

High Country News

The Outdoor and Environmental Bi-Weekly

Vol. 4, No. 10 Lander, Wyoming Friday, May 12, 1972



Schematic drawing of the proposed China Meadows Dam and Reservoir in the Wasatch National Forest of Utah. The Bureau of Reclamation project would provide water for irrigation in Wyoming. The controversial reservoir would

Photo by U.S. Bureau of Reclamation flood an important recreational area, about two miles of quality trout stream, and an improved, 13-unit, Forest Service campground.

Storm Brews Over Utah

BY TOM BELL

A national storm is brewing over the High Uinta Mountains of Utah. The stakes are those which seem to dominate most contemporary environmental confrontations. There is the wider public interest represented by thousands of residents of the Wasatch Front in Utah, and there is the narrow private interest of a few families in Wyoming. A wide range of public values would be sacrificed. And a not inconsiderable amount of public largesse would inure to the benefit of one small locality.

Center of the controversy is China Meadows, an obscure opening of a few hundred acres in the Wasatch National Forest of Utah. But the U. S. Forest Service says, "China Meadows in its natural state is one of the choicest areas in the entire North Slope country."

China Meadows would be taken out of existence by a proposed Bureau of Reclamation Dam and Reservoir. The significance of the area is not just that it is another in a long line of beautiful areas dammed and destroyed by an all-powerful Bureau. Rather it is one in the beginning of a series of highly questionable irrigation projects in the West which may never be built.

Like the Lower Teton Dam and Reservoir in Idaho, China Meadows was approved long before

the era of environmental awareness. Unsound economics and tenuous objectives delayed their fruition until now. Both lend themselves to successful attack, not only on environmental but also economic grounds.

The Lower Teton Dam has already been challenged in court, however unsuccessfully until now. China Meadows may also be challenged.

Behind the impetus for both is the traditional "develop for progress" psychology of the Old West. And along with that concept, the equally hallowed tradition of pork barrel politics.

Eastern states and communities have their rivers and harbors projects, big defense spending, and urban renewal. The low-rainfall West has its Bureau of Reclamation projects.

Empire building bureaucrats have found it to their advantage to cater to the whims of the politicians. And the vote-seeking politicians, never ones to miss a trick, long ago discovered that "making the desert bloom" was a most popular device. It made no difference if reclamation projects were white elephants or boon-doggles. Neither, until now, did too many question the raids on the public treasury.

China Meadows may be one of the precedent-setters. But the politicians are not going to go down without a fight. The bureau of Reclamation (Please turn to page 10).

FLASH!

Herman Werner, powerful Wyoming rancher accused last August of hiring a helicopter flying service to kill eagles over his sheep ranch, has been indicted on charges of killing 366 eagles and 7 Canadian geese. The indictment also carries a charge of conspiracy.

Similar charges had already been filed a day earlier in Colorado against Dean Visintiner of Craig. Federal charges were filed against the Colorado rancher, Doyle Vaughan of Buffalo, Wyoming, and Joe Evans of Baggs, Wyoming.

Vaughan is owner of the Buffalo Flying Service which rented the helicopters used in gunning down eagles. Evans is a deputy sheriff and Wyoming brand inspector.

Visintiner is charged in the killings of 48 golden eagles, Evans of 51 eagles, and Vaughan of 62 eagles. Vaughan could be sentenced to a maximum of 31 years in jail and a maximum fine of \$31,000 if all charges can be proved in the Colorado case. He is also charged in the indictments filed in Wyoming.

The maximum penalty for killing a golden eagle is six months in jail and a \$500 fine.

HIGH COUNTRY

By Jane Bell

Gene Marine, a senior editor of RAMPARTS Magazine, wrote a book entitled AMERICA THE RAPED. It should be required reading for engineers, engineering students, those who hire engineers, city and county and state officials, legislators and congressmen, and all those who would save some of the earth from the ravages of what he calls the "engineering mentality."

Marine says fishermen see a river as something to fish in; industrialists see a river as a place to carry away industrial wastes, and city officials view the river as a place to dump sewage. Engineers see it differently.

"They are dedicated, single-minded men," he says. "And when they talk - which is as rarely as they can manage - theirs is the language of fanatics. . . They build bridges and dams and highways and causeways and flood-control projects. They manage things. They commit rape with bulldozers."

As Marine points out, Engineers aren't the only ones with the "engineering mentality." The ranchers in the Bridger Valley, who want China Meadows Dam, see engineering as a way to solve their problems. But their mentality goes no further than the water on their lands. The Bureau of Reclamation engineers are most happy to oblige for theirs is indeed the "engineering mentality."

They see salt in the Colorado River not as a problem to be solved at its source - by not irrigating any more alkaline land in a 90-day growing area. They see it as another engineering problem - to be solved mainly by vast amounts of money.

The "engineering mentality" pervades our whole way of thinking. It is the embodiment of the ethic of conquering nature and managing the landscape.

Of course we give lip service to nature and the wonders of nature. How else would you explain a wise and astute body of men, collectively known as the United States Congress, in their treatment of Rainbow Bridge? On the one hand they say it must be protected; on the other they insist that no funds should be expended to protect it. And it was they who authorized Glen Canyon Dam.

The problems of water, like most environmental problems, devolve upon the here and now for most individuals. The ranchers of the Bridger Valley represent only a microcosm of the whole spectrum. Nobody wants to look at the bigger problems. No one seems to really care about the tomorrow of their children and their children's children.

As a group, the men and women of the Bridger Valley, or those of the Lower Teton Valley in Idaho, are sincere, honorable, hard-working people. They only want to get ahead in the world. In that, they are no different than the trainmen who move the U.P. trains across the valley down below, or any other given segment of society.

But what all segments seem to miss is the intertie and interdependence of one with another. The farmers of Bridger Valley, Wyoming, seem to have no sense of responsibility to a greater system of society. It seems to make no sense to them that what they want is going to cost others - many others.

I recently finished reading A Report to the National Water Commission by the National Academy of Sciences Committee on Technologies and Water. It is entitled Potential Technological Advances and Their Impact on Anticipated Water Requirements, June, 1971.

The National Academy Committee made a number of recommendations. I was struck by Number 4 - Water planning must have a built-in flexibility. It said, "Too often water plans intended to be implemented over a period of years, often several decades, are cast so rigidly that changes cannot be made in response to altered circumstances. The continuing planning process must have sufficient built-in flexibility to accommodate unforeseen events or conditions. These changes may result from new technologies of importance to the water scene, or perhaps changes in the goals of society."

Further on, the Committee discussed probable future needs. One of those needs is projected to be in the development of oil shale in the very area of the Bridger Valley.

The report says, "The impact of this development on water demands will not be widespread, but in the region where oil shale is located, mostly in Colorado, Wyoming and Utah, requirements for water will be severe. In most of the areas where good shale deposits occur, water supplies are very limited. Exceptional water conservation measures will therefore have to be employed in the development of this resource. . . It is considered likely that by the year 2000, shale oil will be produced in substantial quantity in the central Rocky Mountains. The effect on the national water supply picture will be minor, but the impact in the region where the industry is located will be large. The development of new water supplies such as by precipitation augmentation and long distance diversion may have to enter into the picture."

Where does Wyoming's Governor Stanley K. Hathaway, the Congressional delegation, the Bureau of Reclamation, and the farmers of Bridger Valley really feel a China Meadows project fits into such a picture? How can they honestly justify a project which will permanently flood out a beautiful mountain meadow for an irrigation project which cannot ever hope to survive for long before being phased out by the demands of a new technology?

(Continued on page 14.)

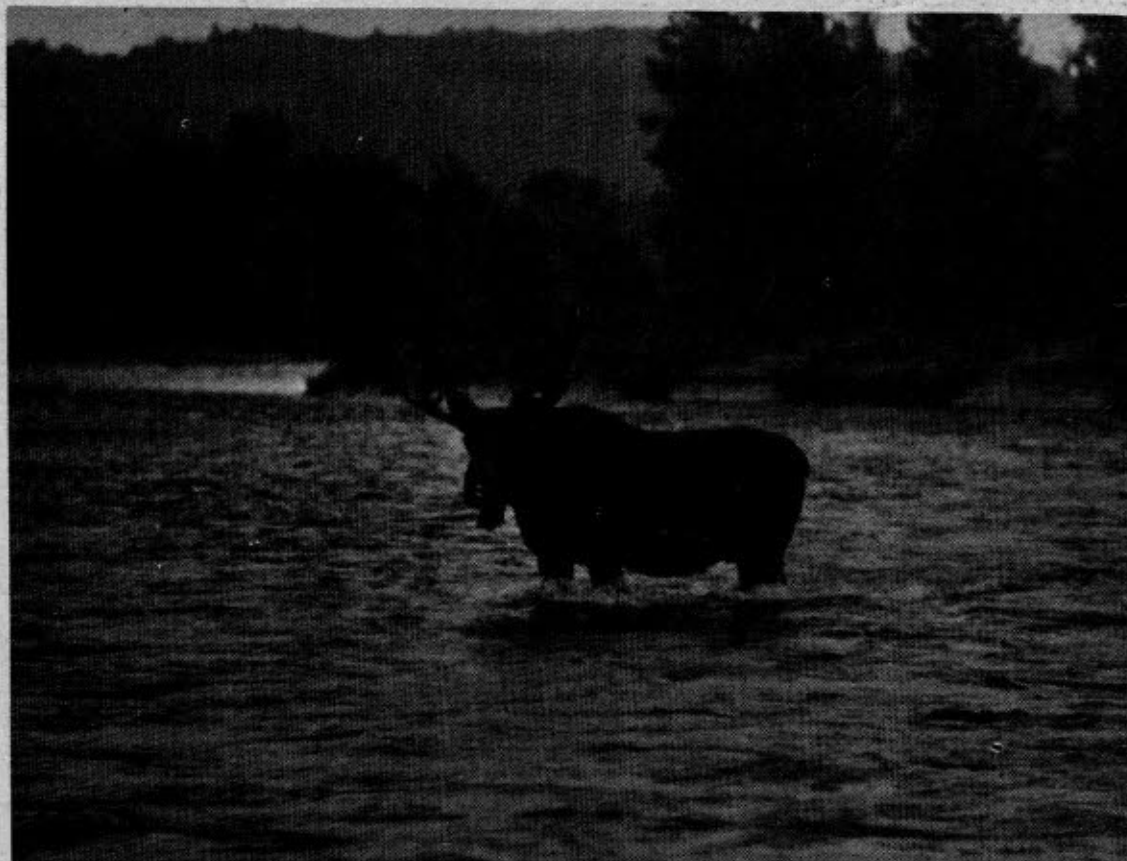


Photo by LeRoy E. Lyon, Jr.

Wild and scenic rivers, like the Snake River in Wyoming, provide unequalled opportunities for people to see wildlife and undeveloped lands. Although, the Snake is not a formally designated wild or scenic river (there are none in Wyoming), it should be a serious candidate.

Letters To The Editor



Editor:

Hope I am not too late to renew my subscription to your wonderful paper. Look forward to reading each and every page. Either I have E.S.P. or you must have read my thoughts. I had been wondering what Lander looked like just a few days before your paper arrived. Lo and behold, there it was before my eyes. What a beautiful setting it is in. I guess the next best thing is to see it in person. And Heaven help me I will by hook or crook.

Your editorials and writings of the big country are worth their weight in gold. I thank God you have the courage to speak up where many are silent. Enjoy the pictures of wildlife very much.

Here, too, we must make way for progress. It is sad to see trees uprooted for housing or what have you. I too am a great nature lover but can't get away from progress.

I only hope Wyoming can keep it's beautiful country. It is far too beautiful to have man destroy it. Some day soon maybe I'll have a chance to visit and enjoy it. Till then I wish you the very best in what you are doing.

Sincerely,
Mrs. Donald Kowalke
Young America, Minn.

Editor:

Enclosed find a check for renewal of our subscription which started as a gift from my sister and her husband, Charles W. Smith, whose fine photographs we enjoy - along with the entire newspaper.

