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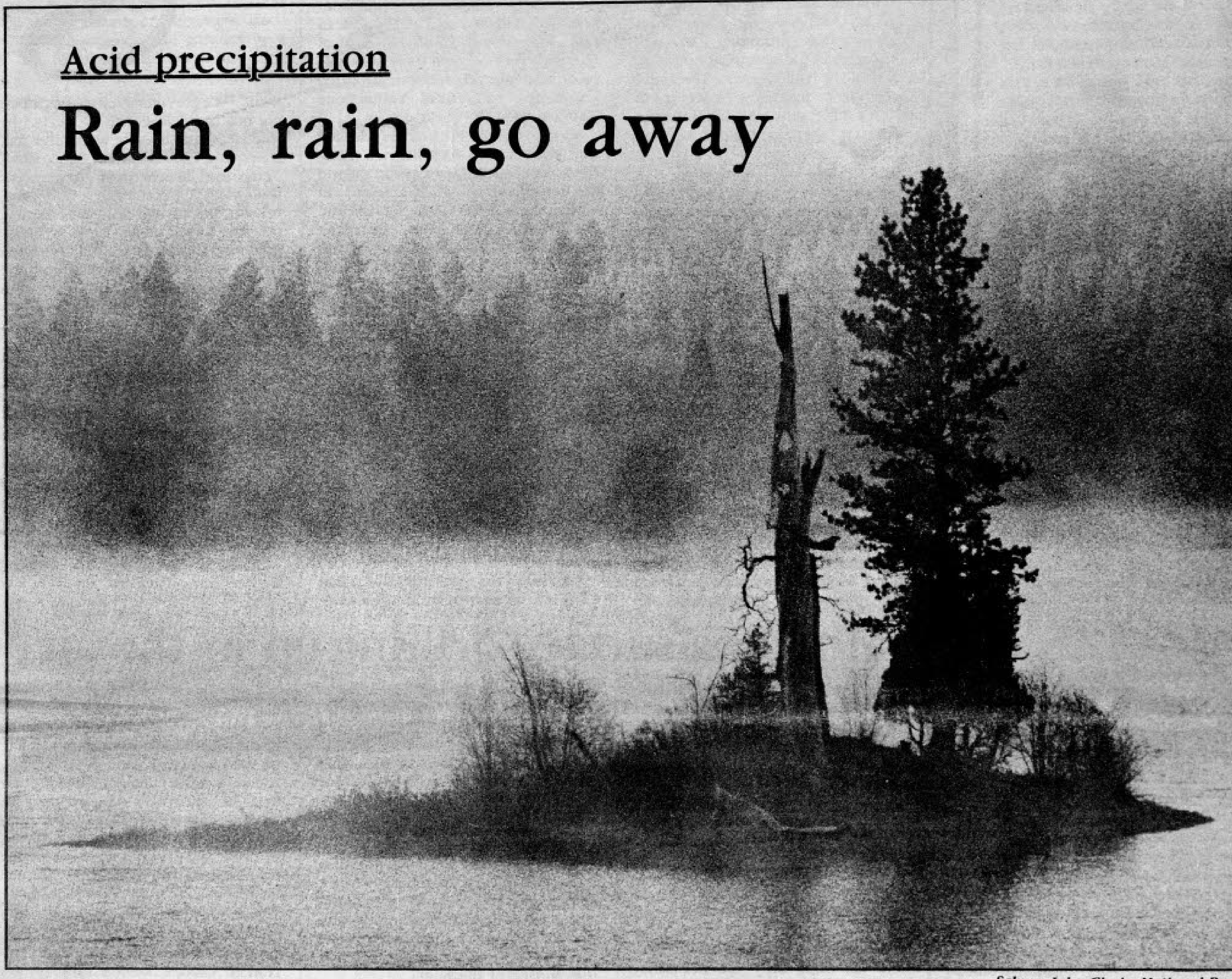
High Country news

Friday, September 17, 1982 *Vol. 14 No. 18* **$1.00**

Acid precipitation

Rain, rain, go away



David Spear

Salmon Lake, Glacier National Park

by Dan Whipple

Two years ago, John Harte, a professor of energy and resources at the University of California at Berkeley, went to Colorado's Western Slope to study the ecology of high mountain lakes in a pristine environment. "We were trying to look at them just to see how they worked," he said. "We happened to take some rain measurements. We were shocked."

Harte, who was working at Galena Lake in the Mexican Cut Preserve owned by the Nature Conservancy, was shocked because he found that the rain falling on his "pristine" lake was acidic. In the time he has been studying the area, the pH level of the rain has fallen in an average range of 4.0 to 4.5, with individual events as low as 3.6. Rain with a pH below 5.6 is considered "acid rain."

Little attention has been given to the phenomenon of acid rain in the Rocky Mountains. Most of the scientific and media attention has been directed to the Northeast and Canada. A vast number of lakes in those areas have already been affected by acid rain, altering their aquatic life, even to the extent of killing many of the fish. The acidity, apparently caused by air-borne sulfur emissions from coal-fired power plants in the midwestern United States, has become "the number one current difficulty in U.S.-Canada relations," according to John E. Carroll, associate professor of environmental conservation at the University of New Hampshire. It has also been a major battleground for environmentalists and the coal industry in the current struggle over the Clean Air Act.

"Acid rain" is a rather imprecise catch-all term for what is more properly known as acid precipitation. Any moisture falling from the sky — whether rain, snow, sleet, hail or fog — with a pH of less than 5.6 is considered acidic. The pH scale is a logarithmic scale that measures acid content. The lower the pH, the greater the acidity. A pH change of one whole number downward indicates a tenfold increase in acidity. For instance, a pH of 4.0 is 10 times more acidic than a pH of 5.0. Seven is the pH of distilled water, or neutral. A pH of greater than seven — up to 14 — indicates increasing alkalinity. Vinegar has a pH of 3.0; lemon juice, about 2.1. Baking soda has a pH of about 8.2 and ammonia 12.0.

According to Jill Baron, a biologist for the National Park Service, "Rain has always been slightly acidic. Just because the pH is below 5.6 doesn't mean you have a problem. Other factors are involved."

Baron has been working with a National Park Service project to measure acid deposition in a number of national parks. They have found that very acid rain is falling in a number of favorite places up and down the Rockies. In Glacier National Park, rain with a pH as low as 4.5 has been measured. In Mesa Verde, 4.2. In Rocky Mountain National Park, a one-time event measured the pH of rain at 3.7. The average for RMNP is about 4.8 to 4.9. Rain in Yellowstone National Park has been measured as low as 4.5. However, Yellowstone is a special case because the park's famed thermal features manufacture their own sulfur, a major contributor to acid rain.

Of all the places measured by the National Park Service in the West, only Craters of the Moon National Monument in Idaho showed very clean precipitation, with an average pH range of 5.0 to 7.0.

Studies on Colorado's Front Range conducted by the University of Colorado scientists indicate acid precipitation is falling there. Acid rain has also been measured in the Flat Tops Wilderness area near the oil shale region of western Colorado. Given the evidence of the distribution of acid rain in the East, in which the pollutants have traveled hundreds or even thousands of miles from the point sources, it seems likely that acid precipitation is falling throughout the Rockies.

However, the mere presence of acid rain is not in itself disastrous. Another factor, known as the "buffering capacity" of lakes, must be considered. At

(continued on page 12)

WESTERN ROUNDUP

Church subdivides Montana land

To add to its 12,000-acre Royal Teton Ranch near Gardiner, Montana, the Church Universal and Triumphant (CUT) has now purchased 5,264 additional acres in the spectacular Paradise Valley of the Yellowstone. The entire parcel, comprising some 11 sections of land, had been subdivided by its former owners, Yellowstone Valley Ranch and Recreational Property.

Park County records show the land has been surveyed and split into 20-acre tracts, available for sale without county review under Montana's land subdivision laws.

Church officials have announced the intended sale of at least 300 subdivided acres to CUT members who plan to develop the "community of Glastonbury."

CUT vice president Ed Francis, of the Royal Teton Ranch said that the 300-acre purchase was intended "as an addition to our existing ranch to be developed as a rural plan community for church members who wish to own property near the organization's retreat."

Last August CUT held its annual retreat at the Royal Teton to celebrate the church's first $1.5 million payment on the $8.5 million ranch purchased from publishing magnate Malcolm Forbes last year. While the entire CUT membership received an appeal from president Elizabeth Clare Prophet to save the Royal Teton, individual members can now own their own little piece of the giant church retreat located just a few miles from Yellowstone National Park.

Vice President Ed Francis claimed that the National Park Service threatened to condemn the church's world headquarters called "Camelot" in Malibu Canyon, California. Francis said that the NPS wants to make it part of the scenic Santa Monica Mountain Recreational Area. That has prompted church officials to look for a new inner sanctum. They found it in Paradise.

Under Montana's subdivision laws, land splits that produce parcels of less than 20 acres are subject to sanitary and environmental reviews by county planners — reviews that developers claim are costly and unnecessary.

To circumvent the reviews, developers frequently split large pieces into 20-acre tracts, then use other exemptions in the subdivision laws to create unreviewed small-tracted housing developments. Apparently that was what was in store for the 5,264-acre parcel recently purchased by the church.

Ed Francis has repeatedly stated that CUT has no interest in land development. "We are committed to the principle not to subdivide this property," he told *HCN* last May. One week after that statement, Francis split the entire Royal Teton into 20-acre tracts, "to preserve their value," according to a CUT press release. Francis still maintains there is no plan to sell off any Paradise Valley holdings except to church members who wish to live in Glastonbury.

The church now controls more than 17,000 acres along the Yellowstone, where residents fear the loss of public access to fishing and recreation areas. Recently Park County Undersheriff LeRoy Keto paid a visit to the Royal Teton where county residents complained that CUT members were stopping motorists on a county road that runs through ranch property.

Keto said CUT members were interrogating drivers about their destinations. He threatened church officials with a citation of criminal mischief if they continued to accost passersby.

Land splits on the Royal Teton Ranch are permitted under state law.

— Don Snow

Montana surface drilling up in the air

The Montana Department of Fish, Wildlife and Parks is being cautious in deciding whether to allow oil and gas leasing on its land. "We've been going carefully," said Ron Aasheim, the department's administrator of conservation and education division, because many of the impacts and benefits are unknown.

However, the state could reap $862,718 a year from oil and gas income and royalties on department land by 1995, under the most optimistic conditions, concluded a report prepared for the agency by consultant James Nybo.

At this time, only "no occupancy lands" on fishing access sites have been leased to companies. No leases have been given to allow drilling on the surface, said James Posewitz, the agency's environmental administrator.

An analysis of the economic and environmental impacts is being done on the nearly 322,000 surface acres of leased and owned land which the department controls. This includes administration sites, wildlife management areas, fishing access sites, state parks, monuments, recreation areas and nearly 103,000 acres of leased public and private lands.

It is difficult to decide whether to lease or not, said Posewitz, because there is a "mosaic of mineral ownership" from federal and private interests. These parties have the right to do whatever they want with the mineral estates since the department has rights to only the surface of the land.

Theoretically, said Posewitz, mineral owners can place wells on department land. This is a potential problem that the department has not had to deal with yet.

An environmental analysis should be available to the public by next October.

Two aspects need to be considered before drilling is allowed, said Posewitz: the potential assets to be made by the department from leasing, and the effect on wildlife. Even if there is an asset, he added, wildlife interests should come first. There is also concern over an increase in roadbuilding, possible spills and the presence of desulphur plants. The Fish and Game Commission has the final authority on the leasing decision, he said.

Aasheim said the most significant area for leasing is on the eastern slope of the Rocky Mountain front from roughly Lincoln to Glacier National Park. Nybo's report estimated that 100,000 acres is the "practical maximum number" of acres, under which the department owns oil and has oil and gas mineral rights, and which might ever be leased.

— Jennifer Walford

Dear friends,

One of the running staff battles here at *High Country News* has to do with what you, our readers, want from the paper.

Jill thinks you want shorter, snappier features on a broader range of topics. Dan thinks you want more in-depth, investigative pieces. Kathy thinks that you're interested in articles that promote a sense of regional identity, while Carol is sure you're craving more articles on wildlife.

In short, each of us is certain that you want exactly what we want. And we, of course, all want something different. So when we get into the thick of the debate, one or the other of us (usually whoever thinks of it first) will claim that The Readers are on our side.

Such claims are, of course, horsepuckey. We haven't had a reader survey since 1978 and a lot has changed since then — both in *High Country News* itself and in the world we cover. Clearly, it's time we stopped squabbling among ourselves and asked you directly, to paraphrase Freud, "What do readers want?"

That, then, is the basis for the reader survey that appears on pages 17 and 18 of this issue.

Unfortunately, the questionnaire looks pretty intimidating even though none of the individual questions is difficult. Just to be sure that it wasn't going to be too much of an imposition on you, we asked Jeff Stern, our new intern, to complete it. It took him a little over a half hour to answer all the questions except the free-form essay question at the end. For what it's worth, he spent 45 seconds on the demographics, four minutes on the consumer questions, another four-and-a-half minutes on the membership etc. section, two minutes on "You and *HCN*," 15 minutes on the evaluation of our present newspaper product and another eight minutes on the paper's future.

We hope you'll spend a half-hour with the survey or whatever time it takes to effectively let us know what's on your mind. We want to give you the *High Country News* you want — and we need your help to do it.

■

With our next issue, October 1, *High Country News*, will enter deeper into the computer age. A Lander firm called Burkart Management Services has been working throughout September to put our entire mailing list on its Wang system. If all goes well, that monumental task should be completed in time to give us a good current list for October 1.

There will undoubtedly be some problems with the system — it's just too big an undertaking to completely escape Murphy's law. We're telling you about it now so that you'll know what's going on if your next paper doesn't show up at the usual time. Give us a call or drop us a note and we'll make sure that the bytes give you back.

■

Slowly but surely, the Publishers Fund continues to grow. Thanks this issue to Mary S. Beer, Bill Dodd, Jennifer Hiebert and Gregory Nelson.

— the staff

High Country News

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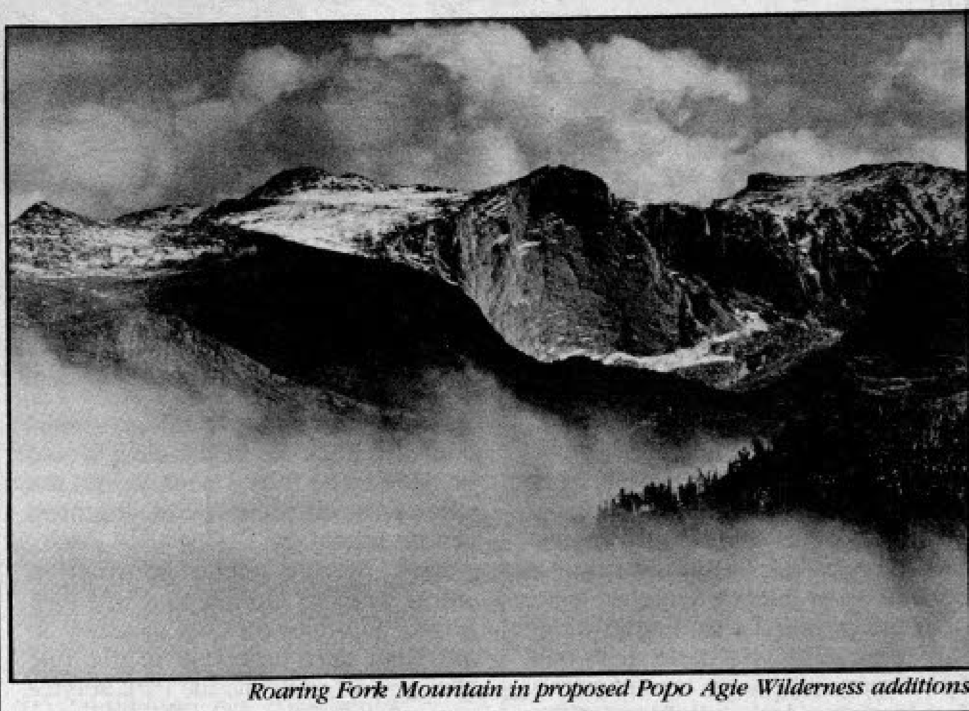
Wyoming wilds bill passes committee

The Senate Energy and Natural Resources Committee has unanimously passed the Wyoming Wilderness Bill proposed by the three-member Wyoming congressional delegation. The legislation, agreed to by a 17 to 0 committee vote, was amended by Sens. Malcolm Wallop (R-Wyo.) and Alan Simpson (R-Wyo.) to include about 200,000 additional acres of wilderness lands. The amendments were greeted by a loud chorus of boos from all sides.

Under the revised bill, 678,449 acres of federal land in Wyoming would be set aside as wilderness. A number of areas would be added to wilderness, which had not been previously designated: the 116,855-acre West Slope of the Tetons, which would be called the Jedediah Smith Wilderness; Laramie Peak, 27,400 acres; Teton Corridor addition to the Teton Wilderness, 28,156 acres; and the Glacier addition to the Fitzpatrick Wilderness, 6,497 acres. In addition, some acreage would be added to include the Middle Fork area in the proposed Popo Agie Wilderness and Kinky Creek in the proposed Gros Ventre Wilderness. The boundary of the Gros Ventre area would also be modified to preserve a snowmobile corridor.

The delegation also altered the controversial release language, which environmentalists had previously interpreted to mean that lands not designated as wilderness would have to be managed for development purposes. The delegation's new language says that each area would be managed according to Forest Service land planning procedures.

When the changes were announced, Simpson said, "The Sierra Club hard-hitters may shriek that this still is not enough wilderness, and that somehow our softened release language still condemns every non-wilderness acre to destruction. I'm rather certain that timber and mining interests will say it is miles too much...If no one likes the bill, we are probably on the right track."



Del Owens

Roaring Fork Mountain in proposed Popo Agie Wilderness additions

If unpopularity is the criteria, the delegation scored a bulls-eye. Sierra Club representative Bruce Hamilton said, "Every area they are adding to the bill is a worthy one, but they are leaving out at least an equal number of equally worthy places. This bill protects as wilderness 200,000 acres less than is already protected by administrative policy. They claim they've softened the release language, but it still says that no more land can be considered for wilderness until after the year 2000."

The energy industry was no more enamoured of the legislation, as Simpson had predicted. Rick Robitaille of the Petroleum Association of Wyoming told the Casper (Wyo.) *Star-Tribune*, "It's apparent that the delegation has taken this action in an attempt to satisfy a small but vocal minority...The changes are not in the best interest of the public and do not represent the desires of the majority of Wyoming residents." Industry officials of timber, mining and oil companies had previously praised the delegation's legislation.

Phil Hocker, conservation chairman of the Wyoming Sierra Club, said that Simpson "always likes to think he's getting shot at from all sides at once. I pointed out to him that General Custer said the same thing, but that didn't mean he was in a good place."

The committee-passed legislation could go before the full Senate as early as next week. Since all of the state's delegation supports it, major changes on the floor are unlikely.

Idaho rabbits safe for another year

The state of Idaho's failure to raise $50,000 this summer has caused at least one-year setback in testing a chemical that selectively poisons jackrabbits. The delay means farmers won't be able to use the chemical, for which officials won't release the name or contents, to control jackrabbits this winter when their numbers are expected to peak in south central Idaho.

Jackrabbit populations in the intermountain West have peaked at least 11 times since 1849, with large variations in the population cycles. Last winter, black-tailed jackrabbits munched their way through $5 million to $10 million in eastern Idaho hay and grain.

Idaho was seeking $50,000 in donations to reopen experiments on an organophosphate known as DRC-1144. Experiments needed to register the chemical for jackrabbit control had to have begun in July since DRC-1144 is only effective on growing crops. But the deadline passed with only $3,000 donated.

Had the money been raised, Jim Evans, a wildlife research biologist with the U.S. Fish and Wildlife Service in Olympia, Washington, would have returned to Idaho to conduct the experiments. Evans studied DRC-1144 at a jackrabbit control research station in Twin Falls from 1964 to 1970.

Evans said experiments in Twin Falls showed DRC-1144 sprayed on foliage has a selective poisonous effect on jackrabbits. Domestic rabbits, mallard ducks and pheasants fed foliage sprayed with twelve and a half times more than the amount needed to kill jackrabbits were not harmed, he said.

The experiments also suggested DRC-1144 does not enter the food chain. Coyotes, dogs, bald and golden eagles, great horned owls and sparrow hawks fed poisoned rabbits showed no poisoning symptoms, said Evans.

Dick Randall/Defenders of Wildlife

"We have extensive pen data in which jackrabbits did not show avoidance (to DRC-1144), but I'm not sure if they are resistant," said Evans. In one test, off-spring from jackrabbits fed a sublethal dose of DRC-1144 did not avoid eating poisoned vegetation, he added.

The Environmental Protection Agency has already approved DRC-1144, under another name, for use as an insecticide. It is now available in garden stores, Evans said. Idaho Department of Agriculture (DOA) officials, fearing farmers would use the insecticide to poison jackrabbits, are not releasing its name.

The proposed experiments would have examined crop residue levels after spraying DRC-1144 at two pounds per acre, the amount recommended to kill jackrabbits. The study would have also determined the effects of the chemical on sheep, cows, and deer.

Greg Nelson, DOA state veterinarian, said Idaho will continue trying to raise money to test DRC-1144 next year.

In central Idaho's Camus County, farmers have given up attempts to use another chemical, 1080, on an increasing population of Columbian ground squirrels this year. After several years of alfalfa hay and grain losses to squirrels, farmers were denied a permit this summer to drop oats treated with 1080 from the air.

