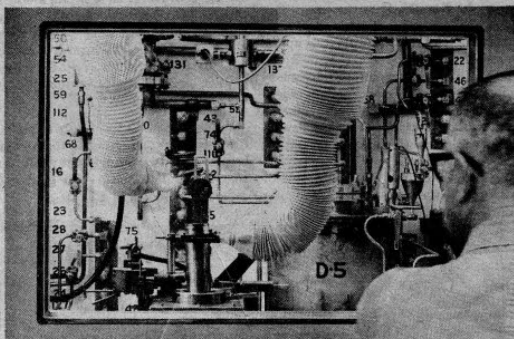


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Everything from tailings heaps to hot Kleenex

Feds eye West for radioactive garbage dump

by Jeanne Koster



REMOTE MANIPULATORS fill capsules with high heat-producing isotopes, cesium and strontium, recovered from reprocessing wastes. The capsules are stored underwater. The operator watches from behind a three foot lead glass viewing window.

The nuclear garbage is piling up: 75,000,000 gallons of intensely radioactive waste from the manufacture of weapons. Another 600,000 gallons at the abandoned commercial reprocessing plant at West Valley, N.Y. Mountains of radioactive tailings from the milling of uranium. Millions of cubic feet of contaminated commercial and defense-related materials, ranging from Kleenex and clothing to entire buildings and even nuclear reactors that must be cut up for disposal once their 30 to 40 year useful life is over.

President Carter added to the nuclear waste crisis by acting to prevent the proliferation of nuclear weapons material. He declared that the United States would not recycle commercial spent fuel for the plutonium and leftover uranium in it. He encouraged foreign countries to forgo reprocessing as well, asking them to ship

their spent fuel to this country for disposal. Now utilities, who had regarded used fuel rods as a valuable commodity, are faced with a growing pile of radioactive white elephants, and they are running out of storage space.

The Carter administration hopes to reverse 30 years of government neglect of the nuclear waste issue. The Department of Energy's fiscal year 1980 budget proposal includes nearly a billion dollars for nuclear waste activities. This spring, Carter is expected to announce a comprehensive nuclear waste policy, based largely on two studies he commissioned — one from a DOE task force headed by Director of Energy Research John Deutch, the other by the Interagency Review Group (IRG), representing 14 government agencies, also chaired by Deutch.

Environmentalists have criticized both reports. They predict, on the basis of the reports and a number of government nuclear waste activities, that the West will bear the main burden of any federal waste disposal policy. The proposed Waste Isolation Pilot Plant (WIPP) near Carlsbad, N.M., is a target of their criticism.

The DOE Task Force Report, referred to as the Deutch Report, was issued in February 1978. It concluded that safe geologic disposal of all nuclear wastes is possible. It recommended that disposal of all commercial waste be federally managed and utility financed. It recommended prompt clean-up

(continued on page 6)

The Environmental Bi-Weekly

High Country News

Vol. 11 No. 8 Lander, Wyo. Friday, April 20, 1979 50¢

Frederick Law Olmsted, 'playground pioneer'

©1979 by Peter Wild

Workmen leaned on their shovels and winked while their new superintendent, apparently a young gentleman, stepped over the runoff from pigsties. Their project was supposed to create a park out of a wasteland of swamps and ledges. But the site was so far north of the city that few believed it would receive much use. Many people looked upon the scheme as a joke, just another opportunity for New York politicians to practice patronage and corruption.

The new boss, in his cloak and cocked hat, was neither as youthful nor as effete as he appeared. By 1857 Frederick Law Olmsted had indeed devoted much of his 35 years to refining his esthetic sensibilities, but he also knew the rough-and-tumble life of a sailor and had parleyed with marauding Indians in Texas. In the next few months he not only engaged politicians in a running battle, he had thousands of men laboring purposefully to shape earth and trees into Central Park.

Drawing on his own thoughts and those of George Perkins Marsh, Carl Schurz and other forward-looking men, he offered the nation a vision of what it might be — a land of humane cities surrounded by the sweeps of national parks and forests. Though the

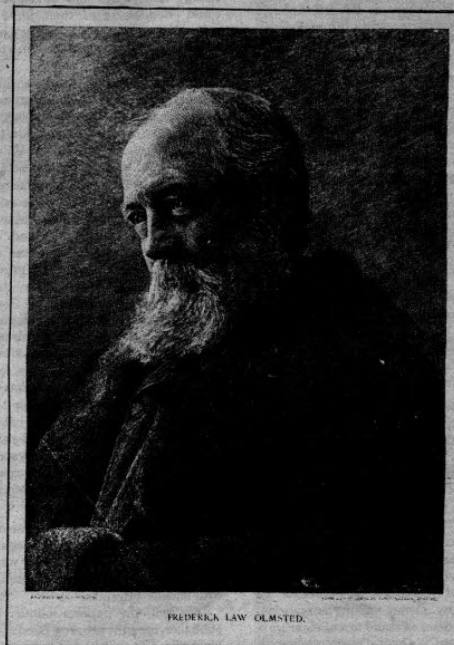
public eventually hailed him as the master of the art he founded — landscape architecture — his vision failed to be implemented on a national scale. It lived, however, to be passed on to Teddy Roosevelt, Gifford Pinchot, Franklin Delano Roosevelt and Lewis Mumford, who struggled to apply it during increasingly critical times.

His successes are remarkable when considered against the odds. He was a man of dreamy genius and rash temper, indecision and strong drive, long periods of work ending in exhaustion. The dualities warred within him throughout his intense career, leading at last to a tragic end.

While George Perkins Marsh strained over his lawbooks in Woodstock, Vt., Olmsted was growing up 100 miles to the south near Hartford, Conn. Like the Marsh family, the Olmsteds boasted a solid New England background, and they possessed sufficient wealth to provide contacts important to the careers of their sons. Yet for all his financial success as a dry goods merchant, Frederick's father, John, displayed indecision in some family matters. Uncertain of how to raise his son, he sent young Fred off to be schooled by a succession of inattentive country parsons.

If the boy's education suffered from this informal approach, he nonetheless enjoyed

(continued on page 4)

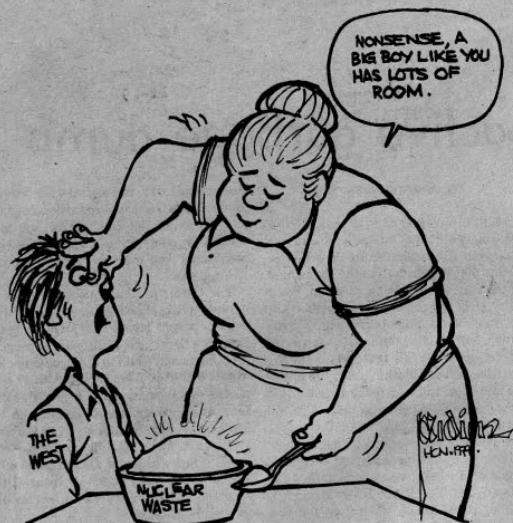


FREDERICK LAW OLMSTED.

Photo courtesy of Yale University Library

FREDERICK LAW OLMSTED: an Emerson with a hoe.

2-High Country News—April 20, 1979



Dear Friends,

"Why do you publish the paper in Lander?" friends occasionally ask.

It is a reasonable question. Our home and workplace is a quiet, 8,000-person town that is neither a center of publishing nor an obvious source of natural resources information. We think it is a good place to publish High Country News, however, for both personal and professional reasons.

We tell some people that we're hiding from angry readers. Lander isn't quite as safely obscure as Edward Abbey's Wolf Hole, Ariz. — but it comes close. The more remote our location, the fewer the hostile fist-pounders we have lined up at our desks.

What the wide open spaces lack in population they make up for in natural riches. Energy and mineral resources, clean air, wildlife, beautiful scenery — just what the entrepreneurs of the nation, both the meticulous and the unscrupulous, would like to exploit.

They need watchdogs to keep them on their toes. We try to oblige by discreetly waiting behind the sagebrush in quiet Lander, Wyo., to make sure they do it right.

We also figure that to put out a paper that is useful for Rocky Mountain people, one must live in the heart of the region — in a place that has retained its distinctive character while faster-paced places have not.

No question about it — it's a predominantly conservative region — but beyond that generalization is amazing diversity. There are conservative long-time residents such as Myra Connell, HCN's "Branching Out" columnist, who are more adamant than the most "radical" environmentalist newcomers when it comes to preserving the land and its creatures. There are other oldtimers who are conservative only about proposed restraints on business. To them, any money-making enterprise, from a postcard stand to a nuclear garbage dump, is a sign of healthy progress. Other oldtimers fight change indis-

criminately, whether it's in the form of a coal-fired power plant or a federal wilderness designation.

The region's liberalizing force, its newcomers, exhibit similar diversity. Many came here out of love of the land and the exhilarating frontier life it provided. They generally view attempts to civilize or make money from the West with skepticism. Other newcomers came for the high-paying jobs that energy and recreation development could offer. Some of them have developed affection for the country here, too, but most don't feel they're in a position to fight to defend it.

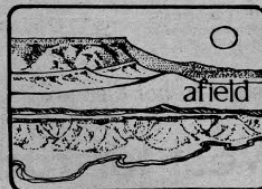
Our neighbors' politics never fail to fascinate us. At a recent Bureau of Land Management meeting about wilderness, one public speaker said that the solitude described in the Wilderness Act could be found in one's closet — why bother with wilderness designations? Another said that newcomers should stop telling native Wyomingites what to do with their public land. Wilderness is like cancer, someone else said — we've got to stop its growth. Another said that it was time states such as Connecticut and New Jersey started providing some wilderness; Wyoming's locked up enough already.

The politics of these issues could never be conveyed to us quite so forcefully if we were living in the urbanized West. There, we'd be most likely talking with a more sophisticated but not quite so sincere lobbyist. Here, we must listen to our neighbors. An understanding of them helps us shape a newspaper that responds to the public's information needs.

Finally, Lander offers us personal benefits — good friends, good country, interesting work — a satisfying way of life that mixes intellectual intensity with outdoor pursuits.

Tom Bell, the paper's founder and publisher, brought us here. Lander was his home. We feel lucky it happened that way.

— the staff



by Hannah Hinchman

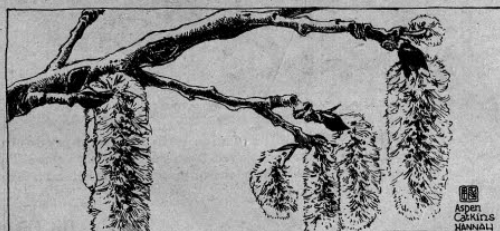
A festive hike with good friends up the canyon of the Middle Popo Agie River: tumult of snowmelt runoff is pierced by dipper caroling and sweet, sincere laughter. The south-facing talus slope vibrates with heat and light. Small yellow flowers are emerging through the soil that is tilled nicely by frost heave.

All day we take note of the acoustics of the canyon, listening to the river's voice

deflected by rock faces or gathered in alcoves. Further up the canyon at the snow line, Townsend's Solitaires float from tree to tree singing. The long, rich warble is like a complete and heartfelt statement; it is followed each time by a long silence. Along the river against the conifers, aspen catkins are fully extended. Each tree appears to be hung with hundreds of young mice.

Dry Lake, our nearby wildfowl migration stop, has coots in abundance. I mistake one for a muskrat as it swims along in a gesture of courting (or aggression) almost submerged. Along come yellow-headed blackbirds winning the award, in my opinion, for the worst bird sound: "Phweet, phweet, bra-a-a-ack," a terrible parody of the redwing's "conquer-eee."

We've had a number of truly warm days. Grass is bright green beside the last snow banks. Robins are singing at dusk again, that sound I associate with glad spring evenings outdoors as a child.



DON JUAN AS EDITOR

Dear HCN,

I've been meaning to write a letter saying you guys do one fine magazine. I have never been a very enthusiastic member of the write-your-congressman environmental movement; but I have been trying for a while now to wake up a little more to the world I live in and the consequences of living in it.

There is a certain sanity to HCN's approach to what appears to be about the same world as the one I live in. It speaks clearly to me without shouting... You might not regard it as a compliment — but I'll bet that if Carlos Castaneda were to talk Don Juan into editing a newspaper, he would work up something that would resemble the High Country News.

George Sibley
Maher, Colo.

HUMAN MULES

Dear HCN,

I read with some interest your article of March 23 concerning mechanical mules. I would think a harness for one or two persons to pull the plow would be far more labor intensive. I believe human mules

were successfully implemented in various parts of the world in previous times. The advantages would be obvious; you wouldn't be limited by 50 feet of cable, you could pull in both directions, and you would have unlimited lateral movement without having to adjust or relocate the "prime mover."

With the large number of serious environmental questions facing the Western states and the country as a whole, I would think that High Country News could better devote nearly 72 inches of column print. "Mechanical Mules" may make interesting fillers, but they remind me of a man on a ladder changing a light bulb by having two friends turn the ladder. I believe such schemes are counter-productive to those who are seriously concerned about conservation, energy, development and allocation of scarce resources.

Michael L. Muenich
Hammond, Ind.

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April 20, 1979 — High Country News-3



Arigetch Peaks would be included in the Gates of the Arctic National Park.

Photo courtesy of the Sierra Club

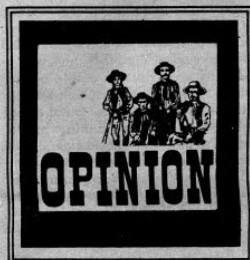
Nothing is too big to ruin, not even vast Alaska

by Tom Lyon

It may seem odd to praise the federal government for anything. But there are some things only a national government is big enough to do. The main thing, which in our time has become almost desperate, is to save enough of wild nature to regenerate the earth after the dark age of industrialism has passed. We owe this to our children and theirs, and to all the other life forms that, over the last few centuries especially, we have bullied so arrogantly.

How much is enough? Nobody knows, but it seems logical to err on the side of abundance. Certainly we should be preserving whole watersheds in representative parts of the globe — a few such ecosystems on each continent, at a minimum. The precious diversity of the Amazon Basin, for example, presently being cut, burned and bulldozed, should be passed intact into the future.