So many of your articles, with a locale name-change are apropos to the problems and/or conditions here in West Virginia.

We are encouraged that your intelligent, level-headed coverage appears to reach so many concerned people. I know several of your articles and pictures reach my fifth-graders!!

Thank you.

Mr. and Mrs. Bert Dressler
Rt. 2 Box 14
Kenna, W. Va.

Editor:

Enclosed is my \$10 for another year of High Country News. This will be the best \$10 that I will spend all year. I only wish I could do more for you. Your paper is doing a wonderful job.

To bad there isn't more sport and environment subscribers to your paper.

I would like to help, so if you would send me an advertising display I will put it up in my store window for everyone to see.

Send 3 copies for I have 3 store windows. Keep up the good work and the best of luck to you and your staff members.

Paul Stagg
Rushville, Ind.



Noise Increasing

The tired mother syndrome may be caused in large part by noise of appliances in the kitchen, according to a University of Wisconsin study reported in Rodale's Health Bulletin (February 20). The study found that noise in the kitchen (the noisiest room in the house) is increasing at the rate of 5 percent a year. Garbage grinders were found to be the loudest appliance, followed in decreasing order by blenders, knife sharpeners, water running full blast from the faucet, electric can openers, and dishwashers. In addition to frazzled nerves, such noise leads to progressive hearing loss.

ENVIRONMENT April, 1971



HIGH COUNTRY NEWS

Published bi-weekly at 140 North Seventh Street, Lander, Wyoming 82520. Tele. 1-307-332-4877. Copyright 1971 by HIGH COUNTRY NEWS, Inc. 2nd class postage paid at Lander, Wyoming 82520.

Material published in HIGH COUNTRY NEWS may be reprinted without permission. Proper credit will be appreciated. Contributions (manuscripts, photos, artwork) will be welcomed with the understanding that the editor cannot be held responsible for loss or damage. Articles will be published at the discretion of the editor.

EDITOR	Thomas A. Bell
OFFICE MANAGER	Mary Margaret Davis
CIRCULATION MANAGER	Marjorie Higley
Subscription rate	\$10.00
Single copy rate	35c
Box K,	Lander, Wyoming 82520



Reprinted from The Idaho Statesman, Boise, April 9, 1972.

The Myth of Need

Some people advocating more massive irrigation projects in Idaho are saying increases in crop production per acre are going to slow down or stop. Thus more irrigated acreage is needed.

That's an interesting theory. But it appears to be entirely false. The best information available to water planners tells an entirely different story - a story of further increases in per acre output.

There is no need for additional irrigated acreage in Idaho or elsewhere in the West to meet national food demands, now or in the foreseeable future.

The Economic Research Council of the Department of Agriculture recognizes as much. In its projections by region for farm output through the year 2020 it assumes no public irrigation projects in the West after 1980.

Consider first of all the fact that the U. S. in 1970 had 430 million acres of cropland. Crops were produced on only 293 million acres of it. Another 49 million acres was used for pasture.

Now the Economic Research Council has projected that 366 million acres will be in crops or in pasture in the year 2020. That projection, however, was based on a population projection which has since been revised downward.

With a more realistic population projection, there should be a revised estimate of something less than 366 million acres for 2020. Even assuming losses in the present supply of 430 million potential acres to subdivisions and highways, there would be sufficient crop land in 2020 without added irrigated acreage.

That's apparently why the ERC considers it reasonable to project no public irrigation projects in the West beyond 1980.

The USDA's projections show continued increases in productivity per acre. So do projections for Idaho prepared by the University of Idaho. Some of the projections through 2020 for per acre production are as follows:

	1966	2020
barley, irrigated	bu. 56.5	100
corn, irrigated	bu. 77	150
winter wheat, irrigated	bu. 60.2	130
winter wheat, non-irrigated	bu. 32.9	55
spring wheat, irrigated	bu. 55.7	110
corn silage, irrigated	ton 17	33
alfalfa hay, irrigated	ton 2.8	6
dry beans, irrigated	lbs. 1760	3000
potatoes, irrigated	cwt. 226	350
sugar beets, irrigated	ton 18.9	26
sweet corn, irrigated	ton 5.2	15
apples, irrigated	ton 7.4	21
pears, irrigated	ton 1.7	15
sweet cherries	ton 1.3	8

There may be errors in those projections, but this is the best information available. It shows that Idaho agricultural output will increase dramatically, even if new irrigation development should be limited.

Aside from increased yields, added production can be expected from privately financed irrigation of dry lands.

If farm prices should rise, more private irrigation is likely.

The idea that large new irrigation projects are "needed" for national food requirements is a myth. If such projects are to be justified, other reasons will have to be found. Their advocates should be honest with the public.



The Coalition For Water Pollution

by Harry Pearson
Copyright 1972, Newsday

In its "Washington Report" the United Auto Workers (UAW) blasted American business for lobbying against a tough clean-water bill. The union newsletter said, "the next time you see a big corporation commercial telling you how much they love the fish and wildlife, remember how they work behind the scenes for dirty water."

What had provoked the UAW's wrath was a letter written by the National Association of Manufacturers (NAM) to the nation's 20,000 largest manufacturers. The letter urged businessmen to work against a tough new federal water pollution control bill because the association said, "the cost to manufacturers would be considerable, to say the least."

The Controversy was over the 1972 water pollution control bill (WPCB), a tough and significant piece of legislation designed to end pollution of the nation's waters by municipalities and industries during the next decade. The bill passed the Senate last year 86-0. That bill, essentially the work of Sen. Edmund Muskie, D-Maine, caught industry by surprise. At that point, an unusual coalition of interests went to work on members of the House Public Works committee, who were drafting an equivalent bill in the House.

That coalition included President Nixon, his Council on Environmental Quality, the Environmental Protection Agency, the National Association of Manufacturers, the U. S. Chamber of Commerce, New York Gov. Rockefeller, U.S. Steel, the National Conference of Governors, and the U. S. Conference of Mayors.

The motivation of the various interests on both sides of the question was more complex and diverse than the ensuing polemics might indicate.

The opponents within government contended that the goal of the Senate bill, elimination of industrial and municipal wastes in the nation's waterways by 1981, would cost prohibitive sums. Environmental groups backing the Senate bill maintain that the cost figures provided by the state and federal agencies are inflated.

The principal features of the Muskie bill are the requirement, by 1976, that industries use the "best practicable" technology to clean up their waste discharges and that all U. S. municipal sewer systems meet secondary treatment standards. The bill requires that by 1981 in-

dustries and municipalities use the "best available" technology to clean up waste waters - that is, technology consonant with "reasonable" costs. And only as a statement of national intent, the bill set 1985 as the desirable date for achieving "zero discharge" of industrial and municipal wastes into the nation's waterways.

The bill also includes provisions that would allow the U. S. Environmental Protection Agency to veto a permit issued by a state to an industry that wishes to discharge wastes into waterways, and would allow any citizen to sue a water polluter.

After months of deliberation in executive session, the House Public Works Committee revealed its own version - a 200-page bill - just two weeks before the House was scheduled to vote on it.

What the House did was to preserve the 1976 goal of "best practicable" waste treatment, while allowing a two-year extension of the deadline. It also abolished, for all practical purposes, the 1981 deadline and the concept of "zero discharge", by ordering a study of their feasibility by the National Academy of Sciences and Engineering (NASE). It restricted the rights of citizens to sue polluters. It eliminated the Environmental Protection Agency's power to veto individual pollution permits.

Despite a last-minute effort by 30 citizens' groups, members of the House Committee were successful in preserving the weaker bill intact.

This leaves the fate of water-quality legislation in the hands of a conference committee composed of members of the House and Senate public works committees.

Douglas Troussell, lobbyist for the National Association of Manufacturers, says, "Oh, yes, we'll be working to see that the conference committee doesn't give in to the Senate on this one." Amendments, designed to strengthen the House measure and backed by the coalition of environmental, labor and civic groups, was defeated.

Rep. Lester L. Wolff, D-N. Y., who tried to beef up the House bill with an amendment, said, "sure there was pressure. The House Public Works Committee is very powerful. There were a number of people who told me that certain subcommittee chairmen told them they would not get public works projects in their areas if they did not vote with the committee on this bill." Barbara Reid, lobbyist for the Environmental Policy Center, said, "both the mayors' and governors' conference endorsed the

House bill without amendments and urged their people to put the pressure on their congressmen.

"New York," she claimed, "played a special role in the whole series of goings-on. Henry Diamond (commissioner of the state's environmental conservation department) helped the governor come up with inflated costs of zero discharge and was responsible for the brouhaha of putting the permit programs under state control."

Diamond says he preferred the House bill because it gives New York more money for sewer construction in the future. The House version authorizes \$24 billion for water pollution control, the bulk of which will go for sewer treatment system costs. That is \$4 billion more than the Senate version authorizes. Diamond acknowledges that it is true he wanted the permit program entirely under state control. He defends the cost estimates he furnished Rockefeller.

Rockefeller made headlines by insisting that the national cost of zero discharge would amount to \$2 or \$3 trillion dollars by the target date of 1985, and that zero discharge was therefore impractical.

The cost estimate issue is central to the passage of the House version of the bill. When the Nixon administration released its official estimate of how much zero discharge would cost - \$316 billion by 1985 - it was less than the cost Rockefeller had given for New York state alone. Meanwhile, Friends of the Earth did its own estimating and came up with a cost of \$55 billion. A Corps of Engineers study, withheld by the administration indicated the cost could be as low as \$161 billion.

First, Friends of the Earth made its estimates (later revised) on the basis of land disposal of sewage and industrial wastes. This sort of treatment is relatively inexpensive and produces water which meets (some say) public health service drinking water standards. The technique consists of spraying liquid wastes over vast acreages and allowing nature to take its course. Bacteria destroy most of the waste products, while the earth filters out the residues.

The withheld Army report, which was released just before the House vote, based its figures on the same disposal technique and on results of experiments in liquid waste treatment in Chicago. The Nixon estimate is based on the costs incurred by distilling the wastes from water through physical and chemical treatment.

(Please turn to page 14.)

Winning Plan For A Floodplain

by Marice Doll

Major flooding of Denver's South Platte River occurred in 1965. The flood was destructive, but in a positive way it forced the residents of the city to take a new look at their ugliest eye-sore. The Platte flows 13 miles through the heart of Denver. At the time of the flood its banks were used as a junk yard and its waters as a dump ground.

In 1965 the river valley represented 10 percent of the total land area in the city and 50 percent of the industrial land area. It should have represented relatively high property values but, instead, the average square-foot value of land in the valley was only \$1.36 compared to the city average of \$2.31.

In 1964, the valley contained an assessed land value of only \$70 million and a tax income of only \$1.7 million, compared to the \$1,152 million and \$28 million respectively for the rest of the city.

The valley was not only a low return area, but a high cost area. Police and fire protection, building inspection, relief and welfare payments and other city costs were significantly higher there than any other section of the city.

Despite potential benefits of the area, the valley was declining as an industrial center. In 1965, it contained 67 percent or two-thirds of all the industrial land in the city. By 1966, it held only 50 percent.

At the time of the flood, then-Mayor Tom Currigan initiated the "Mayor's Platte River Study" for the redevelopment and beautification of the river in Denver. One year later, "In Response of Flood" came out pin-pointing the problems and making recommendations.

Community response was immediate. South Platte Area Redevelopment Council (SPARC) was organized in 1967 by citizens to promote the cause and consolidate the number of people who wanted to help.

It was, and is, the goal of SPARC to provide an effective organization to coordinate and implement citizen action in the planning, beautification, redevelopment, education, research, recreational use, flood and pollution control of the South Platte Valley and surrounding area.

Before extensive development could occur along the river, flood control was needed. The Army Corps of Engineers and the Coordinating Committee for Environmental Planning met regularly with representatives of the Corps Omaha District to study and plan flood control and recreational needs of the Platte and its tributaries.