"The whole county is pretty well infested with squirrels eating alfalfa and grain. They even follow the rows and dig up the grain seeds," said Lois Nadolny, Camus county extension agricultural agent. Nadolny is collecting damage estimates this year.

DOA denied the request because "we felt that the trials done in Washington (where aerial broadcasts of 1080-treated oats have been tested) were flown in an area without wildlife. And we only had a short period of time to decide," said Nelson. The agency did approve ground application of treated oats but wet weather squelched that plan.

"I think we're going to can the whole thing for this year," said Nadolny, "because the squirrels are starting to hibernate now. We may try again next year."

— Renee Guillierie

HOTLINE

More wilds for Metcalf

Sen. John Melcher (D-Mont.) has agreed to an increase in the acreage of the Lee Metcalf proposed wilderness. In February, Melcher proposed 202,000 acres of wilderness in southwestern Montana, but environmentalists said the area was too small. Since then, Montana Gov. Ted Schwinden (D), with the endorsement of the state Democratic party, has proposed several changes to the bill, including the addition of the 72,000-acre Monument Peak-Sage Basin area as wilderness. This area, which lies adjacent to Yellowstone National Park, had been classified as a wildlife management area in Melcher's original bill. By leaving the western portion of this area as a recreation area, the modified plan allows for continued use of the Big Sky snowmobile trail but halts further development, Melcher said. The Lee Metcalf Wilderness bill may be passed this year if the legislation receives unanimous support from Montana's congressional delegation.

No word on land sales

For over eight months the Reagan administration has had its land management agencies inventorying public lands to determine which can be sold (*HCN*, 7/23/82). The land sales are supposed to help reduce the national debt. But now, even after the inventory, the U.S. Forest Service and the Bureau of Land Management are saying there is no word on what exact acreage is up for sale. A Forest Service spokesman told the *Missoulian* that it would probably be six months or more before they will know which lands have been selected for the auction block. The BLM says the only information it has is that the sale will probably take place in late 1983 or 1984. In the meantime, both the Forest Service and the BLM have received many calls from people interested in purchasing public lands.

Fish plan questioned

Idaho Power Company officials fear a loss of electricity if a Northwest Power Planning Council draft fish and wildlife plan is implemented. The council plans to increase water flows at Idaho Power's Hells Canyon dams to restore fish runs in the Columbia river system, according to a United Press International report. Company officials believe increased flow could cause the utility to generate less electricity. According to the draft plan, energy from the Bonneville Power Administration could replace any power losses incurred by the plan. However, company officials said, BPA may not be able to send energy to Idaho Power when the utility most needs it — during the summer irrigation season — since that coincides with peak use of BPA power in southeastern Idaho. A hearing on the final plan will be held in Boise on October 15.

Forest Service money woes

A plan introduced by Sens. Max Baucus (D-Mont.) and Steve Symms (R-Idaho) to change procedures for handling Forest Service money received general support at a U.S. Senate Finance Committee hearing in Missoula, Montana. The plan would require that Forest Service revenues from timber sales, recreation fees and other activities be placed in a "National Forest Investment Fund" to be spent on forest management. Forest Service money now goes into the treasury's general fund. Baucus, Symms and many of those present at the hearing felt that inadequate congressional funding of Forest Service programs in the past has hampered effective forest management. The Reagan administration says the normal budgeting process should be adequate in funding the Forest Service.

HOTLINE

Inspection rights upheld

In an out-of-court settlement with the National Wildlife Federation, the Office of Surface Mining has deleted provisions from its regulations that limited citizen participation in the agency's inspection and enforcement program. Gone are clauses that gave states the option of denying citizen access to mine site inspections and curtailing citizen rights to file lawsuits in state courts. The National Wildlife Federation had sued OSM for not writing an environmental impact statement concerning the agency's regulatory reforms.

More waste for the sewage

The Reagan administration's new interpretation of the Clean Water Act is going to allow municipalities 60 percent more biological material in discharged sewage than they are allowed now. The new interpretation is supposed to help cut back on domestic spending. Municipalities must apply to the Environmental Protection Agency to be granted the right to partially treat the sewage. The General Accounting Office expects the EPA to receive as many as 800 applications and expects the new requirements to save $4 billion to $10 billion in construction and operating costs. The EPA has admitted there will be more organic pollutants emptied into waterways, but said it won't endanger fish habitat or recreation use.

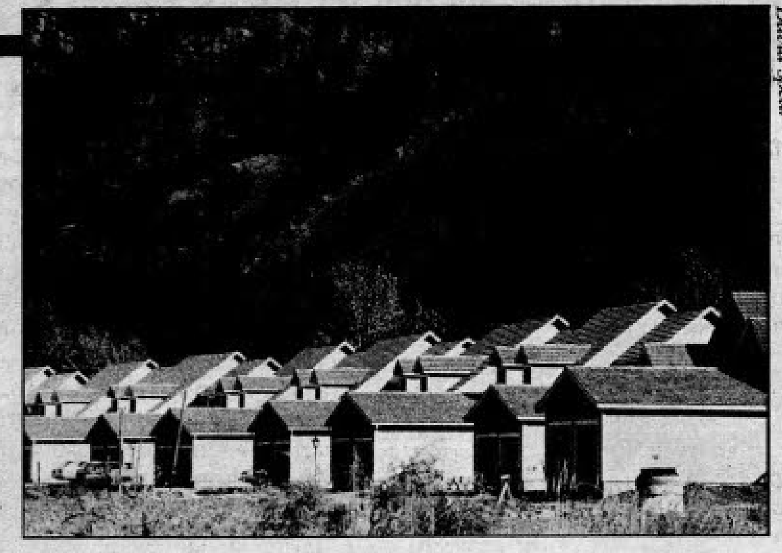
Bizarre sale

Looking for a pair of iguana boots? An opossum coat? If so, don't miss the U.S. Interior Department's September sale featuring these and many other unusual items. The agency is seeking to reduce its inventory of items confiscated during 10 years of animal protection law enforcement. According to a *Washington Post* report, most of the items were smuggled or brought in illegally by unsuspecting tourists. Federal laws do not specify what to do with the confiscated booty.

Wyoming plans land sale

The Wyoming Board of Land Commissioners voted September 3 to sell 476 acres of state-owned land in Jackson Hole (*HCN*, 8/20/82). The board approved the sale on a 4-1 vote despite strong local opposition and a request from a legislative committee for a one-year moratorium on land sales to give lawmakers a chance to review the entire state land program. The land, which consists of one 316-acre parcel and two 80-acre parcels, will be sold at public auction. However, the present grazing leaseholders, the daughter and son-in-law of former Wyoming Governor and U.S. Senator Clifford Hansen, will have the right to match the high bid. The leaseholders have a sales agreement with a developer for one of the 80-acre parcels but have not announced their plans for the other two tracts.

National parks face development



David Spear

Recently, in three separate instances, national parks have been threatened with energy and housing development. An Office of Surface Mining rule change could allow coal mining on privately-owned land within the boundaries of 26 national parks. Interior Secretary James Watt has proposed a land swap within three Alaskan national parks that would open many of the acres to commercial development. And inholders within Grand Teton National Park are discovering there is little substantial opposition to building on their lands.

In the case of the OSM rule changes, Norman Dean, counsel for the National Wildlife Federation, said the changes involve the interpretation of "valid existing rights" to mine for coal on private inholdings within national parks. Under the Carter administration, valid existing rights to mine were limited to those who already had mining permits or had shown "good faith" in efforts to start development on or before the passage of the Surface Mining Act of 1977.

The change would give "individuals the right to mine if they owned property on or before the date of the passage of the Surface Mining Act," Dean said. He said the interpretation is much broader than that of the Carter administration. He said that although OSM director Richard Harris told a congressional committee that no strip mining would be allowed on federal lands, he did not address the question of development on private inholdings.

Park Service public information officer Duncan Morrow said the Park Service informed the OSM that they do not favor such an option in the rule changes. Morrow said the Park Service can only offer its opinion. The decision will still be up to the OSM and/or the interior secretary.

Dean also said that in the draft environmental impact statement on OSM rule changes, the Interior Department indicated they would not only open park inholdings for development, but also inholdings in wildlife refuges and in national forests.

In the Alaska case, Watt wants to swap about 26,000 acres in and near three national parks for about 14,000 state-owned acres within Wrangell-St. Elias National Park in southeast Alaska. The 26,000 acres would be eligible for energy development. Watt and Alaska Gov. Jay Hammond (R) have already signed an agreement on the trade, according to Morrow.

Although the agreement is subject to public hearings and final approval by both the state and federal governments, the *Wall Street Journal* reported that Watt believes prior congressional approval of the deal was not necessary. Past administrations held that such swaps needed congressional approval beforehand.

Interior believes the swap will consolidate federal land in Alaska, while giving the state some land that has high commercial development potential. Watt also sees this as a cheap way to obtain lands critical to the national park system.

And in Grand Teton National Park, Park Service budget cuts have reduced the Park Service's ability to enforce its policy to prohibit new development within the Park.

In the past, the Park Service has used land acquisition funds to buy up private inholdings within the Park whenever development was a threat. But with the Reagan administration budget cuts, acquisition funds are just not available and some inholders are jumping at the chance to build. The *Jackson Hole Guide* reported that four new homes and four additions have occurred in the park in the last two years.

Park officials are hoping that adequate acquisition funds will be available in the future. In the meantime, the Park is being forced to accept some development.

Nuclear waste ban overturned

The state of Washington's attempt to avoid becoming a dumping ground for low-level radioactive waste has been dealt a blow by the 9th U.S. Circuit Court of Appeals.

In late August, the court upheld a year-old federal court decision that struck down Washington's 1980 law that would have regulated the disposal of low-level waste produced outside the state on a 1,000 acre site the state leases near Richland, Washington. The state leased the acreage from the federal government in the early 1960s as a dump.

In making its ruling, the 9th Circuit concluded that state restrictions on dumping would "significantly aggravate the national problem of low-level waste disposal" and said the law violated the supremacy and the commerce clauses of the U.S. Constitution.

The law, Washington Initiative 383, received 75 percent of the votes cast in the 1980 general election, the biggest majority ever given to an initiative in the state. It was to go into effect July 1, 1981, but a district court judge intervened on June 30, 1981, and overturned the law.

The initiative would have prohibited the disposal of filter sludges, resins, filter bottoms, used gloves, protective clothing, rags, tools, papers, plastic and material used to make smoke detectors, luminous dials and emergency exit signs.

The dump, one of three low-level facilities in the United States, receives about 60 percent of the total U.S. waste, 95 percent of which comes from out of state.

According to officials in the Washington Department of Social and Health Services, the amount of waste dumped at the site began to increase around 1970. By 1980, the monthly total averaged about 100,000 cubic feet.

But in the three months just before Initiative 383 was to go into effect, dumping skyrocketed to over 200,000 cubic feet a month as industries in other states rushed to clear their stockpiles. After the court ruling, the quantity fell below 100,000.

State officials said the initiative was a political issue rather than a matter of health and safety. They said there has never been an occupational overexposure at the site, nor has there ever been a transportation accident related to it. In addition, the site is considered an excellent geologic site.

"Washington just doesn't want to be a dump for the rest of the country," said Michael Gendler, a director of the Washington State Environmental Council, the private, volunteer group that mounted the campaign for the initiative.

And assistant state's attorney Michael Hanbey said the federal government doesn't want to deal with the waste either. The feds are among the parties suing the state over the law.

"I argued before the Court of Appeals that the federal government could revoke the state's lease or the waste could be dumped at the Hanford Nuclear Reservation, which is right across the street from the state site," Hanbey said. "But the feds have their hands full with high-level waste and don't want to mess with the low-level, which is much greater in volume."

Neither the state nor the council have yet decided whether to appeal the ruling to the Supreme Court. But both Gendler and Hanbey feel the case for the initiative is strong.

An appeal might not be necessary, however, if a proposal for a Northwest Interstate Compact on Low Level Waste Management is approved by the U.S. Senate. It would validate an agreement between Washington and seven other states that would limit dumping to the members of the compact. Those eight states, Oregon, Idaho, Montana, Alaska, Wyoming, Utah and Hawaii, presently generate four to eight percent of the nation's low-level waste.

— John Soisson

BARBED WIRE

Safety tip. A Careywood, Idaho, man cautions earthlings to be wary in approaching unidentified flying objects. Jerome Eden, one of 13 founders of Planetary Professional Citizens Committee, gave this advice: "People shouldn't expect that such a craft (UFO) is going to be benign. If spotted, you should go into the house — and don't attempt to fire at them."

More inappropriate technology. Arizona Public Service Company burned about 36,000 pounds of marijuana to help fire their Cholla Power Plant near Joseph City, Arizona. The dope, seized as evidence in police raids, was destroyed under court order in what police, in an uncharacteristic attempt at humor, called "Operation Pot Roast." Officials estimate the marijuana produced about 2.8 billion Btu, worth about $35 million for other uses. The benefit/cost ratio was not made public.

Who says there's never any good news? United Press International reports that the city of Houston is sinking into the sea at a rate of four inches a year. Some people believe that it isn't nearly fast enough.

Signs of the times. A number of tribal members on the Flathead Indian Reservation in western Montana are complaining that the tribes' buffalo herd costs too much to maintain and has no purpose. Some of the Indians are proposing eliminating the buffalo from the reservation.

Things we didn't know we needed department. The Gifted Advocacy Information Network of Phoenix, Arizona, has invented a word to be the antonym of "catastrophe." The word, selected from 400 contest entries, is "benestrophe." It won out over such words as "miracle" and "paxivity."

Jail is too good for 'em. Leonard Sisco, Republican candidate for Natrona County (Wyo.) sheriff, said in a newspaper ad that, if elected, he will "lobby courts for tough sentences and restitution for victims."

Uranium regulations misunderstood

While the opening of a Denver field office for the Nuclear Regulatory Commission on October 4 may help, Wyoming environmentalists are concerned that uranium mill tailings regulation will continue to suffer without a formal agreement between the state and the NRC.

Wyoming Gov. Ed Herschler (D), who is facing a strong opponent favored by the industry in November's election, has agreed to drop consideration of a memorandum of understanding between the state Department of Environmental Quality and the NRC. The decision was considered to be a concession to the uranium industry.

The two agencies had been working on the agreement for more than two years (*HCN* 3/19/82). The final draft provided for the NRC to continue its primary responsibility for regulating uranium mill tailings in the state. At the same time, NRC had granted the state primary responsibility for regulating the underground effects of in situ uranium mining.

The memo also formalized a process by which the two agencies would share information and would cooperate on inspections. Because the Wyoming legislature has never voted to assume the responsibilities required of NRC "agreement states," the state must defer to the federal government in jurisdiction. The memorandum could have set a precedent for other non-agreement states to assume limited authority over some uranium matters.

Tom Wolf of the Wyoming Outdoor Council, a statewide environmental group, said the council supports the concept of the memo because its members are not confident that the NRC monitors the industry's activities in the state adequately.

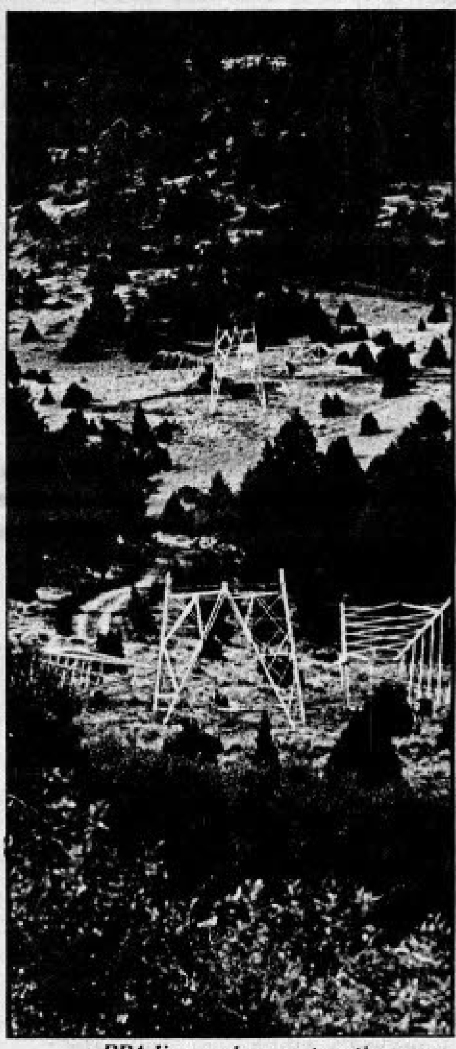
A Wyoming ad hoc uranium committee disagreed with WOC's opinion of the memo. Created by Herschler in 1981 to help the ailing uranium industry, the committee has consistently opposed the memorandum. Its members believe it would not reduce duplication between the state and the federal government, and they question the state's authority to regulate tailings at all. Consequently, the committee asked Herschler to abandon the memorandum effort.

The effects of Herschler's decision to abide by this advice are unclear. The committee also asked — and the governor agreed — to continue the DEQ's oversight role in tailings regulation. However, DEQ's ability to fulfill this responsibility will depend upon NRC voluntarily supplying information and inviting DEQ staff on inspections, which has been a problem in the past, according to Wyoming Assistant Attorney General Dennis Boal.

A spokesman for the NRC said the staff is still studying Herschler's decision. He could not say if the NRC will adhere to the terms of the memorandum without the document to formalize the relationship.

— Marjane Ambler

BPA transmission lines surge ahead



Ellen Ditzler

BPA line under construction near Boulder, Montana

One of the last legal obstacles to the continued construction of the Bonneville Power Administration's controversial transmission lines in Montana has been removed.

A federal judge has ruled that the compliance requirements of Montana's industrial siting law are "subjective and arbitrary" and cannot be enforced in the case of a federal project.

The 500-kilovolt lines will carry electricity from coal-fired generating plants at Colstrip in eastern Montana to the Pacific Northwest.

The ruling, issued in Billings by U.S. District Judge James Battin, was a response to a clash between the state and the federal government over which has jurisdiction over the location of federal energy projects. That conflict arose when Montana asked BPA to move its proposed powerline route across the Missouri River near Townsend to a point one half-mile south to avoid disturbing critical wildlife habitat. Changing the river crossing site was one of several conditions the state said BPA should meet in order to comply with Montana's Major Facility Siting Act.

However, Judge Battin ruled that setting such a condition was subjective and arbitrary and exemplified the siting law's inherent flaw: a lack of "pre-existing, tangible, objective criteria" which developers could follow in order to comply with the law. According to Battin, the absence of such criteria allows the state to articulate its own conditions for each project, calling them statutory requirements.

In a separate decision issued last March, Battin ordered BPA to comply with the "substantive standards" of the state siting law. His subsequent ruling essentially says that the law doesn't have any substantive standards other than the requirement that a project have minimum adverse impacts on the environment — a goal too conceptual and vague without specific regulations or guidelines to back it. Lacking such quantitative standards, BPA could not be expected to comply with the law, the judge said.

Although the state plans to appeal Battin's ruling that the Major Facility Siting Act lacks substantive standards, in the meantime it has "reconsidered" its original request to change the Missouri River crossing. It now sanctions BPA's preferred site, as long as BPA cooperates with the state in developing and applying measures to protect wildlife. If the district court ruling and its implications of federal supremacy remain intact, those mitigating measures will take the form of recommendations which BPA need only comply with on a voluntary basis.

— Ellen Ditzler

Eminent domain legislation possible

The outlook for passage of legislation which would grant coal slurry pipelines the federal power of eminent domain — the power to condemn private property to acquire rights-of-way — looks more favorable now than at any time in the 10 years since the measure was first introduced in Congress. Within the past month, bills have passed both the Senate Energy and Natural Resources Committee and the House Public Works Committee.

Proponents of the legislation, including coal companies, utilities and pipeline operators, argue that the nation needs to develop its coal resources and that the network for transporting and distributing the coal must be expanded beyond the current reliance on railroads. According to a report on the Senate bill, other long distance transportation systems such as railroads, oil and gas pipelines, and electric transmission lines have been granted the federal power of eminent domain during the crucial construction stage and such a granting of power to coal slurries would be consistent.

Opponents of the legislation, including some western and midwestern representatives, the railroads, farmers and environmentalists, question the need for granting such power to the pipelines.

The Reagan administration surprised most observers when it also came out against the legislation on the grounds that important rights of the states are at issue and that it is committed to the transfer of decision-making to the states.

The most crucial issue in the debate is water. Most opponents do not believe that badly needed water in the West should be shipped out of the region. Water law experts have serious reservations about the states' ability to control water resources in the face of interstate pipelines armed with the federal power of eminent domain. The concern recently took on added legitimacy when the Supreme Court ruled in *Sporhase v. Nebraska* that interstate water transfers are articles of commerce.

Proponents of the Senate bill argue that the issue of state water laws is addressed in the eminent domain legislation through amendments introduced by Sen. Malcolm Wallop (R-Wyo.). According to a Wallop aide, the amendments allow a state to shut off its water supply without the action being construed as an unconstitutional restraint on interstate commerce.

Efforts on the House side to reserve the primacy of state water laws in regards to coal slurry pipelines failed, although proponents of such language vow they'll introduce such an amendment when the bill comes up for consideration by the full House.

In the Senate, Sen. Bennett Johnston (D-La.), who originally introduced the legislation in 1981, is considering the measure as an amendment to the debt ceiling bill which is under consideration this month.