But we can't do much about Amazonia. Maybe we could influence — by boycotts, say — the multinational corporations that are gutting it, but mainly it is a Brazilian matter. Our lot will more than likely be to



stand and watch as the tragedy of ignorance unfolds: forests cut, rivers flooding and silted, wildlife killed, soil turned to brick or dust, native cultures transformed into diseased and begging hangers-on, and so on — the old story of the coming of industrial salvation. In our minds will be the chief modern insight, the sense of helpless fatality. "We have constructed a fate," said Thoreau, "an Atropos, that never turns aside."

But there is something we can do about Alaska, an equally important and mostly unspoiled area. President Carter did his part in December, creating 56 million acres of national monuments and 40 million acres of new national wildlife refuges, representing at least one large watershed (the Noatak) and a number of other ecosystems. If there is still a civilization in a thousand years, the people will look back on that act as probably the greatest single political measure of the industrial era. If there is still a civilization then, it will be because of acts like Carter's.

However, the new preserves are not safe yet, and there is much more that needs firm protection if Alaska is to survive the extraordinary — one might say hysterical — pressures for development that characterize our time.

Thus the fight that is going on right now over Alaska, in the Congress, will tell very clearly what kind of a people we are. Last year, the House overwhelmingly passed a bill preserving close to 100 million acres of wilderness in Alaska. But the Senate's consideration of the companion bill was sabotaged by the energetic lobbying of Sens. Mike Gravel and Ted Stevens of

Alaska. Together with Rep. Don Young of Alaska, they reflect with perfect consistency the vision and resolve of the most single-minded developers.

They're almost funny at times — Young, for example, recently described the substitution of a development-oriented bill for the original wilderness preservation bill in these words: "That's what I call perseverance winning over intelligence."

The fight that is going on right now over Alaska will tell very clearly what kind of a people we are.

(Fairbanks Daily News-Miner, March 1). But they are riding on big money and on the enslavement of a whole nation to big energy. If we defeat them and the interests they represent so faithfully, it will be because we lifted ourselves into a larger and better vision of what civilization is about. Some people look at the Alaska legislation as a federal takeover. The words "land grab" are used. But what the oil companies and the lumber companies plan, with the help of the state of Alaska, is an authentic land grab that could leave little for the future. Do these opponents of federal legislation want Alaska to look like, say, Gary, Ind.?

No, of course not, they answer. "Alaska is too big for that to happen." "There's just too much of it." "It'll always be there."

Now, whenever you hear that some place is too big to ruin, listen closely. You are hearing the voice of purposeful ignorance — the pathetic wishfulness of someone who is trying very hard to shut his mind to history. Nothing is too big to ruin, not even the whole earth.

Tom Lyon is editor of *Western American Literature*, a journal published by the Western Literature Association and Utah State University. He is also a professor at Utah State University.

Guest editorials do not necessarily represent the opinions of the staff of *High Country News*.



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BY PETER WILD

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Cornell University photo

THE CAMPUS OF CORNELL UNIVERSITY, partially designed by Frederick Law Olmsted, is on a ridge overlooking waterfalls and Lake Cayuga

in upstate New York. This open square was transformed with the addition of elms and a variety of flowering trees.

Olmsted ...

(continued from page 1)

freedom to ramble over the wooded hills and rolling pastures of the Connecticut River Valley. His country pleasures were heightened on holidays, when the father loaded the Olmsted family into a carriage and took it on lighthearted, lengthy — and for their day unusual — excursions through New England, New York and Canada. The peaceful countryside with their small-town democracies formed the boy's future ideals.

But when the time came for him to think about a career, the indecision inherited from his father came to the fore. He picked up some engineering skills while working as an apprentice surveyor. His father's connections got him a job as a clerk in a New York importing firm, but tallying figures in ledgers bored him. He sat in on classes at Yale. Finally, seeking the romance of Richard Henry Dana's *Two Years before the Mast*, he broke off his desultory studies and signed on a ship bound for China.

A year later he was back, much sobered from rubbing shoulders with common sailors and ducking the abuses of a cruel captain. Still unable to settle down, he dabbled a bit further at Yale. Then eager to apply scientific techniques to agriculture, he persuaded his anxious father to finance a series of farming adventures.

All his undertakings failed to make money; Fred would continue to borrow from his father over the next two decades. The first half of his life, then, might seem to reflect the dallies of a prosperous merchant's son. In reality the future city planner and champion of national parks was squeezing all the insights he could from each activity. The variety of experience would serve him well when he plunged into new disciplines demanding broad views both of nature and human nature.

At the age of 28, concerned about his lack of direction and a bit nervous over the prolonged dependence on his father's purse, Olmsted launched a series of travel and publishing ventures. Thinking back on an overseas trip, he wrote *Walks and Talks of a American Farmer in England* (1852). The book reveals his developing interest in horticulture and his eye for the relationships between landscape and culture.

In the meantime, the United States was seething over the slavery question. On assignment for the *New York Times*, Olmsted set off on two extended tours that took him through the Southern states and into the wild Texas frontier. In three volumes over the next few years he explained the social and economic conditions underlying

antagonisms between the North and South. "Acclaimed as the most accurate picture of conditions in the South," according to historian Theodora Hubbard, the studies brought the late bloomer a heartening first fame.

It also opened the doors to the literary world of New York City. For a time Olmsted felt he had at last found his profession — writer and publisher. Somewhat gingerly, he again turned to his father for support, and with the fresh enthusiasm that typified each new effort, he bought into the new management of *Putnam's Magazine*. Buoyed by their expected successes — and Olmsted's borrowed money — the partners began a publishing firm, Dix, Edwards and Company. The business enlarged his circle of friendships with editors, journalists, politicians and philanthropists who later helped spread his concerns for the nation's land and rallied to support him when under political attack.

With his business apparently going well, Olmsted took a break from the office routine. In high spirits he boarded a ship for England to solicit manuscripts and publicize the firm's new books. A few months later, after he had taken time out to see the public parks of Florence and Rome, the bad news caught up with him. One of the partners had mismanaged funds; the company was going under. Jobless, deeply in debt, Olmsted wrote to a friend, "I can't tell how ashamed I am of being involved in such a mess."

While he was back in New York mulling over his bleak prospects, a dinner companion happened to mention that the city fathers, weary of political delays, were looking for a man to push through the development of Central Park. Olmsted's interest in the position — and his success at winning it — are not as surprising as they might first seem. Not only did he possess basic surveying skills from his apprentice days; as a former farmer he had organized men and shaped the land. He had studied the major parks of England, France, Italy and Germany. But what also swayed the park commissioners were Olmsted's letters of support from influential friends, including Washington Irving.

Olmsted's mastery in planning and building Central Park despite physical odds and political chicanery made him legendary, a kind of organizational wizard in the eyes of the public. And he remains a hero to many present-day New Yorkers. Now surrounded by skyscrapers, the precious rural remnant has won Olmsted the epithets of "Hero of the Landscape" and "Playground Pioneer." Yet as is often the case with broad-gauge public praise, the labels tend to obscure the context of the accomplishment — the fact that Central Park was but the first concrete result of Olmsted's slowly-evolving vision for America.

By the middle of the 19th century, Europe's cities had a few parks. Frequently

these were laid out in straight lines of trees and paved walks leading to formal plazas with bronze and marble statuary. In the United States there were no large public parks. Rural towns simply grew outward in widening circles of unplanned development. On holidays the wealthy fled to Cape Cod or the White Mountains to forget the fetid, often disease-ridden cities. Common people looking for greenery and fresh air picnicked in cemeteries.

America's bright dream that industrialization would somehow result in peace of mind and prosperity for all represented only one side of a double standard. Americans also believed the opposite, that "God made the country; Man made the town," as the saying goes. Even as people boasted about their expanding cities, they felt that the truly good life was to be found among wooded hills laced by winding brooks, among the cows and chickens of Thomas Jefferson's rural democracy. The romantic view had as its most immediate philosophical authority Emerson's transcendentalism, which held that man can peer into nature and see the reflection of his highest moral and spiritual qualities.

Yet for all the cerebral niceties, the problem remained: What to do with the growing

realized that thousands of people would converge each day on his charming 843 acres of transplanted New England. To accommodate them he laid out an extensive underground drainage system, rest stops, vistas and pathways that wound through tunnels. And to strike a balance with the future transportation needs of the city he allowed roads to cut across his park — roads screened by foliage or sunken below the general level of the land.

America's first park maker might have spent the rest of his life refining his unique urban creation. But the Confederate fusillade against Fort Sumter launched him into a series of endeavors that widened his intellectual horizons and eventually brought him national influence and fame.

To support the Union Army, Eastern philanthropists formed the United States Sanitary Commission, forerunner of today's Red Cross. Though reluctant to leave his park, patriotism moved Olmsted to accept the commissioners' urgent invitation to direct their activities. For the next two years the nation's first landscape architect drove himself to bring order out of medical chaos. He directed a civilian corps of doctors and nurses, supervised delivery of tons of medical supplies and organized the country's first fleet of hospital ships. Again combining high ideals with practical skills, he brought relief to thousands of soldiers — both Union and Confederate.

TOUGH CHARACTER

Short-tempered, plagued by insomnia and a variety of other real and imagined ills, Olmsted could be annoying in his penchant to have things his own way. By middle age, he also had developed a tough character of heroic proportions. It often bewildered his admirers. One commissioner lamented to his diary that Olmsted works with "feverish intensity till four in the morning, sleeps on a sofa in his clothes, and breakfasts on strong coffee and pickles!!!" He shouldn't have been surprised at such frantic commitment. A few years earlier, convalescing from a serious carriage accident that left him permanently lame, Olmsted had insisted he be carried around on a stretcher to direct the laborers at Central Park.

He was a man of fierce public loyalties. Before the war broke out, he bought a brass cannon for Kansas abolitionists to help them fend off proslavery marauders. Throughout his life he supported various social and environmental reforms.

His personal loyalties were equally intense. When he finally achieved financial success, he took care to pass on architectural business to Calvert Vaux, his partner in Central Park days, who had fallen on hard times.

And he knew his own mind. Ambitious as he might have been in professional matters, he had no desire for public acclaim in other areas. When a liberal splinter group



cities? To Olmsted, the answer seemed simple: bring God's country back into man's towns. Thus, his Central Park project was an innovative venture in city planning but one having philosophical roots in the culture.

From the quagmire of pigsties and slaughterhouses that preceded Central Park, Olmsted wanted to "make improvements by design which nature might by chance." And his purpose, inspired by the romanticism of the time, was as much moral as esthetic. In fact to him the two were the same: the natural tranquility of his park would help make society good. Reflecting on his underlying social concerns, a writer for *Newsweek* has dubbed Olmsted "Emerson with a hoe."

He put his army of laborers to work moving tons of dirt into "natural" hills and lakes and pastures and planting 17,000 trees to create the scenes that pleased him as a boy hunting rabbits in Connecticut. But he also was a practical man, who

nominated him for vice-president, he hid from the reporters knocking on his door, wanting only to be left to his work.

His intense drive broke his health while he served on the Sanitary Commission. To compound his troubles, the modest pay failed to keep pace with his debts. Again a well-connected friend suggested an alternative. The Mariposa Estate in the foothills of California's Sierras needed a man to oversee its ranching and gold mining enterprises. Again Olmsted searched his conscience, but by this time the Commission was on a firm footing and running smoothly. In the middle of the Civil War, Olmsted struck out for the West.

Originally carved out of the wilderness by the explorer General John C. Fremont, the estate was a vast feudal domain, its raw company towns isolated among thousands of acres. By the time the Easterner arrived, the ranch had been so badly abused — its riches of grass, timber and gold skimmed off — that even Olmsted couldn't save it. The two years of roaming over Mariposa, though, turned out to be the happiest of his life, and they proved to be a valuable interlude for Olmsted and the nation. For one thing, his salary allowed him, finally, to pay off his nagging debts. For another, the developing West offered him new perspectives on man's relationships with the land, for he saw not only rampant destruction but possibilities for stewardship. He studied the company's helter-skelter frontier towns and suggested they be rebuilt with the employees' health and welfare in mind — a radical proposal dismissed out-of-hand by the board of directors back East. But a seed had been planted in the foreman's mind that would flourish in a different situation.

During his stay, California was enjoying one of its periodic booms. Furthermore, it had acquired the sophistication — and wealth — that allowed enlightened citizens to worry about growth. Occasionally staying in San Francisco where his firm did its banking, Olmsted hobnobbed with the state's elite. They recruited him for various projects, designs for San Francisco's Golden Gate Park and plans for the new campuses of Stanford University and the University of California at Berkeley.

Most entrepreneurs wanted to grace their California schemes with lush New England landscapes. To the contrary, Olmsted urged what few had thought of before. Anticipating the concepts of Frank Lloyd Wright, he planned buildings that fit in with the natural surroundings and took advantage of the Mediterranean weather. And he suggested landscaping with plants that would thrive in the hot climate without making demands on the limited water supply.

More significant for the future of conservation, he saw the havoc of hasty mining and timber development. He wrote his family: "All the big trees have been wasted — and still are being wasted, though I am checking it." On days off he nosed his horse up into the unspoiled Yosemite Valley in the Sierras. With the practical concern he demonstrated for the wild things he loved, he lobbied with influential friends until the federal government ceded the valley to the state of California, thus creating the germ of the national park system.

Envisioning a "wild park" for posterity, Olmsted served as president of the commission governing the new reserve. "The first point to be kept in mind," he reported to the California Legislature, "is the preservation and maintenance as exactly as possible of the natural scenery: the restriction of all artificial constructions which would distort the dignity of the scenery." Though the country would violate his ideals in Yosemite and future preserves, Olmsted helped set the stage for John Muir's strenuous campaigns to protect the Sierras. His views served as a basis for the nationwide effort of some 50 years later to create the national park system. It was in

fact Olmsted's son, an activist following in his father's footsteps, who in 1916 wrote portions of the bill creating the National Park Service.

After the Civil War the United States began a marked shift from a rural to an urban society. When Olmsted returned to New York City in 1865, he found himself beset by people seeking his advice on the construction projects funded by the country's new industrial wealth. For the next 30 years his architectural business prospered as he dashed back and forth across the country in a near monomaniacal effort to meet the demand.

Yet always a New England country boy at heart, he was troubled by the rapid growth. He feared that the newly industrialized nation was abusing the natural heritage that he considered essential to society's health. Looking beyond the practical affairs of his own business, he continued to pioneer not only the concept of preserving wilderness but of returning developed land back to its original wild state.

