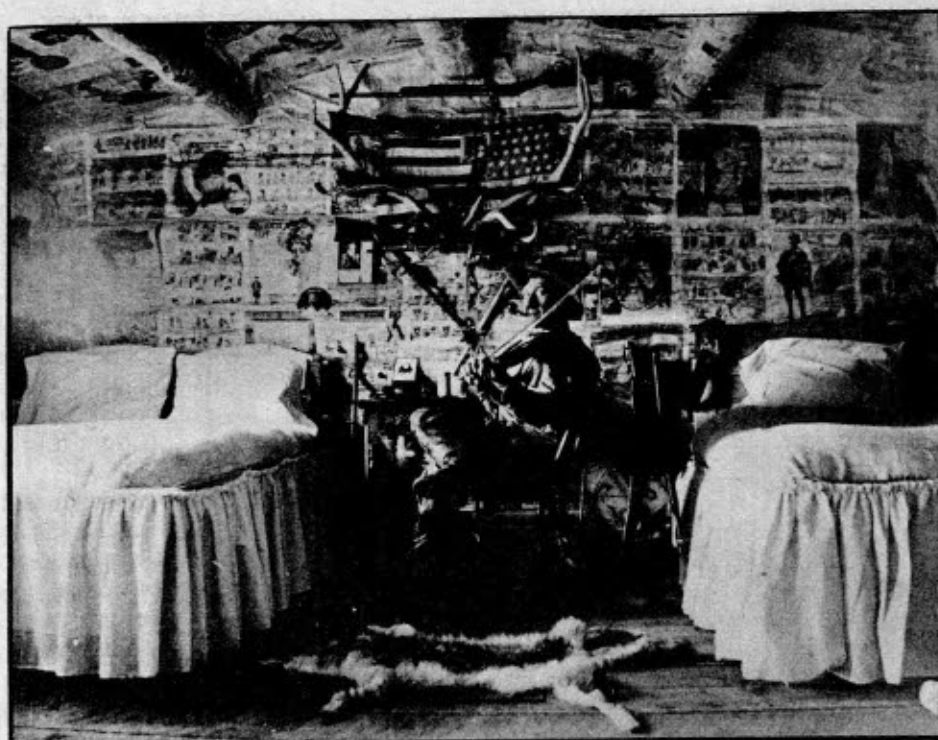
Young cowboy William H. Budd, Sr., rolled his cigarette in this 1926 photo made at the Henry Budd ranch. (Pearl Spencer collection).

Amos Smith came home to Big Piney with enough sidesaddles to equip a regiment. The Griggs and Smith families made up this detachment of the "mule shoe cavalry" (named after Amos' brand) for a trip through Yellowstone in 1904. (Ruth Wilson collection).

Cowboys had very little time for music except in the evening when they would pull out the old fiddle. Taken at the C.I. bunkhouse in 1903. (Frances Clark collection).

Walter Yose showed off the new pair of angora chaps he had just purchased in the Budd store while Lee Smith and Dick Key admired the new attire. (Helen Tanner collection).

William E. Mill, Sr., was deputy sheriff in the Big Piney area. This portrait was taken on a cold winter's day in 1898. (Pearl Spencer collection).

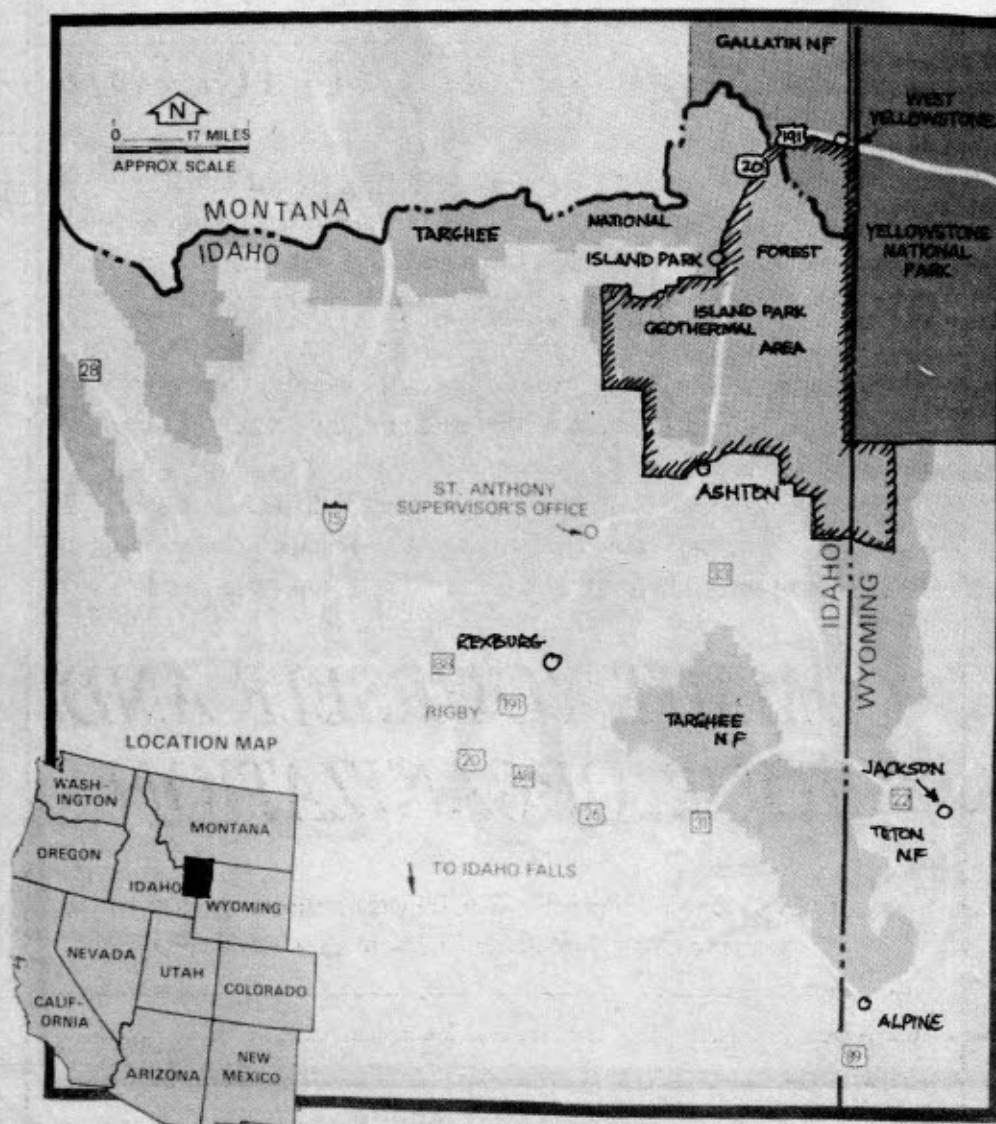




Norris Geyser Basin, Yellowstone National Park

"You can't really tell whether geothermal development will affect nearby natural features until you drill. By then, it may be too late."

— Sierra Club's Ralph Maughan



Geothermal . . .

(continued from page 1)

"Congress got into the act," but to date has failed to pass new geothermal legislation.

The principal target of the reform is the limit on acreage that any one company can hold within a state. That limit is currently 20,480 acres, a figure that reform proponents want to double in order to make development more practical.

"Under the existing limits, many companies have been forced to give up attractive prospects because they were at or near the acreage limitation," Phillips Petroleum Company's Robert L. Wright told a Senate subcommittee in May.

Wright said, "The acreage limitation was originally intended to promote competition and prevent speculative holdings. However, the limitation has actually hindered geothermal development because a single prospect often places a company or individual at the acreage ceiling. Raising the acreage limitation allows larger potential development areas to be created."

The acreage amendment would affect all geothermal leasing areas, not just Island Park. However, it may make development near Yellowstone more attractive. "There's pretty broad agreement that the acreage limit ought to be raised," one Senate staffer said. The only remaining issues are what sort of favor will be granted to municipalities seeking geothermal energy, what procedures for bidding and royalty fees will be imposed and what sort of national park protection language will be included in any legislation.

Currently, there is no park protection language at all in the 1970 law, and Island Park development is being slowed by administrative decisions and slack electricity demand. Now, two bills are before the Senate that would clarify the protection language. Neither is acceptable to environmentalists.

Sen. James McClure (R-Idaho) has introduced a bill that sets the royalty fees, allows waiving of those fees for municipalities, requires "diligent development" by lease holders and doubles the existing acreage limitation. It also gives the interior secretary two years to "determine whether any thermal geological connection exists between the Island Park and the thermal features of Yellowstone National Park." The secretary would then be allowed to issue leases in Island Park if he determined that development "will not adversely affect" Yellowstone's thermal features.

"That's unacceptable," said the Sierra Club's Maughan. "It would briefly protect Yellowstone Park while they do a study. Even Island Park protection is temporary." The bill would not offer any protection to 20 other national park system units, ranging from Hawaii to Alaska to Texas, he said.