— V.M. Kahn

HOTLINE

VMK

Coal tract offered again

One of the tracts offered at the Powder River Basin coal lease sale last April 28 in Montana will be offered again in Cheyenne on October 15. The Rocky Butte federal coal tract near Gillette, Wyoming, was part of the Powder River sale — the largest such sale in history (*HCN*, 4/30/82). Only one company, Texas Energy Services of Gillette, bid on the tract in April. But the U.S. Minerals Management Service decided after the April sale that the bid did not meet fair market value guidelines. The company appealed the decision to the Interior Board of Land Appeals. The MMS agreed to offer the tract again if Texas Energy would dismiss the appeal. The tract is estimated to contain 445 million tons of coal.

Solidly radioactive

In early September Sen. James McClure (R-Idaho) threw a switch activating the nation's first full-size nuclear calciner. The $90 million facility, located at the Idaho National Engineering Laboratory in Idaho Falls, Idaho, converts high-level liquid radioactive wastes into solids. The waste is then stored underground. In an Associated Press report, McClure, chairman of the Senate Energy and Natural Resources Committee, said, "This facility is essential to the public's acceptance of the nuclear industry, both military and civilian." He also said it would ease the public's concern about storage of radioactive waste.

Nuke waste welcomed

There is at least one U.S. congressman who wants a nuclear waste dump in his district: Rep. Sid Morrison (R-Wash.). While the House Energy and Commerce Committee was drawing up its nuclear dump bill, most congressmen voiced their opposition to locating the dump in their states. However, Morrison, whose district includes the Department of Energy's Hanford nuclear reservation, proposed an amendment that would locate a dump in his district. He said his constituents — which include residents of Kennewick, Richland and Pasco, Washington — all feel comfortable with nuclear energy. Hanford made the fuel for the bombs dropped at Hiroshima and Nagasaki in World War II. The committee passed his amendment.

No winds please

The Rocky Flats nuclear weapons plant northwest of Denver would need about eight years and $112 million to protect itself from tornadoes, high winds and earthquakes, concluded a study ordered by the Department of Energy. The report was done by a Palo Alto, California research firm which looked at 1,800 pieces of equipment and five buildings in which radioactive plutonium is handled. The research is part of a continuing survey to determine the future of the controversial plant. Researchers said this investment would protect the plant from earthquakes of 6.0 on the Richter scale and tornadoes or storms with winds up to 300 miles per hour.

Western Regional Council

Taking aim at

by K. Patrick Conner and Tracy Freedman

On a quiet afternoon in June 1981, 47 men from around the Rocky Mountain region gathered beneath the deep Wasatch sky of northern Utah for two and a half days of closed meetings. The air was clean, the vast blue sky as cold and urgent as an alpine lake, and through the windows of the Snowbird Resort lodge they could see the sun turning in the leaves of the aspens.

The air at Snowbird is as pure as any in the country — but perhaps that small irony escaped them. The 47 men were the top executives from the largest mining, energy and banking interests in the Rocky Mountains, and the occasion of their gathering was the annual summer meeting of the Western Regional Council, the facade behind which they have worked to ambush the single most important piece of legislation safeguarding the West: the Clean Air Act of 1970.

Ever since the WRC was founded four years ago in Salt Lake City by former Utah Gov. Calvin Rampton and B.Z. "Bud" Kastler, then the influential president of Mountain Fuel Supply Company, it has been lashing out at what it perceives as troublesome environmental legislation and at federal regulatory excess, and Kastler and Rampton quickly fingered the Clean Air Act as a classic example of the worst of both. According to WRC member James Bruce, president of Idaho Power Company, the Clean Air Act threatens to virtually "shut down" development of the region's energy resources, a sentiment shared by WRC stalwart Conrad Ryan, president of Nevada Power Company, who worries that the Clean Air Act may "end up bankrupting companies."

Over the past four years the WRC has maintained a low profile. According to Bruce Rockwell, Chairman of the Board at Colorado National Bank and a member of the WRC Board of Directors, the WRC is nothing more than a "very low-key, studious organization" interested only in the issues. Indeed, the WRC has managed to garner in Washington D.C., a reputation as a group that "does its homework." That appraisal is precisely in line with the image the council has sought for itself — cautious and responsible.

The council's tactics have been invested with a polish and gleam new to western politics. Beyond their generous campaign contributions to the congressmen on the key committees reviewing the Clean Air Act, the WRC commissioned a slick mapping project purporting to illustrate the effects of the act upon the undeveloped reaches of the West, and WRC members also helped the Reagan administration assemble and staff its team of regulation-slashing anti-environmental zealots. In the cautious words of Colorado Sen. Gary Hart (D), who appeared at the WRC's Snowbird meeting to court the council's approval of his own energy impact assistance legislation, the WRC has come to enjoy "an increasing impact" in Washington, especially as the nation turns to the Rocky Mountains for the domestic energy reserves and strategic minerals the Reagan administration considers vital to national security.

The 47 corporations comprising the WRC rank and file have *already* had a staggering impact upon the West, and their future projects loom before the Rocky Mountains on an equally large scale. But the impact of the WRC in the halls of the nation's capitol may be even greater still. The story of the Western Regional Council, then, is the story of a fistful of western businessmen in the New Corporate West and how they rose to become pivotal players in one of the decade's first environmental showdowns.

Bob Yuhnke of the Environmental Defense Fund calls the WRC "absolutely the most influential industrial group in the western United States." But western businessmen have not always been known for their sophisticated lobbying techniques or their connections in high places. As recently as the 1950s, for example, Salt Lake City was a town run largely by just three men: David O. McKay, for 19 years the president of the Church of Jesus Christ of the Latter-Day Saints; Gus Bachman, the executive vice-president of the Salt Lake Chamber of Commerce; and John Fitzpatrick, the publisher of the Salt Lake *Tribune* and the voice of the community's non-Mormon population. Every week, McKay, Bachman and Fitzpatrick met in the Hotel Utah coffee shop to hash out the problems of the day.

But the power structure of the 1950s began to crumble as the state of Utah grew. From 1950 to 1975 Utah's population mushroomed by 40 percent, and although the Church, the *Tribune* and the Chamber of Commerce continue to wield a certain influence, the Wasatch Front is no longer exclusively at their command.

During the mid-1970s, as western mining and energy interests grew with the increased demand for domestic oil and mineral supplies, representatives of those industries and others began to meet in the Salt Lake Chamber of Commerce building where among other things they commiserated over why the coal boom, expected in the wake of the 1974 Arab oil embargo, had suddenly dissolved. Industry dreams of producing 40 million tons of coal per year by 1980 had evaporated, largely, it seemed, because of the 1977 amendments to the Clean Air Act. Bituminous Utah coal has a low sulfur content, and while the 1970 Clean Air Act required most coal-burning power plants to install "scrubbers" on their emission stacks, those plants burning low-sulfur coal were not affected.

The 1977 amendments to the Clean Air Act required all plants to install scrubbers regardless of the sulfur content of the coal. So vanished the competitive edge for Utah coal and the prospect of a boom. Coal executives were fed up with the growing power of the environmental movement and the way environmental legislation like the Clean Air Act was shaping the development of the West. And they were not alone. Industrial discontent with Washington's policies had been simmering in the West for the better part of a decade, ever since Richard Nixon signed the act into law in 1970.

There are, of couse, other ways to view the act — for example, as a milestone piece of legislation that set into law for the first time comprehensive air quality standards designed solely to protect public health, regardless of the cost. The act was an acknowledgement of the air we breathe as a precious natural resource, and it has been remarkably successful, cleaning up the nation's air and helping spare such national parks as Bryce Canyon and Canyonlands National Park in Utah from coal-burning power plants.

According to the National Clean Air Coalition, a group of environmental and citizens' organizations who support the present act, annual concentrations of carbon monoxide decreased 33 percent, sulfur dioxide 20 percent and total suspended particulates seven percent between 1973 and 1978. In April 1980, the President's Council on Environmental Quality concluded that clean air legislation saves approximately 14,000 lives every year, a feat accomplished while generating $21.4 billion a year in new jobs and decreased sickness among the nation's work force.

The Clean Air Act is supported by overwhelming numbers of the populace: a recent Harris poll established that 86 percent of the people support the act in its present form, and nearly half the country believes clean air legislation should be made more stringent.

While that may have been welcome news for the citizenry, industry was not impressed: provisions for ensuring clean air stepped on WRC corporations that consider the Sierra Nevada, the Overthrust Belt of the western Rockies, and the Four Corners area of Utah, Colorado, Arizona and New Mexico their "backyard." And that, they felt, had to change.

In April, 1977, Bud Kastler called what was to be the first meeting of the Western Regional Council, bringing together former Utah Gov. Calvin Rampton, Bud Pratt, president of Kennecott Copper, E. Alan Hunter, president of Utah Power and Light, and John Hixson, president of Snowbird Corporation. Kastler and Rampton, who during his tenure had been involved with the formation of what was to become one of the most powerful political bodies in the region, the Western Governors Policy Office (WESTPO), were convinced the Rocky Mountain business community needed some muscle in Washington, D.C. Legislation tangling up western industry, they argued effectively to the others, was being written by easterners. Recalled Kastler, "We didn't want to be the servile area of the rest of the nation." The others readily agreed, and by that August 10 companies had kicked in $5,000 apiece to get the council off the ground.

At first it was WRC founder Bud Kastler who pushed the council. With the exception of a few years in the army and a brief East Coast stint with the FBI, Kastler has lived in the West all his life. "I think we're living in the best spot on the whole globe," he said. "We're very lucky to live here — our way of life out West is substantially better than it is back East." He is certain that, left alone, western industry will protect the region from the slash-and-burn development methods visited upon the eastern seaboard by an earlier generation of industry executives.

"Industry did more to cure air pollution on its own before we got the wild-eyed environmentalists on our backs," said Kastler, and this perspective spurred Kastler and John Hixson to discuss forming the WRC as far back as the Nixon administration. When the idea came to fruition, Kastler found a new springboard from which to launch his heartfelt convictions.

Indeed, to Kastler and Calvin Rampton, nothing so acutely embodied what ailed the country as the Clean Air Act. This view naturally appealed to other western corporate interests, and an unprecedented alliance was forged in which construction companies like Morrison-Knudsen and railroads like Burlington Northern put aside their smaller disagreements over the need to construct coal slurry lines. Ironically enough, the Clean Air Act provided the rallying point around which western industry began to organize itself into a coherent political force to be reckoned within Washington D.C.

The WRC carefully tailored itself for the role as western industry's leading voice. When a delegation of 27 WRC members descended on Washington last February to race around the nation's capital for two days in a fleet of five

the Clean Air Act

rented limousines, the groundwork for their goodwill tour had been laid well in advance. Individual WRC companies had opened congressional doors with more than $50,000 in contributions to the members of the House Sub-Committee on Health and the Environment and to senators on the Committee on Environment and Public Works, the two committees charged with reviewing the Clean Air Act.

Of course, the WRC members were not exactly alone in greasing congressional palms. A Common Cause study has disclosed that key congressmen collected staggering sums of campaign monies from the industries most affected by clean air statutes. While the 20 House subcommittee members raised $327,436, the 15 senators harvested a cool $821,973. Eight WRC corporations, for example, contributed significantly to the campaign of first-term Republican Sen. Steven Symms of Idaho. Symms, who tallied over $180,000, has volunteered to lead the fight against the Clean Air Act in the Senate.

In contrast to this deluge of contributions from industry, Rep. Ron Wyden (D) of Oregon and Sen. Gary Hart were the only congressmen on these pivotal committees to receive any support from environmental organizations. Yet the WRC may also have managed to exert an influence on Hart. In 1978, he was named to head the National Commission on Air Quality, a commission formed to scrutinize the Clean Air Act. During the course of that examination the NCAQ established a panel at the Los Alamos Scientific Research Laboratory to focus solely on the Four Corners area. Uranium and coal mining had already ripped through many of the hills in the Four Corners region, and with its coal-burning power plants, the NCAQ thought it would be an ideal place to study the effects of the act upon the West and what effect it might have on future development.

Hart named nine men from WRC companies to sit on the Four Corner Study's 61-member advisory panel. Even though the panel rejected the WRC assertion that the Clean Air Act has saddled western industry with lengthy and unnecessary delays in the construction of new power plants, the Four Corners study echoes the meat of the WRC position, which calls for Class II and III Prevention of Significant Deterioration (PSD) increments to be abolished.

This industrial carte blanche would allow 99 percent of the nation's air to either exceed or degenerate to the maximum pollution levels set by the NCAQS, leaving only Class I areas monitored and protected from encroaching pollution.

In response to criticisms of the NCAQ report, Hart denied there was anything unusual about having nine WRC representatives on the Four Corners panel, and he emphasized that the NCAQ recommendations will in time be seen as environmentally sound.

Beyond the nine WRC representatives, a portion of the Four Corners study was penned by Ralph Becker, a young, hardworking attorney for Bonneville Associates, the Salt Lake City consulting firm contracted by the WRC to develop and facilitate their reports and positions as well as to serve as the council's support staff. Becker wrote — "with a lot of help" — virtually every word of the WRC's Clean Air position paper.

Congress, however, has always been reluctant to dismantle legislation supported by the vast majority of the American public, a hesitancy recognized by Harry Storey, vice-president of Anaconda Copper and chairman of the WRC Clean Air Committee. The silver-haired, blue-eyed Storey has made a career of marketing corporate ambitions on Capitol Hill, first with Monsanto Corporation and recently with Anaconda. Storey suggested to the WRC a massive mapping project to illustrate the impact of the act on the undeveloped West, a project WRC members could present to congressmen along with the council's position.

It took two full years to complete Storey's brainchild, but to the WRC it was well worth the wait. Finally they had a tool to market their position on Capitol Hill. Devoting four large maps to each western state, the WRC package is slick and radiates professionalism. The progression of maps for each state is dramatic: the areas protected by the Clean Air Act grow larger with each turn of the page. The lands protected from unregulated industrial development are splashed across the pages in reds and purples and are surrounded by light- and dark-blue buffer zones. At a glance it looks as if the whole of the West has succumbed to paralyzing environmental legislation.

Some people were not impressed with the mapping project. Richard Ayres, chairman of the National Clean Air Coalition and one of three commissioners unwilling to sign Hart's final NCAQ report, called the maps atrocious and compared them to maps trotted out in 1977 by Alan Hunter. Hunter's maps became known as the "meatball maps" for their outrageous exaggerations of the Clean Air Act's effects on industrial siting in Utah and were resoundingly denounced by, among others, Gary Hart. The WRC maps, said Ayres, "simply reduced the size of the meatballs."

Further, the staff at Region 8 Environmental Protection Agency headquarters in Denver identified 21 industrial facilities already permitted *within* the blue zones indicated on the WRC maps.

"It seems to me that you can't make a clearer case for the disingenuous use of something which was clearly discredited in 1977, than when once again a group like the WRC is peddling what was simply laughed out of the last debate,"said Ayres. But Bob Yuhnke of the Environmental Defense Fund thinks the WRC's dramatic maps, which he likens to "a second-grade education on the Clean Air Act," may prove convincing to many impressionable freshmen congressmen not present during the 1977 clean air debate.

Even WRC allies are unable to stand behind WRC assertions about the act. One of the main problems with the act, the WRC contends, is the long and costly delays that are inherent in the permitting process. But a study done at the request of the WRC by the Western Governors' Policy Office concluded that environmental regulations were not the major cause of construction delays. Instead, the study discovered, labor and equipment delivery delays were far more often responsible for slowing the construction of new industrial facilities.

As dismayed as the WRC might have been over WESTPO's insubordinate permitting study, they certainly couldn't complain about WESTPO's official position on the act. This time WESTPO and the WRC didn't risk an embarassing public disagreement. Before releasing their report, Utah Gov. Scott Matheson (D), a popular and enthusiastic champion of industrial growth who casually refers to the WRC as "WESTPO's business arm," gave a copy of the WESTPO report to the WRC for their comments. Not surprisingly, the WRC position and the WESTPO position are virtually identical.

According to Wyoming Sen. Alan Simpson (R), the WESTPO clean air position is respected by those congressmen reviewing the act because they believe the governors' position best balances environmentalists' concerns with those of industry. But Colorado Gov. Dick Lamm (D) holds a less gracious opinion of the WESTPO position, complaining that no other organizations besides the WRC were solicited for comments while it was being drafted.

In fact, a National Academy of Science report on the PSD increments may be the only study of its type to have been assembled without WRC influence. The NAS conclusions differ significantly from those of other reports. Commissioned by the EPA in 1977, the NAS study concluded that the Class I, II, and III PSD increments are "basically sound" and there is no reason to eliminate any of them.

But Harry Storey and the WRC rank and file didn't waste any time worrying over the NAS report. Storey and Ralph Cox (president of WRC member Anaconda Copper), were busy jetting back and forth between Denver and the Capitol, where they helped with the administration's draft position on the Clean Air Act. In a series of meetings last June, Storey and Cox met with representatives of the Department of the Interior, the Bureau of Land Management and EPA. Those meetings followed an earlier opportunity the WRC had to impress upon the administration the burdens environmental legislation shoveled on industry when, in February, a swarm of 27 WRC members met with Interior Secretary James Watt and the then-unconfirmed heads of the BLM and the EPA, Robert Burford and Anne Gorsuch. Both were former Colorado legislators. Gorsuch had been an attorney for WRC member Mountain Bell.

Storey and Cox must have been convincing during those meetings. In an administration draft of a drastically revised Clean Air Act leaked last summer, ostensibly penned by Gorsuch, virtually every key element of the act had been mauled. Senator Hart's staff found no less than 115 major weakening changes in the document, and House Subcommittee Chairman Henry Waxman (D-Calif.) called it "a blueprint for the destruction of our clean air laws."

Even in the wake of Reagan's electoral victory, the WRC could not have envisioned the political climate in Washington taking such a dramatic though favorable turn. Most WRC members were preparing to support Arizona Congressman John Rhodes (R) for secretary of interior, and when Reagan plucked compatriot James Watt for the post, they were surprised but delighted.

As president of the Mountain States Legal Foundation from 1977 to 1981, Watt had extensive dealings with WRC corporations, representing or filing friend-of-the-court briefs on behalf of such WRC stalwarts as Amoco Production Company and Arizona Public Service Company, and earlier, as a federal power commissioner during the Ford administration, Watt had sided with Northwest Pipeline, Mountain Fuel Supply, Colorado Interstate Gas and Nevada Power Company. Twenty-four WRC corporations contributed to the MSLF general fund during Watt's presidency. John Dendahl of Eberline Instruments and James Bruce of Idaho Power both currently sit on the MSLF Board of Directors, as does former WRC member H.A. "Dave" True of True Drilling. WRC founder Bud Kastler also sits on the MSLF Board of Directors and Calvin Rampton serves on the MSLF Board of Litigation in addition to retaining his post as WRC corporate secretary.

(continued on page 19)

The murky water

by Carol Jones

A few miles above Flaming Gorge Reservoir near Rock Springs, Wyoming, the Green and Blacks Fork rivers curve and twist from different directions to empty their waters into the 90-mile long reservoir that stretches into Utah. In July and August of this year and the past several years Green River seemed appropriately named. It was green — a putrid, murky green. So was the Blacks Fork. And so was the reservoir for a few miles past the confluence of the two rivers.

Tiny blue-green algae, with long Latin names — *Anabaena spiroides* and *Anabaena flos-aquae* — were responsible for fouling the waters. Blue-green algae are microscopic things — neither plant nor animal. They have no cell wall or nucleus and are basically a blue-green bacteria.

During the hottest part of the year, when the water warms up as much as it's going to, the algae feed voraciously and then "bloom" — increase rapidly in tremendous amounts. The algae make the water look green, using up oxygen and thereby killing or running off most fish. Algae also can produce toxins fatal to warm-blooded animals.

As alarming as such algae blooms may sound, they are actually common and are related to a natural phenomenon in the life of a lake — eutrophication. Eutrophication is the natural aging process of any lake, said Jerry Miller of the Bureau of Reclamation's upper Colorado region.

Eutrophication is the "enrichment" of a standing body of water with nutrients. It is the biological succession whereby a lake is turned into a wetland, then into a marsh and so on until it becomes a stable terrestrial system. The lake fills up as plants decay and fall to the bottom.

In highly eutrophic lakes and reservoirs, oxygen is depleted on the bottom due to oxidation of organic matter. The depletion of oxygen coupled with warm summer temperatures make these lakes a difficult environment for fish.

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"Points at the confluence of and in the Blacks Fork and Green River arms of the reservoir already have been classified as eutrophic by the EPA."

— USGS

The extent and degree of eutrophication depends upon many factors, said Dr. James Aumiller, water chemistry consultant for Western Wyoming College's (WWC) proposed Green River Basin Project. The concentration of plant nutrients, depth of water, amount of available sunlight, the rate at which water flows through the reservoir and temperature all affect the process. And algae blooms speed it up considerably.

The accelerated eutrophication at Flaming Gorge has some water experts at Western Wyoming College, Wyoming Department of Environmental Quality, Environmental Protection Agency, Wyoming Game and Fish and the BuRec concerned enough to want a complete study conducted. Aesthetics, declining fisheries and health hazards to both humans and animals are the main reasons for concern. But the cause of the large algae blooms may prove of more consequence than the blooms themselves because the major feed source for the algae may be municipal wastewater effluents.

Blue-green algae feed on plant nutrients, especially phosphorus. Phosphorus occurs naturally around the Rock Springs area and the majority of phosphorus that ends up in the reservoir enters the Green River by means of spring soil erosion. A much smaller percentage of the total phosphorus comes from wastewater effluents from the cities of Rock Springs and Green River.