SPARC was instrumental in keeping Chatfield Dam nearly on schedule and was helpful in obtaining Congressional authorization of Mt. Carbon Dam on Bear Creek in 1968. Both had aesthetically pleasing channel improvements incorporated into them.

The next big step was water pollution control. The city Health Department started almost from scratch in 1966 to track down and stop the pollution. Since October, 1968, SPARC, the Denver Public Schools, Colorado Game, Fish and Parks Department, and the Denver Environmental Health Department worked on a series of tests to determine the progress made in pollution control. The results were to determine if fish could live in a river where nothing could have done so in the murky waters two years earlier.

The tests were highly successful. By 1969 Colorado Game, Fish and Parks Department planted some 10,000 channel catfish in the Platte at sites throughout the Denver area. In 1970 another 10,000 were added.

Colorado Whitewater Association staged a boat-in on the river to prove its recreational potential. Now kayaks, canoes, tubes and rafts are frequently seen on the river. With the improved pollution control, the Colorado Commission on Water Pollution Control upgraded the rating of the river from a low agricultural-industrial grading to a part "warm water fishery" and part "cold water fishery," a high classification.

Denver Parks and Recreation Department initiated a tree planting program. And three new parks were developed. South Suburban Parks and Recreation Department acquired 26 acres of land to develop a Parkway Plan along the Platte in Arapahoe County. Park development included Ruby Hill and Frontier Parks in the southern valley and Vanderbilt Park, which was formerly an illegal dumping ground.

Last fall, Littleton, a southern suburb of Denver, passed a bond issue to match federal funds for a flood plain park. The Littleton Plan calls for purchase and preservation of a two-mile section along both sides of the South Platte. For its efforts the city was honored with an environmental award by the Rocky Mountain

Center on Environment.

Denver Regional Council of Government applied for Federal funds to chart and plan a system of nature and historical trails throughout the region, with the South Platte as its backbone.

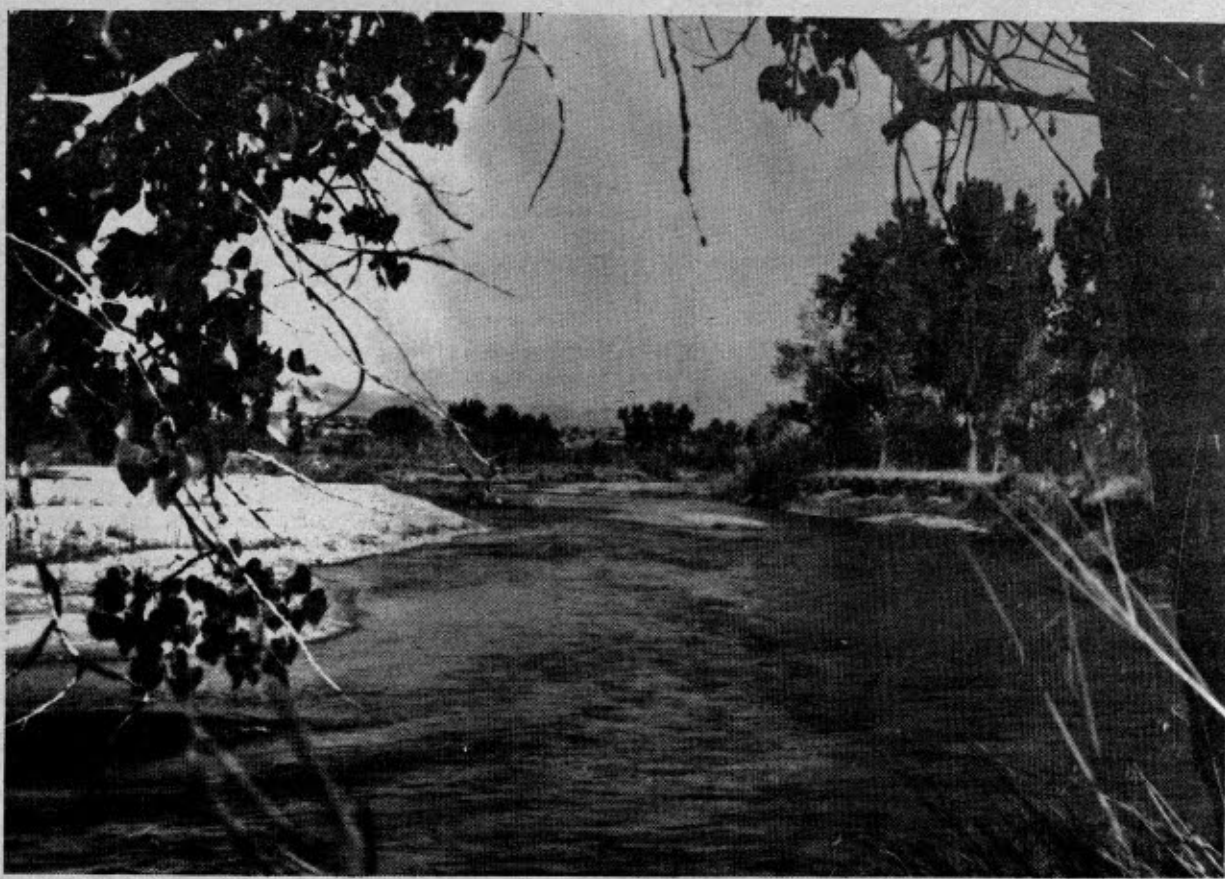
SPARC is working with a railroad committee composed of representatives of major railroads in the central valley to study the feasibility of relocating the switching tracks. The Denver and Rio Grande plans to relocate to its north yard which has enough land to provide its needs. The Colorado and Southern has arsenal land in northeast Denver which it plans to use for relocation.

The biggest project of the "Mayor's Platte

River Study" is the Educational Center at Auraria. The "urban-oriented" complex would contain Metro State College, Community College, and some facilities for the Denver Extension Center for Colorado University. At present these buildings are scattered all over the city. Under a Federal Urban Renewal Project, the complex will go into construction next year.

These are the accomplishments of the first few years of a 20-year program. Reclamation, reconstruction and re-education of the public take time.

But in the meantime, the South Platte River had added a new dimension to a Greater Denver.



A section of the South Platte River near Littleton, Colorado.

Water Projects Under Fire

by Anthony Ripley

Copyright 1972, New York Times

The constant hunt for water, an expensive and almost compulsive tradition in the American west, is coming under increasing criticism, and the big projects designed to bring more of it to arid land are running into trouble.

The 17 states west of the 100th Meridian, which cuts north and south through Dodge City, Kan., have always been chronically short of rainfall.

Ambitious men have solved that shortage with dams, canals and water diversion projects that are among some of the greatest civil engineering works in the nation.

Now, it appears, a fundamental reassessment is beginning of the need for future projects of this sort. The reassessment runs squarely into the teeth of the ancient western belief that water alone is the key to all growth in the west and that the future rests in bringing in more water regardless of the cost.

Many are coming to the shocking conclusion that, dry though it is, the Southwest in particular has plenty of water if man would only cure his sloppy and wasteful habits.

Some of those habits include leaky municipal water systems and a failure to recycle municipal sewage water. But the most extravagant and wasteful habits, they say, belong to the farmers of the Southwest and they raise a basic national question:

Should the government pay farmers not to till the soil in states with high rainfall while it subsidizes farm irrigation in states with low rainfall?

Such groups as the Sierra Club and Ralph Nader's Center for the Study of Responsive Law are crying out against the massive canal and dam building of the Central Arizona Project. It includes flooding an Indian reservation, chopping down riverbank trees because they supposedly drink too much water, sending more water to cities that will not be in short supply for many decades to come and bailing out farmers with cut-rate irrigation water at a time when farmers' fields are being taken over by the huge growth of Arizona cities.

One of the major problems has always been an almost total lack of restrictions of water use in the western states.

In Arizona, for example, 90 per cent of the water supply goes to agriculture, which contributes only about 10 per cent of the state's economy.

Underground pools of water supply most of the water used in Arizona. The supplies are being drained at an annual loss of 3.5 million acre feet of water. (An acre foot of water is the amount it takes to cover an acre of land one foot deep or 326,000 gallons.) That is almost the precise amount used yearly to irrigate lands for feed grains and animal forage, low value crops easily grown in high rainfall areas of the eastern United States, according to a 1966 study by economists at the University of Arizona.

But the defenders of the status quo are adamant. One of their leading spokesmen is Ellis L. Armstrong, commissioner of the Interior Department's Bureau of Reclamation. His agency has built \$6 billion worth of dams and irrigation projects in 17 western states since 1902.

In a speech to the University Council on Water Resources in July, 1970, Armstrong said: "Water is hard to come by (in Arizona) as it is in most of the west. So don't seriously talk to Arizonans about giving up any existing water or abandoning any plans for further development unless your shooting iron is ready for the quick draw."

The Bureau of Reclamation is sending out for more water in the traditional way. It is drawing plans that make its spending for the first 70 years look tiny.

But as Bureau of Reclamation engineers work on drawings and studies and graphs, a number of changes are stirring that may blunt their most ambitious plans:

--In Arizona, politicians are beginning to say privately that the \$1.4 billion Central Arizona Project to bring Colorado River water to Phoenix and Tucson is not a necessity but only a fringe benefit, a marginal insurance policy for the future.

--In Washington, the National Water Commission is drawing up national plans and policies to be ready by 1973 on such subjects as whether water should be used in the dry Southwest to irrigate farmland for low-value crops that can be grown without irrigation elsewhere.

--The Army Corps of Engineers, builder of

Environment: The Voice of the Citizen

High Country News-5
Friday, May 12, 1972

Dr. David Raskin, conservation chairman of the Uinta Chapter of the Sierra Club (600 Utah members), wrote to Mr. David Crandall, Director, Region 4, U. S. Bureau of Reclamation, in opposition to China Meadows. He also presented a statement at the April 18 hearing on China Meadows in Salt Lake City. The following statement is excerpted from both the letter, written before the second hearing was announced, and the hearing statement. It presents the views of those whom he represents.

As you are aware, there is a growing concern in our country with regard to the rapidly progressing degradation of our natural environment and the ever increasing encroachment of man's technological developments on the remaining areas of scenic beauty and wildlife habitat. The proposed China Meadows Dam and Reservoir represent a clear example of this destructive progression.

I was pleased to see that some effort has been made since the preliminary environmental study was issued on July 1, 1971. However, it is my considered opinion that the Draft Environmental Statement of January 6, 1972, is still seriously deficient in a large number of specific areas. I shall attempt to enumerate these as fully as possible.

According to the feasibility study of the Lyman Project published by the Bureau of Reclamation in October 1950, the economics of the proposed irrigation project favored the construction of a single large reservoir at the Bridger site with feeder canals from Black's Fork and the west fork of Smith's Fork. This plan "was shown to be the most economical means of developing Black Fork Basin water to supplement the project area's water supply . . . the adopted plan would result in the most favorable comparison of benefits and costs . . . would more fully utilize the resources than any other plan of development of Black Fork Basin waters". (pp 74-77).

The above described plan was authorized by the Congress on April 11, 1956. Another plan which had been evaluated, but not chosen because of poor economics, was essentially the present project that involves the combination of Meeks Cabin Reservoir on Black's Fork and a China Meadows Reservoir on the East Fork of Smith's Fork. This is the current plan which the Bureau of Reclamation adopted in its Definite Project Plan for the Lyman Project (1962). According to the Bureau of Reclamation, the only reason for the change to the current plan was the opposition to the Bridger site by the irrigators in the Bridger Valley of Wyoming due to high O&M costs. Although the economic analysis had previously shown a benefit-cost ratio of 1.02 for the Bridger site, a seeming miracle of re-analysis came up with a benefit-cost ratio of 1.17 for the current plan in spite of the fact that the previous analysis had shown the Bridger site to have the most favorable comparison of benefits and costs. It seems quite obvious to even the casual observer that the Bureau of Reclamation has engaged in its usual economic gymnastics in order to justify an economically undesirable project because that was the only way to get it built. Without the approval of the Bridger Valley Water Users Ass'n, there would be no repayment contract and, therefore, no Lyman Project. The methods of economic analysis used by the Bureau of Reclamation have been seriously questioned by many knowledgeable people, most recently by the report entitled "Damming The West" published by the Center for the Study of Responsive Law.