In addition to the pending federal lease applications, there are 12,905 acres of state-owned land and roughly 11,000 acres of private land in Island Park which have already been leased for geothermal development. No development has yet occurred, however.

"It's just not economically feasible," said Tom Markland, chief of the Bureau of Minerals with Idaho Department of Lands. He said that a developer would need leases on federal land adjacent to state and private leases to acquire a large enough holding to make a geothermal project viable.

If a company wanted to exercise its rights on state land despite the economic uncertainty, Markland said it could proceed after obtaining permission from the Idaho Department of Water Resources. "I doubt anything would be allowed to go forward without assurance it would not affect neighboring lands," he said. Such assurances might require a developer to drill costly

monitoring wells around a geothermal plant or field.

Given these uncertainties, Markland said, "Until the federal government decides what they are going to do, there will be no development in that area."

As with most other issues, politics has its influence in the Island Park decisions. Sen. Malcolm Wallop (R-Wyo.) held field hearings in late 1981 in Casper, Wyoming, before his Public Lands and Reserved Water Subcommittee. Wallop, who was running for re-election at the time, said after the Casper hearings, "I personally feel, with the lack of information we have to date, that we would be making a hell of a mistake in leasing Island Park."

However, Wallop is now a co-sponsor of the McClure amendments. Destry Jarvis of the NPCA said, "The reason a geothermal amendment didn't pass in the last Congress was because of the politicking. Sen. Wallop was up for re-election and could not be perceived, he thought, as less supportive of protection for Yellowstone than Sen. John Melcher." Sen. Melcher (D-Mont.) has been a strong opponent of the leasing and refused to strike a deal to allow compromise legislation through the last session.

A source close to Wallop said that the senator did get political mileage out of the Casper hearings, but added, "One person can block legislation. Melcher was prepared to do that. Why go through all the abuse?" of trying to force such a controversial measure, he asked.

In addition to the McClure bill, Sen. Henry Jackson (D-Wash.) has proposed a second bill. This one offers broader protection because it would cover all national parks and monuments. According to NPCA president Paul Pritchard, Jackson's bill would require the secretary of interior to review the best geological, hydrological and other relevant evidence and determine whether exploration activities will have "a foreseeably significant adverse effect on nationally significant geothermal features."

Pritchard said such language is "meaningless" without "indisputable evidence" that nearby geothermal development will not affect adjacent national parks. "National parks were not set aside for speculation and experimentation, nor were they set aside to become the focus of opposing factions of both scientific and lay communities who have yet to make accurate and non-debatable determinations as to the connections and extensions of underground geothermal systems."

Pritchard said, "A Park Service environmental compliance chief has cautioned, 'It is very difficult to detect cause and effect relationships' in geothermal changes. Any suggested monitoring procedures could then possibly be affected by lag times and the problems of determining relationships. Those who would place their faith in monitoring and mitigating measures to preserve park thermal features must be severely cautioned."

Added Maughan, "You really can't tell whether geothermal development will affect nearby natural features until you drill. By then it may be too late."

NPCA's Jarvis said, "There is no great need for this geothermal development next to Yellowstone, in relation to the need to protect Yellowstone for the future. There are plenty of other places to go for geothermal energy. There's only one Yellowstone. We think the test ought to be absolute."

There seems to be little debate over the benefits that geothermal energy would bring. William E. Cole, vice president of the Union Oil Company of California's Washington, D.C. office, recently told the Senate Energy and Mineral Resources Subcommittee that the most efficient use of the heat is direct application, whether in industry or as space heating. "Opportunities for such use are rare," Cole said. Such

energy cannot be transported much more than a mile before heat and pressure loss take their toll.

The next most practical application is conversion of the heat into electricity, which can then be shipped via power lines.

Cole estimated that geothermal development in the U.S. could, by the year 2000, produce the energy equivalent of 700,000 barrels of crude oil a day — about 8.5 percent of today's crude oil production.

Both the McClure and Jackson bills are now on the Senate Energy and Natural Resources Committee calendar, but no date has been set for mark up. One Senate staffer said it is doubtful that Congress will enact protection with language stronger than Jackson's. "The House version passed in 1980 had probably the strongest language. It required the secretary to make a finding of no potential adverse impact, which of course you can't do. There's no way the secretary can tell a court that development has no potential for adverse impact.

It's a negative kind of finding you can't make."

As the debate continues in Washington, Old Faithful continues its enchanting repetition. Roughly every 68 minutes it begins to gurgle and groan, expelling irregular spurts of 204 degree water through an oblong vent. In a few minutes, 3,500 to 8,500 gallons of water jet through the five-by-two foot maw.

The exhibition draws up to 3,000 visitors per eruption during peak summer periods. As many as 700 vehicles pull into the Old Faithful area every hour. About 90 percent of Yellowstone's visitors stop at Old Faithful. Should the show ever close, said Maughan, "The public certainly won't forget who's responsible."

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Angus Thuermer is a reporter for the *Jackson Hole News* in Jackson, Wyoming. This article was paid for by the HCN Research Fund.

STATE OF WYOMING PUBLIC NOTICE

PURPOSE OF PUBLIC NOTICE

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

IT IS THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS TO (3) OIL TREATER FACILITIES, AND (1) FEEDLOT FACILITY, TO MODIFY AND (1) INDUSTRIAL PERMIT, AND TO RENEW (1) COMMERCIAL PERMIT, AND (6) FEEDLOT PERMITS AND TO REVOKE (1) OIL TREATER PERMIT.

APPLICANT INFORMATION

(1) APPLICANT NAME: American Quasar Petroleum Company
MAILING ADDRESS: 1700 Broadway, Suite 707
Denver, CO 80290
FACILITY LOCATION: Maverick Springs Tribal #15-13, NW¼, SW¼,
Section 15, T6N, R2W, Fremont County
PERMIT NUMBER: Wy-0031984

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

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

Semi-annual self-monitoring is required for all parameters with the exception of oil and grease, which must be monitored quarterly. The proposed expiration date for the permit is December 31, 1988.

(2) APPLICANT NAME: Davis Oil Company
MAILING ADDRESS: 410 17th St., Suite 1400
Denver, CO 80202
FACILITY LOCATION: Dingo Federal #1, SE¼, NE¼, Section 13, T52N,
R69W, Campbell County
PERMIT NUMBER: Wy-0032000

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

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

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

(3) APPLICANT NAME: Diamond Shamrock
MAILING ADDRESS: 5730 West Yellowstone Highway
Casper, WY 82604
FACILITY LOCATION: Martin Springs Federal 42-17 & 44-17, SE¼, Section 5, T36N, R74W,
Converse County
PERMIT NUMBER: Wy-0031992

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

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

Semi-annual self-monitoring is required for all parameters with the exception of oil and grease, which must be monitored quarterly. The proposed expiration date for the permit is December 31, 1987.

(4) APPLICANT NAME: Jirton - Wyoming Livestock Company
MAILING ADDRESS: P.O. Box 456
Morrill, Nebraska 69358
FACILITY LOCATION: Goshen County
PERMIT NUMBER: Wy-0031976

The Jirton - Wyoming Livestock Company is planning the construction of a 10,000 head cattle feedlot to be located 3.1 miles west of Torrington, Wyoming on Highway 26. Should a discharge occur, it would enter the PF irrigation ditch (Class IV Water) and/or the North Platte River (Class II Water) via unnamed drainages.

The proposed permit requires complete containment of all runoff water from the feedlot except that in excess of the 25 year - 24 hour storm event (3.4 inches). In addition, the proposed permit requires the reporting of any discharge, maintenance of runoff control ponds, periodic drawdown of runoff control ponds, and various other operational and maintenance items. The permit is scheduled to expire June 30, 1988.

(5) APPLICANT NAME: Glenrock Coal Company
MAILING ADDRESS: P.O. Box 4000
Sheridan, WY 82801
FACILITY LOCATION: Converse County
PERMIT NUMBER: Wy-0028525

The Glenrock Coal Company operates an open-pit coal mine located approximately 15 miles north of the Town of Glenrock, Wyoming. It is the desire of the coal company to use Sediment Pond SP-25 for pit water treatment and storage.

An additional discharge point 004, is being added to the permit. It is located in the SE¼, SE¼, Section 9, T36N, R75W, Converse County, Wyoming and discharges to the South Fork (Class IV) of the Dry Fork of the Cheyenne River via an unnamed drainage.

All effluent limitations are based on National "Best Available" Standards and Wyoming's In-stream Water Quality Standards. Self-monitoring of effluent quality and quantity is required on a regular basis with reporting of results quarterly. The permit is scheduled to expire July 31, 1988.

(6) APPLICANT NAME: Brooks Water and Sewer District
MAILING ADDRESS: P.O. Box 2080
Casper, WY 82602
FACILITY LOCATION: Natrona County
PERMIT NUMBER: Wy-0021661

Brooks Water & Sewer District provides water and sewer services to the community of Mountain View and is located west of the City of Casper, Wyoming. Wastewater treatment consists of a single cell lagoon of approximately 24 surface acres. The lagoon is underloaded and there has been no discharge in the recent past, however, the District has requested that the permit be renewed in case a discharge should become necessary in the future.