However, the phosphorus that comes to the water by means of soil erosion is often chemically bound in a manner that makes it unavailable for the algae to feed on, explained Steven Greb, a chemist at Western Wyoming College and project coordinator of the proposed Green River Basin Project. In contrast, the phosphorus in wastewater effluents is usually very available for the algae.

Loren Bahls with the Water Quality Bureau of Montana's Department of Health and Environmental Sciences, disagrees. He said there is no difference between phosphorus that comes off the land in erosion or from wastewater. He said that if phosphorus is tied up in sediment and sinks to the bottom of the lake, it could easily be reintroduced the next year during the lake's annual turnover — the process of "stirring up" the nutrients on the bottom of the lake and the oxygen.

However, in *The Challenge of Ecology*, Clair Kucera has written that "Phosphorus is generally immobilized in agricultural soils; therefore the main source of phosphorus contamination is the municipal waste that is released into waterways throughout the country. Since most cities lack the facilities necessary to remove phosphorus from wastes, most of it literally goes down the drain."

And a 1978 U.S. Geological Survey proposal for a study of Flaming Gorge, reported, "Increasing upstream discharge of municipal wastewater will doubtless increase algal production and consequently anaerobic (oxygen-short) conditions in parts of Flaming Gorge Reservoir. The Southwestern Wyoming Water Quality Planning Association (1976) estimates that the population of Green River, Rock Springs, Bridger Valley and Kemmerer, Wyoming, will increase by 70 to 90 percent from 1975 to 1985 and 100 to 200 percent from 1975 to 2000. The potential exists for similar increases in wastewater discharge to the reservoir. Points at the confluence of and in the Blacks Fork and Green River arms of the reservoir already have been classified as eutrophic by the EPA in a preliminary report stemming from a reconnaissance level national survey on eutrophication."

BuRec's Miller said man's activities can greatly accelerate the problem of eutrophication. "Increased development and increased algae blooms seem to go hand in hand," he said.

"Of the total phosphorus (in Flaming Gorge) about 75 percent comes from erosion," Greb said. "Only about 17 percent of the nutrients come from municipalities. However, the natural phosphorus is low when the algae is blooming and not as available as the phosphorus from the cities.

"As the algae die and decay, anaerobic decomposition takes place. Under anaerobic conditions, as the algae fall to the bottom oxygen is depleted and sometimes the sediment phosphorus (phosphorus from erosion) can be released. The municipality effluent can act as a catalyst for the natural phosphorus to become available. That is just a theory and we hope to quantify that in our study."

The study that Greb, Aumiller, Craig Thompson and others at WWC have proposed is a comprehensive study of the Green River Basin "to identify the specific cause and sources of the eutrophication and declining fisheries in Flaming Gorge Reservoir." The BuRec, Wyoming Game and Fish, EPA, USGS and Wyoming DEQ are all interested in seeing the project funded. It was presented to the Wyoming Water Development Commission in early September, and although the commission seemed interested in the project, there are no funds left in the budget. The commission, which usually funds water development projects, has said it will request

# of Flaming Gorge

> "Phosphorus is generally immobilized in agricultural soils; therefore, the main source of phosphorus contamination is the municipal waste that is released into waterways throughout the country."
>
> — *Clair Kucera*

the additional money for the study from the Wyoming legislature when it reconvenes in January, 1983.

The study of Flaming Gorge and its water quality was begun in 1963 as part of a USGS salinity study of the entire Colorado River Basin. The USGS collected data intermittently until 1975 and was the first to notice the growing eutrophication problems.

From there, EPA funded Western Wyoming College to continue studying the problem. The data WWC gathered is considered baseline data, according to Greb, and he hopes the Green River Basin study can be a continuation of what has been researched to date.

Many federal and state agencies have an interest in Flaming Gorge. The dam was built and is operated by the Bureau of Reclamation. The Bureau of Land Management owns land around it and the U.S. Forest Service owns the access points and manages the campgrounds. The Wyoming and Utah game and fish departments are responsible for fisheries and Wyoming's DEQ is responsible for water quality.

Despite these interests in the reservoir, funding a study remains a problem. John Wagner, technical supervisor with the Water Quality Division of DEQ in Cheyenne, explained that DEQ began a study of problem lakes as part of the 1973 Federal Water Pollution Control Act. During this "Clean Lake" study, DEQ had $147,000 in federal funds to assess and inventory Wyoming lakes. Wagner said the agency identified 19 lakes as "worse than the others" and targeted them for further study. Flaming Gorge was one of the 19. "But the program has pretty much died," Wagner said. "There is no federal money to proceed with the program." Wyoming now has its worst problem lakes identified and no money to study them.

Past USGS, EPA and WWC studies of Flaming Gorge have so far indicated that the eutrophication process has been visibly moving down the reservoir since it was first pointed out by the USGS. Everyone involved is quick to point out that the process is natural and that it would take hundreds of years to move down the entire 90-mile reservoir. Yet it is of concern because the algae blooms are speeding up the process and creating an aesthetically unpleasant situation in a recreation area that has been known for record trout catches.

Dave Dufek, area fishery supervisor with the Wyoming Game and Fish in Green River, said he has watched the algae blooms affect the fisheries in the upper part of the reservoir and the Blacks Fork and Green Rivers for the last several years. Through creel census and random sampling, Dufek concludes that there are few trout caught in the upper area during blooms.

"When the temperature warms up and the algae bloom, the fish leave," Dufek said. "So much oxygen is depleted that there is minimal trout habitat. However, in spring and fall the trout move back and fishing picks up again." Still, Dufek hopes the progression of the eutrophication can be slowed. Meanwhile, the Game and Fish Department is considering stocking warm water fish in that area of the reservoir and rivers, Dufek said.

In addition to driving the fish away, the pea-green waters also cause recreational users to move further down the reservoir, according to the WWC. Such a move is probably good because, as Greb said, a toxic blue-green algae present in Montana's Hebgen Reservoir may also be present in the Flaming Gorge blooms.

In 1977, Hebgen Reservoir, located downstream of Yellowstone Nati-ark, experienced a toxic algae bloom. Thirty-nine head of cattle and nine dogs died after drinking the water in the large bay area of the reservoir known as Grayling Arm. According to Loren Bahls of Montana's Water Quality Bureau, 1977 was a freak year for Hebgen because there were no eutrophication problems prior to that year and there have been no big algae blooms since.

Bahls said, "1977 was a very dry year and Hebgen was managed differently because of that. The dam was closed early in the spring in anticipation of low runoff. That meant the water would be held longer. The longer the water is held and the slower the rate of turnover, the more succession (of algae) will be enhanced. Different algae bloom at different times. It just so happened in 1977 that the water was held long enough, was still enough and the temperature was warm enough that the conditions were right for a toxic algae bloom."

The Montana Water Quality Bureau suspected a toxic algae bloom when a woman reported that her dog died shortly after drinking the reservoir's water. Parts of the reservoir were closed to swimming and water skiing for about a month. Resorts in the area lost money due to decreased recreational business. *Montana Environmental Sciences* reported that state, federal and local agencies spent about $15,000 in studying and monitoring the water.

Bahls said in the case of Hebgen, the phosphorus probably came from Yellowstone Park in a natural form.

In 1980, another toxic bloom killed livestock and some pets in Nelson Reservoir in Montana, Bahls said. He said there is not as much data on Nelson as there was on Hebgen, but he feels conditions were different. He said Nelson is a shallow, irrigation supply reservoir and that 1980 was a warm year, enhancing the algae succession. However, Nelson was also a municipal water supply to the town of Saco. Bahls said Saco's water supply was shut down for a number of days and no human fatalities occurred.

The Montana Water Quality Bureau reports that there is no way to determine if algae toxins are present except by laboratory experiments on animals. The toxic algae have no distinguishing odor, taste or color.

And although the researchers at WWC are afraid the toxic algae may show up in Flaming Gorge, no precautions can be taken, according to Wagner with DEQ. There would have to be proof of toxins before the area would be closed down. Flaming Gorge is not a municipal water supply.

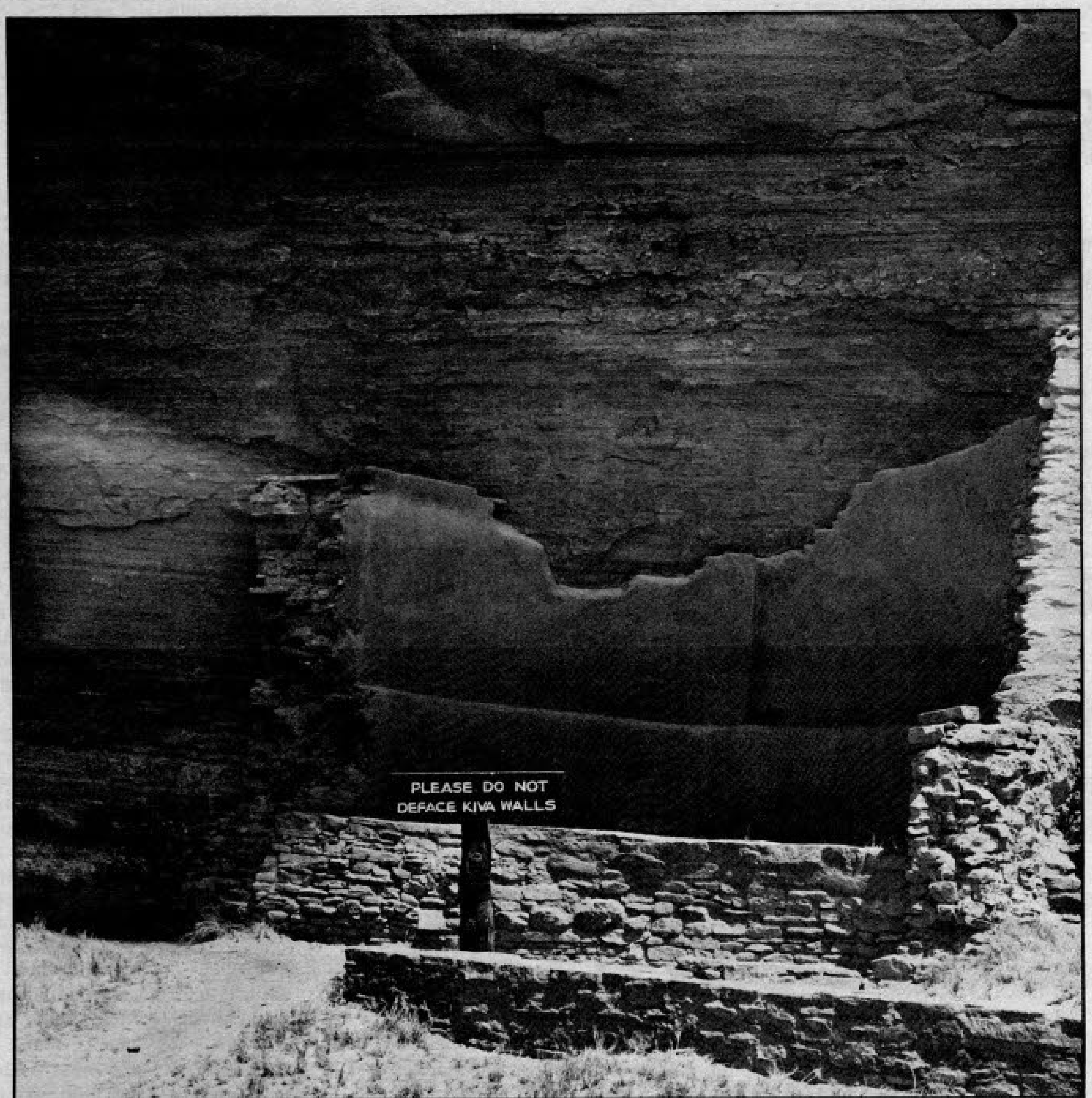
Wagner said — and Bahls, Miller and Greb agreed — that there is just not enough data to cite the cause of the large algae blooms at Flaming Gorge. Even though they all seem certain it is phosphorus and Greb suspects that the most severe phosphorus problem is in wastewater effluents, there is no data currently to back those suspicions.

"We don't feel we have enough facts to go to the cities (of Green River and Rock Springs) and tell them to remove phosphorus from their wastewater," Wagner said. Removing phosphorus is an expensive process.

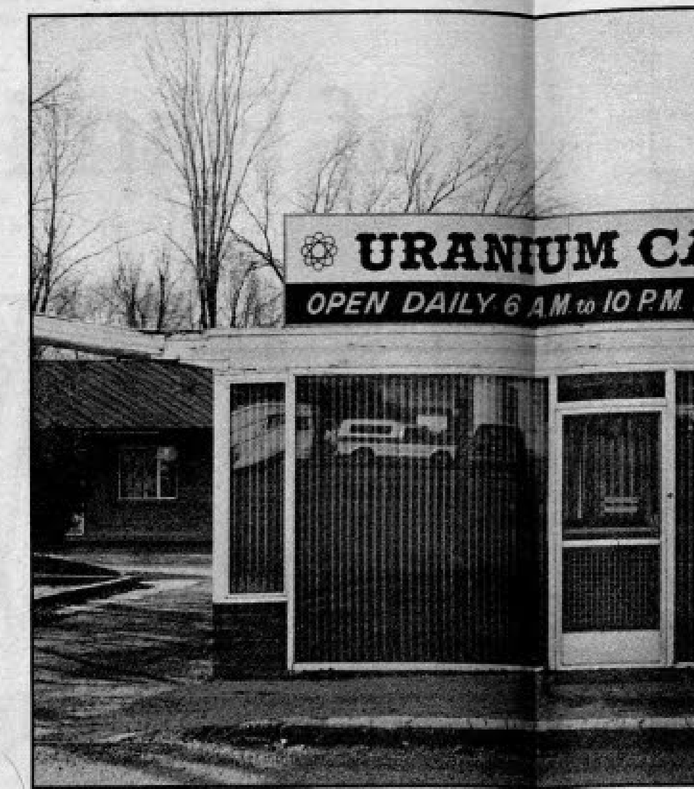
"Before that dam (at Flaming Gorge) was ever built, they should have considered eutrophication," Wagner said. "From a eutrophication point of view, Flaming Gorge is a bad place for a resrvoir. It is so far down the drainage that everything — badlands, etc. — has a chance to erode into the rivers.

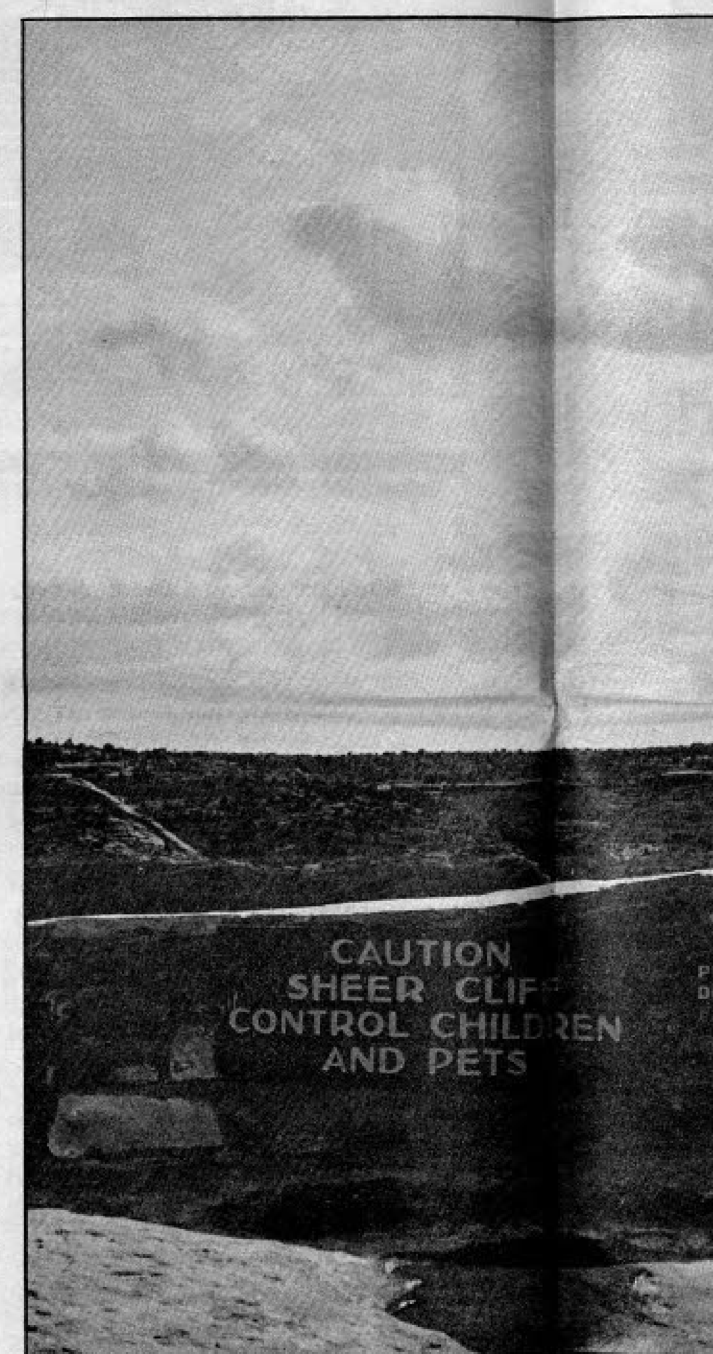
Greb said that Rock Springs is planning to divert some of its wastewater effluents to the city's golf course for irrigation and that should cut down on some nutrient loading.

But it won't be enough if Greb's suspicions about the role of the effluents prove true. Corrective action can only happen after a study has proven that theory or discovered other problem sources of available phosphorus. In the meantime, the putrid green waters and the problems they produce will continue to appear every summer in Flaming Gorge. □