In the time between the authorization by the Congress and the publication of the Definite Project Plan, the project was drastically altered. In doing so, not only was new acreage added to the project area and the entire project redesigned and reevaluated, but the negative environmental impact was tremendously increased. The addition of a dam and reservoir at China Meadows will have widespread and long-lasting consequences on the recreational potential of the area and will result in serious damage to the wildlife habitat.

The inundation of China Meadows will irrevocably destroy a beautiful mountain meadow. It has been the cumulative impacts of such specific developments that has played a key part in the creation of the present nationwide concern for our natural environment. Therefore, the permanent loss of this meadow cannot be readily dismissed as something of only minor value unless one is willing to dismiss environmental losses on a seemingly endless series of such projects, including all of the individual localized losses to be incurred by the

planned construction of the Central Utah Project on the south slope of the Uinta Mountains. At the rate at which mountain streams are being dammed and diverted and meadows are being inundated, there will soon be no natural streams of any consequence in the entire Uinta Mountain Range. This will be a loss of truly national significance.

One of the major deficiencies in the Draft Environmental Statement concerns the failure to fully consider all of the alternatives to the



Projects under fire...

flood control dams and projects, is taking a broader view than its traditional engineering projects. Instead of proposing dams, levees and river channel straightening projects it is considering such alternatives as flood-proofing houses, and discouraging builders from putting up construction on areas prone to flooding.

Municipal water departments are beginning to consider the recycling of waste water from sewage treatment plants. Tucson, Ariz., is trying to sell its treated waste water to farmers and copper mines in the area. Denver is quietly investigating public attitudes on using purified waste water in the city's drinking water system.

Groups like the Sierra Club and Friends of the Earth, spurred by the National Environmental Policy Act of 1969, usually called the Environmental Act, which requires a list of alternatives to major federal projects, are forcing re-examination of water plans both in the courts and among the administrative agencies of government.

"We're passing over the threshold to a new sort of approach," said Dr. Gilbert F. White of the University of Colorado's Institute of Behavioral Science.

White, a professor of geography, has headed a number of national water study groups, among them committees of the National Academy of Science and the National Research Council.

He said he had been encouraged by the realization on the part of many cities that they must be more prudent in handling water. Leakage in municipal water systems, he said, runs 10 to 30 per cent in many municipalities and up to 50 per cent in some sections of Chicago.

Sending out for more water rather than wide use of the present supply is what White calls "the quick technological fix" and is still in great style in the United States.

California's program is now 99 per cent finished, water officials in the state said, with a \$2.8 billion system of aqueducts and dams to bring water from the rivers near San Francisco to the Los Angeles area.

The Central Arizona Project, which took more than 20 years to guide through the Congress, is beginning to stir. It will bring Colorado River water from Lake Havasu behind the Parker Dam on the Western Arizona border across the state and down to Phoenix and Tucson.

In Texas, voters by a slim margin turned down a \$3.5 billion bond issue. The vote only temporarily delayed plans to bring Mississippi River water west across Louisiana, then through reverse flow up the Sabine and Red Rivers, into the Rio Grande Valley and into the high plains area of West Texas, according to officials of Water Inc., of Lubbock. Most of the entire program, which is expected to cost \$10 to \$12 billion, will be paid for, they hope, by the Bureau of Reclamation and the Corps of Engineers.

But perhaps the most ambitious scheme, still in the talking stages, is called the North American Water and Power Alliance. It would take water from the Peace and Fraser Rivers in Canada, move them into the Columbia River system, then to the Central Valley of California, then south to the Lower Colorado River Basin.

Southwest water problems arise because of a

proposed project, including a comprehensive analysis of the environmental impact of each of those alternatives; and including the alternative of abandonment.

For example, there was no evaluation of a smaller Bridger Reservoir in combination with China Lake and/or Marsh Lake. Further, we understand that only 70 percent of the storage in Meeks Cabin has been subscribed. Therefore, approximately 9,000 acre feet are available for use in the Smith's Fork Drainage if a suitable conveyance system can be developed. Some canals now exist, and if properly renovated they could be used to transport water.

This section also lacked a detailed analysis of the costs of the alterations that we described. Somehow, the Bridger Reservoir, which was the most economical at its originally planned size, has now become the most expensive when compared to other previously rejected plans, including the China Meadows alternative. It would appear that a detailed analysis of the costs of all alternatives is required if the public and the ultimate decision-makers are to make a completely informed decision.

Although several alternatives were considered, the environmental impact of those alternatives was not thoroughly explored. For example, on page 40 it is stated that the Bridger (Please turn to page 11)

geographic accident of the west. The great heavy clouds of moisture that form and blow ashore from the Pacific Ocean lose most of their wetness over the Sierra Nevada and Coast Ranges.

The southwest States stand in their arid shadow, except where tall mountains reach up for a share of light rain in the summer and dry, powdery snow in the winter.

When the snows of winter melt, the water runs down the rivers, most of it evaporating and some of it seeping into underground pools to recharge them.

In West Texas, however, the pools do not recharge. Irrigators there are pulling up ancient ground water for irrigation from the southern bed of the immense Ogallala pool that extends under five states. Farmers take a depreciation allowance on their taxes for the used water and wait for the giant Texas Water Plan to solve future problems. In 1970, 65,214 wells in the high plains of Texas were drawing out 5.5 million acre feet of water a year.

In Arizona, farmers appear to be the only ones that will immediately benefit from the Central Arizona Project, along with speculators who have purchased holdings along some proposed aqueduct routes and dam sites.

For the cities of Tucson and Phoenix, the project appears only as a marginal one, at high cost to city dwellers.

Frank Brooks, director of water and sewers in Tucson, noted the city had grown from 35,000 in 1940 to 250,000 in 1970 and is the largest city in the world to get all of its water from underground wells.

"We know the city of Tucson is not going to run dry in the next 20 years," he said in an interview.

Jack D. Johnson, associate director of the Office of Arid Lands Studies at the University of Arizona sees much more water, a 100-to 300-year supply under Tucson.

"Nobody knows," Johnson said. "They've never bothered to determine what's there."

At present in Phoenix, the Salt River Project, an early Bureau of Reclamation effort, has transformed itself into a major public utility and provides water for about \$3 an acre foot.

Water from the Central Arizona Project is expected to cost \$50 to \$70 an acre foot to Phoenix, while costs to irrigating farmers is set at only \$10 an acre foot.

Wesley Steiner, executive director of the Arizona Water Commission, which was formed to handle the Central Arizona Project on a state level, noted the annual over-draft of well water.

"The real question is, when do you face up to the future?" he asked in an interview. "You know you are overdrawing your bank account." The project is the cheapest "new source of supply that will ever be available to you, but it's going to cost a lot more than you are now paying."

Because it is unpopular to speak out publicly against the project, most prominent Arizona men keep silent if they have any doubts.

One, who asked that his name not be used, said that the need for the project was marginal, the price high and the amount of water coming into the area insufficient to cover the annual loss from draining off well water.

6-High Country News
Friday, May 12, 1972

Rainbow Bridge, An Objective Summary

by F. A. Barnes

A great deal has been written about the rising waters of Lake Powell entering the boundaries of Rainbow Bridge National Monument. Much of what has been written falls into three categories: (1) biased, environmentally-oriented material originating from various conservation-minded organizations and individuals; (2) biased, money-oriented material originating from various industrial and political organizations and individuals; and (3) unbiased, unemotional, non-mercenary, but also largely unanalyzed, reporting by various news media.

There is thus plenty of room in this controversy for an objective summary and analysis. It is highly unlikely that such an analysis would have any effect upon the ultimate outcome of this problem, but perhaps it would help those who have a special feeling for the uniqueness of southeastern Utah to reconcile themselves to what most probably is going to happen.

The problem of Lake Powell versus Rainbow Bridge can best be understood if summarized, then divided into three aspects for analysis — political/economic, legal, and practical.

Summary of the Problem

Glen Canyon Dam was built so that Lake Powell would be full at elevation 3700 feet above sea level, and to perform its basic functions of flood control, water conservation and power generation most efficiently at levels not far below this maximum. However, Lake Powell water backs up into Bridge Canyon, and at elevation 3600 begins encroaching upon Rainbow Bridge National Monument. With the possible exception of a few purists, no one particularly cares if the water just goes a few feet into the Monument. But at elevation 3700, the water will be directly beneath Rainbow Bridge, and this troubles a great many people, enough so that legal and other actions have been taken by various groups to halt the rising waters at elevation 3600, in spite of the political, economic and legal repercussions this would create.

Political/Economic Aspects

The political and economic aspects of the controversy simply represent two sides of the same coin. Glen Canyon Dam was built for economic purposes, over the strenuous objections of certain conservation groups. As both federal and state politicians almost invariably consider economic development to be of utmost importance, and perhaps rightfully so, this places most, if not all, federal and state politicians and agencies squarely on the side of the industries which favor full usage of Glen Canyon Dam and Lake Powell, essentially power companies and major water users.

To counterbalance this somewhat one-sided stand for economic-development-above-all-else, are various conservation-minded organizations and individuals. These tend to be somewhat one-sided in defense of natural beauty and existing ecological systems, to the exclusion of economic factors. Again, rightfully so, because such groups serve a very useful purpose. Before they existed, uncontrolled, ill-considered economic "development" has all too often produced short-range gain at the expense of long range environmental and aesthetic disaster, and sometimes even ultimate economic net loss.

So the battle over Rainbow Bridge can be said to be between those who favor economic gain over aesthetic values — such as the beauty of Rainbow Bridge as nature created it — and those who hold that economic factors should not invariably and automatically prevail over all others. This is a healthy situation, as the courts which must ultimately resolve this dilemma will thus be well supplied with facts and arguments on both sides of the question, and thus be able to make sound decisions.

Legal Aspects

Conservationists base their legal case upon a federal law which prohibits dams and reservoir waters in National Parks and Monuments. This law was quite probably enacted by Congress under pressure from conservation groups at a time when economic development forces saw little in the law of danger to future developments, and so put up little resistance to its passage.

Later, however, in passing the legislation necessary for the construction of Glen Canyon Dam, Congress showed its true feelings about this law. It permitted the dam to be designed to operate at the 3700-foot level, it failed to allocate money for any form of construction to keep Lake Powell water out of Rainbow Bridge National Monument, and even specified that allocated funds were not to be used for this purpose.

Thus, the legal situation now facing the courts that must resolve the controversy is highly ambiguous. Each of the contestants can show evidence that Congress is on their side, and that the "intent" of Congress is obvious. Yet the only thing that is really obvious is that state-elected members of Congress have deliberately avoided making their true intent clear, that in order to escape pressures from both sides, they have firmly straddled the fence by passing a law, then neglecting and blocking its enforcement.

Unfortunately, the courts which must decide the legal issue, cannot use this time-honored ploy. They must decide one way or the other. They must either rule in favor of economics, by deciding that Congressional "intent" was to allow full use of Glen Canyon Dam as an ex-

ception to the no-dams-and-water-in-parks law, or in favor of the conservationists by insisting on enforcement of the letter of this law. Either way, Congress is apt to hear a great deal more from those who ultimately lose the decision.

Complicating the matter still further is the fact that existing, legally-binding contracts between power companies and the federal agency that administers Glen Canyon Dam permit impounding water up to the 3700-foot level. Also, the fulfillment of existing water-user agreements depends upon greater reservoir storage capacity than would be available under a 3600-foot level limitation.

Practical Aspects

The practical aspects of the controversy have all too often been obscured by the smokescreens of legal verbosity that both sides have generated. It is easy to say that had Glen Canyon Dam been built to operate at a 3600-foot maximum, there would now be no problem. Perhaps this whole fiasco will serve to prevent such ambiguous law-passing and enforcement in the future.