If a discharge should occur it would be to Casper Creek (Class II Stream). Effluent limitations in the proposed permit were based on the following:

1. Q7-10 in Casper Creek - .646 MGD (estimate)
2. Maximum discharge volume (as limited by the permit) - .01 MGD
3. Water quality standard for total residual chlorine - .002 mg/l
4. Water quality standard for fecal coliform bacteria - 1,000/100 mls (May-September)
5. Water quality standard for unionized ammonia (as N) - .02 mg/l

(continued on page 13)



Helen Bogan

YELLOWSTONE

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a symbol
a biological system
and a geographic region*

must not be sacrificed on the altar of economic and political expediency.

If we allow this last great island of biologic diversity and ecological integrity to be whittled away piecemeal, we allow also the death of the land ethic and visionary ideals upon which the future health of the planet depends.

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People . . .

(continued from page 16)

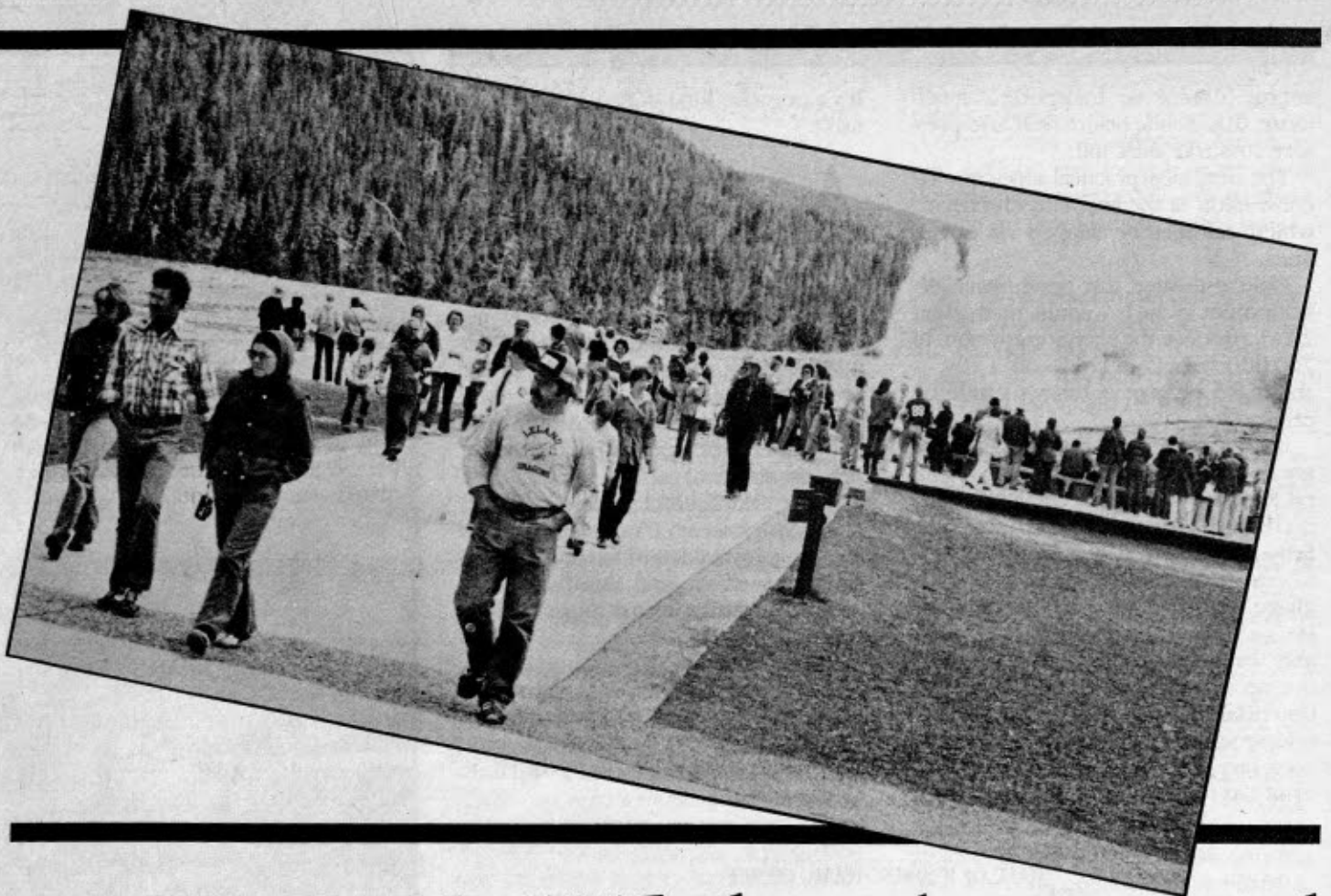
takes place on Park, Forest Service or Bureau of Land Management property — from regulating outfitters to permitting an oil well to building a new septic field for a latrine.

When you look at the numbers — about 2.4 million people vying for a limited number of beds and tent-sites in Yellowstone National Park in 1982 — “people management” nevertheless starts to sound like an essential and wise idea, though fraught with built-in contradictions. If the park is a place where we try to “perpetuate the natural ecosystems . . . in as near pristine conditions as possible” (from the Yellowstone Master Plan), and yet we allow more of these gasoline-burners to chug about in it every year, there is indeed some managing to be done. In Grand Teton National Park, 3.4 million visitors dropped by in 1982. The numbers have been rising steadily throughout this century, with only brief interruptions for wars and energy shortages.

The tidal wave has washed through the paved, slotted campgrounds of the parks and further up the wilderness shore. The backcountry of the parks and surrounding forests that many of us prefer has not been spared the onslaught of people. Far from it. Joan Anzelmo, Yellowstone National Park’s public information specialist, said that Yellowstone’s backcountry was fairly recently discovered by the nation’s hordes of wilderness-seekers — in the early 1970s. For the surrounding forests, the shock was delayed even further, but the explorers are now coming in droves.

Shoshone National Forest’s Bud Riggs says his domain, on the park’s eastern flank, recorded nearly a million visitor/days in 1982, a rise of over 100,000 since 1974. At Montana’s Gallatin National Forest, to the north, visitor/days have been increasing at a rate of 10 percent a year for the past decade, to 2.7 million a year in 1982, and many of those guests are heading into the backcountry.

What we are focusing on here, then, when we talk about managing people, is recreational use. Not the oil drilling, not the timber cutting, not the acid rain or the cattle — though these are the work of people, it would take a book or two to cover them all. Even when we narrow our scope to recreational users, though, there are overlaps. With wildlife management, for instance, when areas of the park are closed to give dwindling numbers of grizzlies some privacy; or with timber-cutting, since it is cast-



In 1915, the park was opened to the private automobile and Yellowstone was “democratized” — if you didn’t mind breakdowns and tire failures, Yellowstone was yours.

aside timber roads that often give hunters and RV navigators easy penetration into the wilds.

We are drawn, too, into a more philosophical area — that is, the balkanized management of a large ecosystem, where different agencies, with differing missions and different administrators, lie back to back in the ecosystem’s bed.

There are two parks, five forests, private holdings and other jurisdictions at work in the Greater Yellowstone. The centerpiece, Yellowstone National Park, is run under a contradictory mandate that seems to require at the same time that it preserve a natural ecosystem and provide a “pleasuring-ground” for mankind (they got right to the point in that 1872 legislation). Accept this peculiar situation, for the time being, and let’s look at a few of the more recent developments in “people management.”

Regulating the backcountry. It’s already begun, and it’s going to get more prevalent, primarily because of new, stronger efforts to protect the grizzly. At Grand Teton National Park, you often must make a reservation. There, 24,387 camper/nights are allowed in a season — not one camper more. Yellowstone, likewise, has a backcountry permit system. Soon it will spread to the national forests. Shoshone National Forest Supervisor Ray Hall says it “may not be very far away” on his forest. Outfitters and outdoor education groups are regulated on both forest and park lands, right down to the number of horses they can take into the backcountry. And this year, some areas of Yellowstone Park have been closed entirely to protect grizzlies.

The public — even those who get turned down for permits — accepts this kind of regulation as a necessity, according to a study by Robert C. Lucas at the Forestry Science Laboratory in Missoula, Montana.

Policing the parks. Increasingly, the park rangers who point the way to the bathroom have spent some time learning to frisk and immobilize lawbreakers at the federal law enforcement center in

Georgia. Superintendent Stark at Grand Teton said the emphasis on law enforcement is an agency-wide policy. It is not inspired by any great rise in crime in this region. He tries to balance the law enforcement training with naturalist courses for his personnel. He admits that crime has gone up proportionally with increased visitation, but officials at the parks say crime most often consists of no more than lifting a camera from a parked car. Forest officials say law enforcement skills are being applied primarily to counter poaching. There are four levels of law enforcement training — ranging from 24 hours of training for rangers who have to enforce campground fees or road closures, to “special agent” status, which requires several weeks of education.