White House Ruins, Canon De Chelly, Arizona



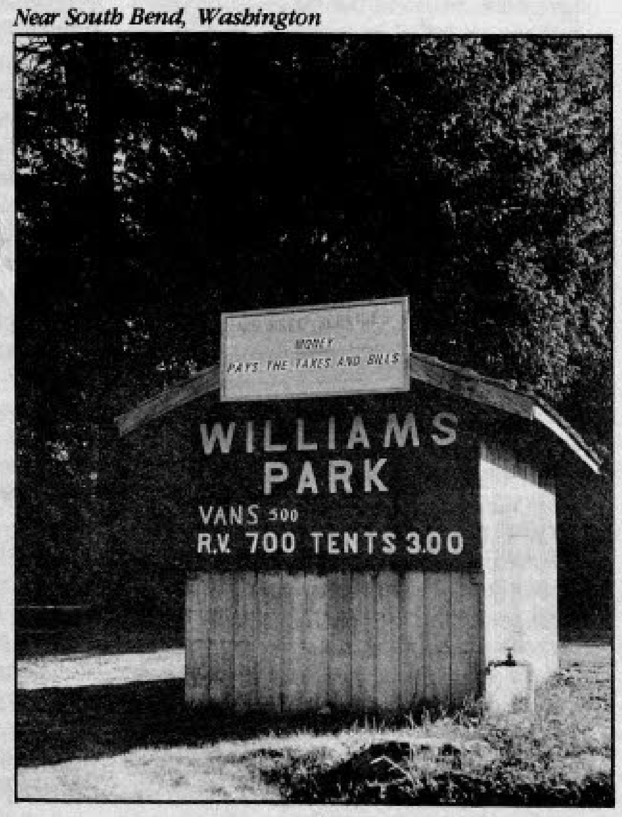


SIGNING UP

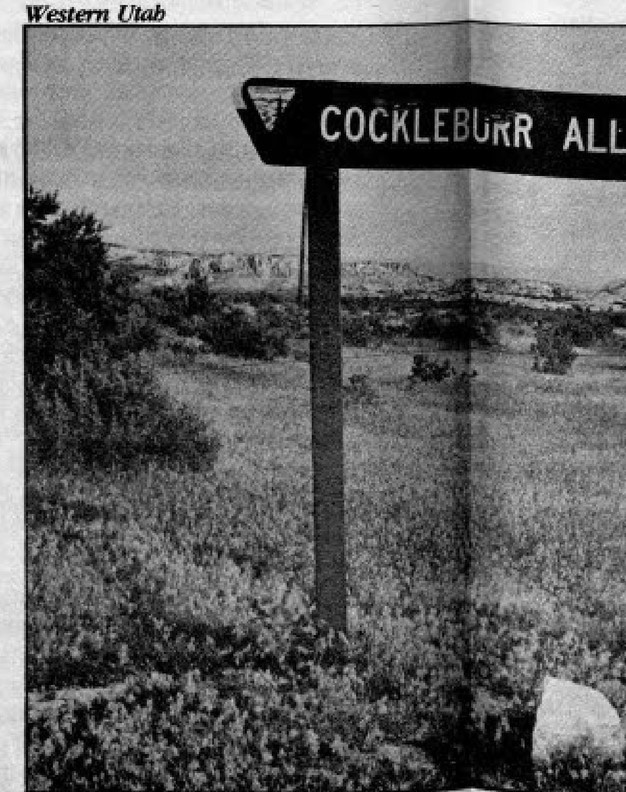
PHOTOS BY JANET ROBERTSON

Shiprock, New Mexico

Near South Bend, Washington



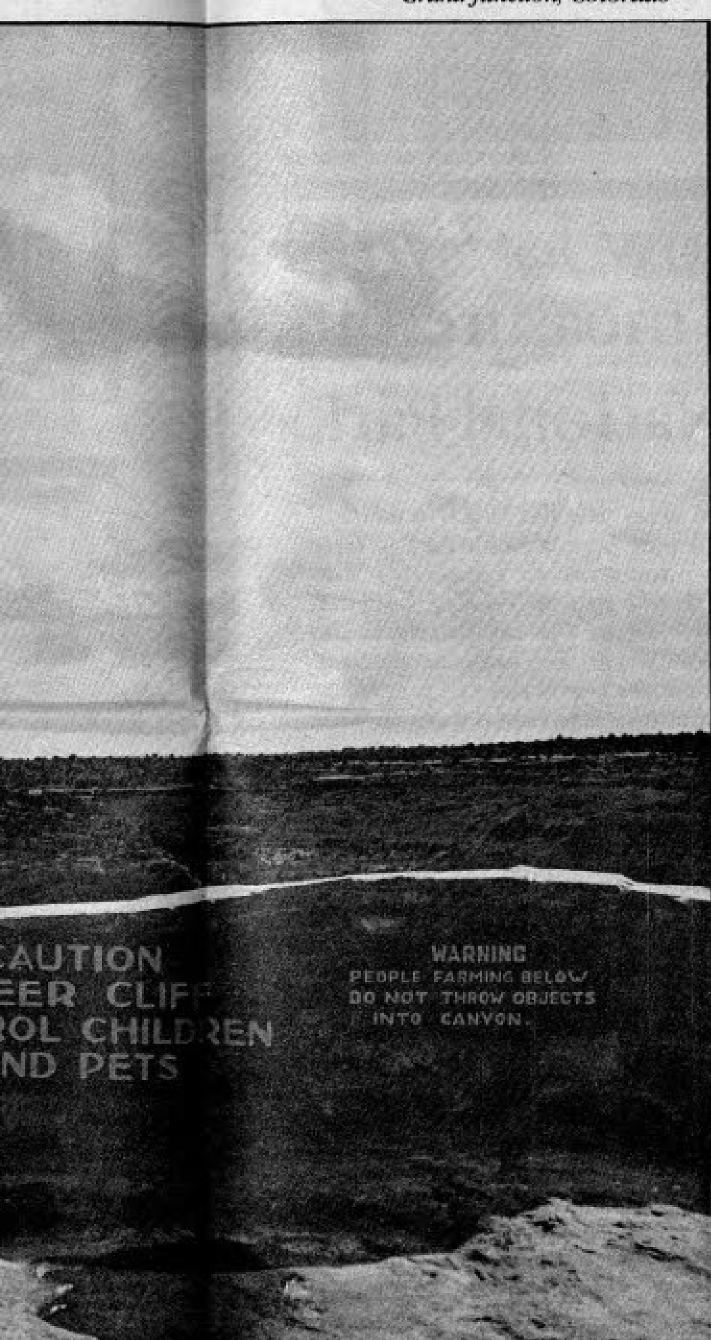
Western Utah



Grand Junction, Colorado

Dinosaur, Colorado

Aztec, New Mexico

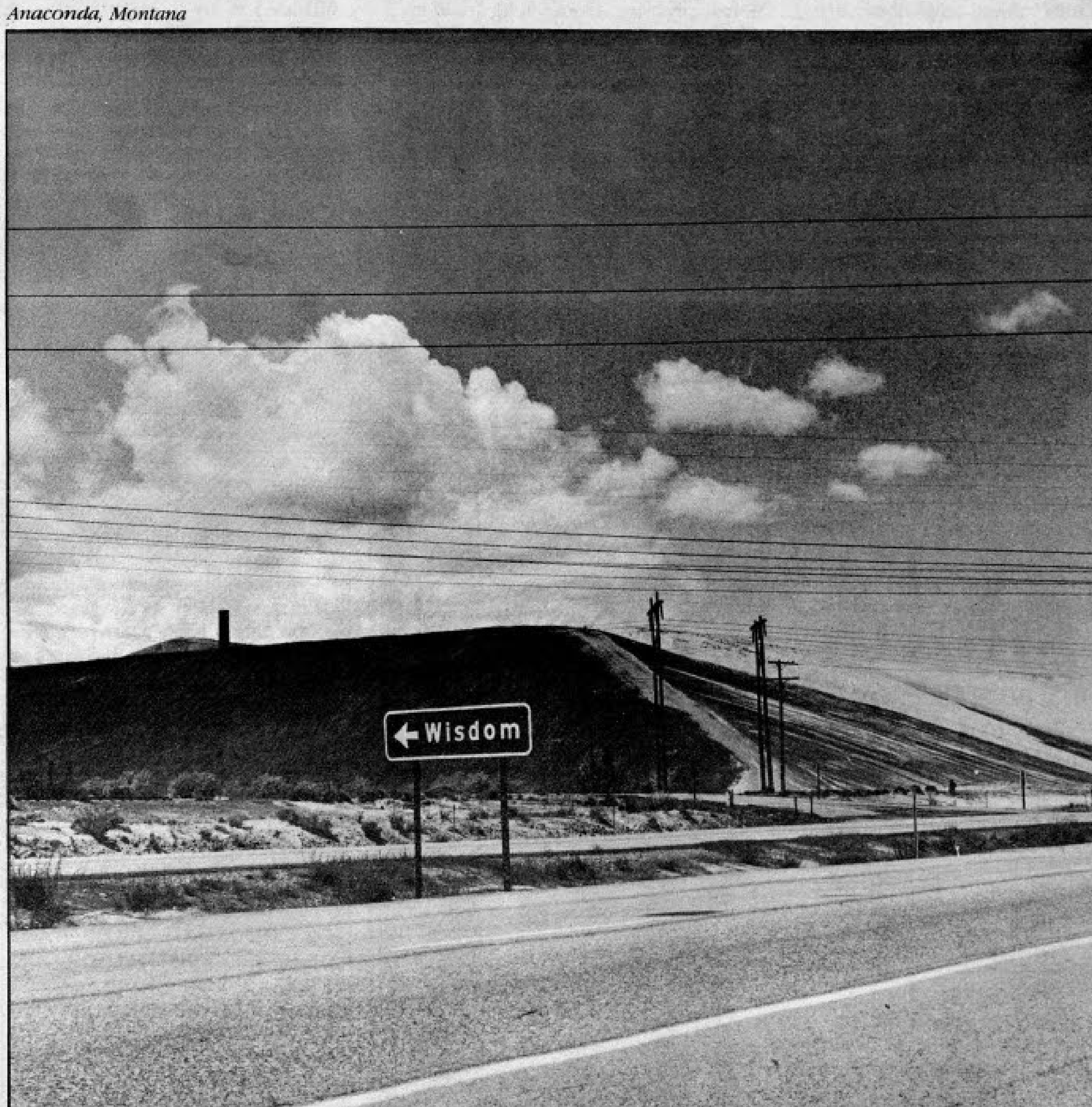


Canon De Chelly, Arizona

Near Hammett, Idaho

Near Kremmling, Colorado

Anaconda, Montana



Acid rain...

(continued from page 1)

lower altitudes in the Rockies, soils are very alkaline. Thus, when acid or low pH rain mixes with alkaline or high pH material, the rain is neutralized and the harmful effects are mitigated. It is only when this buffering capacity is "used up" — more acid is entering the soil than can be neutralized — that acid deposition becomes a problem. At lower altitudes in the West, below 8,000 to 9,000 feet, there is so much alkaline soil that a very large amount of acid precipitation can be neutralized and acid deposition is unlikely to ever become a serious problem.

However, most high altitude lakes are poorly buffered. The University of California's Harte said, "These lakes are pretty much on the level of distilled water (seven on the pH scale). They have little natural alkalinity in the water. In addition, soils around the lakes are granitic, with little buffering capacity. Consequently, these lakes are very susceptible to acidification."

Ben Parkhurst, general manager of Western Aquatics, an environmental consulting firm in Laramie, Wyoming, has studied what literature is available on acid rain in the Rockies. He said, "There are no documented examples of effects on aquatic life in the Rockies, or even in California, from acid rain." However, according to the National Park Service's Baron, "This has the potential to be a greater problem than it is so far. We haven't gotten the fish losses yet because we haven't had the deposition very long."

When acidification invades a lake, there are a number of effects. The exact processes of the damage to the aquatic life are poorly understood, but it appears that, first, fish and plants are harmed directly by the acid itself. Salmon and trout are particularly vulnerable. Acid also directly affects plankton, salamanders, algae and zooplankton.

Acid also damages the microbes that carry out decomposition and are responsible for the lake's nutrient cycle. When these microbes are affected, things don't rot as fast, so plants don't grow as fast.


David Spear

Glacier National Park

Acid rain — with pH as low as 3.7 — has been measured in Rocky Mountain National Park.

A second effect is apparently the result of chemical change in which trace metals, particularly aluminum, are leached out of the soils and into the lake. According to Harte, "There is a potential for a large amount of trace toxic metals (to be released) that are safe to animals when locked in the rocks but are lethal when dissolved."

Because much of the moisture of the Rockies falls as snow, there is an additional problem from acid build-up. When the acid is in snow, it builds up over the winter and melts over a relatively short period in the spring. Consequently, lakes and streams are subjected to a pulse of acid run-off at a time that coincides with the spawning of many fish species.

Very little research has been done on the effect of acid rain on vertebrates other than fish. Obviously, birds and mammals that feed on fish are faced with the potential loss of food supplies. In Ontario's LaCloche Mountains, loons continued to try to nest on lakes that had lost most or all of their fish.

The direct effects on trees and forested areas are also largely unknown. White pine populations in the East have shown some damage apparently resulting from acid deposition, but that doesn't mean that any species in the Rockies would necessarily be affected.

There are two primary culprits in the formation of acid rain — sulfur dioxide (SO_2) and nitrous oxides (NO_x). Through some unknown atmospheric chemistry, these two substances are converted into sulfuric acid and nitric acid. Sulfur dioxide is emitted primarily by fossil fuel-burning power plants and NO_x primarily by automobiles, though both substances are emitted by both polluters.

With the energy boom in the Rockies, the potential for an increase in acid precipitation is very great. According to Harold Bergman, associate professor of zoology at the University of Wyoming, who has worked extensively on water quality problems associated with synthetic fuel development, "There hasn't been a great deal of interest in the acid rain problem in the Rockies. Most of the attention has gone to the Northeast because the level of industrialization there is so much greater. However, it is a major problem that needs to be addressed with potential development of energy in the West — oil shale, power plants, coal liquefaction and gasification. It is going to be a bigger problem than it has been and it has not been adequately studied.

"Most of the work so far has been related to the oil shale industry. One of the major concerns for the oil shale industry is acid deposition downwind." The Flat Tops wilderness area, one of the areas in which acid rain has been measured, is immediately downwind of the Western Slope oil shale country. Acid precipitation has already been measured in the area, even though oil shale activity has been small, relative to the announced plans of the industry.

Energy conversion facilities near high altitude areas pose a substantial threat of acid rain to vulnerable high mountain lakes. Some of the obvious areas where this could be a difficulty are the metropolitan areas along Colorado's Front

Range and Utah's Wasatch Front. But some other areas currently undeveloped and facing development could have new problems. Texaco wants to put a coal gasification plant between Sheridan and Buffalo, Wyoming, along the Big Horn mountain range. Oil shale development is already causing trouble in Colorado. And a plan for four natural gas processing plants in southwestern Wyoming, which would remove sulfur from natural gas, potentially threatens the Bridger and Fitzpatrick Wilderness areas in Wyoming's Wind River mountains.

The Riley Ridge project near Pinedale, Wyoming, (*HCN*, 8/20/82) will process two billion cubic feet of high-sulfur natural gas if current company plans proceed. The four gas plants, even after emission controls are installed, would probably emit 20,000 to 50,000 tons of SO_2 annually, though estimates are still being made by consultants. A coal-fired power plant would emit between 3,000 and 10,000 tons of SO_2 annually. This amount of emissions could result in acid deposition in the nearby lakes of the Bridger and Fitzpatrick wilderness areas.

John Turk, an acid rain researcher with the U.S. Geological Survey, has done the only completed survey on the potential vulnerability of high mountain lakes to acid rain. He studied a large number of lakes in the Flat Tops Wilderness near Glenwood Springs, Colorado, and downwind of the potential Western Slope oil shale development. He said, "We've measured a slight acidification of rain with an average pH of about 5.0. If we got acid rain at the same levels currently falling in the northeast United States (about 4.0 to 4.2), there are about 300 to 400 lakes in the Flat Tops Wilderness that would be extremely sensitive." Turk is now trying to determine how much development could occur in the area without causing substantial damage. He expects that report to be ready next spring.

In "solving" the problem of acid rain, there are charges, countercharges and research supporting virtually every contention to one degree or another. The fact is, there is a great deal unknown about acid deposition. For instance, there is very little known about how acid rain is actually formed in the atmosphere. According to Bill Bernardo, a meteorologist in charge of the Environmental Protection Agency's acid rain program, "We know that SO_2 changes to sulfates (SO_3) which then change to sulfuric acid (H_2SO_4). But we don't know how it works."

Nevertheless, there are two basic approaches to acid rain control — do everything and do nothing. The latter approach is the one advocated by the coal and electric power industry, backed by the Reagan administration. Bernardo said, "Our position is to do more research. There is a $12 million budget in EPA for acid rain research in fiscal year 1983."

The National Coal Association, a Washington, D.C.-based coal industry trade group, also urges more study. NCA's president Carl Bagge said, "A growing number of scientists studying the chemistry of precipitation and surface waters suggest many possible causes — both man-made and natural — for the acidification of lakes and streams. Emissions from coal-fired facilities are just one possibility, and to date there is no direct evidence to document a link."

NCA said that provisions in the Clean Air Act recently passed by a Senate committee could add $200 to $300 million to electric bills over the next 30 years. In addition, according to the United Mine Workers, the legislation could affect 89,000 coal mine jobs — mostly in high-sulfur, eastern coal fields — 225,000 related jobs and $6.6 billion in lost income.

However, most scientists will say that acid rain, in the East at least, is probably caused by power plant SO_2 emissions, although there is no conclusive proof. The Senate Environmental and Public Works Committee recently completed its work on the Clean Air Act revisions, providing for reducing eastern and midwestern emissions of sulfur dioxide by eight million tons, 35 percent by 1985.

Sen. Alan Simpson (R-Wyo.), a member of the Senate committee and leading senator on the revisions, said, "I don't think acid rain is just an eastern phenomenon. It is a national phenomenon. It affects us in the West. There are emissions from smelters in the Southwest and Utah. I introduced an amendment, which was accepted by the committee, to seek mitigation in sterile waters to return them to a fishable status."

The coal industry notwithstanding, virtually everyone agrees that a reduction in SO_2 emissions in the East will reduce the acid precipitation problem. The question is, "How much?" There is no basis for a contention that a certain percentage reduction in SO_2 will result in a certain reduction in the acidity of precipitation. The debate then centers around whether the cure is worth the cost. Environmentalists say it is, the utilities and coal industry say it isn't, and the scientists say they don't know.

Acid rain cannot be combatted unless the point source of the pollutant is known. In the West, copper smelters are usually blamed for the problem, because they are the largest uncontrolled source of SO_2.

However, preliminary work done by University of California's Harte indicates that such a conclusion may be premature. He said, "We've been trying to figure out where the acid rain is coming from on a storm-by-storm basis. Some storms have a low pH, some don't. There are two bases for comparison. In Ohio, the acid rains are caused by coal; in Los Angeles, by autos. The chemical content of the rain in the Rockies looks more like the L.A. rain. But that isn't proof." However, in the East, acid is carried hundreds or thousands of miles, so L.A. cannot be ruled out as the source. Harte said that the ratio of nitric acid to sulfuric acid in the Rockies' precipitation is high. This condition is usually associated with automobile pollution, but Harte cautions that it is also possible with coal-fired power plant emissions.

It is important to remember that there have been no documented effects in the West from acid deposition. However, if the predicted energy development occurs in a number of potentially sensitive areas, there almost certainly will be. Mitigating these problems will undoubtedly cause as much debate in the West as it has in the East. The only thing that is certain is that acid rain is falling. □

TV meets the Clean Air Act

In 1948, an atmospheric inversion of polluted air in Denora, Pennsylvania, resulted in the deaths of four people. This rather unpleasant bit of information opens the independently-produced television documentary *On the Air*, which will be broadcast on Friday, October 1, on KRMA-TV, Channel 6 in Denver at 9:00 p.m. The program looks at the future of air quality in the Rockies.

As far as I know, this is the first video examination of the complex subject of air quality. Producer/director Mary Mann makes a clear and persuasive presentation which is particularly timely as Congress debates the renewal of the Clean Air Act.

The show looks primarily at the questions of visibility and acid rain as related to the proposed oil shale development on Colorado's Western Slope. Several area residents are interviewed early in the program, expressing their dismay at the decline in the region's air quality, even though development has not begun to reach industry's goals.

In addition, the show presents some graphic and disturbing computer-generated pictures of what air qualtiy in the Grand Canyon would be like if allowed to deteriorate to national ambient air quality standards. The program also includes a lucid explanation of "prevention of significant deterioration," a subject that — take it from me — defies easy definition. I won't go into it here; you'll just have to watch the show.

However, while solid, the show is not perfect. Part of the problem stems from the subject matter itself. Air quality does not make what they call "good television." There are few opportunities for dramatic action shots and spectacular confrontation. CHIPs it ain't. Consequently, there are a lot of shots of people being interviewed.

Kent and Donna Dannen

Acid rain monitoring equipment, Rocky Mountain National Park

Secondly, although the show interviews people from both sides of the controversy — the primary industry spokesman is from the American Petroleum Institute — it does not come out unbiased. The program comes down solidly on the side of strict air quality protection to prevent both acid rain and visibility loss in the West.

The producers pay lip service to the current administration policy — Interior Secretary James Watt is shown saying we can have both a sound economy and a clean environment — but it is clear that the producers don't really believe it.

Finally — and I can't believe I'm really saying this — I thought Watt was unfairly made into a major bad guy in the show. The interior secretary is a symbol of the administration's attitude toward the environment and he is the leader of the anti-environmental charge in many areas, but he is not a major spokesman in the clean air battle. It is outside his bailiwick — EPA, the coal and auto industries, and auto state politicians are the high profile folks — and he has not been particularly visible in this struggle. However, Watt is shown extensively, even more than Environmental Protection Agency Administrator Anne Gorsuch, who is the administration's main gunner on the Clean Air Act.

Nevertheless, the show makes a compelling half-hour of television and should be seen by everyone who wants a clear and entertaining look at air quality issues in the Rockies.

The program was produced by Valley Vision TV. It has been distributed to 192 Public Broadcasting Service outlets by the Pacific Mountain Network. Viewers outside the Denver area who would like to see it should write to their PBS outlets requesting that it be broadcast.

— DSW

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 (FWPCAA), 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 (12) OIL TREATER FACILITIES, TO MODIFY (1) INDUSTRIAL PERMIT, AND TO RENEW (5) INDUSTRIAL PERMITS, (40) OIL TREATER PERMITS, AND (2) MUNICIPAL PERMITS.

APPLICANT INFORMATION

(1) APPLICANT NAME: Energy Reserves Group
MAILING ADDRESS: P.O. Box 3280
Casper, WY 82602
FACILITY LOCATION: South Robinson Ranch Field-USA Hoffhire "B" No. 2
Tank Battery, SW¼, SE¼, NE¼, Section 5,
T49N, R67W, Crook County, Wyoming
PERMIT NUMBER: Wy-0031453

Facility is a typical oil treater located in Crook County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to Rush 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.

(2) APPLICANT NAME: Nortex Gas & Oil Company
MAILING ADDRESS: P.O. Box 17583, T.A.
Denver, CO 80202
FACILITY LOCATION: Nortex, Federal #2-7, SW¼, SW¼, Section 7,
T36N, R93W, Fremont County, Wyoming
PERMIT NUMBER: Wy-0031461
FACILITY LOCATION: Nortex, Federal #2-13, SE¼, SE¼, Section 13,
T36N, R94W, Fremont County Wyoming
PERMIT NUMBER: Wy-0031470
FACILITY LOCATION: Nortex, Federal #1-13, SE¼, NE¼, Section 13,
T36N, R94W, Fremont County, Wyoming
PERMIT NUMBER: Wy-0031488
FACILITY LOCATION: Nortex, Federal 886 #1-17, NE¼, SW¼, Section
17, T36N, R94W, Fremont County, Wyoming
PERMIT NUMBER: Wy-0031496
FACILITY LOCATION: Nortex, Federal 886 #3-17, SE¼, SW¼, Section
17, T36N, R93W, Fremont County, Wyoming
PERMIT NUMBER: Wy-0031500
FACILITY LOCATION: Nortex, Federal 886 #4-17, NW¼, SE¼, Section
17, T36N, R93W, Fremont County, Wyoming
PERMIT NUMBER: Wy-0031518
FACILITY LOCATION: Nortex, Federal 193 #2-18, NW¼, SE¼, Section
18, T36N, R93W, Fremont County, Wyoming
PERMIT NUMBER: Wy-0031526
FACILITY LOCATION: Nortex, Federal 193 #3-18, SE¼,SE¼, Section
18, T36N, R93W, Fremont County, Wyoming
PERMIT NUMBER: Wy-0031534
FACILITY LOCATION: Nortex, Federal 193 #4-18, SE¼, SW¼, Section
18, T36N, R93W, Fremont County, Wyoming
PERMIT NUMBER: Wy-0031551
FACILITY LOCATION: Nortex, Federal 193 #5-18, NW¼, SW¼, Section
18, T36N, R93W, Fremont County, Wyoming
PERMIT NUMBER: Wy-0031569
FACILITY LOCATION: Nortex, Federal 886 #6-18, SE¼, NW¼, Section
18, T36N, R93W, Fremont County, Wyoming
PERMIT NUMBER: Wy-0031577

Facilities are typical oil treaters located in Fremont County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharges are to Dry Cheyenne Creek (Class IV) and Muskrat Creek (Class IV) via an unnamed drainage.