But the present, very real problem must be solved too, and there are practical considerations on both sides. If Lake Powell waters are held to the 3600-foot maximum, then power production and major water users who depend upon the full water impoundment potential of the dam will suffer economic loss. And if the water is allowed to reach the 3700-foot level, there is a possible danger that Rainbow Bridge will be undermined and collapse. Legal aspects aside, the problem is simply one of very real economic loss versus the potential loss of a one-of-a-kind natural wonder. No one seriously claims that water standing under Rainbow Bridge would detract from its beauty. That the water might weaken and endanger the span is the only practical issue.

How serious this danger may be is anyone's guess. All kinds of experts have made all kinds of claims, some saying the probability of collapse is very low, others contending that disaster would be inevitable. They can't all be correct, but there is no practical way of determining in advance which experts are wrong.

There is objective evidence on both sides. Rainbow Bridge is formed of Navajo sandstone and stands on a base of layered Kayenta deposits. Some of these layers are hard, others relatively soft. As the waters of Lake Powell have risen, hundreds of miles of shoreline have consisted of Navajo sandstone cliffs supported by Kayenta deposits, with the water lapping at or near the interface. Yet despite this, signs of collapse are few.

On the other hand, Powell waters have only been at this level for a relatively short time, yet despite this, massive collapse has occurred. Just a mile or so uplake from The Rincon, where the rising waters of the lake have been working on Kayenta deposits for about three years, a dramatic change has been taking place. In 1969 a huge section of the solid Navajo sandstone cliff above the lake slid into the lake, leaving a finger-shaped shard of rock some 200 feet tall still leaning against the cliff at a slight angle. In 1970, this monstrous slab disappeared into the water, together with countless tons of additional rock. In 1971, weakened still further by the rising water, the 300-foot cliff suffered still another massive collapse, this one carrying more material into the lake than all the previous falls together, and leaving an enormous, deep scar reaching clear to the top of the solid rock wall.

So Kayenta deposits are indeed weakened by constant contact with water, and massive collapses of undercut Navajo sandstone do occur. But when it comes to Rainbow Bridge, it is simply a matter of judging probability, and in this we are all about equally unqualified.

Various proposals have been made for allowing the lake level to reach 3700 feet, but excluding the water from Rainbow Bridge National Monument. Unfortunately, all such proposals have been impractical. Even ignoring costs, the best of them would cause more damage to the terrain in and around the Monument than the rising waters probably will, and would also be unsightly in the extreme.

Conclusions

The whole controversy will soon be judged in a federal court and doubtless, whichever way this decision goes, the losers will appeal to still higher courts. And doubtless too, whoever ultimately loses in the courts will then continue efforts to get Congress off of its fence. So the whole affair will probably continue for years.

Which way will the first legal decision go? That, too, is anyone's guess, but on the basis of (Continued on page 7)

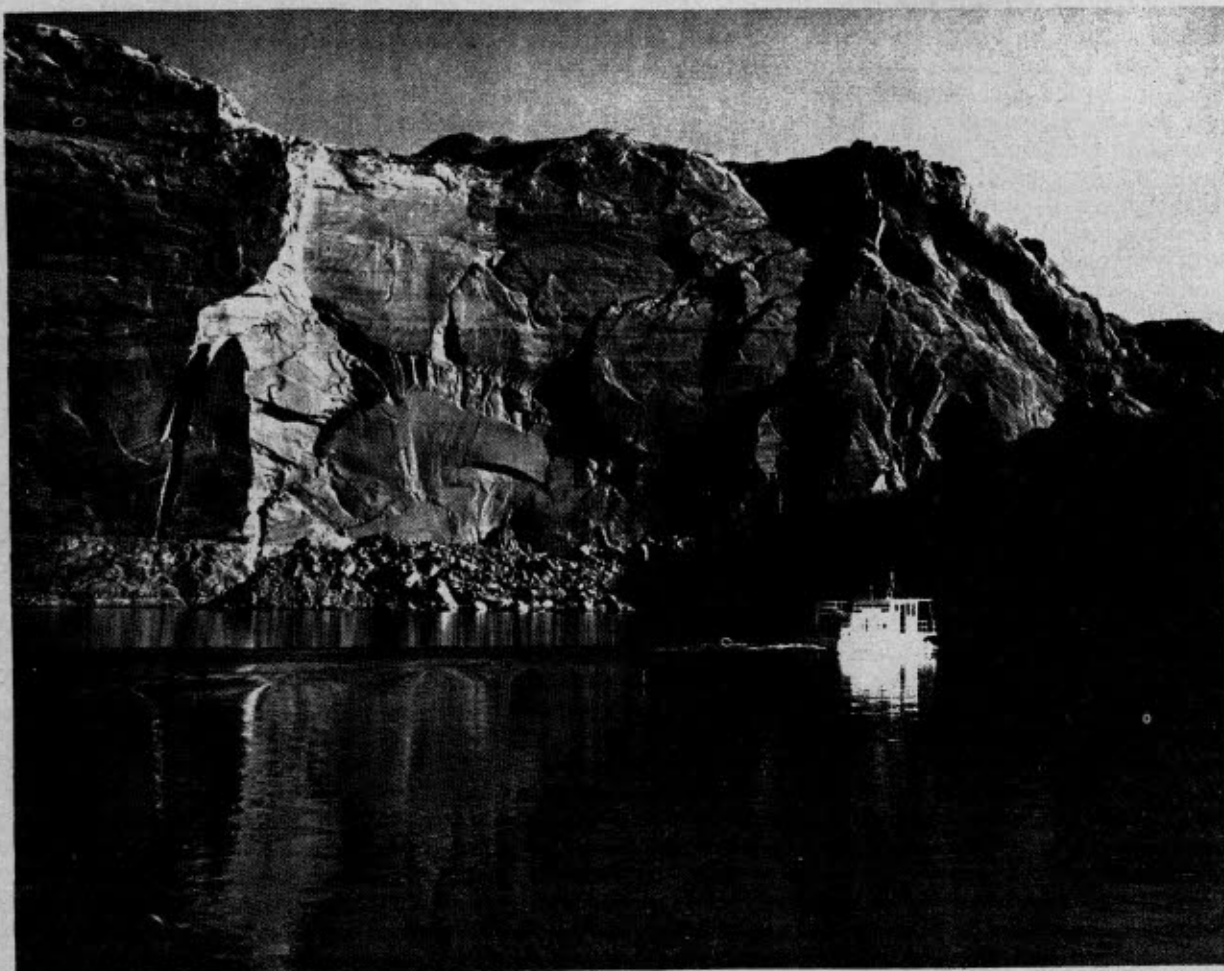


Photo by F. A. Barnes

The rising waters of Lake Powell do cause massive collapse in the formations that comprise Rainbow Bridge and its footing. This photograph of a high Navajo Sandstone wall near The Rincon shows the second stage of a progressive collapse that has continued for three years. A year after this photograph was taken, the 200 foot spire of rock disappeared under the water, together with great quantities of additional rock. The following year, 1971, a still greater collapse occurred, in the same place.

RAINBOW



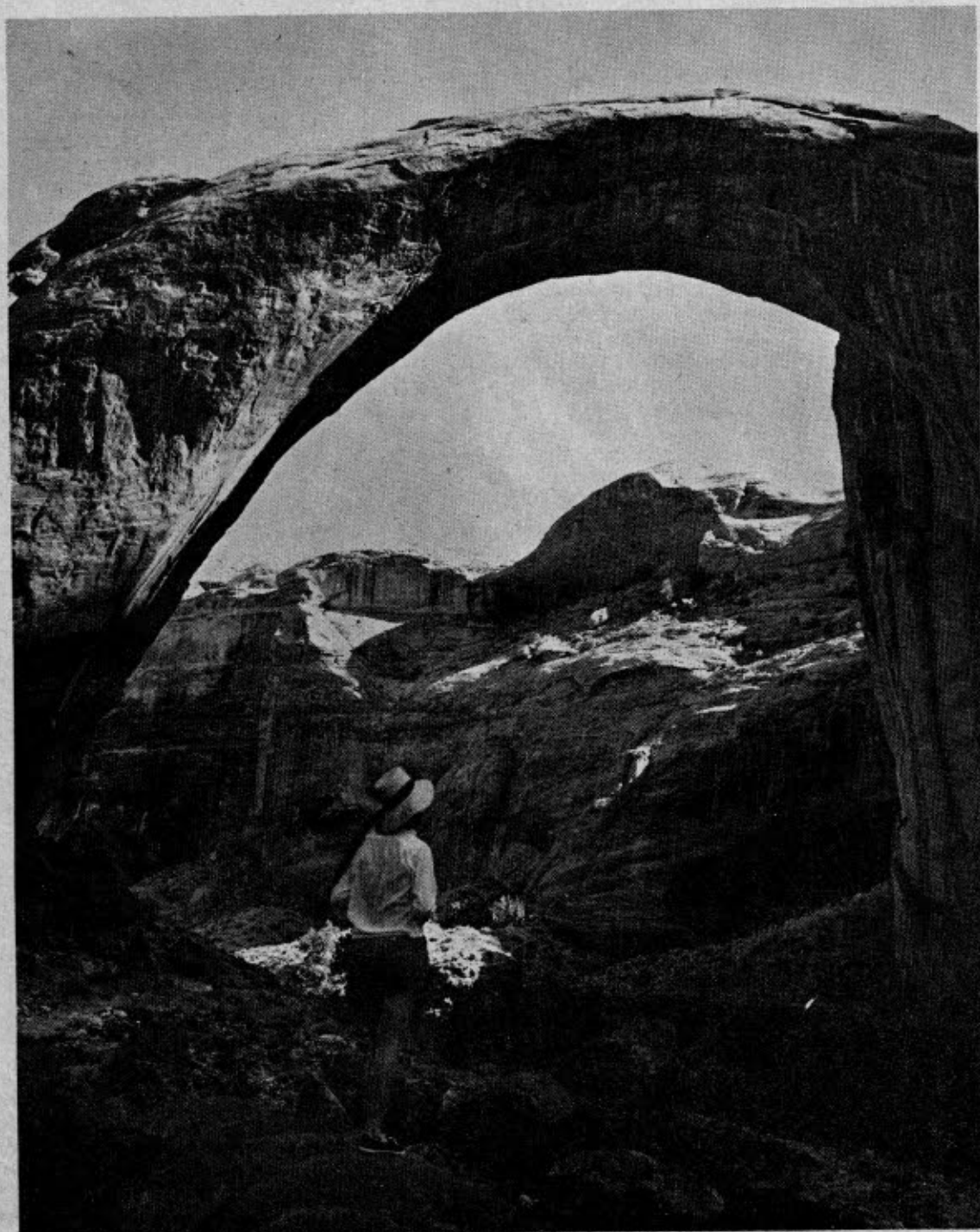
Photo by Jack E. McLellan

Rainbow Bridge, a geologic wonder of the Colorado River. Once renowned by the Navajo and Hopi of the Powell have brought it within easy reach. The Bridge looms over the dry wash of the canyon (upper right). But the canyon is not the only thing to see (page 6.)

The foot trail to Rainbow Bridge has been growing shorter each year. The first glimpse of Rainbow Bridge is a way between the dock and Rainbow Bridge. People in the foreground, and the dock. Less than another 100 feet, directly under the span. Unless you were closer in 1972 than it did a year ago.

An off-season visitor (lower right) without the usual number of tourists. The height of the travel season. Kayenta deposits which conserve the waters. Full use of Glen Canyon reservoir be usable up to the 100 feet, it enters Rainbow Bridge.

Rainbow Bridge is also important in the creation of Lake Powell, the direction by jeep or horseback, by Indian guides. Now that Bridge visit Rainbow Bridge each year. The concessionaires in large tour boats. Bridge.