He became a prime mover in persuading the New York Legislature to set aside hundreds of thousands of acres in the Adirondack Mountains — the first large state preserve of its kind in the East. Saddened by the clasp of commercial exploitation around Niagara Falls, he lobbied until the United States and Canada agreed to tear down the eyesores and turn Niagara into an international park. Soon asked to draw up a plan to restore the area, Olmsted didn't mince words about the sanctity of the preserve.

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the National Zoo in Washington, D.C., worked on the design of the Chicago World's Fair and laid out the grounds of the nation's Capitol.

The basic idea behind these projects may be seen today in Riverside, Ill. Olmsted's plan for the Chicago suburb broke with the traditional grid-like pattern of most cities. Instead it is graced with curved roads following the contours of the land, open spaces, clusters of trees, mandated setbacks for homes and a central meadow — all innovations for his day. So great became the fame of such work that practically all the major cities of his time, including Boston, Montreal, St. Louis, Detroit and Chicago, bear his rural signature.

"He paints with lakes and wooded slopes, with lawns and banks and forest-covered hills," lauded one of his contemporaries. However, for all the accolades of his day and for all his straining efforts, he could not counter the population growth that later demolished many of his exquisite plans. He could not turn aside the nation's preference for immediate gain through unplanned growth.

Yet, depressed as he became in later years, the failure was not in the scope of his vision but in the country's ability to fulfill it. Broken in mind and body, Olmsted died at the age of 81 in an asylum he had helped design years before. ★

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Peaceful countrysides with their small-town democracies formed the boy's future ideals.

ills of California's Sierras needed a man to oversee its ranching and gold mining enterprises. Again Olmsted searched his conscience, but by this time the Commission was on a firm footing and running smoothly. In the middle of the Civil War, Olmsted struck out for the West.

Originally carved out of the wilderness by the explorer General John C. Fremont, the estate was a vast feudal domain, its raw company towns isolated among thousands of acres. By the time the Easterner arrived, the ranch had been so badly abused — its riches of grass, timber and gold skimmed off — that even Olmsted couldn't save it. The two years of roaming over Mariposa, though, turned out to be the happiest of his life, and they proved to be a valuable interlude for Olmsted and the nation. For one thing, his salary allowed him, finally, to pay off his nagging debts. For another, the developing West offered him new perspectives on man's relationships with the land, for he saw not only rampant destruction but possibilities for stewardship. He studied the company's helter-skelter frontier towns and suggested they be rebuilt with the employees' health and welfare in mind — a radical proposal dismissed out-of-hand by the board of directors back East. But a seed had been planted in the foreman's mind that would flourish in a different situation.

During his stay, California was enjoying one of its periodic booms. Furthermore, it had acquired the sophistication — and wealth — that allowed enlightened citizens to worry about growth. Occasionally staying in San Francisco where his firm did its banking, Olmsted hobnobbed with the state's elite. They recruited him for various projects, designs for San Francisco's Golden Gate Park and plans for the new campuses of Stanford University and the University of California at Berkeley.

Most entrepreneurs wanted to grace their California schemes with lush New England landscapes. To the contrary, Olmsted urged what few had thought of before. Anticipating the concepts of Frank Lloyd Wright, he planned buildings that fit in with the natural surroundings and took advantage of the Mediterranean weather. And he suggested landscaping with plants that would thrive in the hot climate without making demands on the limited water supply.

More significant for the future of conservation, he saw the havoc of hasty mining and timber development. He wrote his family: "All the big trees have been wasted — and still are being wasted, though I am checking it." On days off he nosed his horse up into the unspoiled Yosemite Valley in the Sierras. With the practical concern he demonstrated for the wild things he loved, he lobbied with influential friends until the federal government ceded the valley to the state of California, thus creating the germ of the national park system.

Envisioning a "wild park" for posterity, Olmsted served as president of the commission governing the new reserve. "The first point to be kept in mind," he reported to the California Legislature, "is the preservation and maintenance as exactly as possible of the natural scenery: the restriction of all artificial constructions which would distort the dignity of the scenery." Though the country would violate his ideals in Yosemite and future preserves, Olmsted helped set the stage for John Muir's strenuous campaigns to protect the Sierras. His views served as a basis for the nationwide effort of some 50 years later to create the national park system. It was in

fact Olmsted's son, an activist following in his father's footsteps, who in 1916 wrote portions of the bill creating the National Park Service.

After the Civil War the United States began a marked shift from a rural to an urban society. When Olmsted returned to New York City in 1865, he found himself beset by people seeking his advice on the construction projects funded by the country's new industrial wealth. For the next 30 years his architectural business prospered as he dashed back and forth across the country in a near monomaniacal effort to meet the demand.

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CENTRAL PARK was designed by Frederick Law Olmsted, who believed its natural tranquility would help make society better. Many people at the time scoffed at the park, saying it was too far north of New York City to be used much.

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Radioactive garbage...

(continued from page 1)

of abandoned uranium mill tailings and strict management of tailings from operating mills.

It also admitted that DOE will not meet its goal of a functioning full-scale nuclear waste repository by 1985 and strongly recommended that the government relieve utilities of spent fuel when storage becomes overcrowded and put it in Away From Reactor (AFR) storage depots until a permanent repository is established.

Finally, the Deutch Report recommended adjustment in the authorization of the WIPP in New Mexico, presently scheduled to receive transuranium-contaminated wastes from the weapons industry. These are ordinary materials — gloves, other clothing and parts of the weapons plant — that have been contaminated with long-lived radioactive substances, especially plutonium. The report urged that the WIPP also be used as an "intermediate-scale facility" to demonstrate a method of disposing of spent reactor fuel. WIPP should also be used, the report suggested, for experimental placement of military high-level waste.

MORE CAUTIOUS

After receiving the Deutch Report, the president commissioned the Interagency Review Group to examine the report's recommendations. The draft review group report, issued in October 1978, while more detailed and more cautious than the Deutch Report, was basically an expansion and an endorsement of it, with an interesting addition and an important qualification.

The addition was a suggestion for helping DOE hurdle the barriers to nuclear waste disposal being erected by states. Because nuclear defense capability and nuclear power benefit the whole nation, the review group reasoned, states should not refuse to bear the burden of nuclear waste that accompanies such widespread benefit, and the government should not have to go to individual states for siting permission.

But states should have the right of "consultation and concurrence," the review group said. There should be a planning council, composed of selected governors and representatives of Indian tribes, national organizations of state and local governments, and federal agencies. The planning council would select sites in consultation with affected states. To avoid "institutional" complications, repositories should be sited in more than one region, the review group said.

The review group's most important qualification of the Deutch Report was a reminder that there are two distinct options for demonstrating spent fuel disposal. The government could either go for earliest possible demonstration by using salt as the emplacement medium (meaning the WIPP); or it could wait a few years for research on other geological media (shale, granite, basalt, and others) to provide a set of well-researched alternatives for the first demonstration site.

Environmentalists complained that the short, 30-day public comment period for the review group's draft was a government attempt to avoid scrutiny. When the comment period was eventually extended by a few weeks, environmentalists used the time for a clamorous attack on the document. Most probably agreed with National Resources Defense Council spokesman Terry Lash that the report was, however, an improvement over previous federal efforts, chiefly because of its admission that

past nuclear waste policy had been simplistic and that difficult questions remain unanswered.

The review group's recommendations on Away From Reactor storage depots drew fire. Dave Berick of the Environmental Policy Center and David Masselli of Friends of the Earth called the proposals a massive bail-out of industry with an unreliable funding plan. The Energy Policy Information Center labeled it a ploy to keep spent fuel handy for the day when a future president will reverse Carter's ban on reprocessing and the plutonium breeder reactor.

"Consultation and concurrence" with states sounded like a fancy kind of arm-twisting to Peter Montague of the Southwest Research and Information Center in Albuquerque. He cited a legal opinion, presented by government lawyers to DOE Secretary James Schlesinger, which says that states have no right to concur in an area such as nuclear waste that has been preempted by the federal government. Congress, it seems, would have to specifically grant states a right of concurrence in the

They will put nuclear waste in the West "because we are politically impotent and politically naive — also because of geology."

matter. But concurrence is a meaningless right anyhow, concluded Montague, because it means only a right to agree, not to disagree or veto.

Further, Montague treated as lip service the report's suggestion that disposal sites be chosen in various regions. "They will put it here (in the West) because we are politically impotent and politically naive

— also because of geology," he said. He suggested that most wastes should go to the Midwest and Northeast to minimize the risks of transportation.

NO ASSURANCE

Environmentalists were united in their objection to the draft review group report's chief conclusion: "Successful isolation of radioactive wastes from the biosphere appears technically feasible for periods of thousands of years." They pointed to a June 1978 document released by the Environmental Protection Agency in which an ad hoc panel of earth scientists concluded that there can be no present assurance that radioactive waste can be kept from the biosphere for the thousands of years that are required.

The ad hoc panel found flaws in virtually every technical approach the DOE is considering. High level wastes encased in glass will probably leach out in a little over a decade, the panel said, and inadequate testing has been done on wastes encased in ceramics. Wastes evaporated to a granular solid are also leachable, the panel said. In addition, it said waste canisters would be unlikely to resist corrosion and leaking under high temperature and pressure of deep geological disposal. In addition, not a single geological formation now being considered is impervious to water that might leach out wastes and carry them back to the biosphere. Salt in particular, the ad hoc panel said, has several serious drawbacks, including high solubility and high chemical reactivity, that would appear to make it unsuitable for hot nuclear wastes.

The controversy about salt bed disposal is a major focus of environmentalists' criticism of the draft review group report. The Deutch Report proposed the WIPP salt beds for waste experiments that might lead to permanent disposal. Environmentalists read into the draft review group report an implicit endorsement of the WIPP; all the environmentalists agreed on WIPP's unsuitability. Said Montague of the Southwest Research and Information Center, "I don't know a single environmentalist in favor of salt or WIPP."

The final review group report, issued on March 13, is somewhat more conservative



PETER MONTAGUE: "Consultation and concurrence" with states sounds like a fancy kind of arm twisting.

in its technical conclusions than the draft was. It admits that nuclear waste disposal will be more costly and more difficult than earlier estimated and that the feasibility of successful disposal is far from proven. Nevertheless, it sees no reason why a cautiously implemented disposal plan should not succeed.

Two aspects of the final review group report hold particular interest for the West. First is the matter of the WIPP. The final report suggests more strongly than the draft did that there should be further study of other geologic possibilities before commitment of spent fuel to salt.

Nevertheless, Friends of the Earth's David Masselli says that the review group does not contradict the DOE's commitment to the WIPP for spent fuel demonstration. Most of the final report's policy directives touching on such a facility remained unchanged from those of the draft, he explains; "and they fit the WIPP." For example, the final report recommends early transuranium-contaminated waste disposal, as planned at the WIPP, and adds that "co-location" of these wastes and an intermediate-scale facility for spent fuel is a good idea.

Masselli adds that there is \$13.6 million in DOE's proposed 1980 budget designated for spent fuel disposal demonstration. "The WIPP is the only place they can spend that money in 1980," he says. "DOE really, really wants the WIPP."

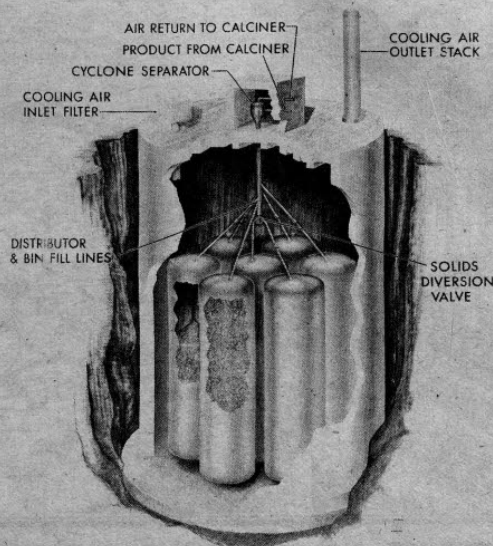
Ron Lipschitz of the Union of Concerned Scientists agrees that DOE will press Carter to barrel ahead with the WIPP, despite any ambiguous quibble from the review group. "DOE has a lot of prestige invested in WIPP," he says. "They see it as the salvation of the nuclear option."

WEST MOST FAVORABLE

A second point of particular interest to Westerners is the review group's admission in the final report that, although the regional approach to siting is desirable, the West does have the most favorable conditions for nuclear waste disposal — suitable geology, dry climate and sparse population.

Natural Resources Defense Council lawyer Terry Lash says that all the advanced waste disposal investigations are taking place in the West. Even if Carter should announce a halt this spring to WIPP spent fuel demonstration, that would still leave plenty of Western nuclear waste disposal activity at the Hanford Reservation in Washington, Idaho National

(continued on page 7)



Idaho National Engineering Lab drawing
HIGH LEVEL liquid wastes are converted to granular calcined solids, which look like styrofoam beads. The beads are stored in bins within vaults, as shown above.

Engineering Laboratory and the Nevada Test Site.

Hanford, 570 square miles of federal land near Richland, Wash., is the nuclear waste capital of the world. It has 50 million gallons of high level wastes in notoriously leaky tanks, plus 5.67 million cubic feet of transuranium-contaminated wastes. The latter are planned to go to the WIPP, not only the 5.67 million cubic feet of current inventory, but also decommissioned reactors and other facilities already past middle age after 35 years of nuclear weapons work. The high level wastes as well could conceivably go to WIPP. Or, both classes of waste may be placed in Hanford's basalt, a tough volcanic rock.

Experimental tunnels are now being dug in the basalt. In 1980 heaters will be put in the tunnels to simulate the temperature accumulations that would occur with spent fuel rods. If thermal tests are promising, spent fuel will be placed in the rock experimentally.

There is also a persistent rumor that Hanford will receive Asian spent fuel for Away From Reactor storage. When queried about this rumor, the DOE public affairs official for Hanford replied, "There is no funding yet, and no United States policy as yet on accepting waste from other countries."