Resorts and “dispersed” recreation. Secretary of Interior James Watt has confused the public’s conception of the parks with his emphasis on improving park comforts and accommodations — an emphasis which contradicts longstanding efforts to disperse recreation and reduce overnight stays within the parks. At Yellowstone, working with a new concessionaire, TWA Services, park officials are trying to upgrade deteriorating facilities while keeping the park “bed count” down around 8,300. On the whole they seem to be working around Watt’s rhetoric — expanding Grant Village, but tearing down places like the Fishing Bridge development, which is in prime grizzly country. The question has not been fully answered, though: Are the parks, or the surrounding forests, the proper places for resort development? The crush in Gallatin National Forest over the last few years has been partly due to the Big Sky ski resort, officials say, which introduced a large and demanding new crowd. New proposals for resorts on public lands — from Ski Yellowstone near Mount Heben to a new lift up Cache Creek near Jackson — come up all the time. To make money, they require lots of people and lots of “entertainment.”

Consensus groups. There’s another kind of “people” that our public land

officials need to manage. They don’t just visit the Yellowstone region on a cross-country jaunt. They live within the ecosystem. One of the more recent, and fairly controversial, developments is the “consensus group” approach to getting local involvement in public lands management. The idea, according to Fred Kingwill of Bridger-Teton National Forest, is to let decision-makers and local residents get to know each other one-on-one. Specialists now roam about in the Forest Service applying “team building” and “consensus work” in the framework of Social Resource Management Training. They’re trying similar approaches as the different national forests develop their forest plans. Officials admit that no consensus is likely to be reached. Skeptics say it’s like joining an encounter group where you get your pocket picked.

Bridger-Teton used the approach on some controversial timber sales in the Upper Green River area that had upset local residents. Opponents of the sales made their feelings heard. The sales were canceled, eventually. However, the sales were canceled because of low bids, not public objections. Nevertheless, it should be interesting to see if, as Kingwill says, when the locals and public land administrators “know about each other’s kids — like when they’ve got a basketball game tonight,” it leads to new harmony and better decision-making.

In the end, though, the real people management problem, and the problem in all areas of administering the greater Yellowstone ecosystem, is the irony of conflicting missions for the various agencies, and, in the case of the parks, within an agency. The Forest Service has a “multiple use” mission, which means that a gold miner has as good a shot — maybe better — at using a particular patch of backcountry as a cross-country skier.

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ples abound. If I fish the headwaters of the Yellowstone River in Shoshone National Forest I can pull out six trout. This is the Thorofare Country, a gorgeous continuum that flows across park and forest borders, and the master planners neglected to run a fault line along the division where you cross over into the park. But if I do cross that imaginary line into the park, it's strictly catch-and-release fishing. I'm a criminal in a different world. A different set of values.

The folks at Yellowstone and Grand Teton National Parks are making a game effort to ride out the Reagan administration without turning their provinces

into Ramada Inns. They're finding ways to provide both the "pleasuring-ground," for instance, by Grant Village and "an island of wilderness serenity," by closing off sectors essential to the grizzly.

One can hope for more radical solutions, but not really expect them. Attempts to coordinate policies among the parks and the forests have borne some fruit — a region-wide outfitter policy, for instance, or the grizzly recovery program, which may have come too late. But the confusion of purposes and aims remains, and will remain as long as

the ecosystem is gerrymandered among agencies.

The park remains the centerpiece and offers the greatest opportunity for reform, simply because its stated goals are not nearly so utilitarian as those of the national forests. In the park, there is the possibility that the managers could push people in a more radical direction — away from the service and safety of hotels and automobiles, into a more direct experience of this unique ecosystem. If the park were less of a museum behind glass, and more of a place where man was put on equal footing with a thriving natural world, a constituency

might build for protecting the whole ecosystem.

That would deliver us to the doorstep of the most intriguing irony of all: That by regulating man, by taking away his mechanical advantages in this ecosystem, we would give him the opportunity to see how nature operates without his regulation, and to learn the lessons offered in that.

+++

Geoffrey O'Gara is a freelance writer in Lander, Wyoming, and a contributing editor of HCN. This article was paid for by the HCN Research Fund.

Minerals...

(continued from page 7)

one mine in the United States — a small placer-dredging operation in Alaska — produces significant amounts of new platinum. Anaconda's Stillwater Project would satisfy about three percent of current demand.

Some experts believe that the government should begin stockpiling more platinum ores, but where those ores

should come from is a matter that remains unsettled. Cheap labor in South Africa guarantees low-cost mining in the platinum-rich Merensky Reef, yet PGM in the Stillwater has discovered ores that are two to four times richer in platinum than the Merensky, the world's leading producer.

It is conceivable that federal dollars will again be spent to stimulate mining in the Stillwater, so that the U.S. can gain a position among world-class platinum suppliers.

What this may mean for the greater

Yellowstone remains unclear. The draft impact statement on the Stillwater Project is curiously silent about mine-induced impacts in both the Absaroka-Beartooth Wilderness and Yellowstone National Park. The latter is not mentioned at all, and impacts in the former are dismissed as minor.

It appears that the authors of the EIS limited their review chiefly to issues raised during "scoping" meetings to identify local concerns, which are chiefly the concerns of Stillwater ranchers.

In any event, it is clear that neither federal and state officials, nor the companies they review, are willing to view the greater Yellowstone region as an area that extends well beyond the boundaries of the park.

For mines in the greater Yellowstone area, "scoping" appears to be just as it sounds: looking through the narrowest possible tube to define the issues of greatest concern. But given the rocky history of mining north of Yellowstone, that's not terribly surprising. □

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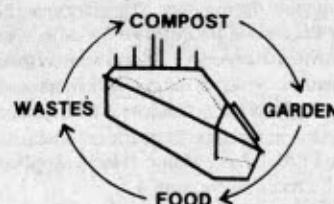
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(continued from page 11)

6. Average pH of receiving stream - 8.0 (estimate)
7. Maximum temperature of receiving stream - 25°C (estimate)

Using the above it was determined that the allowable ammonia concentration (as N) would be 24 mg/l. Since this value approximates the ammonia concentration for raw sewage, no ammonia limitation was included in the permit. At this time it appears that violation of Wyoming's in-stream standards for dissolved oxygen will not occur provided National Secondary Treatment Standards are achieved. However, this position will be re-evaluated (and the permit modified if necessary) as more information becomes available. The effluent limitation on fecal coliform bacteria is more stringent than necessary to meet water quality standards, however, the limitation can be achieved by a lagoon system without employing disinfection.

Due to the large amount of excess capacity in this lagoon, there is no expectation that a discharge will actually occur during the duration of this permit, therefore, the effluent limitations are effective immediately and there is no schedule of compliance in the permit.

Brooks Water and Sewer District is part of the Casper Area-wide Collection and Treatment Project, therefore, upon completion of that system the District must connect to the area-wide system and the existing treatment facilities will be abandoned.

Self-monitoring is required on a regular basis with submission of reports quarterly. The permit will expire August 31, 1988.

- (7) APPLICANT NAME: Andrews Livestock
MAILING ADDRESS: P.O. Box 850
Torrington, WY 82240
Goshen County
Wy-0022501

Andrews Livestock is a cattle feedlot located near the Town of Torrington, Wyoming. Any discharge from the feedlot would enter an unnamed slough which is tributary to the North Platte River (Class II Water).

The proposed permit requires "no discharge" to surface waters of the State except in the case of a 25 year/24 hour storm event. In addition, various operation and maintenance requirements such as removal of sediment from runoff control ponds, elimination of water gaps, and isolation of pest control wastes are required.

- (8) APPLICANT NAME: Joe Bowen
MAILING ADDRESS: Box 247
Wheatland, WY 82201
Platte County
Wy-0022322

The Joe Bowen Cattle feedlot is located six miles south of the Town of Wheatland, Wyoming. Any discharge from the feedlot would enter Ayers Draw (Class III Water).

The proposed permit requires "no discharge" to surface waters of the State except in the case of a 25 year/24 hour storm event. In addition, various operation and maintenance requirements such as removal of sediment from runoff control ponds, elimination of water gaps, and isolation of pest control wastes are required.

- (9) APPLICANT NAME: The Gross Wilkinson Ranch Company
MAILING ADDRESS: P.O. Box 186
Pine Bluffs, WY 82082
Laramie County
Wy-0022144

The Gross Wilkinson Ranch Company feedlot is located approximately one mile north of the Town of Pine Bluffs, Wyoming. Any discharge from the feedlot would enter Lodgepole Creek (Class III Water).

The proposed permit requires "no discharge" to surface waters of the State except in the case of a 25 year/24 hour storm event. In addition, various operation and maintenance requirements such as removal of sediment from runoff control ponds, elimination of water gaps, and isolation of pest control wastes are required.

- (10) APPLICANT NAME: John W. Kissell
MAILING ADDRESS: P.O. Box 161
Cheyenne, WY 82001
Laramie County
Wy-0027995

Mr. John W. Kissell operates a small swine feeding operation just east of the city limits of Cheyenne on the banks of Crow Creek (Class III Water). The facility holds from 25 to 75 animals and covers an area of approximately 1/2 acre.