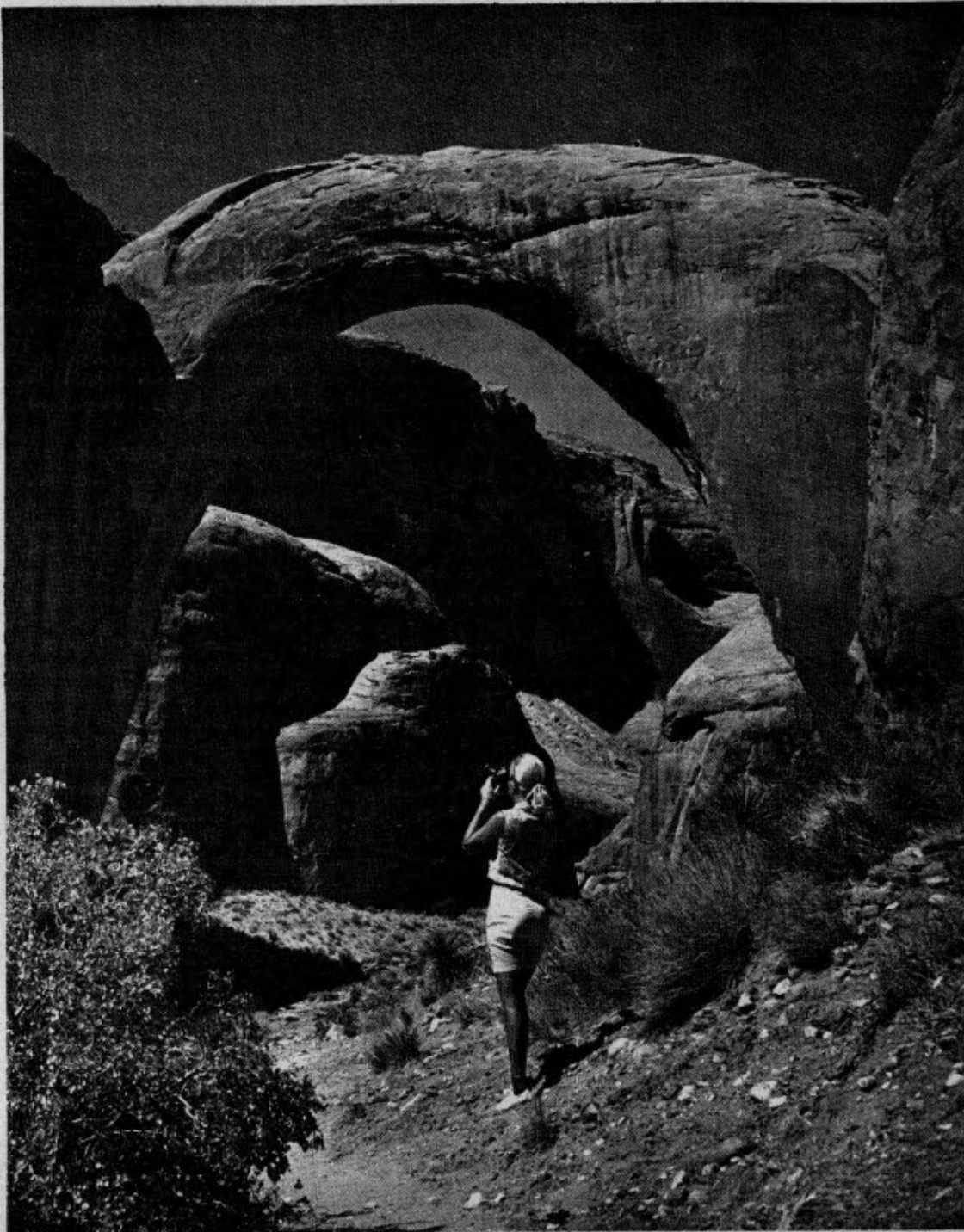
Rainbow Bridge

Bridge, a geologic wonder of immense proportions, arches over a side canyon of the Colorado River. Once remote and practically inaccessible, the rising waters of Lake Powell brought it within easy viewing of multitudes. In the photo at left, Rainbow Bridge arches over the dry wash (lower left) while the black waters of Lake Powell inch up the canyon (upper right). But rising waters have also brought controversy. (See story on page 10.)

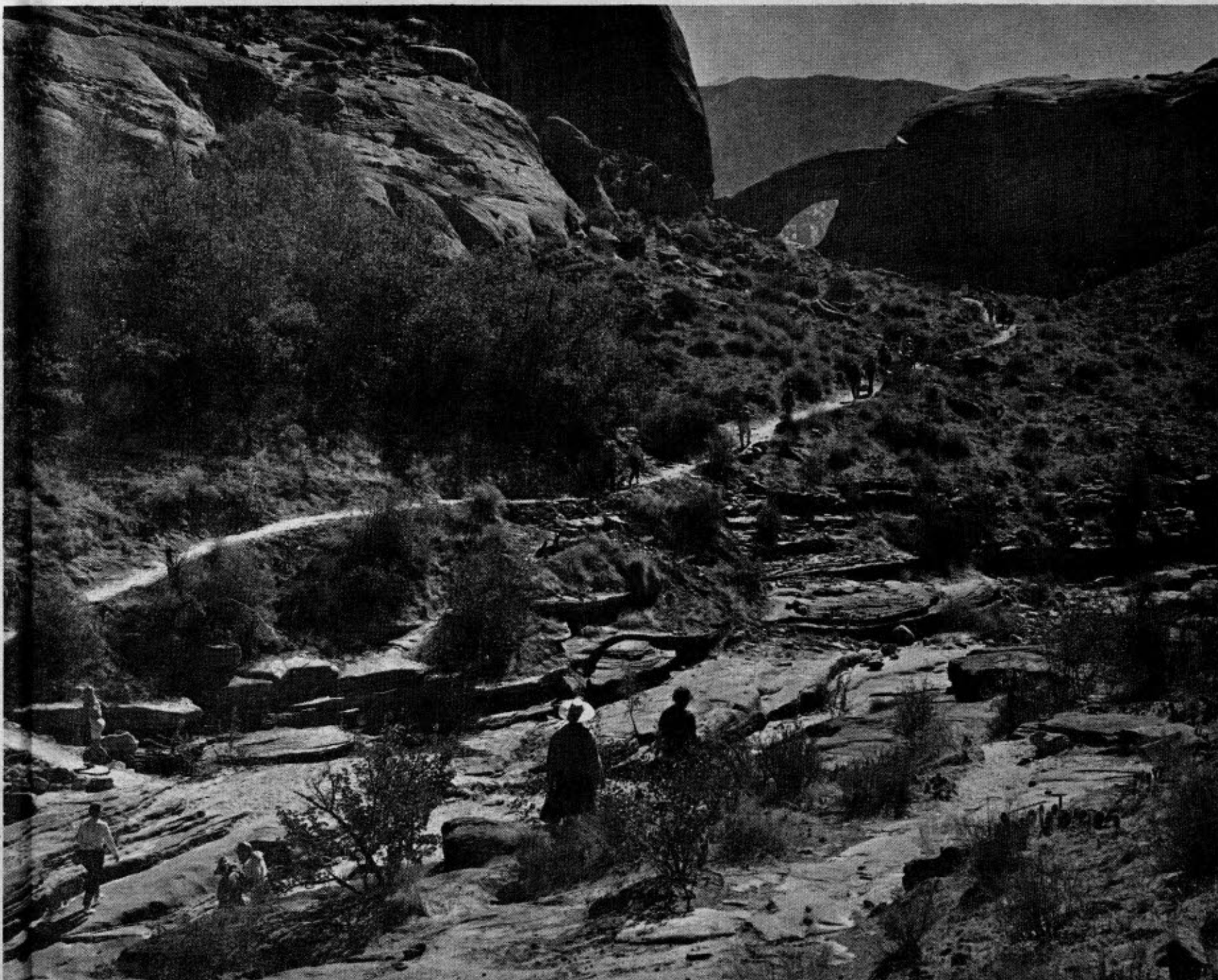
Trail to Rainbow Bridge from where the water has reached in Bridge Canyon, is getting shorter each year. The photo at lower right, taken in 1969, showed the trail to Rainbow Bridge that hikers get. At that time, this point was about half the distance to Rainbow. In 1971, the water reached about the level of the two people in the foreground, and it was possible to enjoy this view of Rainbow Bridge from the trail. Unless restrained by court decision, the water will approach even closer to the span. (See story on page 10.)

On a recent visit (lower left) admires the downstream side of Rainbow Bridge, a small number of tourists that appear around the enormous, graceful span at the travel season. The Navajo sandstone bridge stands on a base of layered sandstone which conservationists fear will be weakened by rising Lake Powell water. The Glen Canyon Dam for power and water conservation requires that the water be kept up to the 3700-foot elevation level. But as the water rises above 3600 feet, it violates present federal law.

Bridge is also impressive when viewed from upstream (upper right). Before Lake Powell, the few people who visited the gigantic span came from this point on horseback, then on foot, accompanied across the Navajo Reservation. Now that Bridge Canyon can be reached by boat, thousands of tourists visit Rainbow Bridge each year, most of them brought there by Lake Powell-concessionaire tour boats. In 1971, the tour-boat dock was within sight of Rainbow Bridge.



Photos by F. A. Barnes



10-High Country News
Friday, May 12, 1972

Storm Over Utah ...

scheduled only one public hearing on their proposal. The hearing was held on October 13, 1971, in Mountain View, Wyoming, (population 600) with very little public notice. About 75 people attended.

Of all the thousands of users of the North Slope of the High Uinta Mountain, only two were present at the local hearing. They were Hartt Wixom, environmental editor of the Salt Lake City-based DESERET NEWS, and Dr. David Raskin, professor at the University of Utah and conservation chairman of the Uinta Chapter of the Sierra Club. At the hearing, they requested an additional hearing for the benefit of the public in Utah. David Crandall, regional director of the Bureau, assured them that he would schedule a hearing at Salt Lake City.

The word was not long in getting to Wyoming Governor Stanley K. Hathaway and U. S. Senator Clifford P. Hansen. One or both interceded with Department of the Interior officials who thereupon vetoed any second meeting.

It was only through concerted effort by many individuals and concerned groups that a second hearing was finally scheduled for April 18, 1972, in the Little Theater in the Salt Palace at Salt Lake City. It was announced by the Bureau of Reclamation on March 21. Some 600 people attended.

Knowing that the project would face a hostile crowd in Utah, Wyoming officials made great effort to attend in force. Governor Hathaway made sure that a suitable contingent of state officials were on hand to testify.

Wyoming State Engineer Floyd Bishop an outspoken advocate of water development and equally outspoken detractor of comprehensive water planning, offered his expert opinion that the reservoir "would constitute an enhancement to fish and wildlife values."

Bishop said farmers on the proposed project were desperate for the supplemental water. He asked, "How could anyone argue that these deserving farmers should be denied a right to make a living, especially in light of the fact that their tax dollars help support those on welfare in the cities?"

Bishop's question was countered by Dr. David Raskin's statement which pointed out that the 60 farm families benefited by China Meadows water would get a direct subsidy of \$80,000 per family, exclusive of interest. No one challenged his figures. (For more on this interesting subject of irrigation subsidies, readers are invited to study DAMMING THE WEST, The Nader Task Force Report on the Bureau of Reclamation.)

The Wyoming Game and Fish Commission had opposed the China Meadows site as early as 1960 in spite of the fact it was in Utah. The Commission said an alternative site inside Wyoming was better. Other recommendations by the Commission in regard to the entire Lyman Project concerned water flows from the companion reservoir, Meeks Cabin. That reservoir was finished in 1971 but with restrictions on minimum flows which preclude a stream fisheries, and no public access to stream areas which had been guaranteed by the Bureau.

In spite of these problems with fisheries on the project, Governor Hathaway ordered Wyoming State Fish Warden Don Dexter to make a statement at Salt Lake City. Dexter's statement avoided any approval of China Meadows and restricted his comments to the stream below "which could benefit from stabilization of flows from the reservoir."

The Bonneville Chapter of the American Fisheries Society, representing the professional fishery biologists of both Utah and Wyoming, presented a strong resolution in opposition to China Meadows. Parts of the resolution read, "insufficient downstream releases will result in the degradation of an additional 1-1/2 miles of fish habitat (in addition to the 2 miles to be inundated)."