The Idaho National Engineering Laboratory in eastern Idaho receives spent fuel from DOE research reactors and atomic submarines. INEL fishes out leftover uranium, leaving plutonium in the waste. Then the wastes are evaporated to solid granular form and stored in stainless steel vessels encased in above-ground reinforced concrete caissons. DOE is likely to leave the Idaho waste where it is for some time. The present storage is estimated to be good for 500 years, so there is not the urgency to get these wastes in the ground that there is for leak-prone tanks at Hanford and at the Savannah River weapons plant in South Carolina.

A 5000-metric ton capacity storage pool for naval and test reactor spent fuel is under construction to replace INEL's present pool. Both Dave Berick of Environmental Policy Center and Masselli of Friends of the Earth speculate that the new INEL pool might be used for commercial waste storage. "That capacity is awfully tempting," says Masselli.

INEL also has 3.58 million cubic feet of transuranium-contaminated wastes presently destined for the WIPP.

At the Nevada Test Site, 65 miles northwest of Las Vegas, tests are being done in granite, shale and volcanic tuff to find a body of dry, stable rock 1,500 to 2,000 feet deep, which could accommodate commercial spent fuel or high-level wastes. The DOE public affairs office in Las Vegas says that so far "nothing looks negative" in the experiments in Nevada.

A Florida utility is donating half a ton of spent fuel for storage experiments at the test site. The waste will be repackaged in an old "hot bay" formerly used for nuclear rocket engine maintenance. Some is being placed in above-ground storage in concrete silos. Some will be placed in shallow dry wells lined with concrete and steel. The rest will go for a test in a granite tunnel excavated during the 1960s for nuclear detonations. Holes will be drilled into the tunnel floor to receive spent fuel assemblies. If successful, says DOE, this experiment "could become permanent."

FRONT END WASTES

Waste disposal activity at Hanford, INEL, the Nevada Test Site and WIPP are all for the back end of the nuclear fuel cycle. The West will have front end wastes to worry about as well. And it's a big worry. About 85 percent of uranium ore's original radioactivity remains in the wastes, or tail-

ings, from milling. In addition to some unrecovered uranium, considerable thorium remains. Thorium decays into radium, which decays into radon gas, which travels freely in the air before it breaks down into radioactive daughter products on the way to final formation of stable, non-radioactive lead.

This decay process liberates a small amount of gamma radiation and some beta radiation, but mostly it produces the low-level alpha radiation. "Low-level" is not a synonym for "low risk," especially with free-floating radon, which along with its longer-lived daughter products, poses a

continual hazard from internal radiation if inhaled.

The half-life of thorium is 80,000 years and that of radium 1,600 years, so the radon gas just keeps on coming. Uranium mill tailings may exhale radon at up to 500 times the natural background rate. Because of their huge volume and long radioactive life, Nuclear Regulatory Commissioner Victor Gilinsky says that in the long run, tailings make "the dominant contribution to radiation exposure from the nuclear fuel cycle."

The Uranium Mill Tailings Radiation Control Act of 1978 was passed to enable

the Nuclear Regulatory Commission, directly and in cooperation with states, to gain a firmer regulatory grip on the chaotic uranium tailings situation. The law does not mean, however, that the West can stop worrying about tailings.

John Russell of the EPA Office of Radiation Programs, the office charged with setting tailings radiation standards for the Nuclear Regulatory Commission, says the agency is only in the very early stages of assessing the tailings problem.

Here are some of the issues under consideration: Would a radon emission standard of twice background make sense? That is the standard informally suggested by the Nuclear Regulatory Commission, even though many places in the West already have unusually high background radiation.

Won't capping tailings with clay, as is currently proposed, tend to dry them out? Moisture suppresses radon exhalation; therefore drying of tailings under clay might accelerate radon emission above the level originally achieved by burial of the tailings.

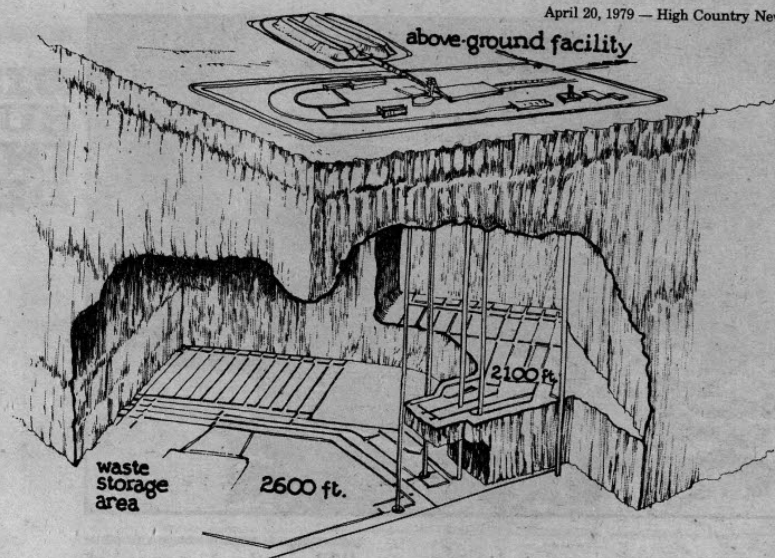
What is to prevent tree roots from breaking through the relatively shallow clay and soil coverings now proposed for tailings burial? Invasion by tree roots might permit biological uptake of radioactivity or provide flow paths for water.

What about the water quality threat if tailings are used to backfill open pit mines, as some have urged?

Finally, just how long, realistically, should the tailings be expected to stay put? "We haven't come up with a number of years to aim at for isolation," says Russell. "Essentially, it should be forever."

"Forever" is the key word in nuclear waste disposal, at least as far as human civilization reckons. Pennsylvania anti-nuclear activists Dr. Chauncey Kepford and Dr. Judith Johnsrud with grim facetiousness once called radioactive waste "the gift that never stops giving."

It seems that with mill tailings from the front end of the fuel cycle and with transuranium-contaminated waste, military high-level waste and spent fuel from the back end, the West is going to be well gifted, even if the president does decide this spring to cool DOE's ambitious plans for the WIPP.



PLANS for the Waste Isolation Pilot Plant call for storing wastes in a salt formation near Carlsbad, N.M.

Drawing by Hannah Hinchman

Radioactive waste: a primer

Nuclear wastes must be isolated from the biosphere because exposure to their radiation is potentially harmful to living things, to the genetic material of cells. Radiation exposure can lead to cancer, birth defects and degeneration of living tissue.

Three types of hazardous radiation are **alpha particles**, two protons and two neutrons; **beta particles**, electrons created in radioactive decay; and **gamma rays**, high-energy electromagnetic waves. Gamma radiation is the most penetrating. Hot gamma-producing wastes require elaborate shielding by thick concrete, lead or deep water. Beta particles require only ordinary steel for shielding. Alpha radiation can be stopped by mere paper or even skin.

Radioactivity is lost over time as unstable atoms break down in their progress toward a stable state. A radioactive element's **half-life** is the time required for a quantity of it to lose half its radioactivity. Strontium 90, for instance, has a half-life of 28 years, whereas plutonium 239 has a half-life of 24,100 years. Iodine 131 has a half-life of 8.1 days; but iodine 129 has a half-life of 17.2 million years.

Four classes of nuclear waste require strict isolation. First is **high-level waste**, from the reprocessing of spent fuel from both commercial reactors and reactors designed to produce weapons

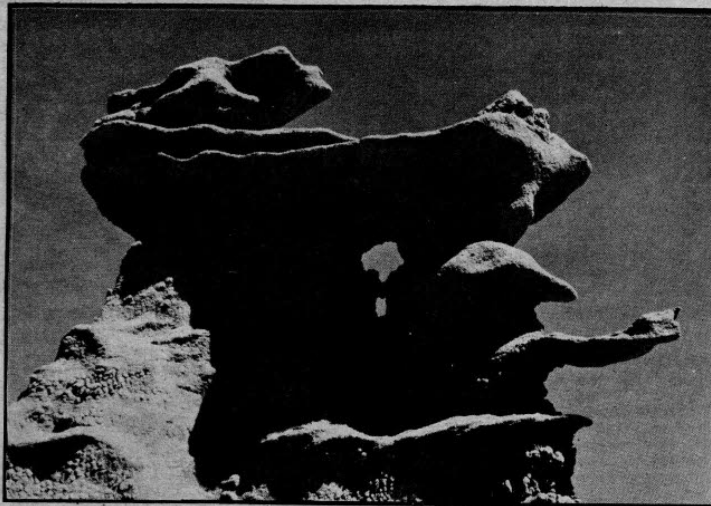
material. Reprocessing extracts plutonium and leftover uranium from used fuel, leaving wastes that emit intense gamma radiation. These wastes contain, among other radioactive elements, strontium 90 and cesium 137, which require 600 and 1,000 years respectively to decay to final stability. High-level wastes are radioactive enough to boil in their liquid state, and they are corrosive. It is proposed that these wastes be evaporated to a granular solid (calcined) or incorporated into glass or ceramic logs (vitrified) for safe disposal.

Unreprocessed **spent fuel** contains all the radioactivity of reprocessed wastes plus plutonium, which, although it emits only weak alpha radiation, is fiendishly toxic and carcinogenic if ingested or inhaled. Plutonium requires half a million years to become harmless.

Transuranium-contaminated wastes consist of ordinary materials that have become polluted with radioactive substances from a nuclear facility. They emit low-intensity radiation but also contain hazardous amounts of plutonium.

Uranium mill tailings emit low-level alpha radiation with some beta and gamma radiation. They are a problem because of their huge volume and because they exhale radioactive radon gas for close to a million years.

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BISTI: SURREALISTIC G IN THE NEW ME DESERT

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"There is a sense of other-worldliness about the Bisti. The sun bears down relentlessly and the wind, which often blows with staggering force, provides the only sound."

Photos by LaDonna Kutz

by Jack Kutz

It took 65 million years to create the geologic wonder known as the Bisti. Yet within the next two years, coal mining may strip all of the area's rock formations and paleontological treasures from the face of the earth.

This spectacular badlands on public land in northwestern New Mexico has been leased for strip mining by Western Coal Co., and unless environmentalists' efforts

succeed, mining will start in the near future.

The Bisti was born as a tropical swamp — a hot, steamy Cretaceous Eden teeming with dinosaurs, fish and crocodiles. During its Tertiary adolescence the first mammals emerged and the great reptiles died.

In its middle ages, the Bisti's mud turned to shale, and its giant trees turned to stone. Slowly, it was covered with layer after geologic layer, and then, just as slowly, the

inexorable forces of wind and rain carved its strata into its present forms.

Its name, which comes from the Navajo language, is pronounced BISS-tie and has many different meanings, all of which add up to a single English word — badlands.

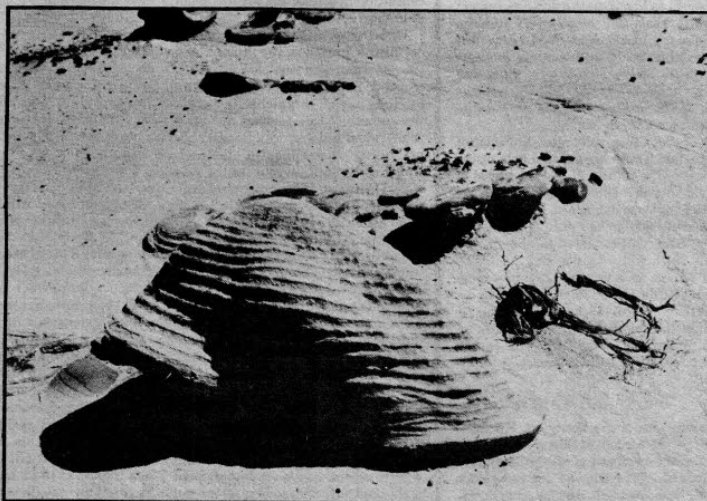
Though the Bisti covers only a few sections on the vast map of the Four Corners area, its boundaries encompass a treasure house of geologic and paleontological wealth. Its shallow canyons are held by

red-tinted hills, and the grey shale below has been sculpted into a fantastic gallery of stone pedestals, tent rocks, giant toadstools and carved boulders.

There is a sense of other-worldliness about the Bisti. The sun bears down relentlessly and the wind, which often blows with staggering force, provides the only sound.

In places, the wind has swept the rock clean, revealing glimpses of fossilized bone.

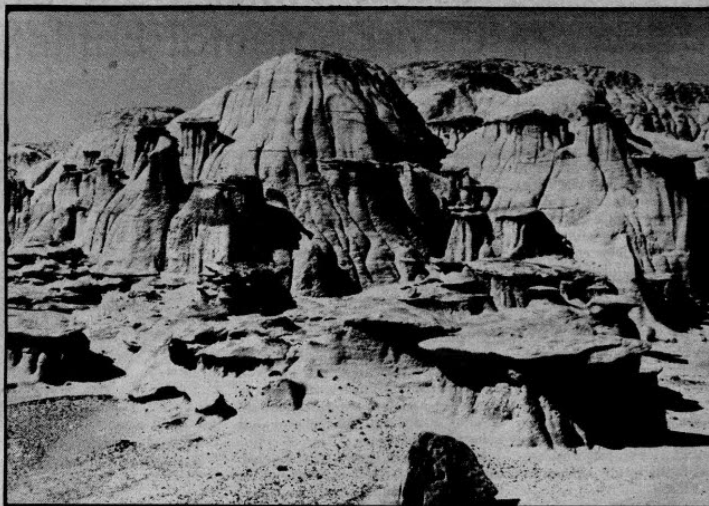
"This is one of four places on earth where the transition between dinosaurs and mammals is found. It is possibly the only place in the nation with petrified stumps the size of redwoods."



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"...the gray shale below
has been sculpted into a
fantastic gallery of stone
pedestals, tent rocks,
giant toadstools and
carved boulders."

"This is one of four places on earth where the transition between dinosaurs and mammals is found," says Keith Rigby, a Bureau of Land Management paleontologist. "It is possibly the only place in the nation with petrified stumps the size of redwoods."

Much of the Bisti's fabulous collection of petrified wood and rare fossils has already been stolen by vandals. Alton James of the San Juan County Historical Society says, "Bones, whole sections of turtle shell and shark skin, and petrified trees 160 feet long have been hauled out by the truckload. They've tried to move other things that just crumbled and were ruined."

Vandalism, however, is the least of Bisti's problems; the coal lease hangs over the badlands like a dark shadow.