In response to citizen complaints to the Laramie County Health Department, DEQ personnel made an on-site inspection of the facility and identified it as a potentially significant source of pollution to waters of the State. The Department therefore required the owner to apply for a permit to discharge.

The proposed permit requires "no discharge" to surface waters of the State except in the case of a 25 year/24 hour storm event. In addition, various operation and maintenance requirements such as removal of sediment from runoff control ponds, elimination of water gaps, and isolation of pest control wastes are required.

- (11) APPLICANT NAME: Yoder Grain and Lumber Company
MAILING ADDRESS: P.O. Box 391
Torrington, WY
Goshen County
Wy-0022233
Wy-0023043

The Yoder Grain and Lumber Company operates two feedlots in the Torrington, Wyoming area. Permit Wy-0022233 is for the old Bohenkamp feedlot located 1 1/2 miles southwest of the Town of Torrington. Any discharge from this facility would enter the Rock Ranch Canal or the Cherry Creek

(continued on page 14)

14-High Country News — June 24, 1983

BULLETIN BOARD

NUCLEAR WASTE GUIDELINES

The Department of Energy has issued a revised draft of the general guidelines for the recommendation of sites for nuclear waste repositories. The final draft of these guidelines will be used to identify and nominate repository sites for nuclear waste disposal. The original guidelines received 2,000 written and oral comments. Public comments are now being accepted until July 6, 1983, on the revised draft. Copies of the draft are available at the Energy Department's headquarters and operations offices, at numerous state and federal agencies, and at some local libraries. Written comments should be submitted to Critz George, DOE Director of the Guidelines Task Force, c/o Weston, Inc., 2301 Research Boulevard, Third Floor, Rockville, Md. 20850.

PRBRC GARAGE SALES

The Powder River Basin Resource Council, a Wyoming rancher/conservation group, has scheduled two fundraising garage sales for July. One will be held July 9 in Buffalo, Wyo., at 500 Fullerton, and the other will take place July 23 in Gillette at 1709 O'Hara Dr. If you have donations or want more information contact Buffalo coordinator Lynn O'Gan, 307/684-7035, or Gillette coordinator Dave Johnson at 307/686-4074.

DRAFT GRAZING EIS

The Bureau of Land Management will hold a public hearing on the Salt Wells-Pilot Butte Draft Grazing Environmental Impact Statement in Rock Springs, Wyo., July 13. The hearing will begin at 7:00 p.m. in room C-204 at Western Wyoming College. The proposed management plan affects over three million acres of BLM land in the Rock Springs area. Written comments on the draft statement will be accepted until July 31 and should be sent to Jim Cagney, Team Leader, SW-PB Grazing DEIS, Salt Wells Resource Area-BLM, P.O. Box 1170, 79 Winston Drive-Gateway Building, Rock Springs, Wyo. 82902.

NRAG BIRTHDAY PARTY

The Northern Rockies Action Group is hosting a 10th year anniversary celebration beginning July 18 at the Snake River Ranch in Jackson, Wyo. Special guests U.S. Senator Max Baucus (D) and futurist Dr. Willis Harman will discuss politics, values and the future of the region. Also scheduled are a western barbecue, a canoe trip and a Snake River float. For more information contact Linda Wood, Northern Rockies Action Group, 9 Placer, Helena, Mont. 59601, 406/442-6615.

GROUNDWATER HEARING

Groundwater protection will be the focus of a public meeting in Grand Junction, June 30, at 7 p.m. in the Valley Federal North Friendship Room, 5th and Rood. The meeting, sponsored by the Colorado Department of Health and the Water Quality Control Commission, is to discuss local and statewide groundwater quality issues, problems and options. For more information on the hearing, contact Robert Arnett at 303/320-8333, ext. 3355.

UTAH SIERRA CLUB OUTINGS

The Utah chapter of the Sierra Club is offering a series of outings this summer. Activities include day hikes, bike tours, backpacking trips and tubing. For information on Ogden area activities, contact Chuck Reichmuth, 801/621-3844. For Salt Lake area activities, contact Jim Baker, 801/467-0544.

FOREST SERVICE JOBS

The Black Hills National Forest has received funds for special projects and employment under the Emergency Jobs Act. Bids for contracts from individuals and private businesses will be accepted for work such as tree thinning and campground water and sewer improvements. To be placed on the contractor mailing list, or for more information on the jobs program, contact Elaine Worfel, Black Hills National Forest, Box 792, Custer, S.D. 57730, 605/673-2251.

(continued from page 13)

Drain (Class IV Water). Permit WY-023043 is for the Holly and Yoder feed yards located adjacent to the Holly Sugar plant. Any discharge from this facility would be to the North Platte River (Class II Water).

The proposed permits require "no discharge" to surface waters of the State except in the case of a 25-year/24 hour storm event. In addition, various operation and maintenance requirements such as removal of sediment from runoff control ponds, elimination of water gaps, and isolation of pest control wastes are required.

APPLICANT NAME:	Elk Oil & Gas
MAILING ADDRESS:	Unknown
FACILITY LOCATION:	Crook County
PERMIT NUMBER:	WY-0028011

Recent efforts to contact Elk Oil and Gas by mail and telephone have been unsuccessful. The Revenue and Taxation Department no longer has any record of the company and an on-site inspection of June 2, 1983 indicates the facility appears to be abandoned and is no longer discharging. Therefore, action will now be taken to formally revoke this discharge permit.

STATE/EPA TENTATIVE DETERMINATIONS

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

PUBLIC COMMENTS

Public comments are invited any time prior to August 3, 1983. Comments may be directed to the Wyoming Department of Environmental Quality, Water Quality Division, Permits Section, 1111 East Lincolnway, Cheyenne, Wyoming 82002, or the U.S. Environmental Protection Agency, Region VIII, Enforcement Division, Permits Administration and Compliance Branch, 1860 Lincoln Street, Denver, Colorado 80295. All comments received prior to August 3, 1983 will be considered in the formulation of final determinations to be imposed on the permits.

ADDITIONAL INFORMATION

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

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

Public Notice No. WY-83-007

TOXICS MANUAL

A new manual is available for activists concerned over workplace and environmental hazards. "Winning the Right to Know: A Handbook for Toxics Activists" explains the purpose and use of "right to know" laws, discusses existing legislation and describes how to draft "right to know" legislation. The handbook is available for \$7.95 plus postage from Conference Publications, Conference of Alternative State and Local Policies, 2000 Florida Avenue, N.W., Washington, D.C. 20009, 202/387-6030.

WYOMING WILDERNESS BILL

A public hearing on the Wyoming Wilderness Bill will be held in Washington, D.C. June 28. The bill would add 650,000 acres of Wyoming forest land to the National Wilderness System. The remaining areas of the 3.7 million acres under review would be designated for non-wilderness management. The bill was approved by the Senate in April and is now pending before the House Interior Committee. Comments on the bill should be sent to Rep. John Seiberling, 1324 Longworth Building, Washington, D.C. 20515. For more information on provisions of the bill, call 202/225-2311.

DEFENDING WILDERNESS AREAS

The Sierra Club has published a do-it-yourself guide for wilderness activists. "Saving the Solitude: A Guide to the BLM Wilderness Study Process" describes the Bureau of Land Management decision process for wilderness designation and explains how individuals can exert influence on these decisions. The publication is available for \$3 plus \$1.25 handling from Sierra Club Information Services, 530 Bush Street, San Francisco, Calif. 94108.