Ironically, the resolution was read by a Utah fishery biologist. His department had been ordered by Utah Governor Calvin Rampton not to testify at the hearing.

Similarly muzzled was the U. S. Forest Service, Department of Agriculture, whose field people have adamantly opposed China Meadows. Undoubtedly, the political influence of Wyoming Senators Gale McGee and Clifford P. Hansen had also been felt in high places in the Agriculture Department.

Not surprisingly, some of the most avid supporters of Bureau of Reclamation projects are local businessmen. Caldwell Dykes is the secretary-treasurer of the Bridger Valley Water Conservancy District. He also happens to be president of the Uinta County State Bank of Mountain View. A good part of the \$16 million expenditure on the Lyman Project will find its way through his bank.

Dykes told a Kemmerer Wyoming Lions Club

audience last November that, "The hour is late. Wyomingites interested in the future of the state must impound water for development."

He referred to Utah environmentalists trying to stop China Meadows, and then quoted from a banking magazine, "No one can deny that man soils his own nest, and no one will argue that unless something is done, this world will be a most unpleasant place in which to reside. But

The China Meadows Project

The following article on China Meadows is excerpted in large part from the Bureau of Reclamation Draft Environmental Statement of January 6, 1972, with additional excerpts and statements from other sources.

The Lyman Project, located in southwestern Wyoming and northeastern Utah, is within the Green River Basin which is tributary to the Colorado River. All the lands to be served by the Lyman Project are located in Wyoming's Bridger Valley which extends from the foot-hills of the Uinta Mountains northward for about 25 miles. The project plan proposed construction of two dams - Meeks Cabin on Blacks Fork and China Meadows on the East Fork of Smiths Fork. Meeks Cabin Dam was completed during June, 1971.

Water from the reservoir would be used for supplemental irrigation of about 10,200 acres of land located in the vicinity of Lyman, Fort Bridger and Mountain View. Travelers along Interstate 80 through southern Wyoming pass directly through the project area.

The damsite is located in Summit County, Utah, about 4 miles south of the Wyoming-Utah State line. The dam would have a crest length of 2,350 feet with a maximum height of 109 feet above streambed. In addition to the dam, a 1,000-foot-long dike with a maximum height of 43 feet would be constructed across a saddle to the west to prevent spills into the existing China Lake. The reservoir would be located entirely within the boundaries of the Wasatch national Forest and approximately 5 miles north and outside of the boundary of the High Uintas Primitive Area.

Estimated construction costs for China Meadows is approximately \$5.1 million. That does not include interest costs during the construction period. The annual operation and maintenance costs are estimated to be \$11,200. The reservoir would have a total storage capacity of 13,200 acre-feet of water. The dam is scheduled for construction in 1972.

The latest Bureau of Census reports shows that approximately 58 percent of the total county and 31 percent of the project area in Uinta County is in private ownership. Federal lands account for only 38 percent of the county, but 64 percent of the project area.

The reservoir site is used primarily for summer cattle range and provides approximately 95 cow-months of grazing. China Meadows also furnishes suitable summer range for deer, elk, and moose. Following summers of adequate precipitation and runoff, it also furnishes forage during the fall months for game animals. The loss of moose habitat would be permanent whereas the loss for the other larger game would be cushioned somewhat as the animals relocate to adjacent areas.

The situation on the Lyman Project at present is that about two-thirds of the irrigated lands originally scheduled to receive supplemental water are now benefiting from irrigation released from Meeks Cabin Dam. The other one-third of the project is dependent upon storage on the Smiths Fork drainage for an equitable irrigation service.

A nondevelopment alternative would create an economic burden on those farmers within the project area who would not receive needed supplemental water supply provided by the China Meadows Reservoir. Supplemental water provided by China Meadows Reservoir would result in an increase in annual production of approximately 1,750 tons of alfalfa hay; 1,350 tons of meadow hay; 12,950 AUM's of grazing, and 1,200 bushels of oats. Benefits resulting from this increase in farm production are estimated to be about \$97,000 annually.

Under the existing contract, water users are not required to begin repaying construction costs of Meeks Cabin Dam until all project works have been completed, including a dam in the Smiths Fork drainage (China Meadows). If a decision were made not to develop additional storage, it would be necessary to renegotiate an amended contract with the water users.

The reservoir would not be a large one by Bureau of Reclamation standards. Total land

like most emotional issues, extremists and radicals and irresponsible crusaders are urging us to take corrective measure which could in the end, destroy us."

Those most concerned with China Meadows may well ponder those words, and wonder about something being done to keep our world from being a most unpleasant place. And who, in the end, will really destroy us?

area to be flooded is only 372 acres. But the area is a key site for access to the north slope of the High Uintas.

At present the natural beauty of the China Meadows area is outstanding. The broad meadow with the meandering stream is contrasted by pine and aspen covered hills on both sides. People traveling to the area enter from the north. Crossing the bridge at the north end of the meadow offers a magnificent view - the green meadow with the stream, wooded hills on either side, and the High Uinta Mountains and Primitive Area forming a backdrop for the scene. Deer, elk, and moose are often seen in or at the edge of the meadow. In early spring, high runoff forms a small lake at the north end of the meadow, adding interest to the landscape. As the runoff subsides, the lake recedes and green grass replaces it.



Recreational use within the China Meadows area is quite extensive. People are drawn to the area by the attractive meadows and surrounding forest, the delightful summer climate, easy access and proximity to the High Uinta Primitive Area, the excellent hunting in season, and the numerous fishing opportunities available in the large number of lakes and streams on the Uinta's north slope. Existing recreation facilities located within the reservoir basin, which would require replacement, consist of 13 family-size camping units and appurtenant facilities at the China Meadows and Trail Head Campgrounds.

A Forest Service recreation study shows 29,000 visitor-days of use per year in existing facilities. It also shows recreation use is increasing at a rate of four percent compounded annually.

The reservoir will inundate about two miles of the East Fork of Smiths Fork in one of its most biologically productive and scenic reaches.

The impact statement says the reservoir would provide more fishing opportunity "although lake fishing is of a much different character than high quality cold water stream fishing."

But in a statement which rebuts that assertion, the U.S. Forest Service says, "Existing natural beauty of the area will be impaired by the unnatural appearance of the earth-fill dam and by any disturbance outside a proposed high water line for dam construction material. The greatest detractor to natural beauty would be ugly mudflats left during the period the reservoir is drawn down. These flats would dominate the landscape. The opportunity to view wildlife will be reduced as the wildlife habitat now adjacent to the stream in the meadow will be inundated. By comparison with other recreation reservoirs in Utah, China Meadows will have a low rating because of the large, rapid drawdown. We recognize that wildlife values along with their recreational enjoyment and subsidiary uses far outweigh the value of irrigation water in this area. The basic purpose for developing recreation sites in the China Meadows area is primarily due to its unusual beauty and its location as a trailhead for the High Uintas Primitive Area. Because of the drawdown in the peak of the recreation season, the China Meadows Reservoir would be a distraction rather than a benefit to these developments, for many users."

Travelers along Interstate 80 follow in the footsteps of Oregon Trail emigrants. But unlike the pioneers of yesteryear, today's travelers

(Continued on page 11)

... Voice of the Citizen

site would require channelization of Willow Creek below the damsite and that "would completely destroy any fishery of the existing stream . . ." This statement implies that a valuable fishery would be destroyed, whereas all authorities freely admit that there is essentially no fishery now. In addition, there is no consideration given to the potential fishery and recreation benefit which would be derived from the Bridger site.

On the other hand, the benefits to be derived from a reservoir fishery at China Meadows seem to be greatly exaggerated. First, China Meadows is located in the State of Utah and would require a Utah fishing license. Since the vast majority of fishermen would have to be drawn from the Wasatch Front area, it would be necessary to provide overnight camping facilities for them. The construction of China Meadows Reservoir would not only inundate the present campground at China Meadows, but it would also inundate the areas where the Forest Service plans to construct an additional 198 family units to accommodate increased recreation use of the area. There will be no remaining sites suitable for such a development. This will even interfere further with the current and rapidly increasing use of China Meadows as a jumping-off area for the High Uintas Primitive Area. Since many people coming from the Wasatch Front to go backpacking in that area depend upon a place to camp before setting out for the wilderness the next morning, the feasibility of such trips will be seriously reduced.

With respect to the need for another reservoir fishery, it should be noted that there are already 16 to 20 large reservoirs in Utah which can be used by fishermen from the Wasatch Front. It is estimated that another 10 to 15 reservoirs are being planned. Also, there are over 1,000 natural lakes in the High Uintas which provide excellent fishing opportunities. A great many of these lakes and reservoirs are considerably closer to the Wasatch Front than is the proposed China Meadows Reservoir.

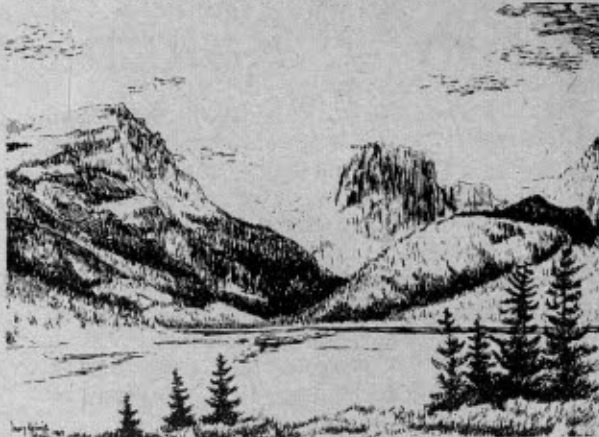
Another basic error in the calculation of benefits for the fishery in China Meadows Reservoir concerns the actual quality of that fishery. The Utah Division of Wildlife Resources has gone on record to the effect that only fingerlings would be planted in the reservoir and would provide a poor to moderate fishery. This poor fishery will be due to three factors. First, the reservoir will fluctuate from full pool to minimum pool during July and August (a drawdown of 47 feet) and will, therefore, be very unattractive to fishermen. Second, the reservoir is at an elevation of 9,300 feet and would be available to fishermen for only approximately three months each year. Finally, there are many more attractive fishing waters within less than the three hour drive from the Wasatch Front to China Meadows.

Thus, the combination of an abundance of reservoir fishing in Utah, no local population on which to draw, the lack of overnight facilities, and the existence of a poor reservoir fishery hardly seem to justify the Bureau of Reclamation calculations of 17,000 man-days of fishing per year. Coupled with a decrease in quality of downstream fishery due to peak summer flows being shifted into the prime recreation season making the stream unfishable and the reduction of average minimum flows from a historical average of 13cfs to 8cfs, there will be a considerably greater loss to recreation than has been figured in the economic analysis.

The basic economics of this project are quite suspect and open to challenge. First, the Bureau of Reclamation uses very questionable methods in arriving at their cost-benefit ratio. Beginning with a 1.02 ratio for the Bridger site in 1950 it is difficult to comprehend how the less desirable alternative of a Meeks Cabin-China Meadows project could come up with a more favorable benefit-cost ratio. This is even more true today when we know that construction costs are rising at a much greater rate than farm income. In fact, the estimated cost of the China Meadows Dam is \$5.1 million today in contrast to the \$4.7 million stated in the Draft Statement. When one considers that in recent years the actual costs of Reclamation projects have been averaging three times the estimated costs, one wonders about the true benefit-cost ratio of this project. Certainly the \$78,000 in estimated direct benefits for the China Meadows portion of the project will not show the same amount of increase. If one considers the estimated losses to recreation, fishing, wildlife, and timber of \$68,000 annually, the benefit-cost ratio drops strikingly below any acceptable figure. This does not even include such intangibles as scenic beauty, loss of wildlife habitat, and the excess value of fishing a natural trout stream over that of contemplating a fluctuating mud flat in what was once a

magnificent high mountain meadow.