The Bisti area contains the largest undeveloped strippable coal reserve in the San Juan Basin. Although the area has been under lease since 1961, the threat of actual strip mining has not been imminent due to the lack of railroad access to the coal beds. Last year, BLM announced the proposed Star Lake-Bisti Coal Project, and the picture immediately changed. Star Lake-Bisti will bring a railroad, a paved highway, power transmission lines, a 2000 megawatt power plant and strip mining to the area.

Western Coal Co., a subsidiary of New Mexico Public Service Co., has been willing to exchange its lease in the Bisti area for federal coal elsewhere. George Beyers, spokesperson for Western, acknowledges that mining the badlands "would not be in the best public interest." But unless a coal lease of like tonnage and comparable

economic value can be exchanged, Western "will have to begin mining by July 1980," he says.

Beyer stresses, however, that Western will start mining at the other end of its lease. "The Bisti will be the last to go."

Legislation to authorize a Bisti lease exchange failed in Congress last year, but New Mexico's congressional delegation has promised to introduce a new bill during this year's session.

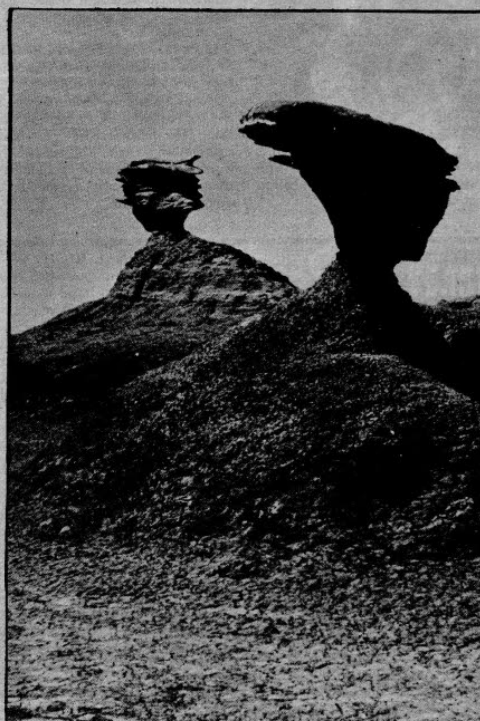
If such an exchange can be arranged, New Mexican environmental groups believe the Wilderness Act offers the best possibility for permanent protection of the Bisti.

After pressure from conservationists, BLM included parts of the area in its review of roadless areas and agreed that the Bisti has "potential for further wilderness consideration." The area has been closed to off-road vehicles, and the Sierra Club has hired personnel out of its Farmington office to patrol the area.

Both the Sierra Club and the New Mexico Wilderness Study Committee feel the Bisti meets the necessary qualifications for Wilderness Act protection: It is unroaded, substantially unimpaired and definitely offers "outstanding opportunities for solitude."

The only criteria the Bisti does not meet is that of size; it is less than 5,000 acres. New Mexican conservationists believe that sufficient public demand can overcome this obstacle, and BLM admits the area's size and unique topography make it a manageable unit.

But the future of the Bisti is far from certain. It could easily be mined away in a flickering instant on the earth's calendar.



10-High Country News — April 20, 1979

Black Hills: next major environmental battlefield?

by Arlen Crane

Rarely have Indians, ranchers and environmentalists — people of all ages and such diverse backgrounds — banded together to seek a solution of a common problem as they did at the Black Hills Alliance Strategy Conference held March 31 and April 1. Representatives from the Sierra Club, Wilderness Society, Friends of the Earth and National Wildlife Federation and others from 14 states gathered in Rapid City, S.D., to oppose energy development in the Black Hills.

The Black Hills, badlands and much of western South Dakota have been under extensive uranium exploration for many years. Tennessee Valley Authority and Union Carbide plan to begin mining operations within one year. Other companies holding claims or actively exploring in the area include Kerr-McGee, Wyoming Minerals, Gulf, Energy Resources Inc., Rio Algom, Homestake, Chevron and Rexcon. Uranium mining is only part of the concern, according to Black Hills Alliance attorney Bruce Ellison.

In early 1977, thousands of claims were

filed for taconite (iron ore) in the Nemo Canyon area of the Black Hills. Ellison says, "If we allow iron mining to come into the hills, we have to consider that this is associated with steel production in this region." Rapid City could become the Pittsburgh of the West, he says.

Western South Dakota also is being considered as a site for nuclear waste disposal. In addition several square miles of land have been found "ideal" for nuclear power plant siting, according to a 1976 Sixth District Council of Local Governments report.

Slurry pipelines for transporting coal from Wyoming to Texas and Arkansas also are planned.

An eight-foot diameter pipeline, known as the West River Aquaduct, has been proposed to transport nearly 200,000 acre-feet of water annually from the Missouri River to Gillette, Wyo., for coal slurry and industrial development.

According to the *Rapid City Journal*, the Black Hills is likely to become one of the "major environmental battlegrounds of the nation."

People who attended the conference are considering legal action, based on the Fort Laramie Treaty of 1868 between the United States government and the Lakota Indian Nation. The National Wildlife Federation is also considering legal action to require a regional environmental impact statement dealing with the total effects of development on the Black Hills.

Winnona LaDuke, research consultant to the International Indian Treaty Council and a member of Women of All Red Nations, urged organized opposition to insure that environmental damage and uranium-induced cancer deaths that occurred in the Southwest don't happen in the Black Hills.

Black Hills historian John Honerkamp, Sr., called the area "precious and delicate... Let's do all we can to protect it."

Meade County rancher Marvin Kammerer, who received a standing ovation, said, "The Indian concept is a beautiful concept...one of use. We are merely stewards of the soil. I have an obligation as an occupier to leave it in as good or better shape when I leave."



PEOPLE FROM 14 STATES met in Rapid City to determine how to create a national focus on threats to the Black Hills.

Photos copyright 1979 by Shelley A. McIntire, Migizi Communications



BRUCE ELLISON (left), Black Hills Alliance attorney, talks with Mark Tilsen, one of the organizers of the conference.



JOHN HONERKAMP, SR., Black Hills historian: "Let's do all we can to protect the Black Hills."



energy news of the Rockies and Great Plains

OIL MAN BACKS RARE II. The president of the American Association of Petroleum Geologists says that the U.S. Forest Service proposals in RARE II (the second Roadless Area Review and Evaluation) are "reasonable" and should be supported by the oil industry. Robert D. Gunn says that the study, which has been severely criticized by environmentalists, gives the industry access to over 85 percent of the potentially valuable lands in national forest system. Some oil organizations, notably the American Petroleum Institute, have criticized the study for not opening up more land. Environmentalists say that the RARE II proposals do not provide enough wilderness.

ETSI WINS FINAL RIGHT-OF-WAY CASE. Energy Transportation Systems, Inc., which hopes to build a coal slurry pipeline from Gillette, Wyo., to White Bluffs, Ark., has won the last of 65 court cases granting the right to cross railroad tracks that are on private land. Railroads have refused ETSI right-of-way across railroad lands. The company could now proceed to build the pipeline using these "windows," but an ETSI spokesman says that the route would have to be more circuitous than crossing the railroad land and would add greatly to the initial cost of the line. Consequently, the company will continue efforts to get Nebraska and Kansas to approve eminent domain for the pipeline. The railroads have consistently opposed the slurry line, fearing that the lines would cut into their profitable coal hauling business. The case, which was decided in the ETSI's favor by U.S. District Court Judge Warren K. Urbom in Nebraska, validates ETSI's right to cross a Union Pacific track in western Nebraska.

HARD HIT. The coal industry is being hit hard by new regulations, a projected decline in the growth rate of electric power, and rate increases for railroads, according

to federal coal policy analyst Jack Campbell. It's being hit so hard, in fact, that Campbell says the industry will not be able to meet President Carter's goal of doubling coal production by 1985. The 1.2 billion ton production that Carter had hoped for will be no bigger than 990 million tons, Campbell says. Prices for coal used to generate electricity are down this year from a peak of \$35 a ton in 1974 to \$22 a ton or less.

AGENCIES AT ODDS OVER EIS. The U.S. Forest Service and the U.S. Geological Survey disagree on whether a full environmental impact statement should be prepared before an exploratory oil well can be drilled in the Bridger-Teton National Forest in Wyoming. The Forest Service recommended a full EIS last year after concluding that the potential of a full oil field development in the Cache Creek area of the forest could have a major environmental impact. USGS says that a full EIS is only required if the well, which is proposed by the National Cooperative Refinery Association, goes into full-scale production. If the impasse continues, a final decision will have to be made by the chief of the Forest Service and the head of the USGS.

SIERRA CLUB TESTS "UNSUITABILITY" RULES. The Sierra Club has filed a petition with the U.S. Office of Surface Mining Reclamation and Enforcement to declare the Alton coal field in southwestern Utah unsuitable for strip mining. The club says that the mining in the coal field could occur as close as three miles from Bryce Canyon National Park. As a result, visitors would have limited views from the south end of the park. The petition will test the rules covering lands unsuitable for mining that were recently established by the surface mining office. Club attorney William Haring says, "We believe this is the first petition to be filed in the West. If a coal field sitting beside a national park can become a strip mine, the concept of 'unsuitability' loses all meaning." A hearing must be held on the petition within 10 months and a decision on unsuitability made within 60 days after the hearing.





The HCN Hot Line

energy news from across the country

NUCLEAR CAUTION. The near-disaster at the Three Mile Island nuclear plant in Harrisburg, Penn., has had repercussions around the world. In West Germany about 35,000 people attended a rally protesting a planned nuclear waste dump. In Sweden, former Prime Minister Trobjörn Falldin called for the shutdown of a reactor modeled after the Pennsylvania plant. The parliament in Denmark will extend its debate before making a decision about building nuclear plants in Denmark. In the United States, Gov. Jerry Brown of California has requested a temporary shutdown of the Rancho Seco nuclear plant, a "near twin" to the plant in Pennsylvania. New York has scrapped plans for a large nuclear plant in Cementon. Six members of the Senate Environment and Public Works Committee have urged President Carter to delay any proposals to accelerate licensing of nuclear facilities.

FIGHTING FOR REDDY. The Environmental Action Foundation has been charged with "unfair competition" and "trademark infringement" by the parent company of Reddy Kilowatt, the well-known cartoon symbol of the utility industry. The foundation has published books posing "Reddy" as purse-snatcher, gambler, panhandler, and other figures ridiculing the industry's policies. "Reddy" has been previously leased only to electric utilities who have portrayed him as a "genial, likeable, well-mannered, and even-tempered" character. The foundation will base its defense upon the First Amendment. The trial begins May 1 in Washington, D.C.

SOLAR SUCCESSES SOUGHT. The Center for Renewable Resources, an outgrowth of last year's Sun Day festivities, has launched a nationwide survey of model solar and energy conservation projects. "Although not always publicized adequately or funded sufficiently, thousands of solar programs are in place today," says Denis Hayes, chairman of the center. "These pioneer efforts demonstrate that solar is ready to be implemented now on a mass scale." The survey will look at agricultural applications, educational programs, financing mechanisms and legislation. For more information, contact the center at 1028 Connecticut Ave. NW, Washington, D.C. 20036.

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—NON-PROFIT—

FORD PROVIDES HIGH ALTITUDE CARS. The Ford Motor Co. has told U.S. Sen. Gary Hart (D-Colo.) that it is now adjusting Ford cars and trucks in high altitude areas to make them pollute less and perform better. Ford tests indicate that at high altitudes, the adjustments reduce emissions of carbon monoxide by 17 percent and hydrocarbon emissions by eight percent. Carbon monoxide is a serious air pollution problem in the Denver area. The high altitude adjustments will be made at no cost to cars still under warranty and at "minor cost" to other cars. Dealers are being urged to adjust new cars and those on the road since 1975. The adjustments include changes in the engine's spark setting, idle mixture and choke setting. Hart also urged General Motors and Chrysler to follow Ford's example.

CLEANING UP THE AIR. Environmental Protection Agency Administrator Douglas Costle has released information showing that the air in the U.S. is getting cleaner, but, "We're still a long way from having healthy air throughout the country." According to EPA, between 1972 and 1977, sulfur dioxide levels dropped 17 percent, carbon monoxide levels were cut 20 percent, particulates (smoke and dust) decreased eight percent, resulting in an estimated 18 million fewer people being exposed to levels violating health standards in 1977, compared with 1972. Ozone levels showed little change, although this stability occurred in a period of increasing vehicle miles. Nitrogen dioxide levels increased. Copies of the report are available free from the Monitoring and Data Analysis Division, Office of Air Quality Planning and Standards, EPA, Research Triangle Park, N.C. 27711.

PASSIVE SOLAR TECHNOLOGY FUNDING. The Department of Energy is soliciting proposals for the design and installation of passive solar energy for commercial buildings. This is the fourth and final round of demonstrations for commercial buildings to be funded under the Solar Heating and Cooling Demonstration Act of 1974. Passive solar energy designs are sought because more projects are necessary to obtain adequate performance and evaluation data, DOE says. Persons interested in applying for funding should ask for PON-4. Call (800) 523-2929 or write to the National Solar Heating and Cooling Information Center, P.O. Box 1607, Rockville, Md. 20850.

VOLCANO POWER. By sinking a well more than a mile underground, the state of Hawaii has begun its first attempt to harness volcano power. The well, on the slope of the Kilauea Volcano on the island of Hawaii, is designed to tap a reservoir of 876-degree underground water. The water will be converted to steam to generate electricity for the island's 3,000 inhabitants. If all goes as planned, more such projects could follow to provide power for large-scale ocean mining — the dream of the industrialists who are watching the first 3.5 megawatt volcano experiment closely.

ARABIAN DAYS. The Department of Energy's Solar Energy Research Institute has requested proposals for building the world's largest solar power system for two villages in Saudi Arabia. The requests were issued to 144 firms in the United States and four firms abroad. The system, which will be designed to deliver a peak output of 350 kilowatts, will provide enough power for 3,500 people. Full operation for the solar plant is planned for 1981. Eventual expansion to deliver 1000 kilowatts is foreseen.

April 20, 1979 — High Country News-11

Two groups vie for Yellowstone

In a move shrouded in mystery, a Cheyenne, Wyo., architect has requested permission to divert Yellowstone River water from Montana to Wyoming to be used for coal plants. Jan H. Paul has filed an application in both Wyoming and Montana for permission to divert 252,000 acre-feet of water for energy industries.