CAMPING IN THE NATIONAL PARKS

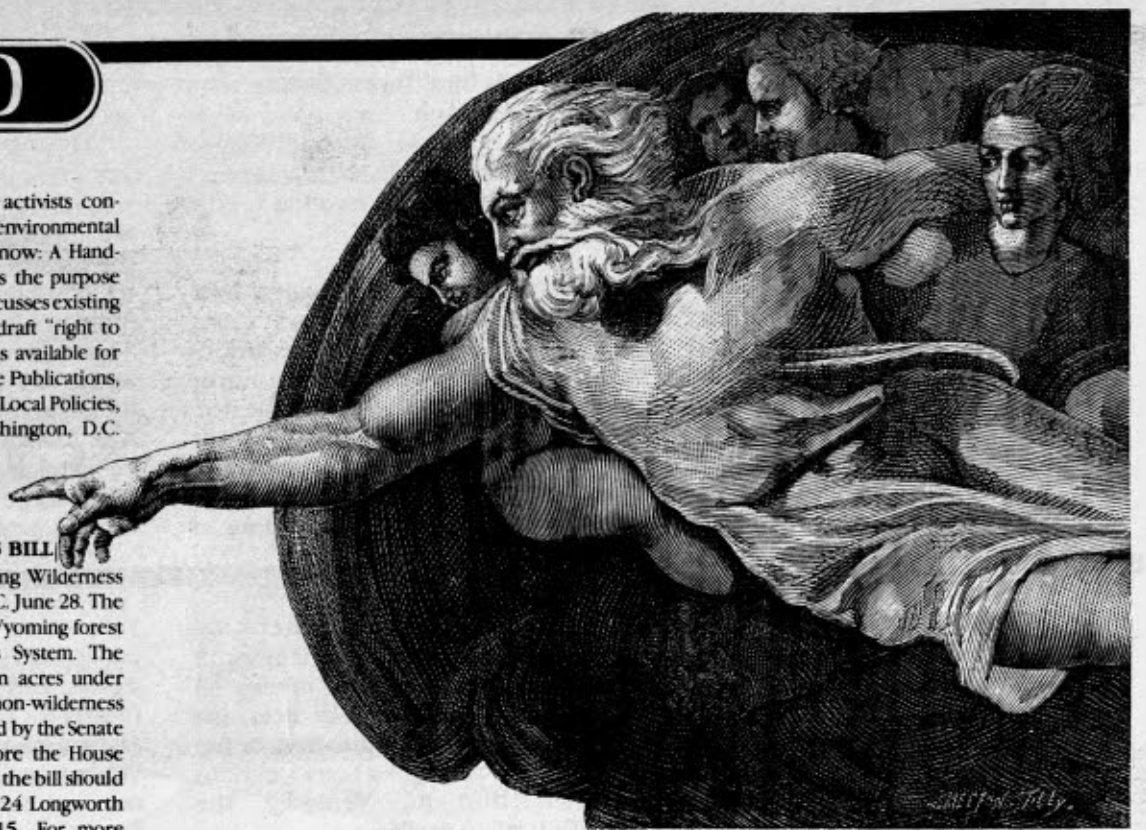
The 1983 edition of the National Park Service booklet, "Camping in the National Park System" is now available. The booklet provides information on the 104 areas of the National Park System that offer camping facilities. It provides information on fees, visitor regulations, safety tips, recreation opportunities and facilities. Copies are available for \$3.50 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

AUDUBON SCHOLARSHIPS

The National Audubon Society Expedition Institute is offering grants of up to \$500 to high school, college or graduate students. The money may be used for expenses while attending school, internships, attending a summer program or working on a project. The Expedition Institute is a year-round program for studying ecosystems, cultures and history throughout the country. The grants may be used for the Expedition Institute or for other educational activities. To request an application form and information, send a large self-addressed, stamped envelope to the Scholarship Committee, National Audubon Society Expedition Institute, RFD 1, Box 149B, Lubec, Maine 04652. Applications must be received by Aug. 1.

BIOSPHERE POLLUTION

The Clean Energy Research Institute of the University of Miami has issued a call for papers for the April, 1984, Miami International Symposium on the Biosphere. The symposium provides a forum for the latest research findings on the environmental effects of acid rain, air pollutants, nuclear wastes and other pollutants. It also offers an opportunity to consider what must be done to reduce or eliminate the effects of these agents. The forum is open to researchers in these areas and to interested individuals. Send typewritten abstracts with title and authors' names, affiliations and addresses before October 1, 1983 to Dr. T. Nejat Veziroglu, director, Clean Energy Research Institute, University of Miami, P.O. Box 248294, Coral Gables, Fla. 33124.



ARIZONA WILDERNESS EIS

The Bureau of Land Management has released a draft environmental impact statement covering nine wilderness study areas in southeastern Arizona. A series of four public meetings will be held in July to receive public comments on the draft. The EIS includes areas in Cochise, Gila, Graham, Greenlee counties and a small portion of Hidalgo County, N.M. Written comments will be accepted until August 31, 1983. For copies of the EIS and information on the hearings, contact the BLM Safford District Office, 425 E. 4th St., Safford, Ariz. 85546, 602/428-4040.

RIVER OF NO RETURN OVERVIEW

An overview of the River of No Return Wilderness has been completed and distributed to forest supervisor and district ranger offices of the Salmon National Forest and to public libraries in the surrounding area. The report is a step in the development of the comprehensive wilderness plan that will be prepared. The next step is development of alternative management options which will be open for public review and comment. For further information contact Frank Elder, Salmon National Forest, P.O. Box 729, Salmon, Idaho 83467.

LOST LAKE TIMBER SALE

The Bridger-Teton National Forest in northwestern Wyoming is planning a one million board-foot timber sale near Lost Lake, two miles northwest of Togwotee Pass. The sale area lies within a Grizzly Bear Management Situation 1 area. This classification requires keeping human-grizzly conflicts to a minimum. Measures such as winter harvesting, minimum road construction and planting of whitebark pine will be undertaken. An environmental assessment is available for review at the forest supervisor's office, in Jackson, Wyo., and at the ranger district office in Moran, Wyo. Comments on the proposed sale should be sent by June 28, 1983 to Forest Supervisor, Bridger-Teton National Forest, Jackson, Wyo. 83001.



GREATER YELLOWSTONE EXPEDITIONS
BOX 142 • TETON VILLAGE, WYOMING 83025

HIGH, WILD, AND LONESOME

TRADITIONAL HORSE PACK TRIPS WITH A TRAVELING CAMP. WE CROSS DIVIDES, OFTEN THE BACK-BONE OF THE RANGE WE ARE IN. WE TRAVEL ABOUT 7-10 MILES A DAY AND HAVE A LAYOVER DAY APPROXIMATELY EVERY THIRD DAY.

BUSHWHACKER SPECIAL

FOR THE MOUNTAIN RUNNER OR OFF-TRAIL HIKER, WE PROVIDE A HIKING GUIDE AND BASE CAMP COMPLETE WITH COOK, PACKER, AND PACK STRING.

HIKE AND HORSE CAMP

ON-TRAIL HIKING AND CAMPING IN WYOMING'S HIGH COUNTRY WITH A PACK STRING SUPPORT INCLUDING HEARTY MEALS AND A TENT CAMP AT DAY'S END.

PHOTOGRAPHIC FORAYS

BASED FROM A STATIONARY HORSE CAMP IN THE TETON RANGE FOR A WEEK IN OCTOBER. THE GUIDES ARE EXPERT TRACKERS, HUNTING GUIDES, AND COMPETENT PHOTOGRAPHERS. CHOICE OF SUBJECT IS YOURS, INCLUDING BIG GAME, SMALL GAME, BIRDS, MOUNTAINS, HORSES, AND CAMP LIFE.

WILD ENCOUNTERS

Idaho Wildlife is again sponsoring a contest for amateur photographers. Photos will be accepted in color and black-and-white and must be taken in Idaho. Categories are scenic, wildlife, outdoor recreation and outdoor living. Complete contest rules can be found in the May-June issue of *Idaho Wildlife* or may be obtained from the Idaho Department of Fish and Game, P.O. Box 25, Boise, Idaho 83707.

JOB BLACKMAIL AND THE ENVIRONMENT

Environmentalists for Full Employment has produced a book that shows how employers and politicians use the promise of jobs and the threat of unemployment to blackmail workers and communities and to split apart potential allies in the fight for a clean environment. *Fear at Work: Job Blackmail, Labor and the Environment* is available for \$10.95 from EFE, 1536 16th St. N.W., Washington, D.C. 20036.

HAZARDOUS WASTE FACILITY SITING

A handbook on siting hazardous waste facilities has been prepared by the Conservation Foundation, Chemical Manufacturers Association and the National Audubon Society. The book discusses the issues that must be addressed during any siting decision including protection of human health and the environment, effects on property values and preparation for potential accidents. It is intended to provide a basis for dialogue among the participants involved in the decision process. "Siting Hazardous Waste Management Facilities" is available for \$3.00 from the National Audubon Society, 115 Indian Mound Trail, Tavernier, Fla. 33070.



Mike McClure

NEW HCN T-SHIRTS

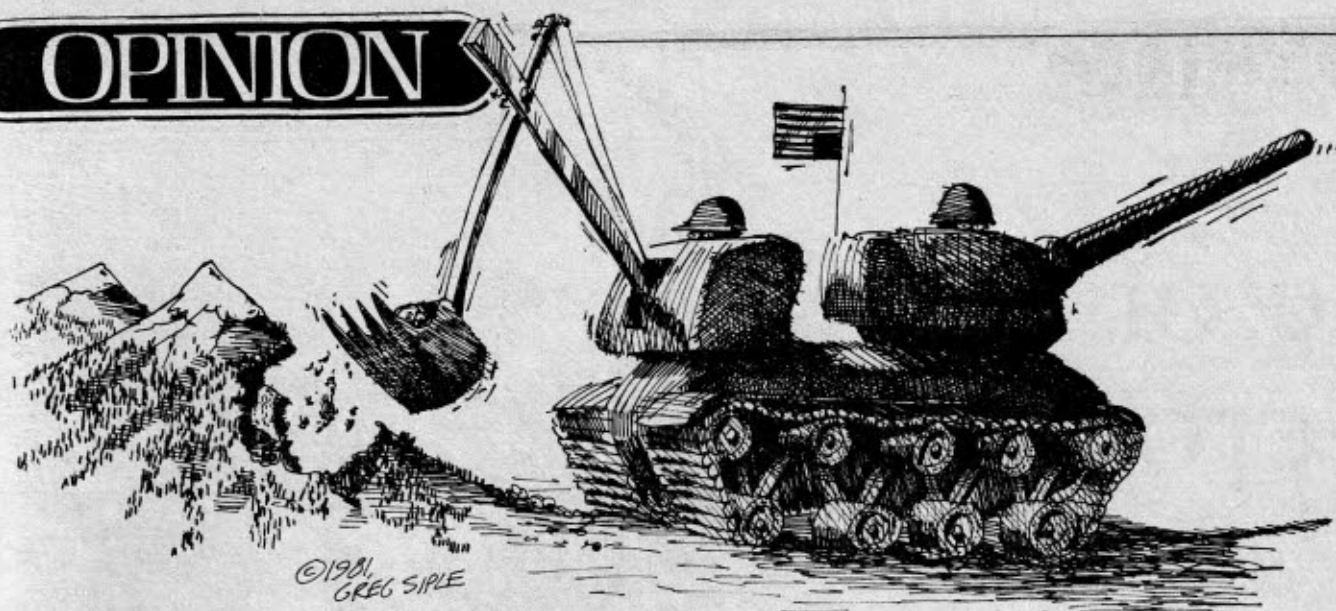
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OPINION