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

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

(3) APPLICANT NAME: Triton Coal Company, a wholly owned subsidiary of
Shell Oil Company
MAILING ADDRESS: P.O. Box 2906
Houston, Texas 77001
FACILITY LOCATION: Buckskin Mine, 10 miles north of Gillette
Campbell County, Wyoming
PERMIT NUMBER: Wy-0028479

The Shell Oil Company is the developer of a large open-pit coal mine approximately ten miles north of the City of Gillette, Wyoming which is known as the Buckskin Mine. The mine has six separate points of discharge. Four of the discharge points consist of pit dewatering, coal handling and washdown water. The remaining two points consist of discharges of treated domestic sewage. The discharges are to Rawhide Creek and Spring Draw (Class IV waters).

The proposed permit requires that the discharges comply with effluent limitations which are considered by the State of Wyoming to represent "best available treatment" effective immediately. However, the proposed permit also contains a "reopener" clause which requires the permit to be modified if more stringent limitations are developed at the federal level. The proposed permit contains a provision exempting the permittee from effluent limitations when a precipitation event exceeding the 10 year-24 hour storm occurs. The proposed permit also requires control of runoff from disturbed areas.

Self-monitoring of effluent quality and quantity is required on a regular basis with reporting of results quarterly. The permit is scheduled to expire October 31, 1987.

(4) APPLICANT NAME: Conoco, Inc.
MAILING ADDRESS: 907 Rancho Rd.
Casper, WY 82601
FACILITY LOCATION: Johnson County, Wyoming
PERMIT NUMBER: Wy-0000612

The Conoco Inc. Sussex Gas Plant is located in Johnson County near the Town of Linch, Johnson County, Wyoming. The plant extracts hydrocarbon liquids from natural gas. Wastewaters consist of cooling tower blowdown, in-plant drains, and water extracted from natural gas. The discharge flows to Anderson Draw (Class IV Water).

The proposed permit requires compliance with effluent limitations judged by the State of Wyoming to represent "best available treatment," and assures compliance with Wyoming's In-stream Water Quality Standards. Periodic monitoring of effluent quality and quantity is required with reporting of results quarterly. The permit is scheduled to expire December 31, 1987.

(5) APPLICANT NAME: Husky Oil Company
MAILING ADDRESS: P.O.Box 1588
Cheyenne, WY 82001
FACILITY LOCATION: Laramie County, Wyoming
PERMIT NUMBER: Wy-0000442

The Husky Oil Company's Cheyenne Refinery is a 30,000 barrel per day plant. Process wastewater discharges to Crow Creek (Class IV Water).

The proposed permit requires compliance with effluent limitations based upon "best practicable" standards. It is the State of Wyoming's position that limitations more stringent than best practicable are not needed due to the fact that:

1. Crow Creek is a Class IV Water;
2. During the majority of the year almost the entire flow of the creek consists of effluent from the City of Cheyenne's two wastewater treatment plants;
3. Best practicable treatment is sufficient to protect downstream water uses (irrigation and stock and wildlife watering);

Best practice treatment is sufficient to insure that no health hazard is created.

The proposed permit requires periodic monitoring of effluent quality and quantity with reporting of results monthly. The permit is scheduled to expire December 31, 1987.

(6) APPLICANT NAME: Marathon Oil Company
MAILING ADDRESS: P.O. Box 120
Casper, WY 82601
FACILITY LOCATION: Rock Creek Gas Plant, Carbon County, Wyoming
PERMIT NUMBER: Wy-0001970

The Marathon Oil Company operates a natural gas processing plant in the Rock Creek oil field in Section 34, T20N, R78W, Carbon County, Wyoming. The plant is located at the Town of McFadden, Wyoming.

Potable water is used in the plant to cool the engines and this water is discharged directly to Rock Creek (Class II Water). Possible contaminents are heat, and oil and grease, however, past monitoring has shown relatively low temperatures (64°F) and oil and grease concentrations well below 10 mg/l. Other wastewaters produced in the plant are routed to a production water reinjection unit and are disposed of below the surface.

The proposed permit requires monitoring of flow, temperature, pH, and oil and grease and includes effluent limitations for oil and grease (10 mg/l) and pH (6.0 - 9.0).

If temperature monitoring indicates that there is the possibility of violation of Wyoming's In-stream Water Quality Standards, the permit will be modified to include a temperature limitation. The permit is scheduled to expire December 31, 1987, which is the expiration date for the permits issued to the oil production units in the Rock Creek field.

(7) APPLICANT NAME: Phillips Petroleum Company
MAILING ADDRESS: 10th Floor Phillips Building
Bartlesville, OK 74004
FACILITY LOCATION: Converse County, Wyoming
PERMIT NUMBER: Wy-0001287

Facility extracts natural gas liquids from natural gas by the propane refrigeration method. The plant is water cooled and the waste stream is made up of cooling tower blowdown, water extracted from the natural gas and plant drainage. The discharge is to Antelope Creek (Class IV Stream) via an unnamed draw.

Proposed permit requires compliance with standards considered to be "best available" for this type of facility effective immediately. The permittee must monitor the quality of the effluent on a regular basis and report the results quarterly. The permit will expire December 31, 1987.

(8) APPLICANT NAME: The Union Oil Company of California
MAILING ADDRESS: P.O. Box 79
Worland, WY 82401
FACILITY LOCATION: Washakie County, Wyoming
PERMIT NUMBER: Wy-0001201

The Union Oil Company of California operates a natural gas processing plant located approximately ten miles north of the City of Worland, Wyoming. The plant treats natural gas by extracting raw gasoline, butane and propane. The plant is water cooled and discharge 001 is made up of approximately 9 million gallons per day of once through cooling water. In emergency conditions discharge point 001 may also consist of plant drainage and produced water. Discharge point 002 consists of dehydrator cooling water. The receiving stream is the Big Horn River (Class II).

The proposed permit requires immediate compliance with standards judged to be "best available" by the State of Wyoming. In addition, the permit requires that the temperature of the discharge be no more than 5.2°C higher than the temperature of the influent. This is based on a minimum stream flow of 44.84 MGD, a maximum discharge from the plant 9.5 MGD and a maximum allowable in-stream temperature increase of 1.1°C.

The proposed permit requires monitoring of influent and effluent water quality on a regular basis with reporting of results quarterly. The permit will expire December 31, 1987.

(9) APPLICANT NAME: Ant Hills Production Company
MAILING ADDRESS: P.O. Box 864
Lusk, WY 82225
FACILITY LOCATION: Government-Delahoyde Lease, Section 25, T37N,
R63W, Niobrara County, Wyoming
PERMIT NUMBER: Wy-0000523
FACILITY LOCATION: Government O and G Lease, Section 30, T37N, R62W,
Niobrara County, Wyoming
PERMIT NUMBER: Wy-0001554
FACILITY LOCATION: Antoine Government #1, SW¼, Section 1, T37N,
R63W, Niobrara County, Wyoming
PERMIT NUMBER: Wy-0028134

Facilities are typical oil treaters located in Niobrara County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharges are to Old Woman Creek (Class IV), Crazy Woman Creek (Class IV) and Lance Creek (Class II W.W.) via an unnamed drainage.

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

(10) APPLICANT NAME: Arnell Oil Company
MAILING ADDRESS: 6815 South Steele Street
Littleton, CO 80122
FACILITY LOCATION: Poison Spider Field, Battery #2, NW¼, Section
12, T33N, R83W, Natrona County, Wyoming
PERMIT NUMBER: Wy-0024376
FACILITY LOCATION: Poison Spider Field, #1 Battery, NW¼, Section
12, T33N, R83W, Natrona County, Wyoming
PERMIT NUMBER: Wy-0024368

Facilities are typical oil treaters located in Natrona County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharges are to an unnamed Stock Pond in the Poison Spider Creek (Class IV) drainage.

The discharges must meet Wyoming's Produced Water Criteria effective immediately. Chapter VII of the Wyoming Water Quality Rules and Regulations infers that as long as the Produced Water Criteria is met, the water is suitable for beneficial use. There is no evidence to indicate that limitations more stringent than the Produced Water Criteria are needed to meet Wyoming's Water Quality Standards. The Department will continue to evaluate the 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 permits is December 31, 1987.

(11) APPLICANT NAME: Atlantic Richfield Company
MAILING ADDRESS: P.O. Box 5540
Denver, CO 80217
FACILITY LOCATION: East Unit, Big Muddy Field, NE¼, NE¼, Section
13, T33N, R76W, Converse County, Wyoming
PERMIT NUMBER: Wy-0000710
FACILITY LOCATION: South Glenrock Field, Block A Unit, SE¼, NW¼,
Section 1, T33N, R76W, Converse County, Wyoming
PERMIT NUMBER: Wy-0000728
FACILITY LOCATION: Lance Creek Field, Bell Edgemont, NE¼, Section
28, T36N, R64W, Niobrara County, Wyoming
PERMIT NUMBER: Wy-0024856
FACILITY LOCATION: Clarks Ranch Field, NW¼, Section 6, T35N, R84W,
Natrona County, Wyoming
PERMIT NUMBER: Wy-0024864

Facilities are typical oil treaters located in Converse and Niobrara Counties, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharges are to North Platte River (Class II), Crazy Woman Creek (Class IV) and Salt Creek (Class IV). The discharges must meet Wyoming's Produced Water Criteria effective immediately. Chapter VII of the Wyoming Water Quality Rules and Regulations infers that as long as the Produced Water Criteria is met, the water is suitable for beneficial use. There is no evidence to indicate that limitations more stringent than the Produced Water Criteria are needed to meet Wyoming's Water Quality Standards. The Department will continue to evaluate the 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.

(12) APPLICANT NAME: Atlantic Richfield Company
MAILING ADDRESS: P.O. Box 5540
Denver, CO 80217
FACILITY LOCATION: Ford Cheyenne Well #2, NE¼, NW¼, SE¼,
Section 33, T36N, R65W, Niobrara County, Wyoming
PERMIT NUMBER: Wy-0027294

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 Lance Creek (Class II W.W.) via an unnamed drainage.

The discharge must meet Wyoming's Produced Water Criteria effective immediately. No chemical limitations have been imposed on this facility except for oil and grease (10 mg/l) and pH (6.5 - 8.5). This is due to the extreme aridness of the area which allows for beneficial use of the water for agricultural purposes. There is no evidence to indicate that limitations more stringent than the Produced Water Criteria are needed to meet Wyoming's Water Quality Standards. The Department will continue to evaluate the discharge and, if necessary, will modify the permit if evidence indicates that more stringent limitations are needed.

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

(13) APPLICANT NAME: R.G. Berry Company
MAILING ADDRESS: % McIlnay—Adams
2305 Oxford Lane
Casper, WY 82601
FACILITY LOCATION: Federal #2-26 and #1-26, W-19719, NW¼, NW¼,
Section 26, T21N, R78W, Carbon County, Wyoming
PERMIT NUMBER: Wy-0028231

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

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.

(14) APPLICANT NAME: Murry P. Dahill
MAILING ADDRESS: 523 South Park
Casper, WY 82601
FACILITY LOCATION: Iron Creek Oil Field, Section 11, T23N, R82W,
Natrona County, Wyoming

PERMIT NUMBER: Wy-0023566

Facility is a typical oil treater located in Natrona County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to Iron Creek (Class IV).

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.

(15) APPLICANT NAME: J.G. Dyer
MAILING ADDRESS: % Harriette Allen, 68-783 Highway 111, Suite 4, Cathedral City, CA 92234
FACILITY LOCATION: SBMWCSU Tank Battery, SW¼, Section 16, T33N, R76W, Converse County, Wyoming
PERMIT NUMBER: Wy-0026573

Facility is a typical oil treater located in Converse County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to the North Platte River (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, 1987.

(16) APPLICANT NAME: Gary Energy Corporation
MAILING ADDRESS: 115 Inverness Drive East, Englewood, CO 80112
FACILITY LOCATION: South Baggs Field, #3-12 Government Clark Lease, NW¼, SW¼, Section 3, T12N, R93W, Carbon County, Wyoming
PERMIT NUMBER: Wy-0024546

Facility is a typical oil treater located in Carbon County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to Sand 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.

(17) APPLICANT NAME: Grace Petroleum
MAILING ADDRESS: 1515 Arapahoe, Denver, CO 80202
FACILITY LOCATION: Lance Creek Field, #3 Novick, Section 6, T35N, R65W, Niobrara County, Wyoming
PERMIT NUMBER: Wy-0001589
FACILITY LOCATION: Lance Creek Field, #11 Thompson, Section 6, T35N, R65W, Niobrara County, Wyoming
PERMIT NUMBER: Wy-0001597

Facilities are typical oil treaters located in Natrona County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharges are to Little Lightning Creek (Class IV).

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

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

(18) APPLICANT NAME: Gulf Oil
MAILING ADDRESS: P.O. Box 2619, Casper, WY 82602
FACILITY LOCATION: West Salt Creek Field, SE¼, Section 29, T40N, R79W, Natrona County Wyoming
PERMIT NUMBER: Wy-0025518

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

The discharge must meet Wyoming's Produced Water Criteria effective immediately. No chemical limitations have been imposed on this facility except for oil and grease (10 mg/l) and pH (6.5 - 8.5). This is due to the extreme aridness of the area which allows for beneficial use of the water for agricultural purposes. There is no evidence to indicate that limitations more stringent than the Produced Water Criteria are needed to meet Wyoming's Water Quality Standards. The Department will continue to evaluate the discharge and, if necessary, will modify the permit if evidence indicates that more stringent limitations are needed.

Semi-annual self-monitoring is required for all parameters with the exception of oil and grease, which must be monitored quarterly. The proposed expiration date for the permit is December 31, 1985.

(19) APPLICANT NAME: Kedco Management Corporation
MAILING ADDRESS: % Keplinger Operating Company, 800 West Werner Ct, Suite 190, Casper, WY 82601
FACILITY LOCATION: Federal #11-17 and Galles Federal #1, NW¼, Section 17, T36N, R63W, Niobrara County, Wyoming
PERMIT NUMBER: Wy-0028002

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 Crazy Woman 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.

(20) APPLICANT NAME: Kennedy & Mitchell, Inc.
MAILING ADDRESS: P.O. Box 27D, Denver, CO 80227
FACILITY LOCATION: Federal 1-77, Mahoney 1-77-2 Tank Battery, NW¼, SE¼, Section 4, T25N, R88W, Carbon County, Wyoming
PERMIT NUMBER: Wy-0027987

Facility is a typical oil treater located in Carbon County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to an unnamed ephemeral drainage in the Great Divide Basin.

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.

(21) APPLICANT NAME: Natomas North America
MAILING ADDRESS: 1515 Arapahoe Street, Suite 387, Denver, CO 80202
FACILITY LOCATION: #1 Federal Wasserburger Tank Numbers 1383, 1384, 1385, NE¼, NW¼, Section 1, T37N, R63W, Niobrara County, Wyoming
PERMIT NUMBER: Wy-0030465

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 Spring Creek (Class IV).

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.

(22) APPLICANT NAME: Natural Gas Processing Company
MAILING ADDRESS: P.O. Box 541, Worland, WY 82401
FACILITY LOCATION: Cow Creek #2-12 Well, NE¼, Section 12, T16N, R92W, Carbon County, Wyoming
PERMIT NUMBER: Wy-0027359

Facility is a typical oil treater located in Carbon County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to Dry Cow 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.

Natural Gas Processing WY-0027359 discharge is within the Colorado River drainage, therefore, the provisions of the Colorado River Salinity Control Policy apply. That policy states that there shall be no industrial salt discharges which exceed 1 ton per day. Since this discharge will be considerably less than 1 ton of salt per day (approximately 100 pounds/day), it is allowable under that policy.

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.

(23) APPLICANT NAME: Phillips Petroleum Company
MAILING ADDRESS: P.O. Box 2920, Casper, WY 82602
FACILITY LOCATION: Evelyn "A" Lease, NW¼, Section 4, T33N, R75W, Converse County, Wyoming
PERMIT NUMBER: Wy-0026191

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

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.

(24) APPLICANT NAME: Prenalta Corporation
MAILING ADDRESS: P.O. Box 2514, Casper, WY 82602
FACILITY LOCATION: Prenalta Government 31-7-36-77 Lease, NE¼, Section T36N, R77W, Natrona County, Wyoming
PERMIT NUMBER: Wy-0026298

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 an unnamed drainage in the Sand Spring Creek (Class IV) drainage.

The discharge must meet Wyoming's Produced Water Criteria effective immediately. No chemical limitations have been imposed on this facility except for oil and grease (10 mg/l) and pH (6.5 - 8.5). This is due to the extreme aridness of the area which allows for beneficial use of the water for agricultural purposes. There is no evidence to indicate that limitations more stringent than the Produced Water Criteria are needed to meet Wyoming's Water Quality Standards. The Department will continue to evaluate the discharge and, if necessary, will modify the permit if evidence indicates that more stringent limitations are needed.

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

(25) APPLICANT NAME: Prenalta Corporation
MAILING ADDRESS: P.O. Box 2514, Casper, WY 82602
FACILITY LOCATION: Prenalta Government 33-31-39-61 Lease, SW¼, SE¼, Section 31, T39N, R61W, Niobrara County, Wyoming
PERMIT NUMBER: Wy-0028053

Facility is a typical oil treater located in Niobara County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to Bridge 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.

(26) APPLICANT NAME: Provident Resources
MAILING ADDRESS: 777 Grant Street, Suite 600, Denver, CO 80202
FACILITY LOCATION: Government A-25-3 Lease, NE¼, NE¼, Section 25, T33N, R69W, Converse County, Wyoming
PERMIT NUMBER: Wy-0001104

Facility is a typical oil treater located in Converse County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to Shawnee Creek (Class IV).

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.

(27) APPLICANT NAME: W.E. Sauer Oil and Gas Company
MAILING ADDRESS: 5710 West Yellowstone, Casper, WY 82601
FACILITY LOCATION: Wallway Government #1, SW¼, SE¼, Section 31, T25N, R88W, Carbon County, Wyoming
PERMIT NUMBER: Wy-0023876

Facility is a typical oil treater located in Carbon County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to Alkali Lake (Class IV).

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.

(28) APPLICANT NAME: Simasko Production Company
MAILING ADDRESS: 1580 Lincoln Street, Suite 1220, Denver, CO 80203
FACILITY LOCATION: Lease W-26684, Tank Battery #468 & 469, NE¼, SE¼, Section 26, T35N, R64W, Niobrara County, Wyoming
PERMIT NUMBER: Wy-0027286

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 Young Woman Creek (Class IV) via an unnamed drainage.

The discharge must meet Wyoming's Produced Water Criteria effective immediately. No chemical limitations have been imposed on this facility except for oil and grease (10 mg/l) and pH (6.5 - 8.5). This is due to the extreme aridness of the area which allows for beneficial use of the water for agricultural purposes. There is no evidence to indicate that limitations more stringent than the Produced Water Criteria are needed to meet Wyoming's Water Quality Standards. The Department will continue to evaluate the discharge and, if necessary, will modify the permit if evidence indicates that more stringent limitations are needed.

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

(29) APPLICANT NAME: Summit Resources
MAILING ADDRESS: 11211 Katy Freeway, Suite 260, Houston, TX 77079
FACILITY LOCATION: Speas Lease #1-A, NE¼, Section 35, T33N, R82W, Natrona County, Wyoming
PERMIT NUMBER: Wy-0027413

Facility is a typical oil treater located in Natrona County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to Poison Spider 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.

(30) APPLICANT NAME: Tenneco Oil Company
MAILING ADDRESS: P.O. Box 3119, Englewood, CO 80155
FACILITY LOCATION: Leimser Lease Battery, SW¼, Section 5, T36N, R63W, Niobrara County, Wyoming
PERMIT NUMBER: Wy-0023507

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 Rush 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.

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BULLETIN BOARD

BLUEPRINTING CLEAN WATER

The Clean Water Act is detailed in a booklet, "Blueprint for Clean Water," published by the League of Women Voters Education Fund. Write to LWVEF, 1730, M St., NW, Washington, D.C. 20036 for the 75 cent booklet.

NEW FOSSIL RULES

The Bureau of Land Management has published new proposed rules on the collection of fossils, petrified wood and hobby minerals on public lands. The new rules would require a permit for collecting fossils in protected areas or for collecting for commercial purposes. Specimens collected without proper permits could not be sold, traded or bartered. The regulations are published in the Aug. 17 *Federal Register*. Comments will be accepted until Oct. 18. Write the Director (550), BLM, 18th and C Streets, N.W., Wash. D.C. 20240.

HAZARDOUS WASTE GUIDELINES

The Waste Management Division of the Colo. Dept. of Health has adopted two sets of guidelines on applications for hazardous waste disposal sites. One site outlines the technical information companies must develop in their applications for hazardous waste sites. The other outlines the process the Waste Management Division will follow in reviewing those applications. Both sets are similar or identical to guidelines dismissed last year following a sunset review of the agency. For copies, call (303) 320-8333, ext. 4364.