Paul's attorney, Jack R. Gage, Jr., said that the water would be used in Wyoming for coal-fired power plants or coal gasification or liquefaction. However, Gage, who was an unsuccessful candidate for Wyoming's Republican gubernatorial nomination last year, would not divulge the names of the companies that want to make use of the water. He said that more than one company was interested, however.

Gov. Tom Judge (D) of Montana called the application "alarming because the quantity sought is substantial, because it would be used in Wyoming, because the specific uses are not defined, and because it coincides with an action of the Wyoming Legislature approving another application for the use of Little Bighorn water to slurry coal to Texas. There is no question that such proposals will affect water rights and

the future use of water in Montana."

Judge also said that the state Department of Natural Resources considers the application incomplete.

In an effort to combat future industrial applications, three men representing farming and ranching interests applied for rights to four million acre-feet of water annually. The applicants are former state Sen. Terry Murphy, now a lobbyist for the National Farmers Organization; Farmers Union lobbyist Chris Johansen; and Montana Farm Bureau lobbyist Zack Stevens.

The three said that the application was submitted hastily because of the earlier Wyoming application. The group hopes to establish priority over future industrial applications. If their claims are granted, they said they will turn the rights over to state farm groups.

Even though this application was also considered incomplete by the Department of Natural Resources, the department decided to accept the applications, reserving the right to dismiss them later if the agency is not convinced they are bona fide. Had the application been rejected, new industrial applicants would have been able to get priority by claiming water before the three men.

Veto, courts again slow Colstrip plant

Montana Gov. Tom Judge has vetoed legislation that would have exempted Colstrip 3 and 4 generating units from state siting requirements. Judge called the bill, which passed the state legislature earlier this year, "special legislation."

He said in his veto message, "I have not, and will not, lend the authority of this office to extend special privileges to the Montana Power Co. or to anyone else. While true equality may be an impossibility, legislated inequality is intolerable."

Judge reiterated his support for the project, which calls for the construction of two 700 megawatt power plants at a \$1.5 billion estimated cost but said that the exemption was not the answer.

Hours before Judge's veto the Montana Supreme Court ruled that the Board of Natural Resources must further study the environmental issues raised by the Colstrip project.

The court upheld portions of a lower court decision and ordered studies of whether mine-mouth power generation is preferable to generating power where the electricity is demanded; a clearly designed

nated transmission line corridor; and whether the plant should be restricted to using one kind of nearby coal, instead of other types.

Both Montana Power and the Northern Plains Resource Council, which brought the suit, claimed victory. NPRC said that the company will now have to follow the legal procedures. MPC said that on two major issues — air and water quality certification and disallowance of certain cross-examination testimony — the court had ruled in the company's favor. A spokesman said that an unfavorable ruling on these points could have resulted in several more months' delay.

The original hearings on the power plants took 13 months before the Department of Natural Resources issued its conditional approval in June 1976. The matter has been on appeal through the court system since then.

The Colstrip power plants are a joint venture of Montana Power Co., Pacific Power and Light, Puget Sound Power and Light, Portland General Electric and Washington Water Power.



Photo courtesy of EPA

TWO DECISIONS in Montana, a veto and a state supreme court action, have slowed progress again on the Colstrip 3 and 4 power plants. Colstrip 1 and 2 pictured above.

12-High Country News — April 20, 1979

1979 Idaho legislators preoccupied with budget

by Glenn Oakley

As anticipated, the Idaho Legislature was preoccupied with implementing a one percent initiative, a measure passed by voters last November that limits property taxes to one percent of value. Pat Ford, director of the Idaho Conservation League, summed up the session's record on environmental issues by calling it "fairly typical — not very good." The session adjourned March 26.

Environmental forces suffered a significant setback early in the session when Public Utilities Commissioner Robert Lenaghan was rejected in a bid for renomination (see HCN, 3-9-79). Lenaghan was accused of not letting Idaho Power expand rapidly enough.

The legislature later easily approved Gov. John Evans' second choice to the PUC — Perry Swisher, then a night editor of the *Lewiston Morning Tribune*. Asked if he would be a consumer advocate, Swisher said, "There is too much consuming."

By resolution, the legislature directed the Board of Health and Welfare to lower the dissolved oxygen standards below hydroelectric dams from six parts per million to five parts per million (see HCN, 4-6-79). The legislators approved lowering the standard in order to save money for Idaho Power Co. and irrigators at American Falls Dam; however, the resolution applies to all

waters below hydroelectric dams in the state.

Boise auto dealers led a successful fight against a bill to allow counties with more than 100,000 people to institute mandatory vehicle emission inspection and maintenance programs. The bill was directed at Ada County, which includes Boise, a trouble spot for air pollution. The annual attempt by the Idaho Legislature to repeal the Land Use Act was defeated on the house floor 34-36.

A bill to allow private property owners to grant conservation easements to land conservation groups or local governments died in the House Revenue and Taxation Committee after winning senate approval. The bill would have made it easier for such groups as the Nature Conservancy to protect land, as well as giving landowners more land management options.

The legislature sent a message to Congress, urging it to permit construction of a high dam on the Snake River that would flood part of Hells Canyon. Construction of the High Mountain Sheep Dam was ruled out when Congress formed the Hells Canyon National Recreation Area, but the legislators are seeking an exemption for the dam.

The legislature also passed a memorial suggesting that the governor and the legislature should be able to veto congressional decisions to designate wilderness areas,



Photo by Ernie Day

HELLS CANYON. Idaho legislators sent a message to Congress urging construction of the High Mountain Sheep Dam. The dam is prohibited by Congressional legislation that created the Hells Canyon National Recreation Area.

wild rivers or national recreation areas on public land.

Two bills allowing cities and counties to develop energy systems were passed and signed into law, but a third bill allowing local governments to issue revenue bonds

to finance those systems failed. The bills were primarily directed at allowing the expansion of geothermal energy production in southeast Idaho, but they allow for wind, solar and biomass energy systems as well. Electric utilities opposed the bills.

Regs would give tribes more control over mining

by Dede Feldman

New mining regulations proposed by the Bureau of Indian Affairs that give tribes more control over their mineral resources are still not out in their final form after a two-year delay. Ellen Brown, a representative of the Council of Energy Resource Tribes in Washington D.C., calls the delay "disturbing." Tribal officials are worried because intense pressures have been put upon them by energy corporations in the interim.

According to Richard Wilson, a Santee-Sioux with the BIA in Washington, D.C., the delay has been caused because revisions in the regulations — many of them requested by the tribes — have put an extra burden on BIA. Wilson, who had previously predicted that the regs would come out this winter, now says he can't set a date.

Initial impetus for the new regulations was provided by a 1973 Northern Cheyenne Tribe challenge of BIA-approved coal leases and permits on that reservation. The Northern Cheyenne charged that the leases and permits, which covered more than 90 percent of the reservation, didn't protect the land and water nor provide a fair return to the tribe.

The purposes of the new regulations are: to ensure that tribes receive fair market value, to minimize adverse environmental and cultural effects and to allow tribes to enter into contracts under which they're responsible for oversight and management.

Instead of limiting the tribes to traditional leases, with percentage royalty rates, the new rules offer options, including partnerships, operating agreements and profit sharing. In addition, the regulations provide for stricter environmental

safeguards and reclamation standards.

The new regulations also limit mining contracts with Indian mineral owners to 10 years and require the BIA area director to prepare environmental assessments.

In a separate set of regulations governing oil and gas, minimum rental rates are set at \$2 per acre, and royalties are set at 16.66 percent. Minimum royalty rates are not set for coal, however.

Tribes made comments on the proposed regulations at hearings held throughout the West in 1977. In Billings, Mont., the Crow Coal Authority called for inventories and price projections of minerals on tribal land before mining agreements could be approved by the BIA.

"That's impossible for any amount of money," said BIA's Wilson. Wilson said there is an overall BIA mineral survey under way, but because of the millions of acres of Indian land involved, it will not be complete until 1995.

At another hearing in Window Rock, Ariz., Louis Crowder said that because the regulations are not retroactive, they do not cover "unconscionable coal contracts" made between the Navajo Tribe and Utah International in the late 1950s. Those leases are providing the tribe with only 15 to 25 cents per ton royalties and include few environmental safeguards.

He also criticized the BIA for delaying action on tribally negotiated leases and asked that the Interior secretary be required to approve or disapprove a lease within three months.

BIA delays, which sometimes are as long as three years, put the tribes at a competitive disadvantage because of the changing prices for coal and other resources, according to the National Tribal Chairmen's Association.

In written comments submitted to BIA,

the association said BIA should get out of the minerals leasing business altogether. "The NTCA strongly recommends that the BIA fundamentally reappraise its role as trustee for the development of Indian owned resources," a 1977 letter to the BIA stated. "We feel that the bureau should function as advisor, the tribes as actor."

The White Mountain Apache Tribe from the Fort Apache Reservation in Arizona agreed, saying it opposes the new regulations as undue "interference in tribal contractual relations."

Many of these comments stem from what one BIA official called "ignorance of the federal government's trust responsibility."

Despite the criticism, Wilson says that overall, most of the tribal comments have been favorable, with the real flack coming from the companies.

"The industry feels we are contorting ourselves on behalf of the tribes; they say they will go elsewhere, but I'm not too worried about that — if there's a market they will be there, too." Estimates of Indian-controlled reserves range as high as 66 percent of the nation's uranium and 30 percent of the strippable coal.

Wilson added that many tribes were pleased to see that the new regulations provide for consultation with the tribes at several steps in the process.

Although the new regulations will provide more control, Wilson cautions that there is just so much regulations can accomplish.

"It's a question of enforcement," he said.

To improve tribes' planning and enforcement the BIA is now subcontracting with tribes to set up tribal mineral planning offices. These offices are already set up on a few reservations such as Northern Cheyenne and Crow in Montana, Fort

Berthold in North Dakota and Standing Rock in South Dakota. In response to criticism that BIA has been lax in its protection of Indian mineral resources, Wilson said, "There really are two groups in the bureau, one that wants Indians to control their own resources and another that is listening to other voices. In 1974-75, under former Interior Secretary Thomas Kleppe, pro-developers in the Department of Interior were in control, and they made the policies that are in effect now. But, in general, since 1976, there have been none of the neo-colonial policies that the BIA is so often characterized with."

As an example of the new attitude, Wilson points out that in the summer of 1976 the BIA in Albuquerque looked at the Crownpoint uranium leases and found that the environmental assessments didn't address the cumulative impact of mining. In response, the BIA has compiled the San Juan Basin Regional Uranium Study, now out in draft form. The report addresses the impacts of mining in the entire Four Corners area.

"The BIA is no longer going to fall for the argument that yes, the development may be environmentally dangerous, but it gives the tribe lots of money. We're concerned with water and radiation damage."

Wilson has some advice for Indian tribes. He feels that each tribe should get someone who is exclusively committed to protecting tribal resources to plan and manage resource policies.

He says, "There are people in the BIA dedicated to Indians — many are Indians themselves — but there's also federal policy. When it comes to this, I like to quote Chuck Lipton, 'You trust your mother, but you cut the cards.'"



Western Roundup



Forest timber sale planning ignored wildlife concerns

A group of Wyoming environmentalists have won a Pyrrhic victory over the U.S. Forest Service in an appeal of a timber sale. The appeal is forcing a major review of the agency's criteria for future sales. However, timber in the area that was the object of the appeal has already been sold and cut.

In a review of the Red Creek-Cottonwood Creek timber sale in the Bridger-Teton National Forest in Wyoming, Assistant Secretary of Agriculture Rupert Cutler criticized the entire process that led to the sale, saying, "I am deeply disturbed by both the failure to plan for protection of wildlife study values and to sufficiently inform the public and state agencies, specifically the Wyoming Game and Fish Department, concerning a controversial land management decision."

The major focus of the controversy was a joint Forest Service-Game and Fish cooperative elk study begun in 1974. The study was designed to determine the pre-logging and post-logging effects of timbering and timber roads on elk. The control

area included the contested timber sale area, which wasn't to be logged, and adjacent area that was being logged.

According to Cutler's decision, "The Environmental Analysis Report listed as the main objective of the sale the enhancement of big game habitat, yet the report summarily dismisses concerns by staff biologists and Wyoming Game and Fish Department personnel regarding the effects of the sale on the elk-logging study. Nowhere in the EAR was there an evaluation of the environmental consequences of impacting a unique wildlife study program into which both state and federal resources had been invested."

Cutler also said that the sale "did not meet (Forest Service) planning criteria in that the EAR was not filed until some four months after the six-month timber sale program announcing the sale was released. Such after-the-fact treatment of environmental considerations can only raise a presumption in the public mind that the EAR

was a justification statement rather than a method of careful analysis."

The timber was purchased by Louisiana-Pacific Corp., which owns a timber mill in Dubois, Wyo., near the sale site. The company had argued that 65 percent of the household income in Dubois depended on the lumber mill, and the town would collapse if the sale was interfered with. Cutler said, however, that he could find "no clear and urgent reason" why the sale could not have been delayed until the elk study was completed.

Unfortunately, some timbering has already taken place in the sale area, and roads have been constructed. Henry Phibbs, a Jackson, Wyo., attorney instrumental in bringing the matter before Cutler, says, "The cooperative elk study may be damaged beyond repair." Cutler is ordering that certain procedures be changed to make sure the incident is not repeated, but he could see no benefit in reversing the decision to sell the timber.

The Sierra Club, the Wilderness Society and Friends of the Earth filed the appeal.

Audubon attacks 'wasteful' water scheme

On the basis of a new economic analysis of the Central Arizona Project, the National Audubon Society has asked President Carter to cancel the huge water development scheme. CAP is a plan by the Bureau of Reclamation to divert billions of gallons of Colorado River water to southern Arizona, ostensibly for agricultural purposes. It includes four large dams and hundreds of miles of canals through which the water would be pumped uphill 2,000 feet.