STRATEGIC METALS: DESTROYING THE COUNTRY IN ORDER TO SAVE IT

BOOKS

A whale's point of view

Sounding

Hank Searls. Ballantine Books, 1982. 214 pages. \$6.95 paper; \$13.50 hardback.

Review by Myra Connell

Sperm whales and humans swim "against the odds" in their struggle for survival, carrying the "last faint hope of earth."

Told largely from the viewpoint of an aging sperm whale, *Sounding* combines scientific fact and believable fantasy in a novel that departs sharply from the blazed trails. It goes beyond the knowledge of cetaceans into the purely speculative.

Searls interprets whales' gruntings,

blatting, "blangings" and put-puttings as a complex language. He theorizes that whales not only communicate on a vast scale among their own and related species, but also attempt communication with man.

Alternate chapters follow the lives of the whales and the fate of a stranded Soviet submarine. The readers' interest is held captive all the way to the incredible finale.

However, the ultimate theme exposes man's lemming-like suicidal slide toward his own destruction as well as elimination of his fellow-creatures. The sperm whale, largest-brained of any living creature, is presented as intelligent. The author says whales believe in an ancient prophecy that "someday man would understand cetacean beings..."

Wanton hunting that brought some species near extinction is described with uncanny genius, not from the whales' point of view, but as experienced by the aging male sperm whale.

As author-omniscient, Searls views the water-world from inside the sperm's brain, concentrating on whales' way of life. He feels the whales' hates, loves and fears, reasons as a whale might, lives and prepares to die as a whale would. A reader is brought to empathetic awareness of profound effects of man-controlled events on whales and other sea life.

Whales are happily puzzled when in the summer of 1981 men suddenly refrained, for the first time in 150 years, from sending whaling ships to sea. Fantasy is so skillfully blended with facts

Straightening out minks and weasels

Montana Wildlife

Robert C. Gildart with Jan Wassink, 1982. \$14.20 postpaid. 128 pages; illustrations. Published by Montana Magazine, Box 5630, Helena, MT 59604.

Review by Geoffrey O'Gara

Here I sit, looking at a picture book, which shows nesting trumpeter swans, a flying squirrel landing on a dead tree trunk, a grizzly grazing for roots amidst a field of wildflowers.

It makes me uneasy. Looking at pictures of marmots, I wonder if I'm not getting out enough now that summer has officially arrived. After all these pictures are second-hand, and no

matter how sharp and well-framed, they don't stand up next to the unblurred memory, with all its particulars.

That's the only problem I have with books like *Montana Wildlife*, the third book in a handsome series produced by Montana Magazine, under the rubric Montana Geographical Series. It's a beautiful book. It was preceded in the series by books on *Montana Mountain Ranges* and *Eastern Montana* and will be followed by books on Glacier and Yellowstone National Parks, Western Montana and the Missouri River.

The book covers the state's wildlife simply and broadly, and adds dollops of information about ecological systems (grasslands, taiga and tundra) and unobtrusive ways to observe and photograph wildlife. The authors, one a wildlife biologist and both with crowded

freelance resumes, have a few things to say about wildlife management, past and present: nothing new, but good summaries of the difficulties various species encounter in Montana's diminishing wilds, and current thinking on how to preserve the space and sustenance those species require. The essays on particular creatures inform you primarily of the species' behavior and management history — there is only incidental information about specific game populations and locations.

My complaint about a book like this — and I'll make it quietly, because the book is successful on its own terms — is that its strength resides in the photography. It hasn't the scientific or technical weight to educate those who want more than just a one page sketch (compare its five pages, mostly pictures, on

June 24, 1983 — High Country News-15

LETTERS

LORNE GREENE

Dear HCN,

Larry Mehlhoff is so right about Lorne Greene (HCN, 5/27/83).

One could really relax and enjoy Bonanza because Greene did not allow cruelty to movie animals. No "running Ws" to trip horses for spectacular falls, no Spanish bits, spurs, abuse or neglect of any kind.

Lorne Green's name appears on behalf of numerous humane causes. He is vice-chairman of the board of directors of the American Horse Protection Association, working for legislation that would eliminate drugging race horses, bills to outlaw painful soaring and cruel devices used to "gait" Tennessee Walkers and assuring USDA enforcement, humane transportation of horses, and others.

It is indeed fortunate that not all Hollywood personalities are empty-headed homocentrics.

Georgie Leighton
Aspen, Colorado

that a reader is sometimes in doubt where one leaves off and the other begins.

As Searls turns from the whale world to the distressed submarine, men and women imprisoned under 600 feet of water show their true natures. Somewhat incidentally, conflicting aspects of Soviet ideology are revealed. Obsessive devotion to the state meets head on with ideals of individual freedom.

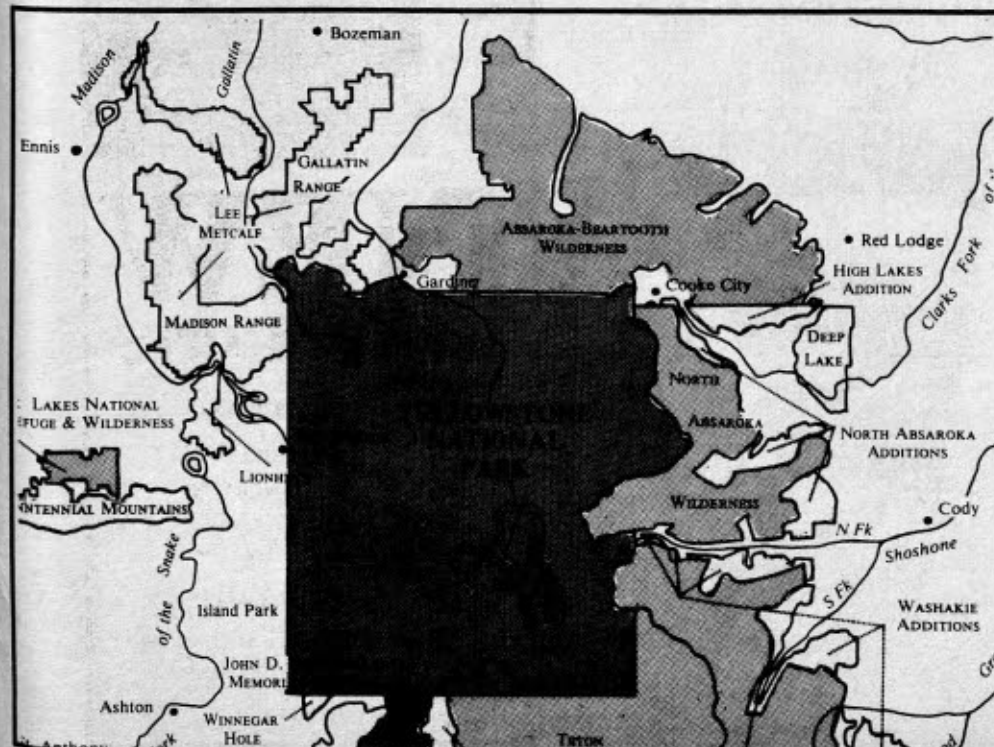
One is impressed by the author's prodigious knowledge of whale behavior that leaves few gaps. Although *Sounding* is fiction, it presents a powerful appeal for the environmental movement and sheds lights on the political situation as well.

MONTANA WILDLIFE



elk, with the wrist-spraining 700-page *Elk of North America*), and it hasn't the poetry to give you some sense of spiritual-biological connection (as you might get from, say, Barry Lopez's account of Indian buffalo myths in *Winter Count*). That leaves the pictures. They are magnificent, plentiful, and mounted in a well-designed format.

Not a bad place to start if you're getting your first look at some of Montana's wildlife, and you're trying to get your minks and weasels straight.