FEMINISM/ENVIRONMENTALISM TALK

"Energy: Culture and Technology," a conference focusing on feminism and environmentalism, Native American energy issues, women's art and the integration of women's studies into the curriculum will be held Oct. 8-10 at the University of Montana, Missoula. The conference is being sponsored by the Northwest Women's Studies Assn., Affiliated Women of MSU, the Women's Resource Center of Missoula and the Women and Technology Network. For more information, call (406) 728-3041 or (406) 243-4153.

YELLOWSTONE SYMPOSIUM SET

"America's Endangered Heartland," an interstate conference on Yellowstone National Park and its surrounding public lands, will be held Oct. 9 at Montana State University, Bozeman. Sponsored by the Greater Yellowstone Coalition, composed of over 20 environmental organizations, the symposium will host a variety of experts on the Yellowstone ecosystem, which includes the Park and surrounding lands in Wyoming, Idaho and Montana. For registration and other information, contact the Madison-Gallatin Alliance, Box 875, Bozeman, Mont. 59715 or call Dr. Richard Tenney at (406) 586-5502.

FLOOD REPORT

The results of a 1980 California symposium have been published in a volume concerning storms, floods and debris flows. The purpose of the symposium was to study the floods of 1978 and 1980 in California and Arizona. The volume is one of a series of reports commissioned by the Committee on Natural Disasters of the National Research Council. A single copy of the 487-page *Complete Symposium Proceedings*, including *Overview and Summary*, is free. A single copy of the 47-page *Overview and Summary* can be obtained as a separate document. Contact the Environmental Quality Laboratory, 314-40 Caltech, Pasadena, Calif. 91125 or (213) 356-4167.

GETTING ORGANIZED

The Northern Rockies Action Group will offer a weekend workshop on non-profit organization management Oct. 1-3 at the Teton Science School in Jackson Hole, Wyoming. Titled "Getting organized: effective management of citizen groups," the workshop should be helpful to staff, volunteers and board members of community-based citizens groups. Cost is $100, including all training materials; optional food and lodging are available at the Science School for $35 per person. For more information, contact Kathy Bramer at NRAG, 9 Placer St., Helena, Mont. 59601 or (406) 442-6615.

UTAH WILDERNESS FUNDRAISER

Author Edward Abbey and singer Utah Phillips will be the featured entertainment at the Utah Wilderness Association's annual fundraiser Friday, Oct. 1. The evening of humor and fun will begin at 7:30 p.m. at the South Side High School Auditorium, 1575 South State, Salt Lake City. Admission is $7 and the public is welcome.

COLO. WILDERNESS TRIPS

The Colo. Wilderness Network is sponsoring two outings into BLM wilderness study areas in coming weeks. A two-day hike of about 18 miles will head into the Troublesome Wilderness Study Area Sept. 24-26. A second excursion of 10-15 miles will head into the Black Ridge Wilderness Study Area Oct. 9-10. For more information, call Marty Sorenson at (303) 469-1273 on the Troublesome hike, Dick Guadagno at (303) 626-5586 on the Black Ridge hike.

POWDER RIVER ANNUAL MEETING

The Powder River Basin Resource Council will hold its 10th annual meeting Saturday, Sept. 25 at Lodore in Story, Wyoming. The event begins at 3 p.m. with an election of board members and will conclude (or meld into music and conversation) at 9:45, following dinner and an address by Walt Ackerman, administrator of DEQ's Land Quality Division. To make a dinner reservation ($6.95 for baked ham and barbecued ribs), write PRBRC, 48 N. Main, Sheridan, Wyo. 82801.

COSC ANNUAL MEETING

Energy experts Amory and Hunter Lovins will be the keynote speakers at the annual meeting and retreat of the Colorado Open Space Council, scheduled for Oct. 1-3 in Crested Butte. The retreat will review Colorado conservation issues and set COSC's priorities for 1982-83. The Lovins'. address, scheduled for 7 p.m. Sat., Oct. 2, at the Crested Butte Fire Hall, is open to the public. For more information, contact COSC, 2239. E. Colfax, Denver 80206, (303) 393-0466 or (303) 249-3170 in Montrose.

BLM EXTENDS COMMENT PERIOD

The Utah BLM office has extended the deadline for public comments on 56 Utah wilderness study area Site Specific Analyses (SSAs) to Nov. 30. The SSAs, which are available for public review at all BLM offices and county courthouses in the state, will provide the basis for a statewide environmental impact statement on the areas, which is scheduled for release in late 1984.

NAME YOUR OWN PARK

Montana's Department of Fish, Wildlife and Parks has prepared application forms that citizens can use to nominate their favorite historic and recreational sites to become state parks. Applications are due by Dec. 1. The state legislature makes the final site selections and funds for acquisition are derived from Montana's coal severance tax.

WYO. CONSERVATION CONGRESS

Several Wyoming conservation groups are teaming up to put on the 1982 Wyoming Conservation Congress in Casper Sept. 25-26. The focus of the weekend event will be wildlife — specifically the Wildlife and Recreation Trust Fund. Sessions at the Casper Izaak Walton League Lodge will begin at 10 a.m. Saturday and conclude at 3 p.m. Sunday. Sponsors are the Audubon Society, Izaak Walton League, Jackson Hole Alliance, Wildlife Federation, Sierra Club and Wyoming Outdoor Council. For more information, contact the Outdoor Council at (307) 635-3416.

(continued from page 15)

(31) APPLICANT NAME: Terra Resources
MAILING ADDRESS: P.O. Box 2500
Casper, WY 82601
FACILITY LOCATION: Flat Top Field, Reese 26-1, SW¼, NW¼, Section 26, T33N, R96W, Converse County, Wyoming
PERMIT NUMBER: Wy-0001431
FACILITY LOCATION: Flat Top Field, Chew Government 23-1, NW¼, Section 23, T33N, R96W, Converse County, Wyoming
PERMIT NUMBER: Wy-0001449
FACILITY LOCATION: Brooks Ranch Sand Unit, NW¼, Section 15, T33N, R77W, Natrona County, Wyoming
PERMIT NUMBER: Wy-0001473
FACILITY LOCATION: Notches Dome Field, Tensleep Unit, NE¼, Section 10, T37N, R85W, Natrona County, Wyoming
PERMIT NUMBER: Wy-0001481
FACILITY LOCATION: Boone Dome Unit, Well #2, NW¼, Section 10 T35N, R85W, Natrona County, Wyoming
PERMIT NUMBER: Wy-0001503
FACILITY LOCATION: Notches Dome Field, Okie #1 Unit, NE¼, Section 10, T37N, R85W, Natrona County, Wyoming
PERMIT NUMBER: Wy-0001511

Facilities are typical oil treaters located in Converse and Natrona Counties, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharges are to Shawnee Creek (Class IV), Muddy Creek (Class II) via an unnamed drainage, Okie Draw (Class IV) via an unnamed drainage and South Fork Powder River (Class IV) via an unnamed drainage.

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

(32) APPLICANT NAME: Texaco, Inc.
MAILING ADDRESS: P.O. Box 2100
Denver, CO 80201
FACILITY LOCATION: Table Rock Unit #3, NW¼, SE¼, Section 2, T18N, R98W, Sweetwater County, Wyoming
PERMIT NUMBER: Wy-0025330

Facility is a typical oil treater located in Sweetwater County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to Bitter Creek (Class III) 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.

(33) APPLICANT NAME: Townsend Company, Inc.
MAILING ADDRESS: 210 Grandview Drive
Newcastle, WY 82701
FACILITY LOCATION: Gose State #1 SE¼, SW¼, Section 36, T38N, R63W, Niobrara County, Wyoming
PERMIT NUMBER: Wy-0031151

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 Lance Creek (Class II W.W.) 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.

(34) APPLICANT NAME: Union Oil Company of California
MAILING ADDRESS: P.O. Box 2620
Casper, WY 82602
FACILITY LOCATION: South Casper Creek Field, NE¼, SE¼, Section 3, T33N, R83W, Natrona County, Wyoming
PERMIT NUMBER: Wy-0023914

Facility is a typical oil treater located in Natrona County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to an unnamed stock pond in the Poison Spider Creek (Class IV) 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.

(35) APPLICANT NAME: Union Texas Petroleum
MAILING ADDRESS: 1860 Lincoln Street
Suite 1010
Denver, CO 80295
FACILITY LOCATION: Rohweder Tank Battery, #4, NE¼, Section 20, T16N, R61W, Laramie County, Wyoming
PERMIT NUMBER: Wy-0020541

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

The discharge must meet Wyoming's Produced Water Criteria effective immediately. No chemical limitations have been imposed on this facility except for oil and grease (10 mg/l) and pH (6.5 - 8.5). This is due to the extreme aridness of the area which allows for beneficial use of the water for agricultural purposes. There is no evidence to indicate that limitations more stringent than the Produced Water Criteria are needed to meet Wyoming's Water Quality Standards. The Department will continue to evaluate the discharge and, if necessary, will modify the permit if evidence indicates that more stringent limitations are needed.

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

(36) APPLICANT NAME: Viable Resources, Inc.
MAILING ADDRESS: P.O. Box 3192
Casper, WY 82602
FACILITY LOCATION: Pine Mountain Tank Battery #1, Section 35, T35N, R84W, Natrona County, Wyoming
PERMIT NUMBER: Wy-0025101

Facility is a typical oil treater located in Natrona County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to Jack Allen Draw (Class IV).

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.

(37) APPLICANT NAME: The Town of Dayton, Wyoming
MAILING ADDRESS: P.O. Box 176
Dayton, WY 82836
FACILITY LOCATION: Sheridan County, Wyoming
PERMIT NUMBER: Wy-0020435

The wastewater treatment facilities serving the Town of Dayton consist of a 2-cell non-aerated lagoon. In 1976 the discharge permit for this facility was inactivated due to zero discharge. However, recently the lagoon has begun to discharge to the Tongue River (Class II Stream) and it is now necessary to re-issue the permit.

The proposed permit requires only that the existing facilities be operated at maximum capability and efficiency. However, the permit also contains effluent limitations based on National Secondary Treatment Standards and Wyoming's In-stream Water Quality Standards which must be met with receipt of federal construction grant funds.

Periodic monitoring of effluent quality and quantity is required with reporting of results quarterly. The permit is scheduled to expire August 31, 1987.

(38) APPLICANT NAME: Town of Hudson, Wyoming
MAILING ADDRESS: P.O. Box 56
Hudson, WY 82515
FACILITY LOCATION: Fremont County, Wyoming
PERMIT NUMBER: Wy-0020664

The wastewater treatment facilities serving the Town of Hudson, Wyoming consist of a single-cell aerated lagoon with no disinfection equipment. The discharge is to the Popo Agie River (Class II Water) via an unnamed drainage.

The proposed permit requires compliance with National Secondary Treatment Standards and Wyoming's In-stream Water Quality Standards effective immediately. The single exception to this is the limitation for the parameter fecal coliform bacteria. Since the Town has no chlorination facilities it is unable to meet a fecal coliform limitation. However, the Town is on the State's priority list for receipt of federal funds and, upon notification of the availability of such funds, will be required to submit a schedule for meeting fecal coliform limitations.

The proposed permit requires periodic monitoring of effluent quality and quantity with reporting of results quarterly. The permit is scheduled to expire December 31, 1987.

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 FWPCAA will be protected.

PUBLIC COMMENTS

Public comments are invited any time prior to October 18, 1982. 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 October 18, 1982 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-82-009

Dear Reader,

Don't panic. Don't be intimidated. And don't ignore this page.

THIS IS YOUR CHANCE to tell us what you think of *High Country News* and what you think the paper should become.

It's also a chance for you to help *HCN* financially without spending a cent. Your answers to the questions on demographics and consumer behavior should help us attract advertisers. And your answers on membership and citizenship should help us build circulation by telling us where to look for other readers like you.

Help us give you the paper you want. Complete and return this reader survey TODAY to Reader Survey, Box K, Lander, Wyo. 82520.

Thanks,
The Staff

Demographics

1. Sex: ___ Female ___ Male
2. Age: ___
3. Marital status: ___ Married ___ Single
4. Children (please indicate how many in each age group):
   - ___ 0-5 yrs.
   - ___ 6-12 yrs.
   - ___ 13-19 yrs.
   - ___ over 19 yrs.
5. Education (highest level completed):
   - ___ Less than 12 years
   - ___ High school
   - ___ College
   - ___ Postgraduate work
6. Occupation: ___
7. Income before taxes:

Individual income	Household income
___ Under $10,000	___ Under $10,000
___ $10,000 - $14,999	___ $10,000 - $14,999
___ $15,000 - $19,999	___ $15,000 - $19,999
___ $20,000 - $29,999	___ $20,000 - $29,999
___ $30,000 - $49,999	___ $30,000 - $49,999
___ $50,000 or more	___ $50,000 or more

8. State of residence: ___
9. Size of community:
   - ___ rural
   - ___ under 10,000
   - ___ 10,000 - 25,000
   - ___ 25,000 - 100,000
   - ___ 100,000 - 1 million
   - ___ over 1 million

Consumer interests

1. Home ownership (check as many as apply):
   - ___ own a home
   - ___ own land/plan to build
   - ___ own a second home
   - ___ hope to buy a home within the next three years
   - ___ have recently made energy-related home improvements (check below):
     □ solar □ wood heat □ insulation □ other ___
   - ___ plan to make energy-related home improvements in next two years (check below):
     □ solar □ wood heat □ insulation □ other ___
2. Consumer goods:

Own	*Plan to buy in next 12 months*	
___	___	35 mm camera
___	___	instamatic camera
___	___	stereo equipment
___	___	color TV
___	___	videocassette recorder
___	___	personal computer
___	___	backpacking gear
___	___	nordic ski equipment
___	___	alpine ski equipment
___	___	canoe/kayak
___	___	other boat

3. Outdoor activities:
   - ___ hiking
   - ___ backpacking
   - ___ climbing
   - ___ canoeing/kayaking
   - ___ sailing
   - ___ running
   - ___ golf
   - ___ other ___
   - ___ bicycling
   - ___ nordic skiing
   - ___ alpine skiing
   - ___ hunting
   - ___ fishing
   - ___ birdwatching
   - ___ tennis
4. Other leisure interests:
   - ___ reading
   - ___ photography
   - ___ art/crafts (specify) ___
   - ___ music (specify) ___
   - ___ collections (specify) ___
   - ___ other ___
   - ___ gardening
   - ___ cooking
5. Have you made any mail order purchases in the last 12 months? ___ yes ___ no

   Have you purchased:
   - ___ books
   - ___ food/vitamins
   - ___ clothing
   - ___ other ___
   - ___ records/tapes
   - ___ gardening equipment
   - ___ sporting goods

   Have you requested catalogs or information by mail in the last 12 months?
   ___ yes ___ no
6. Did you travel on vacation during the past 12 months? ___ yes ___ no

   What were your primary vacation activities? ___

   How did you travel? ___ plane ___ car ___ train ___ bus ___ boat ___ other

   How many vacations do you have each year? ___

   How many vacation days do you have each year? ___

Readership/Membership/Citizenship

1. Do you consider yourself an environmentalist? ___ yes ___ no
2. Do you belong to any of the following organizations? Check as many as apply.
   - ___ Sierra Club
   - ___ Wilderness Society
   - ___ Audubon Society
   - ___ National Wildlife Federation
   - ___ other *national* conservation organizations (please specify) ___
   - ___ other *state/local* conservation organizations (please specify) ___
3. What environmental issues are you particularly interested in?
4. What other social or political issues are you interested in?
5. Do you read a daily newspaper? ___ yes ___ no

   Which one(s)? ___

   Do you read a weekly newspaper? ___ yes ___ no

   Which one(s)? ___

   What other newspapers or magazines do you subscribe to? ___

You and High Country News

1. How long have you subscribed to *High Country News*? ___
2. How were you introduced to the paper?
   - ___ sample copy
   - ___ direct mail
   - ___ library copy
   - ___ through a friend
   - ___ other ___
   - ___ newsstand
   - ___ gift subscription
   - ___ advertisement
   - ___ at the office

more...

3. How long do you spend reading *HCN* on the average? ____

4. How long do you usually keep your copies of *HCN*? ____

5. How many other people (*not* counting yourself) read your copy of *HCN*? ____

6. Have you ever contributed money to the HCN Research Fund or Publishers Fund?
___ yes ___ no
If so, in what range have you contributed recently?
___ $10 or less ___ $11-$25 ___ $25-$50 ___ $50-$100 ___ $100-$250
___ $250-$500 ___ $500 or more

High Country News Evaluation

1. Which of the following statements most closely describes the way you usually read *High Country News*?
   - ___ Skim the paper in its entirety
   - ___ Skim the paper in its entirety, then return to read items of interest
   - ___ Skim the paper, reading shorter items of interest, then return to read longer features
   - ___ Skim the paper, reading all items of interest along the way
   - ___ Read the paper cover to cover
   - ___ Other ____

2. How often do you read the following regular features of *High Country News*? Please circle your answer. (If you regularly read these items in a particular order, could you number them for us?)

Front page feature	*always*	*usually*	*sometimes*	*never*
Western Roundup	*always*	*usually*	*sometimes*	*never*
Dear Friends	*always*	*usually.*	*sometimes*	*never*
Barbed Wire	*always*	*usually*	*sometimes*	*never*
Hotlines	*always*	*usually*	*sometimes*	*never*
Inside feature	*always*	*usually*	*sometimes*	*never*
Centerspread	*always*	*usually*	*sometimes*	*never*
Books	*always*	*usually*	*sometimes*	*never*
Bulletin Board	*always*	*usually*	*sometimes*	*never*
Opinion	*always*	*usually*	*sometimes*	*never*
Letters	*always*	*usually*	*sometimes*	*never*
Back page feature	*always*	*usually*	*sometimes*	*never*

3. Which of the issues we cover interest you most? Number 1,2 and 3 the issues you are most interested in; check all others that interest you.
   - ___ appropriate technology
   - ___ energy development
   - ___ people
   - ___ public lands
   - ___ toxics/pesticides
   - ___ water
   - ___ wildlife
   - ___ agriculture
   - ___ ecology/biology
   - ___ nuclear issues
   - ___ politics
   - ___ timbering
   - ___ urban issues
   - ___ wilderness
   - ___ other ____

4. Which of the following issues do you think *High Country News* covers the best? Please number your answers from one to three, starting with the best.
   - ___ agriculture
   - ___ ecology/biology
   - ___ nuclear issues
   - ___ politics
   - ___ timbering
   - ___ urban issues
   - ___ wilderness
   - ___ other ____
   - ___ appropriate technology
   - ___ energy development
   - ___ people
   - ___ public lands
   - ___ toxics/pesticides
   - ___ water
   - ___ wildlife

5. In which of the following areas does *HCN*'s coverage need the most improvement? Please number your answers, starting with one for the area which needs the most work.
   - ___ agriculture
   - ___ ecology/biology
   - ___ nuclear issues
   - ___ politics
   - ___ timbering
   - ___ urban issues
   - ___ wilderness
   - ___ other ____
   - ___ appropriate technology
   - ___ energy development
   - ___ people
   - ___ public lands
   - ___ toxics/pesticides
   - ___ water
   - ___ wildlife

6. Please circle your answer. *High Country News* feature stories are:

Fair/balanced/objective	*always*	*usually*	*sometimes*	*never*
Lively/interesting	*always*	*usually*	*sometimes*	*never*
Thoughtful/perceptive	*always*	*usually*	*sometimes*	*never*
Boring/dry	*always*	*usually*	*sometimes*	*never*
Too technical	*always*	*usually*	*sometimes*	*never*
Unusual	*always*	*usually*	*sometimes*	*never*
Too short	*always*	*usually*	*sometimes*	*never*
Too long	*always*	*usually*	*sometimes*	*never*

7. How would you rate the layout of *High Country News* in the following areas? Please circle your answer.

Attractiveness	*excellent*	*good*	*fair*	*poor*
Readability	*excellent*	*good*	*fair*	*poor*
Quantity of illustrations	*excellent*	*good*	*fair*	*poor*
Quality of illustrations	*excellent*	*good*	*fair*	*poor*
Quantity of photographs	*excellent*	*good*	*fair*	*poor*
Quality of photographs	*excellent*	*good*	*fair*	*poor*

8. Why do you read *High Country News*? Please place check marks by all the reasons that apply; place two check marks by the primary reason you read the paper.
   - ___ news of environmental issues in my state and community
   - ___ news of environmental issues elsewhere in the Rocky Mountain region
   - ___ environmental news from Washington
   - ___ investigative reporting
   - ___ news analysis and perspective
   - ___ sense of regional identity
   - ___ sense of environmental community
   - ___ to find out what environmentalists are up to
   - ___ other ____

Looking ahead

1. In the future, do you think *High Country News* should:
   - ___ (a) continue to report exclusively on the environment
   - ___ (b) branch out and cover other regional news of interest?