The principal points in the economic analysis, done by Dr. Thomas M. Power, chairman of the economics department of the University of Montana, are: (1) Agriculture is being used as a cover for the project, the real purpose of which is to bring water to municipalities and industries in one of the most prosperous, fastest growing areas in the country. (2) CAP is one of a series of "cascading errors" on the part of

the Bureau of Reclamation that create the need for still more projects. CAP would take California irrigators' water, which would have to be replaced from another drainage. As there is not enough water in the Colorado River to support all of CAP's dams, possibly the Bureau would have to consider diverting water south from the Columbia or Yukon drainage. (3) CAP would encourage the waste of water in the Southwest. (4) Additional water is not needed in the Southwest, as the water table could last for hundreds of years if the squandering of the resource were slowed down. (5) CAP is uneconomical because it returns to taxpayers less than 35 cents for each of the more than five billion dollars to be spent on the scheme.

Dr. Elvis Stahr, former president of National Audubon Society, said that his organization is concerned about the project's impacts on wildlife and the Yavapai Indians as well as the waste of water, energy and money. One of the dams would force relocation of the tribe and threaten two of the seven pairs of endangered bald eagles in the Southwest.

Numbers of sportsmen concern states

Idaho has been the first state to stop advertising fishing and hunting, and the chief of the Wyoming Game and Fish Fisheries Division, Joe White, predicts that other Western states will shortly follow. Earlier this year nonresident hunting license fees were doubled by the Wyoming Legislature.

However, according to White, the problems are not all caused by nonresident hunters. With the energy boom in Wyoming, the state's population has rapidly increased, and many of the newcomers' hunting habits are "abominable," White says. He says hunters in four-wheel drive vehicles often trespass, litter and cut fences.

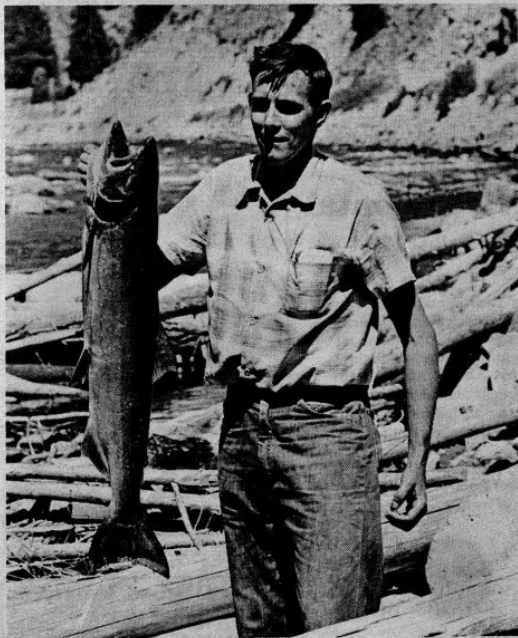


Photo by Ernie Day

IDAHO has stopped advertising its fishing opportunities. Photo taken in the Sawtooth Mountain area of Idaho.

Ute Tribe withdraws CUP opposition

Utah's Ute Indian Tribe is backing off in its opposition to the Central Utah Project. The tribe wired two U.S. House and Senate committees studying the project to announce that it would not appear as scheduled at hearings because good faith negotiations are underway with the state of Utah.

The tribe had threatened to withdraw its support for the \$1 billion-plus project unless certain demands concerning tribal jurisdiction and hunting and fishing rights were recognized by the state (HCN, 3-23-79). The tribe hopes to settle the issues with the state by the end of April.

However, Tribal Chairperson Ruby Black said in the telegram to the Congressional committees, "Notwithstanding the outcome of the negotiations...the Ute tribe will support further funding of the Central Utah Project only upon the condition that storage facilities be constructed for the impoundment of tribal waters for tribal use before the diversion of any additional water." Two units that will directly benefit the tribe have been the last ones to receive attention from CUP planners.

The push for construction of the two units — Uintah and Upalco — was joined by Utah Gov. Scott Matheson. In his testimony before the committees, he said that construction was essential to meet the state's commitments to the tribe.

Eavesdropper

SAVE THE CONDOR CAMPAIGN. An Interior Department task force has proposed a full-scale program to save the endangered California condor; there are believed to be fewer than 30 of the birds left. The program will include greatly expanded research, habitat protection and captive breeding. The National Audubon Society board has endorsed the recommendations, with some minor exceptions. There is some disagreement among other environmental groups about whether a captive breeding program could be successful. The task force says that the first condors to be captured will be either immatures or non-breeding adults, so there won't be as much risk of diminishing the birds' breeding success in the wild.

NO MORE SUGARPLUMS. Yosemite National Park has decided to start identifying resident bears by numbers instead of by names. The decision came after a letter campaign to stop the Park Service from killing a marauding black bear known as "Sugarplum." The letters said, "Save Sugarplum," and one offered to put up the "nice, sweet bear" in a backyard.

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April 20, 1979



HCN Bulletin Board



LOONEY LIMERICKS

by Zane E. Cology

As hot wastes pile up we must hurry
To bury them deep in a hurry.
Out in the West
Would likely be best,
They have too few folks there to worry.

ORGANIZATIONAL WORKSHOPS

The Northern Rockies Action Group, a non-profit management support organization providing organizational, financial and media skills to citizen groups in the Northern Rockies is providing workshops

on several aspects of organizing. The topics are: organizing members for action, May 18-19, Casper, Wyo. \$25 tuition; membership recruiting, July 20-21 in Helena, Mont. and Sept. 21-22 in Boise, Idaho, \$40; negotiating resource policy, Sept. 28-30, Jackson, Wyo., \$75; and financial management, unspecified dates in November, Boise, Idaho, \$40. For further information contact NRAG, 9 Placer St., Helena, Mont. 59601 or phone (406) 442-6615.

SUN DAY RERUN

Organizers of last year's Sun Day are being urged to sponsor a news conference on May 3 to reinforce the growing public awareness of solar energy. A packet is av-

ailable to help organizers prepare for the event. The information includes a press handbook, a list of ideas for media events, a sample press release and a copy of Sun Times. To obtain the packet, write to the Center for Renewable Resources, 1028 Connecticut Ave., N.W., Washington, D.C. 20036.

SOLAR WORKSHOPS

Five workshops in solar energy systems are being offered by Colorado Sunworks of Boulder, Colo. The workshops concern heat loss and solar gain, two workshops on passive solar energy (introduction and advanced design), active solar systems and solar water heaters. The fee is \$40 per class or \$185 for all five. Contact Colorado Sunworks, Box 455, Boulder, Colo. 80306 or phone (303) 443-9199.

NO NUKES DEMONSTRATION

Plans for a major demonstration to be held April 28 at the Rocky Flats Nuclear Weapon Plant west of Denver have been announced by the Rocky Flats Action Group of Colorado. Members of the Wyoming New American Movement, who will participate in the demonstration, invite interested people to attend their weekly meetings every Thursday at 7:30 P.M. in the basement of the Albany County Public Library in Laramie. For more information contact Michael Durgain, executive secretary, Wyoming New American Movement, P.O. Box 338, Laramie, Wyo. 82070.

WETLAND COORDINATOR

The U.S. Fish and Wildlife Service has hired a "wetlands coordinator." Wetlands serve as nursery areas for fish and shellfish, breeding and wintering grounds for waterfowl, and provide food and cover for deer, furbearers, songbirds and other wildlife. The new coordinator, who will provide wetland information to the public and other agencies, is Gilbert Key, U.S. Department of Interior, Fish and Wildlife Service (PD-HP), Washington, D.C. 20240, (202) 343-4034.



THE DAILY MAIL by Myra Connell

At our house the mail woman is eagerly awaited each day. Perhaps she will bring a letter from a long lost friend, perhaps a check, photo-prints sent to a lab for finishing or the latest *High Country News*!

Alas, on many days the mail box holds none of these exciting things, but it is a rare day when we don't get at least one appeal for cash to aid a worthy cause.

Most of these are long on wordiness. Nearly all can be classified into two groups: environmental and social.

At the top of the pile is a bulky envelope from the Whale Protection Fund which says that "it's really important for you to answer the questions and mail the completed survey as soon as possible" and "the second favor I would like to ask of you is to please help us carry out our plans by sending a tax-deductible contribution today."

Well, I don't mind completing the survey sheet, but the cash donation? I'll have to think about it, in connection with the natural gas bill that is six times what it was 10 years ago. The fact that a contribution is tax-deductible is immaterial since my income isn't in the tax-paying brackets.

Next in the pile is a strange-looking envelope that I haven't seen before. A pathetic picture of a baby seal stares, captioned "KISS THE BABY GOODBYE." Greenpeace takes six pages of fine print to urge me to join the campaign to "stop the slaughter and... save the lives of nearly 80,000 seals." The emotional appeal suggests a tax-deductible contribution of \$500 or less.

The next envelope also has a startling picture — a wrecked auto. Bella Abzug, on behalf of the Karen Silkwood Fund, explains why the mysterious death of Karen Silkwood, a nuclear laboratory technician, must be investigated. Please contribute to Truth and Justice. Anything up to \$500 will help.

Well, at least I know who Bella Abzug is. Most of the requests give no reference to a source where I may check the honesty of the organizations making the appeal.

Friends of the Earth explains an environmental program in four closely-typed pages, and offers a life membership for \$1,000. Along the letter margin I see the names of the Advisory Council, which includes Robert Redford and an Abby Rockefeller. I've heard those names somewhere!

The National Leukemia Association

urges me to help fight that dread disease. The Holy Land Christian Mission suggests that \$12 will provide a "love basket" for a hungry refugee near Bethlehem. A picture of a malnourished child breaks my heart.

NAACP Legal Defense Fund needs money. Of course I would like to help fight racial discrimination! Rev. Jesse Jackson's Push for Excellence would like some help, also.

Right to Life wants support in behalf of the unborn, while American Civil Liberties and National Abortion Rights League gang up in favor of right of choice.

Heavens — my Audubon, Powder River Basin Resource Council and Wyoming Outdoor Council dues aren't paid yet!

WILDERNESS ADVENTURE



with an
environmental
twist

Friends of the Earth's Wyoming Representative, Howie Wolke, announces a new idea in wilderness travel: backpacking, mountaineering, and cross country ski trips featuring high quality guiding and instruction in the use of safe, low impact wilderness travel techniques. Also, we offer two intensive field courses focusing on public lands and wilderness, designed for the environmental activist, but valuable for anyone who shares our concern about the management of our public lands.

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April 20, 1979 — High Country News-15

STATE OF WYOMING PUBLIC NOTICE

PURPOSE OF PUBLIC NOTICE

THE PURPOSE OF THIS PUBLIC NOTICE IS TO STATE THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS UNDER THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972 (FWPCA), P.L. 92-500 AND THE WYOMING ENVIRONMENTAL QUALITY ACT (35-1-101 et. seq., WYOMING STATUTES 1967, CUMULATIVE SUPPLEMENT 1973). IT IS THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS TO (1) ONE INDUSTRIAL FACILITY AND (2) ONE OIL TREATER FACILITY; AND TO MODIFY (10) TEN MUNICIPAL DISCHARGE PERMITS WITHIN THE STATE OF WYOMING.

APPLICANT INFORMATION

(1) APPLICANT NAME: LUHR BROTHERS, INC.
MAILING ADDRESS: P.O. BOX 99
GUERNSEY, WYOMING 82214
FACILITY LOCATION: GRAYROCKS DAM
PLATTE COUNTY, WYOMING
APPLICATION NUMBER: Wy-0028240

Luhr Bros, Inc. is a construction company which plans to open a gravel washing operation near the proposed Grayrocks Dam. The washed gravel will be used in the construction of the dam. The water which comes out of the gravel washing equipment will be routed to a settling pond with a discharge to the Laramie River (Class II Stream). It is expected that the operation will continue for less than one year, therefore, an expiration date of May 30, 1980, is proposed.
The proposed permit requires compliance with effluent limitations which are considered to be "best practicable" for gravel washing operations. Periodic self-monitoring of effluent quality is required with submission of results monthly.

(2) APPLICANT NAME: R.G. BERRY AND COMPANY
MAILING ADDRESS: C-O McILANY-ADAMS AND COMPANY, INC.
2305 OXFORD LANE
CASPER, WYOMING 82601
FACILITY LOCATION: FEDERAL No. 2-36 W-19719,
NW¼, NE¼, SECTION 26,
T21N, R75W, CARBON COUNTY,
WYOMING
APPLICATION 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 Foote Creek (Class II Stream) 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 this 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 is December 31, 1982.

(3) PERMIT NAME: TOWN OF CHUGWATER, WYOMING
MAILING ADDRESS: P.O. BOX 243
CHUGWATER, WYOMING 82210
PERMIT NUMBER: Wy-0021431
(4) PERMIT NAME: TOWN OF DUBOIS, WYOMING
MAILING ADDRESS: P.O. BOX 456
DUBOIS, WYOMING 82513
PERMIT NUMBER: Wy-0020834
(5) PERMIT NAME: TOWN OF GLENROCK, WYOMING
MAILING ADDRESS: P.O. BOX 417
209 SOUTH FOURTH STREET
GLENROCK, WYOMING 82637
PERMIT NUMBER: Wy-0020630
(6) PERMIT NAME: TOWN OF GRANGER, WYOMING
MAILING ADDRESS: P.O. BOX 42
GRANGER, WYOMING 82934
PERMIT NUMBER: Wy-0022373
(7) PERMIT NAME: TOWN OF KAYCEE, WYOMING
MAILING ADDRESS: P.O. BOX 265
KAYCEE, WYOMING 82639
PERMIT NUMBER: Wy-0021733
(8) PERMIT NAME: TOWN OF LOVELL, WYOMING
MAILING ADDRESS: 336 NEVADA AVENUE
LOVELL, WYOMING 82431
PERMIT NUMBER: Wy-0020061
(9) PERMIT NAME: TOWN OF MEETEETSE, WYOMING
MAILING ADDRESS: P.O. BOX 98
MEETEETSE, WYOMING 82433
PERMIT NUMBER: Wy-0020044
(10) PERMIT NAME: TOWN OF RANCHESTER, WYOMING
MAILING ADDRESS: P.O. BOX 236
RANCHESTER, WYOMING 82839
PERMIT NUMBER: Wy-0022161
(11) PERMIT NAME: TOWN OF TORRINGTON, WYOMING

MAILING ADDRESS:

P.O. BOX 250
TORRINGTON, WYOMING 82240

PERMIT NUMBER:

Wy-0020231

The wastewater treatment facilities serving the Town of Chugwater, Wyoming consist of a 2 cell, non-aerated stabilization pond system with no disinfection equipment. The effluent discharges to Chugwater Creek (Class II Stream).