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The middle of the madding crowd

by Geoffrey O'Gara

"I wish I were dead." So wrote Rudyard Kipling, having his first look at America's finest park. He stared in awe at Yellowstone National Park's bubbling mud pots and spitting geysers, the lumbering bears and enormous elk, the thick forest. But he could not escape the "howling crowd," and so he wished for passage to the afterlife. His first night at Mammoth he found himself among noisy, preening American tourists, with their "ghastly vulgarity, the oozing, rampant Bessemer steel self-sufficiency and ignorance." Carelessly, he invited their guides to travel further with him: "The tourists — may their master die an evil death at the hand of a mad locomotive."

Kipling toured the park in 1889, at a time when there was no preserve like it in the world. He arrived by train at Cinnabar Station and made the dusty rounds of the park from there by stagecoach. Young American ladies, decked out in the same vacation finery they would wear on a weekend at New York's Saratoga Springs, tittered that the sights were "elegant," and scratched their names with hairpins on the bottom of geyser pools. An old lady from Chicago stuffed moss agates into her reticule.

These were indeed the days of "elegant" tourism in Yellowstone, though the adjective more described the people than the accommodations. Park historian Aubrey Hines called them the "carriage trade" — well-heeled travelers of the Victorian era who could afford a six-day package tour of the park, provided by a subsidiary of the Northern Pacific railway. Already in Kipling's time lodging had been erected at key points a day's stage apart, and tourists would travel around much the same route, making many of the same stops that tourists do today. (The Old Faithful Inn — one of the world's largest wood structures, and still an impressive sight today — was built 14 years after Kipling's visit.) Six days cost \$50 — a hefty sum before the century's turn.

Bounced along dusty roads in the stagecoaches, travelers were proudly aware of how far they had ventured from civilization. Still, it was more holiday than adventure. After a visit to Old Faithful, Kipling wrote, "The congregation returned to the hotel to put down their impressions in diaries and notebooks which they wrote up ostentatiously on the verandas."

And so it went for the next 30 years. The railroads vied for concessions; at Canyon Hotel a brass band played, and a grizzly cub cavorted on a chain. The year Kipling visited — the 17th year of the park's existence — 6,000 people toured Yellowstone. But things were soon to change. With the advent of the automobile, in the 1920s, the park would enter a new phase.

1925. They were honeymooners, a young couple who didn't mind roughing it. In the Hayden Valley they pulled their car over, walked a few feet off the dusty roadbed, and set up a tent, where they spent the night.

The idea of such activity in the park makes Jack Stark laugh today. Daniel and Audra's son is superintendent of Grand Teton National Park, Yellowstone's southerly neighbor, and he hosts over three million visitors a year. Nobody is allowed to just pitch a tent by the side of the road. You can't, for that matter, hike into the backcountry without first getting a permit from the Park Service. Stark also has to approve climbers before they ascend Teton peaks — and they're standing in line for the Grand.

The automobile is a rolling mechanical irony in the parks of the greater Yellowstone ecosystem today — parks which from the very beginning (in 1872) were to be "(retained) in their natural condition." The first car entered the park in 1902 — illegally. The Yellowstone military commandant forbade the Winton Model T entry, but Henry G. Merry drove in anyway, only to be banished — not, however, before the commandant took a ride.

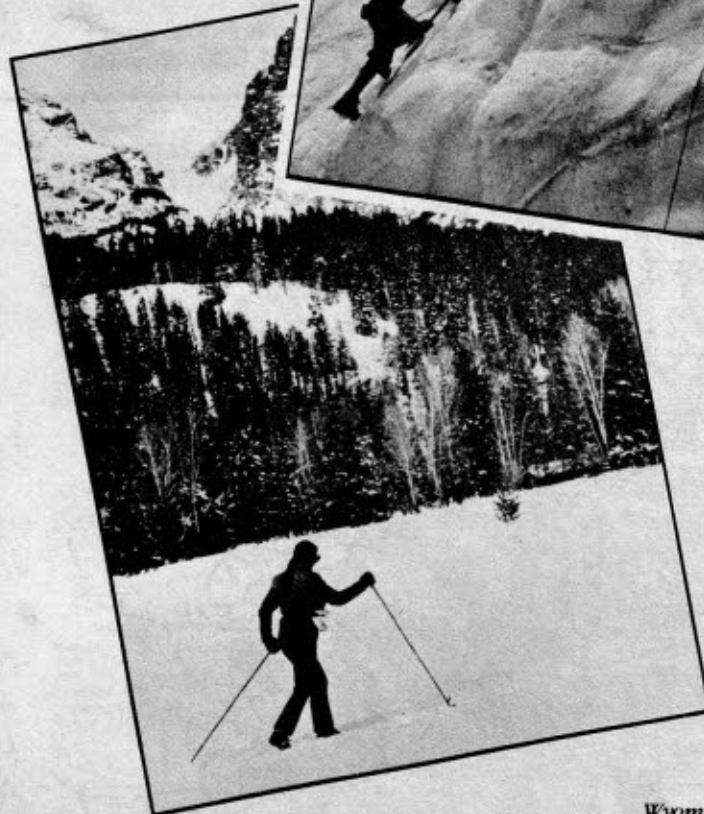
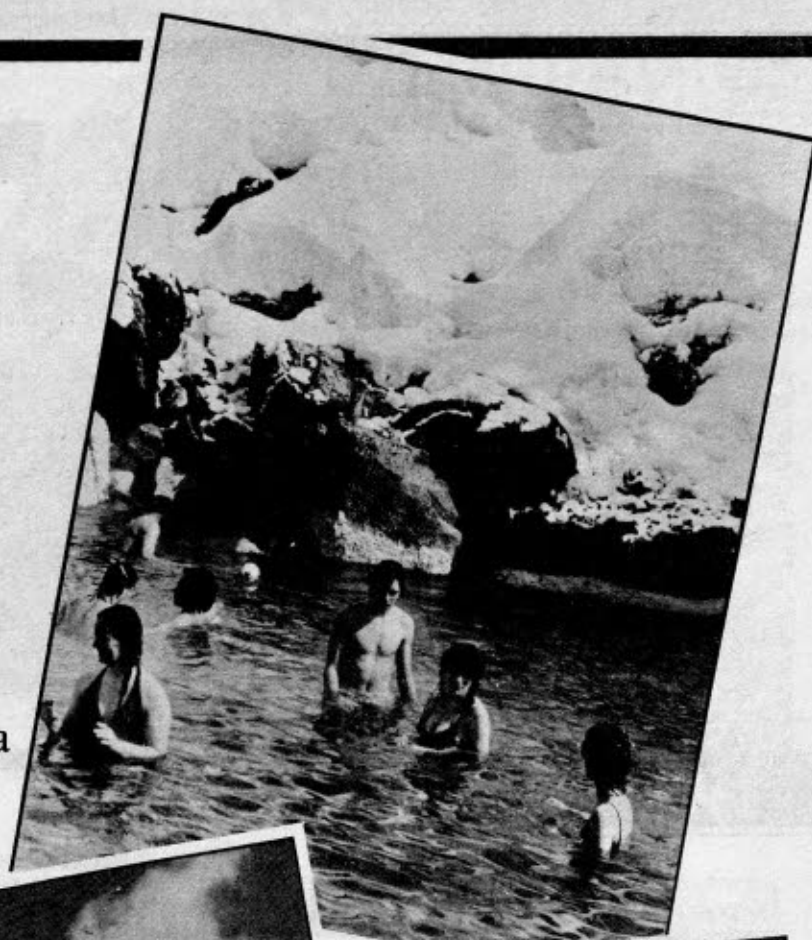
In 1915, the growing popularity of the products of Henry Ford's assembly line was too much for the secretary of interior to resist. The park was opened to private automobiles, and the Yellowstone was "democratized." The railroads and concessionaires began to lose their grip. If you didn't mind the breakdowns and tire failures that were inevitable on the crude roads, Yellowstone was yours.

The year the Starks honeymooned in Yellowstone, 154,282 people came to the park, more than 15 times the number in Kipling's day. The roads are now paved, and millions travel them every year. The automobile, more than anything, turned Yellowstone National Park into a natural museum, in which the wonders and abundant wildlife are viewed through glass. But it also made a trip to the park possible for millions who might otherwise never have seen it.

Leap ahead, then, to 1983. The automobile has grown like Yellowstone's buffalo herd, greater in number than ever, though you can't stop and camp whenever and wherever you feel like. The "howling crowd" is still howling — on a recent visit, camping at Norris with two young and weary daughters, I listened as the party slotted next to us squabbled with another family over who had staked out a particular campsite earlier in the day. Frisbees were flying and beer was flowing. Kipling would have drowned himself in the Gibbon River.

Which brings us to the subject of this story, "people management," a ductile and amorphous science practiced in the laboratories of our public land managers. In the greater Yellowstone ecosystem, such a science would seem to be applicable to just about anything that

(continued on page 12)



Daniel and Audra Stark drove their Model T from Kansas to Yellowstone National Park in