   If you checked (b), what other areas would you like to see us cover?
   ____
   ____

2. Please check all answers which apply. In the event of a financial crisis, would it be acceptable to you if we:
   - ___ reduced the number of pages of *HCN*
   - ___ reduced the frequency to once a month
   - ___ raised the subscription price to $18

   Which would you prefer? ____

3. Which of the following regular features would you be interested in seeing added to *High Country News*? Please number 1, 2 and 3 the ideas that interest you most; place check marks beside any other ideas that interest you.
   - ___ a column from Washington, D.C.
   - ___ a regional political column
   - ___ a column on natural history
   - ___ a column on outdoor equipment/recreation
   - ___ a regional travel column
   - ___ a regional gardening column
   - ___ a regional calendar of environmental events/outings
   - ___ a more general regional calendar of events
   - ___ regular news of environmental groups in the region
   - ___ a column on rule changes proposed in the *Federal Register*
   - ___ occasional pieces on non-environmental topics (specify) ____
   - ___ regular listings of EISs and major plans proposed for public lands in the region, including comment and hearing dates and deadlines
   - ___ other ____

4. What sort of ads would you like to see in *HCN*?
   - ___ appropriate technology
   - ___ art/crafts
   - ___ books
   - ___ conservation groups
   - ___ educational opportunities
   - ___ entertainment
   - ___ gardening
   - ___ hunting/fishing guides
   - ___ other ____
   - ___ none
   - ___ mail order
   - ___ music
   - ___ organic foods
   - ___ outdoor equipment
   - ___ personals
   - ___ photography/optics
   - ___ restaurants
   - ___ travel

5. Finally, what else do you want to tell us? (This is your chance to suggest specific story ideas, tell us what you like and dislike about the paper, give your ideas on what *High Country News* should become or...it's up to you.)
____
____
____
____
____

Please mail your completed questionnaire to Reader Survey, Box K, Lander, Wyo. 82520.

Thanks!

OPINION

Getting (some of) the lawyers off the dole

As we once told you in a Dear Friends item, we love to read the *Wall Street Journal* here in the office. That paper's coverage ofbusiness and much general interest news is first rate and is almost always good reading.

In addition to the information value of the paper, there is always something amusing on the editorial pages. For sheer fuddy-duddyism, the *WSJ* editorial pages are unsurpassed.

Recently, the *Journal* praised a Reagan administration initiative now before Congress that would prohibit the government from paying attorneys' fees to public interest group lawyers if the group loses a case. As an example of this "dole," the *Journal* mentioned a Sierra Club case brought last February to tighten pollution controls on coal-fired power plants. The club lost the case, but the court ordered the government to pay $90,000 in the club's attorneys' fees because the case had "substantially contributed to the goals of the Clean Air Act." Appalled at this waste of taxpayer resources, the *Journal* urged the lawyers to get off the dole.

The *WSJ*'s pique at the legal profession is somewhat understandable since the paper is used to dealing with the sharks who inhabit the world of business law, rather than the noble hearts who do public interest work. But we'll concede that it does seem a bit ludicrous to pay plaintiffs for losing a case. However, the *Journal*'s editorial notes, without apparent embarrassment, that the Reagan administration proposal does not apply to payments for legal services made to "individuals and businesses attempting to obtain relief from regulation and other burdens" — just to public interest groups.

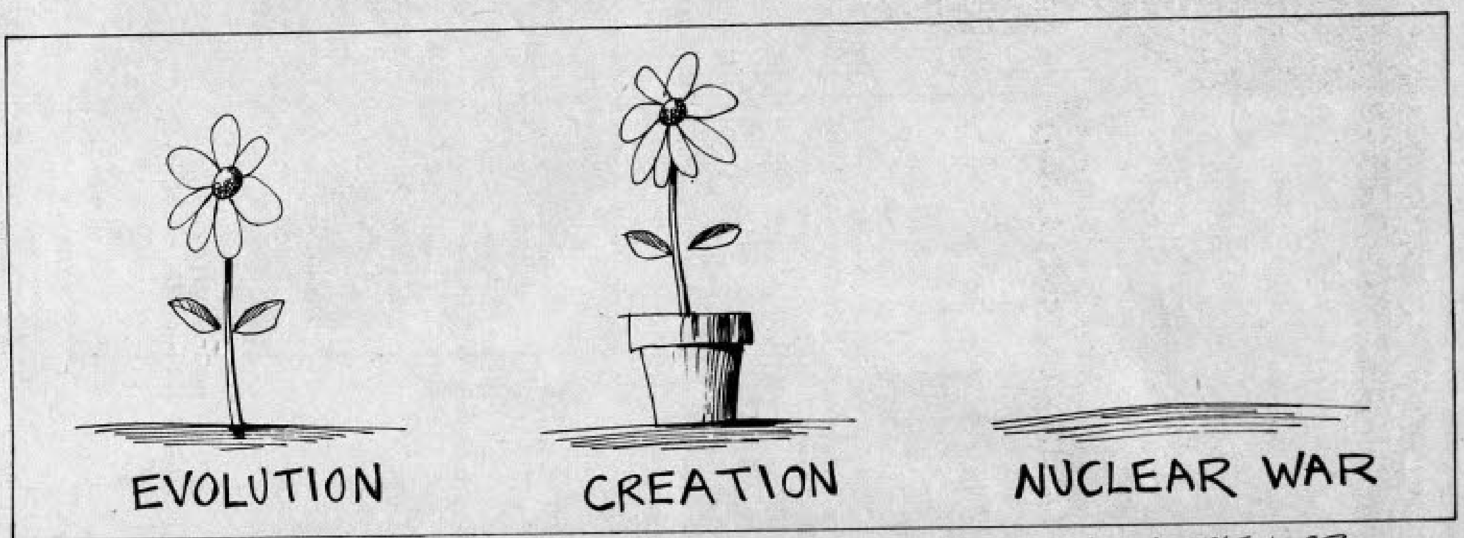
What this means is that access to the courts in environmental, civil rights and other public interest cases, will be limited to those who can afford it. Those who need financial assistance to bring their cases before a judge will be precluded from any government aid.

The *Journal* argued, "People who hate nuclear power plants or superhighways should certainly be entitled to fight them in the legislatures and the courts, but it is hard to see why the taxpayers sould finance their campaign." Fair enough, but it is even harder to see why the taxpayers should finance the legal campaigns of already-wealthy corporations that seek to pour an extra bit of pollution into the air or water, damaging the health and welfare of that very same taxpayer while making even more money for the company.

Payments for lawyers in public interest cases make some considerable sense. It reduces the barriers to airing complex and important issues in the courts. However, if payments are to be eliminated for public interest groups, there is no reason whatever to leave private interest groups on the dole.

— *DSW*

LETTERS



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ENOUGH, ALREADY

Dear *HCN*,

I keep staring at that quote...I can't seem to take my eyes off of it more than a minute or so and they wander back: "But we also realize that we can't very well stop activities that have been going on."

It was made by a biologist in the article on the black-footed ferrets (*HCN*, 7/23/82) and though it is indicative of the times, it still is quite disturbing. Particularly so in light of the comments made in the same issue by Paul Ehrlich about his book, *Extinction*, and Carol Jones in her commentary about the ill-fated sparrows and casual destruction.

I am reminded of an observation made by a Quaker philosopher that as long as man is in motion, he feels that he is accomplishing something...whether it is for better or worse remains to be seen.

We don't bat an eye at putting an eternal end to some of nature's activities that have been proceeding for tens of thousands of years, but to suggest a temporary halt to any of man's activities that are all of a couple of years old? Blasphemy!

Certainly humankind's collective ego has not yet reached the point where we can't stop for one micro-second on the evolutionary clock to allow a species to recover. Jack Turnell's gesture to forego the seismograph line was a generous one. And while there is part of me that says we shouldn't expect one person to foot the bill, there is another part that wonders if there isn't anyone left on this godforsaken planet that cares enough to say my momentary convenience is not worth the price my children will have to pay.

Perhaps it is time to sit back for a moment to examine just where we are going and see if there are not some "activities that have been going on" that we had better "very well stop" before they stop us, spiritually if not eventually physically.

Geoff Tischbein
Ft. Collins, Colorado

WAR AND ENVIRONMENT

Dear *HCN*,

While in Lander recently in the course of my transcontinental walk for peace, I stopped in at the *High County News* office to offer an interview on a subject of concern to your readers: the threat of nuclear war. I was told that *HCN* could not cover such a subject, because it wasn't an "environmental" issue; when I refuted that contention, I was told that you simply didn't have the resources to cover the subject, regardless of its relevance to the environment.

I am not writing now to reiterate to you the environmental nature of the nuclear weapons threat — that is commonly appreciated. Rather, may I direct some words toward the insufficiencies of your editorial policy? A newspaper which gives front-page coverage to the black-footed ferret, by virtue of its endangered status, should have the guts to speak out against nuclear weapons — on behalf of the *thousands* of species these insane devices endanger.

To hear the cry of the coyotes usher in the day, to watch a rare merganser skitter across a wilderness pond — to name two of my personal memories of walking across Wyoming — such is to know the imperative of survival against this hideous threat. We who have chosen life are pitted against monolithic forces of greed and cynicism. We need every voice uplifted in this struggle!

High Country News, get off your seats and join our chorus!

Seeb Hall
Laramie, Wyoming

GULLIBLE

Dear *HCN*,

If we are to be so gullible as to adopt the Colorado Resource Recovery Committee (*HCN*, 8/20/82) opinion that litter is "new money" just waiting for profit seekers to glean from roadside trash, then it seems we should put forth author Ed Abbey's idea of tossing out our empties to create jobs. Especially in states without bottle bills.

We environmentalists could create thousands of jobs and "new money" if we teamed with industry and promoted pollution rather than always trying to clear the air.

Roger H. Brooks
Newport, Oregon

WRC...

(continued from page 7)

Until recently few environmental groups had ever heard of the WRC, a condition likely soon to change. Indeed, it is astonishing that 47 of the most powerful corporations of the New Corporate West could marshall themselves into a single, galvanized force determined to cut the heart out of the nation's single most important piece of environmental legislation without so much as raising an eyebrow from the American public.

Even at the WRC's meeting last June at Snowbird with Gary Hart, Idaho Sen. James McClure (R) and Utah Gov. Scott Matheson filing in and out of the lodge to court favor with the council, no one seemed to know or care what the WRC was doing. Beyond the congressmen graciously accepting WRC campaign contributions or praising their slick and impressive maps, the only significant notice the WRC seems to have received has been from Colorado Senator Gary Hart, who has repeatedly solicited WRC input on energy impact assistance legislation. Hart defended his friendship with the WRC, a relationship that at first may seem odd given the senator's longstanding support of the environmental movement. "I represent all the people," he said.

So far in the 1982 congressional session, WRC and like-minded opponents of the Clean Air Act have had to settle for a bit less than half a loaf. The Senate committee has passed a bill that is generally hailed by environmentalists, while the House of Representatives has found itself locked in a bitter debate that sees less chance of settlement as the Congress moves toward adjournment (*HCN*, Western Roundup, 9/3/82). However, the debate will continue to rage first on the Senate floor, where opponents will undoubtedly attempt amendments, and then next year again in the House.

‡‡‡

K. Patrick Conner is an associate of and Tracy Freedman is a reporter for the Center for Investigative Reporting. This story was funded, in part, by a grant from the Tortuga Foundation. The article was first published in Friends of the Earth's *Not Man Apart*.

The First High Country News Auction

Through the good graces of Stuart and Isabel Mace and their Toklat Gallery and Malachite Small Farm School, *High Country News* is pleased to offer this auction of five outstanding Zapotec Indian rugs from the Teotitlan del Valle pueblo of Oaxaca, Mexico.

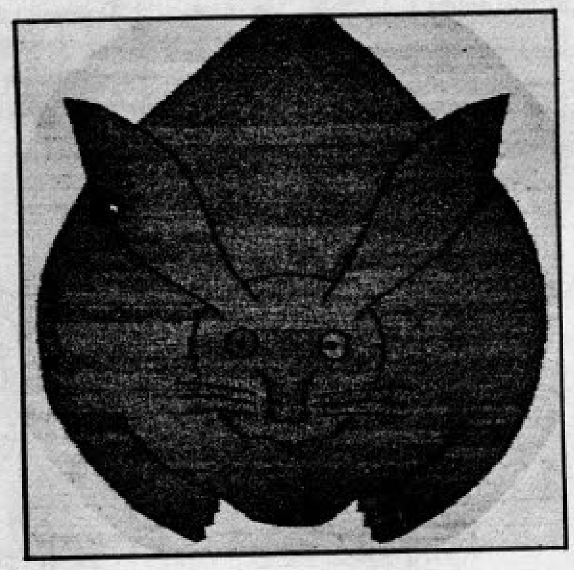
They are exquisite examples of the work of this high mountain village in southern Mexico. There, an entire family participates in the making of these tapestry-type rugs, which are hand-spun, hand-dyed and hand-woven in a traditional manner that goes back 400 years. The Maces, who carry the rugs at their Aspen Toklat Gallery, have first pick from the 800 weavers in the village.

1. To place a bid, complete the form below (or print the required information on a separate sheet of paper) and mail it to *High Country News*, Box K, Lander, Wyo. 82520.
2. The highest bids in the possession of *High Country News* on Wednesday, September 29, will be awarded the rugs.
3. In the event of a tie, the bid with the earliest postmark will get the rug.
4. In the next issue of *High Country News* (September 17), we will publish the high bids received to date (as of September 15) along with the initials of the high bidder.
5. Minimum bids are based on the wholesale value of the rugs, the cost if you were to purchase them directly from a trader in the village. We have arranged with the donor to consider this value the "actual value" of the rugs for tax purposes. On that basis, we have been advised that the amount of the bid over and above the minimum may be tax-deductible to you, the purchaser. (Bid high!)

#1

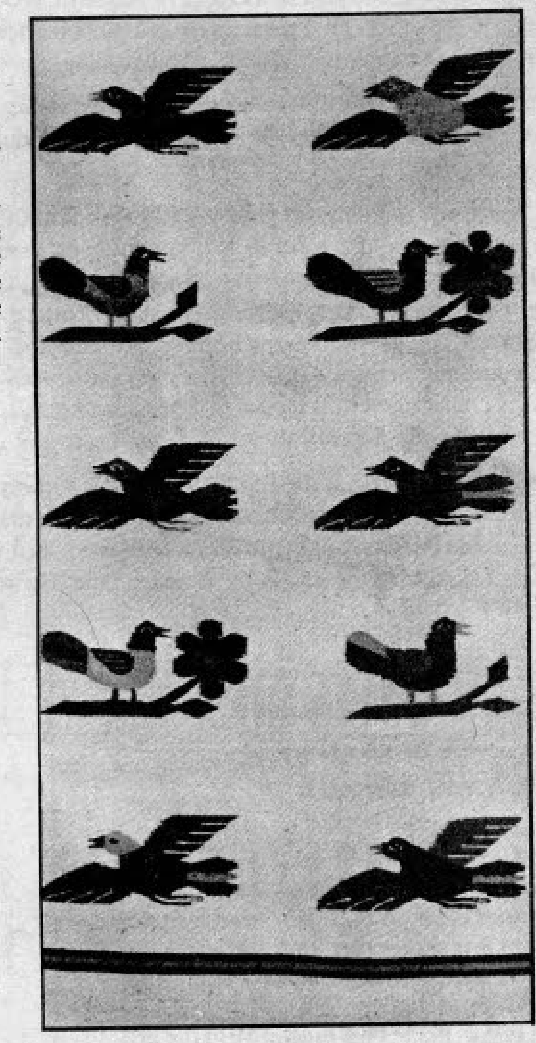
Rug #1: Mimbres Mountain Sheep
by Isaac Vasquez, master craftsman
Size: 38" x 66"
Colors: Brown background, indigo blue border design, red-orange (cocheneal) and white figures.
Dyes: Cocheneal, indigo
Warp: Wool
Weft: Handspun wool
Remarks: This is the finest of the five rugs in this collection. It took over 13 months to weave and is signed by the weaver, one of the finest craftsmen in his village. The central figure is taken from a pot design from the Mimbres Valley culture that flourished from 1200 to 1450 A.D. and is considered to be the highest stage ever reached in pot decoration in the Southwest. In that culture, when a young man reached maturity, he and a special friend would agree to produce for each other during their lifetimes an ola, or ceremonial bowl, which would be buried with them at death. The design would represent some aspect of the person's personality or life or feelings about things. The mountain sheep symbol adapted here for the rug would indicate that this person was very fond of his grandchildren and liked to carry them around.
Minimum bid: $775

#2



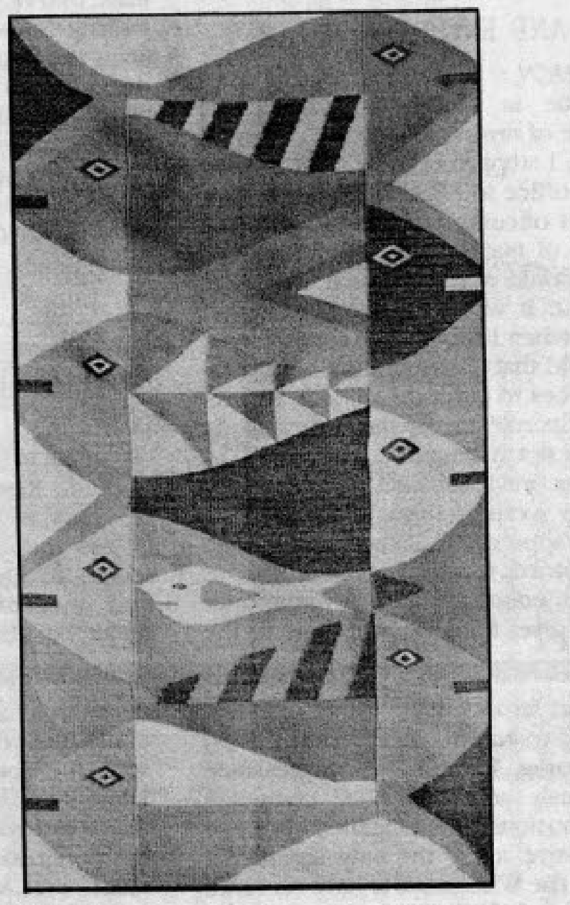
Rug #2: Rabbit
by Lorenzo Gutierrez
Size: 38" x 42"
Colors: Cream field, light beige outline, gray figure with black accents.
Dyes: All natural fleece tones
Warp: Wool
Weft: Handspun wool by spinning wheel
Remarks: The plump rabbit design is based upon an old Japanese family crest. While the subject matter is not typical of the Teotitlan del Valle village, its handling is. It is an excellent example of these people's ability to absorb ideas from other cultures and put their own stamp on them.
Minimum bid: $210
Current high bid: $225 ERS

#3



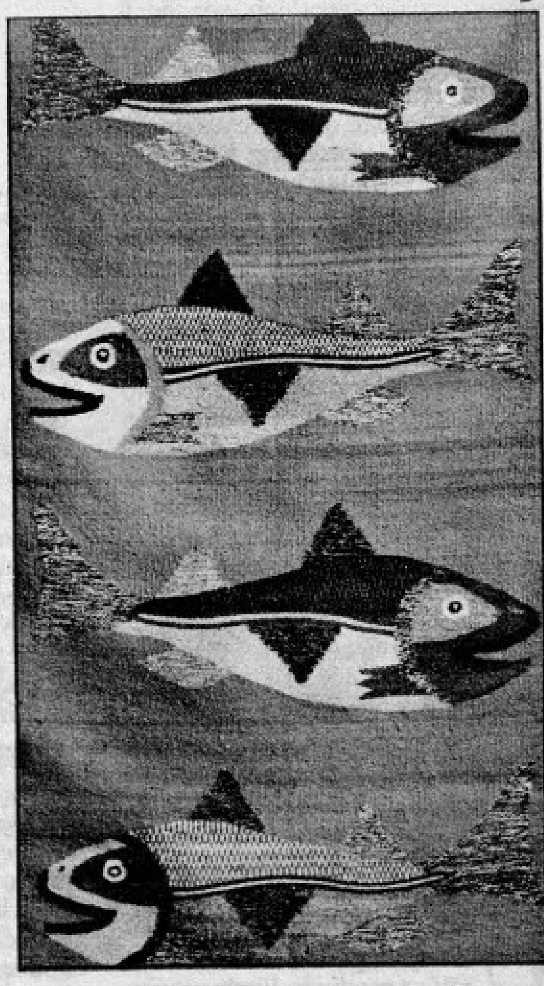
Rug #3: Birds
by Braulio Laso
Size: 30" x 58"
Colors: Cream field, birds in brown, blue, gray, purple and pink.
Dyes: Analine and vegetal
Warp: Wool
Weft: Dropspindle-spun wool
Remarks: This is a very softly woven piece, featuring multiple use of one of the main themes of the village, birds.
Minimum bid: $140
Current high bid: $140 JEB

#4



Rug #4: Modern Fish
by Cornelio Lopez
Size: 32" x 55"
Colors: Beiges, browns and light greens
Dyes: Analine
Warp: Wool
Weft: 100 percent wool, machine spun
Remarks: A beautifully executed modern interpretation of the traditional fish symbol. The design is clever and the colors are quite subtle.
Minimum bid: $240

#5



Rug #5: Laughing Fish
by Braulio Laso
Size: 35" x 61"
Colors: Brown border, tan background, brown and gray figures.
Dyes: Pomegranite pulp
Warp: Wool
Weft: Handspun wool
Remarks: The design is an original composition by the weaver. The tan backgound is created by the pomegranite dye; the rest of the colors are natural wool.
Minimum bid: $285 *Current high bid: $405 LRK*

AUCTION BID

Name ____________________
Address ____________________
City, State, Zip ____________________

$ ____ *Rug #1:* Mimbres Mountain Sheep
$ ____ *Rug #2:* Rabbit
$ ____ *Rug #3:* Birds
$ ____ *Rug #4:* Modern Fish
$ ____ *Rug #5:* Laughing Fish

Signature ____________________

Date ____________________

Mail to High Country News, Box K, Lander, Wyoming 82520.