The wastewater treatment facilities serving the Town of Dubois consist of a two cell stabilization pond system in which the first cell is aerated. There is no disinfection equipment. The effluent from the second cell is discharged to the Wind River (Class II Stream).

The wastewater treatment facilities serving the Town of Glenrock, Wyoming, consist of a three cell stabilization pond system in which the first two cells are aerated. The effluent from the second cell is chlorinated prior to discharge into the third cell. The effluent from the final cell enters the North Platte River (Class II Stream).

The wastewater treatment facilities serving the Town of Granger, Wyoming, consist of a septic tank with a discharge straight to the Blacks Fork River (Class III Stream).

The wastewater treatment facility serving the Town of Kaycee, Wyoming consists of a single cell non-aerated lagoon. There are no disinfection units. The effluent discharges to the Middle Fork of the Powder River (Class II Stream).

The wastewater treatment facility serving the Town of Meeteetse, Wyoming consists of a septic tank with a discharge straight to the Greybull River (Class II Stream).

The wastewater treatment facilities serving the Town of Lovell, Wyoming, consist of a two cell, non-aerated stabilization pond system. There are no disinfection units and the effluent is discharged to the Shoshone River (Class II Stream).

The wastewater treatment facilities serving the Town of Rancaster, Wyoming, consist of a two cell non-aerated stabilization pond system. There are no disinfection units and the discharge from the second pond enters the Tongue River via an unnamed slough.

The wastewater treatment facility serving the Town of Torrington, Wyoming, consists of a four cell non-aerated stabilization pond system with no disinfection equipment. It is possible to discharge from three separate outfall points; 001 is the outlet from the second cell; 002 is the outlet from the third cell; and 003 is the outlet from the fourth cell. The permit allows a discharge from the second cell only under emergency conditions. All discharges are to the North Platte River (Class II Stream).

The present permits for these facilities require only that the existing facilities be operated at maximum efficiency, however, the Towns have now been offered Federal construction grant funds which means the wastewater treatment facilities must now be upgraded to meet Federal effluent standards and Wyoming's in-stream water quality standards. The proposed permits include limitations on BOD-5, total suspended solids, fecal coliform bacteria, pH and total residual chlorine. A schedule of compliance to meet these limitations must be submitted for each Town by August 1, 1979. Upon receipt and approval, the schedules of compliance will become enforceable parts of the permits.

The proposed effluent limitations for the parameter fecal coliform bacteria are more stringent than necessary to meet Wyoming's in-stream water quality standards, however, these limitations will be technologically easy to achieve by each of the sewage treatment facilities.

Due to the large dilution factors in each of the receiving streams it has been determined that treatment facilities capable of ammonia removal are not necessary at these facilities.

At this time it appears that violation of Wyoming's in-stream standards for dissolved oxygen will not occur provided National Secondary Treatment Standards are achieved. However, this position will continue to be evaluated (and the permits modified if necessary) as more information becomes available on each Town. The proposed permits contain a section which requires each Town to begin planning for expansion of its wastewater treatment facility once 80 percent of the design flow is reached.

Self-monitoring requirements in the proposed permits require the monitoring of all limited parameters on a routine basis with reporting of results quarterly. The proposed permits are scheduled to expire April 30, 1984.

The Towns have been exempted from meeting Federal effluent requirements by July 1, 1977, since, in accordance with Federal requirements, they specifically requested an extension due to the previous unavailability of Federal construction grant funds. In addition, the Towns requested and received less stringent effluent limitations for the parameter total suspended solids as authorized by Federal regulations for stabilization pond systems with a design volume of less than 2.0 MGD.

(12) PERMIT NAME: TOWN OF ROCK RIVER, WYOMING
MAILING ADDRESS: P.O. BOX 5
ROCK RIVER, WYOMING 82083
PERMIT NUMBER: Wy-0020184

The Town of Rock River currently has no sewage treatment facility. Raw sewage is discharged to Phelan Draw (Class IV Stream) which flows approximately two miles before entering Rock Creek (Class II Stream).

The existing permit does not require the Town to take any corrective action until Federal construction grant funds are offered. Those funds have been offered and now, after considerable delay, the project (a non-aerated stabilization pond) is in the design process.

The permit modification is to update all requirements to meet the most recent effluent and in-stream water quality standards. Upon completion of the new treatment facility the Town will be required to meet the following limitations:

1. Secondary treatment standards for BOD-5 and pH. More stringent limitations are not required since the immediate receiving stream is a Class IV Water.
2. Liberal limitations for total suspended solids are authorized under Federal regulations for stabilization pond systems of less than 2.0 MGD (the Town specifically requested these limitations).
3. Stringent year-round limitations on fecal coliform bacteria as required by Wyoming's in-stream water quality standards for discharges to Class IV Waters.
4. A limitation of 5 mg/l for total residual chlorine. In the judgment of the Department, this rather high level of residual chlorine will dissipate in the two miles of open draw before the effluent reaches a fishery (Rock Creek), and, thus, will not cause violation of Wyoming's in-stream water quality standard for chlorine.
5. Because the receiving stream is Class IV there appears to be no need to limit the concentration of ammonia.

The proposed permit contains conditions which require the Town to submit a schedule for compliance on or before August 1, 1979. Upon receipt and approval, the schedule of compliance will become an enforceable part of the discharge permit.

The proposed permit also contains a section which requires the Town to begin planning for expansion of the wastewater treatment facility once 80 percent of the design flow is reached.

The monitoring of all limited parameters is required on a routine basis with reporting of results quarterly. The proposed permit is scheduled to expire April 30, 1984.

The Town of Rock River has been exempted from meeting Federal effluent requirements by July 1, 1977 since, in accordance with Federal regulations, it specifically requested an extension due to the previous unavailability of Federal construction grant funds.

STATE-EPA TENTATIVE DETERMINATIONS

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

PUBLIC COMMENTS

Public comments are invited any time prior to May 21, 1979. Comments may be directed to the Wyoming Department of Environmental Quality, Water Quality Division, Permits Section, Hathaway Building, Cheyenne, Wyoming, 82002, or the U.S. Environmental Protection Agency, Region VIII, Enforcement Division, Permits Administration and Compliance Branch, 1860 Lincoln Street, Denver, Colorado 80295. All comments received prior to May 21, 1979, 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-79-005

16-High Country News — April 20, 1979

Bearhead Swaney wins 1979 conservation award

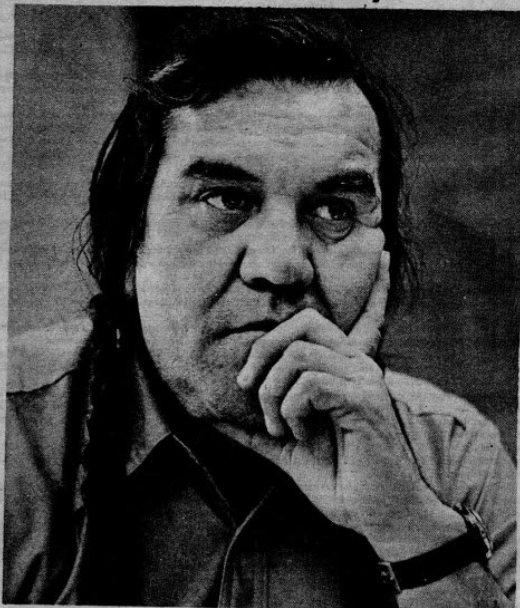


Photo by Harley Hettich

BEARHEAD SWANEY: "Wild rivers are only made once."

Editors' note:

One of the 20 American Motors Conservation Awards for 1979 will go to Tom "Bearhead" Swaney, former tribal chairman of the Confederated Salish and Kootenai tribes. According to American Motors, Swaney "comes highly recommended for his work in protecting the reservation environment."

Five previous award winners endorsed Swaney, as well as many conservation groups.

Swaney told the *Missoulian* that he was happy to receive the award, but that "it is

ironic that at the same time they were considering me for an award because of my involvement in environmental issues, my colleagues on the tribal council were deposing me as tribal chairman for precisely the same activities." He was removed as tribal chairman on Jan 6.

Other explanations for Swaney's removal differ. While a misunderstanding over the killing of a mountain sheep on the reservation apparently spurred the decision, Swaney's personality seemed to have been the biggest factor. The following article offers some insight. He is still a member of the tribal council.

by Richard Eggert
Reprinted from *The Missoulian*

PABLO, Mont. — Tom "Bearhead" Swaney has a way of making deep impressions on people.

"Bearhead? Well, I can tell you this. Without him on the council, people would still be pushing us around, taking our land and destroying what's left of our culture. He has helped give us back our pride." That is the way an Indian woman from Arlee characterizes Swaney.

However, one of his tribal constituents from St. Ignatius had quite a different view of the 47-year-old tribal leader: "Bearhead Swaney; you know what his initials stand for, don't you?"

The odd thing about Swaney is that he seems to inspire both reactions. He is a strong, inspirational leader with a deep, moving voice housed in a dark handsomely broad frame. His striking resemblance to the 19th century Bitterroot Salish Chief Charlo is enhanced by shoulder-length braids and a forehead lock of hair.

When he makes speeches, which is often and with a forceful grace, he has an alarming way of cutting through the trivia and

getting to the meat of a subject and moving his audience along with him.

For instance, during a forum on U.S. Army Corps of Engineers plans to build dams on the Flathead River, a young couple leaned forward spellbound in their chairs as Swaney discussed the relative merits of a wild river and one that is dammed to provide hydroelectric power. "Anybody can build a dam anyplace; all it takes is technology and money, but wild rivers are only made once," Swaney concluded, and as he did, tears were welling in the eyes of the two young people.

On the other hand, some people who have spent time trying to talk with Swaney will tell you he can bore you almost to tears. He has a penchant for off-colored jokes and quips that some people find offensive.

People who have to deal regularly with Swaney find an hour's session with him can be an endurance contest. "I got what I needed, but, boy, did I have to pay for it," one exhausted tribal employee said after an afternoon meeting with Swaney.

Swaney is the father of four children and is a farmer in the Post Creek area.

He was born in 1931 in St. Ignatius but

spent his youth in Dixon. His mother was Mary Catherine McDonald Swaney, a Nez Perce Indian and granddaughter of Angus McDonald, who was the first permanent white settler on the Flathead Reservation. His father was James Daniel Swaney, a Scotch-Irishman.

Swaney grew up in a small cabin on the west side of Dixon with three brothers and two sisters. It was the Depression, and times were hard. "We were dirt poor but didn't know it because everybody around here, both Indian and white, was dirt poor in those days," Swaney recalls.

Swaney says people of the reservation community were aware of who was Indian and who was not in those days, but "it didn't make as much difference in those days because everybody had too many other problems to worry about."

After graduating from Dixon High School, Swaney attended Western Montana College and the University of Montana. In 1961 he took his first job, that of tribal treasurer with the Confederated Tribes.

In 1963 he went to work for the Bureau of Indian Affairs, first at the Crow Agency in eastern Montana and later as an education specialist in California.

Then, in 1967, Swaney says, he decided he "wasn't cut out to be a bureaucrat" and he returned to the Flathead Reservation. There he took a job as reservation ranger supervisor for the Community Action Program.

During the late 60s and early 70s Swaney began moonlighting as a public speaker on Indian rights and problems. He began to develop what at the time seemed like radical views and became widely known as an Indian activist.

Later, while serving on the tribal council, Swaney enhanced his radical image by supporting sovereignty for Indian reservations, speaking out for Indian water rights and endorsing American Indian Movement activities such as a march on the Bureau of Indian Affairs central office in Washington, D.C.

He served on the council on and off until the council appointed him chairman in January 1978.

When Swaney assumed the tribes' highest position he set a number of goals for himself. Among these were: protecting the integrity of tribal lands and resources and acquiring more land for the tribes.

The tribes are continuing to purchase some reservation lands, but, he says, "not enough."

"Land is the only thing nobody has figured out how to make yet and is therefore the rarest and most valuable commodity. We can't buy back too much of our lands," Swaney says.

Swaney and the tribal council have picked bold fights with several powerful economic bodies which have eyes for reservation lands and resources.

Last summer the council voted eight to one not to negotiate with the Northern Tier Pipeline Co. for an easement through the Flathead Reservation.

The easement sought by the company for its primary routing would have taken the crude-oil line through the tribes' Southfork of the Jocko Primitive Area. Swaney, backed by the tribal council, told a company representative, "There isn't enough money to buy a route through the Jocko."

Swaney has also been a leading tribal opponent of dams on the lower Flathead River. He has testified against them at Corps of Engineers-sponsored public meetings and workshops, and the council has

made it clear to the corps it will not tolerate dams built without specific tribal authorization.

The tribal council has scored at least one major economic gain during his tenure as chairman. In August the tribes and the Montana Power Co. agreed to raise the annual rent on Kerr Dam \$950,000 to \$2.6 million. The utility will continue to pay this sum to the tribes until its license expires in 1980.

Swaney believes the tribes should actively seek to take over the dam after 1980. Both the tribes and Montana Power have applied to the Federal Energy Regulatory Commission for the next license to operate the dam. "Our application is not just a bluff card. We are dead serious about taking over Kerr Dam," Swaney says.

Swaney is also serious about an Indian Self Determination Act contract application to take over the Flathead Irrigation Project. "I think we are going to actively pursue taking over the project. It's good business because the power end of the project could produce tribal revenue," he explains.

The Flathead Irrigation Project provides both irrigation water to farmers on the Flathead Reservation and electric power to the reservation area. It is currently under the administration of the Bureau of Indian Affairs.

Although diplomacy has never been one of Swaney's more apparent strong suits, he does feel there has been a lessening of tension between Indians and whites on the reservation.

"I don't think my image as an Indian radical has really hampered me in dealing with non-Indians in the community. I think most whites on the reservation realize that the tribes are willing to get along with anybody as long as we don't have to pay to get along," he explains.

But even though he has been involved in politics for most of the last decade, he would rather be a farmer.

"I consider myself a politician, but I would rather be a rancher. The problem is I am lousy at ranching," he says.

Since buying his 180-acre farm on the banks of Post Creek, Swaney has dabbled in just about every common agricultural practice. His experiments in cattle, pigs, chickens, hay and grain have "never quite made it."

But Swaney is quite good at making strong impressions on people.

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