The total cost of the Lyman Project will be in excess of \$16 million of which the direct beneficiaries, the irrigators, are to pay only \$2.5 million with no interest charges and a repayment period of 50 years. The public is therefore footing the bill for the remaining \$13.5 million. On the China Meadows portion, the irrigators will pay \$500,000 and the public will pay at least \$4.8 million. What will be received from our large expenditures of public funds?



With respect to the irrigation benefits, the returns are questionable. Most of the project lands are so poor that they are restricted in crop adaptability to the production of grass forage. In the project area, 60% of the serviceable lands are class 4, 30% are class 3, and only 10% are class 2. In addition, these lands are at elevations of 6,500 to 8,000 feet, where the period free from killing frost is only 90 days. A total of 1958 people live in the project area. Of that total, 1250 live on farms, and the population has gradually decreased over the past 20 years. Since only 60 families would be served by the China Meadows Reservoir, this amounts to a direct subsidy of \$80,000 per family, exclusive of interest.

This brings us to other alternatives which have not been considered, namely abandonment of the project. If China Meadows Reservoir were not built and a new contract with the water users could not be negotiated, there would probably be benefits resulting from such a situation. It would be possible to operate the Meeks Cabin Reservoir as primarily a fishing and recreation development. This would provide enhancement to the environmental and recreation benefits which could provide the basis for writing off a great portion of the money already invested. Also, the secondary benefits to the local area from tourist income might be substantial. Another possibility of abandonment might be a direct subsidy to the farmer in the form of feed for livestock or purchase of their lands with the public funds thus saved for the use of the public. No consideration of these alternatives has been offered. Since there are 10,000 acres in the project, funds available for purchase would amount to \$450 per acre. Certainly, that exceeds the fair market value of those lands.

Considering the costs involved, another reasonable alternative is abandonment of the project. This would not be without precedence if the National Environmental Policy Act is to be met. According to the now famous Calvert Cliffs decision, before environmental damage has been irreparably done by full construction of a facility, alterations in the plans must be considered even for projects approved prior to Jan. 1, 1970.

"A total reversal of the basic decision to construct a particular facility or take a particular action may then be difficult, since substantial resources may already have been committed to the project. Since NEPA must apply to the project in some fashion, however, it is essential that it apply as effectively as possible - requiring alteration in parts of the project to which resources have not yet been inalterably committed at great expense." (Calvert Cliffs decision, p. 23)

There are other points in the Calvert Cliffs decision which apply to the China Meadows proposal. On page 27 of that decision it states that, "In each individual case, the particular economic and technical benefits of planned action must be assessed and weighed against the environmental costs; alternatives must be considered which would affect the balance of values. The magnitude of possible benefits and possible costs may lie anywhere on a broad spectrum. Much will depend on the particular magnitudes involved in particular cases. In some cases, the benefits will be great enough to justify a certain quantum of environmental costs; in other cases they will not be so great and the proposed action may have to be abandoned or significantly altered so as to bring the benefits and costs into a proper balance." Obviously the proposed China Meadows Reservoir falls into the latter category.

The National Park Service stated that "Important tangible and intangible conservation and recreation values would be destroyed by the construction of China Meadows Reservoir." (Definite Project Plan for the Lyman Project). The U. S. Forest Service stated that "China Meadows is excellent moose habitat used heavily by the only moose herd in Utah." That herd is now established at over 300 head by the Utah Division of Wildlife Resources. The Forest Service went on to say that "China Meadows in its natural state is one the choicest areas in the entire North Slope country." (Definite Project Plan for the Lyman Project 1962). The Forest Service stated that the project is incompatible with their multiple-use policies and estimated that by 1975 losses to recreation and fisheries alone would amount to approximately \$66,000 per year. Obviously those figures would be larger if estimated today. Also it was stated at a meeting on Jan. 28, 1972 in the offices of the Bureau of Reclamation that the Utah Div. of Fish and Game had strongly opposed the China Meadows project because of severe damage to fish and game.

The only public meeting which has been held on this matter was at Mountain View, Wyoming, on Oct. 13, 1971. It is obvious that this meeting did not provide the opportunity for the recreational users of the area, the great majority of whom live in the Wasatch Front area, to express their views. From the roster enclosed in the Draft Statement, it can be seen that Hartt Wixom and I were the only persons other than government representatives there to represent views other than those held by water users.

At that meeting Mr. David Crandall stated that if there was enough interest indicated, another meeting would be scheduled in Salt Lake City. Mr. Wixom then requested that such a

(Continued on page 13.)

Meadows...

would not suffer from alkali dust and long, weary miles between alkaline water holes. Few stayed on in the area surrounding Jim Bridger's trading post. Those who did found the climate rigorous.

The elevation at Mountain View is 6,800 feet. The impact statement says, "The area is cool, semi-arid with freezing temperatures having been recorded in every month of the year. The average frost-free period is about 92 days. Mean annual temperature is 41 degrees with extremes ranging from 27 degrees below zero to a high of 102. High winds are common which account for high evaporation rates in spite of moderate temperatures."

Those high rates of evaporation also tend to concentrate high solutions of salts in the upper layers of the soil. Irrigation waters percolate the salts and then carry them off to the Colorado River.

The environmental impact statement points out that waters above the project area tend to be of relatively good quality. It says, "Above points of irrigation return-flow, dissolved solids in project streams range from 50 to 130 ppm. However, below the confluence of Blacks Fork and Smiths Fork, water of Blacks Fork is generally of poor quality with total dissolved solids ranging from 400 ppm to 3,200 ppm as measured by the U.S. Geological Survey at their gaging station. This confluence is below the project area and the deterioration of water quality is largely a result of return flows from irrigation."

Recent investigations have shown 3.5 million tons of salt are now going into the Colorado River from all states each year. A recent Colorado River Enforcement Conference in Denver recommended that the Bureau of Reclamation undertake a salinity-control program. The program is estimated by the Bureau to cost about \$500 million over the next 30 years. It would only be able to hold salinity at present levels. Those levels are estimated to cause \$16 million a year in damages to California and Arizona.

One of the projects proposed by the Bureau is a \$70-million effort to improve the quality of irrigation-return flows in the Grand Valley of Colorado.

The Bureau of Reclamation environmental statement says, "It is not anticipated that there would be any increase in the total annual salinity contribution to the Green River through return flows resulting from irrigation in the China Meadows service area." The Bureau supports its contention by saying that the water is only for supplemental irrigation and that there will be "improved irrigation efficiency."

No such efficiency has ever been demonstrated on any Bureau project to date, and certainly none can be expected here.

12-High Country News
Friday, May 12, 1972

Western..... Roundup

Search Is On For Rare Swift Fox

LINCOLN, Nebr. — A search is being launched in Nebraska by the Game and Parks Commission for information on the swift fox, a small canine predator that has been eliminated from much of his prairie home and may now be on the verge of extinction.

Immediate goals of the Commission project are to learn of the fox in Nebraska and to determine approximately how many still exist. The last report of a swift fox in Nebraska was one killed by a car in McPherson County in 1966.

The swift fox was recently nominated for placement on Nebraska's protected species list as endangered species. If members of the Game and Parks Commission agree, it will then receive protected status under an act of the Legislature passed in 1971.

Anyone sighting one of these rare foxes should report it to a Game Commission office in Bassett, Norfolk, North Platte, Alliance, or Lincoln. The information may also be relayed to a conservation officer or to Ross Lock, Nongame Specialist, Game and Parks Commission, P. O. Box 30370, Lincoln, Nebr. 68503.

Since manpower for the study is limited, anyone seeing what might be a swift fox should be as thorough and accurate as possible in observing the animal and making the report. Good notes from an observer will help Commission personnel eliminate false leads, which could hamper the project.

Compared to the red fox, the swift is small. Maximum weight of an adult swift is 6 pounds, while an adult red seldom weighs less than 8 pounds and often ranges to 15 pounds. Other good clues to field identification include its small size, a buff or pale yellow-brown coat, overly large ears, and a black-tipped tail. In contrast, the red fox sports a white-tipped tail. The entire top side of the grey fox's tail is black.

The swift fox prefers range country and apparently shuns croplands. His diet is believed

to consist almost entirely of small rodents and an occasional cottontail or jackrabbit. It rarely shows interest in domestic animals or fowl.

A swift fox is not as wary as his red and grey cousins. Therefore, Commission biologists theorize that poisons distributed to control coyotes may be one of the causes of his extreme scarcity.

Bison To Return

The Crow Indians will once again have bison on their reservation in Montana. A once-thriving herd was eliminated because of brucellosis. Now, the Department of Interior and Commerce have announced a \$310,000 project to reintroduce 35 head.

The money will be used to fence a 100,000-acre range, and build a corral, holding pens and other facilities for managing the animals. The buffalo will come from the Interior Department herd at Theodore Roosevelt National Memorial Park at Medora, N. D.

The buffalo will serve as a tourist attraction in conjunction with Yellowtail National Recreation Area developments.

Project Discussed

Project Wagonwheel, a proposal to extract natural gas from deep geologic formations by nuclear explosions, was soundly discussed at a meeting in Big Piney, Wyoming, April 29. The project would eventually involve thousands of acres in Wyoming's Green River Basin.

Nearly 1,000 people gathered in the small town (population 570) to hear a panel of experts discuss pros and cons of the project. Nearly five hours of discussion left some citizens as confused as before. But most were still not convinced that the project would not harm the peaceful valley.

Most damaging indictments of the project came from David M. Evans of Evergreen, Colorado, director of the Potential Gas Agency of the Colorado School of Mines, and Dr. Robert Pendleton, A Utah University radiologist.

Evans says El Paso Natural Gas Co., sponsor of the project, is talking in terms of 300 trillion cubic feet of gas from 13,000 wells.

"That's four and one-half blasts per day for 12 years," he told the group.

The test blast involves five 100-kiloton blasts fired five minutes apart. Each is expected to produce earth movement equal to five on the Richter scale.

Pendleton said even the remotest chance of release of tritium into the atmosphere would jeopardize a high-quality lifestyle. He said the earthquake effects could cause untold damage.

"Every part of the environment will be really just brutally handled," he said.



Eagle Briefs

James Vogan, the helicopter pilot who revealed mass killings of eagles in Wyoming last year, was fined \$108 in a Wyoming justice court on game violations. He was found guilty on one count of illegal possession of deer and one count of illegal transportation of a deer. The violations were alleged to have occurred during eagle shooting flights. Vogan's lawyer said the case would be appealed to district court.

A dead golden eagle found along U. S. Highway 20-26, east of Douglas, Wyoming, had a note attached. The unsigned note said, "I brought him in for you city fellows to count. You seem to take a big interest in the wildlife we ranchers raise and feed on our deeded land." Cause of death of the big bird is unknown.

Force Appointed

New Mexico Governor Bruce King has created an Energy Study Task Force. Purpose of the group is to estimate the rate of depletion of energy sources in the state, and to suggest alternative energy sources.

King appointed himself chairman with other state officials as members. He also appointed a vice president of the Southern Union Gas Co. and the president of the private citizen's Conservation Coordinating Council. The governor indicated he would make other appointments to include representatives of rural electric cooperatives and other environmental groups.

Area Proposed

Utah Representative Sherman Lloyd has announced hearings on his bill to create a Glen Canyon National Recreation Area. His proposal would coincide with the present withdrawal by executive order.

Under Lloyd's proposal, funds would be authorized for the construction of a highway from Glen Canyon City to Bullfrog Basin. Conservation groups have opposed such a highway. They have proposed an alternate which would generally make use of existing highways and would route traffic through existing towns.

Conservationists also want a two-year study of the Escalante River drainage for possible wilderness designation. A senate bill sponsored by Utah Senator Frank Moss includes such a study.

Sparring Goes On

Legal sparring still goes on in the battle to stop the Lower Teton Reservoir project in Idaho. Latest moves have come from both sides in the continuing controversy.

The Sierra Club, Trout Unlimited, and concerned individuals are trying to stop construction of the dam. Their latest move was an amended appeal aimed at gaining a "standing" in court to continue action.

Earlier the group had sought an injunction to stop construction now under way. The group maintained that construction was not being done according to the guidelines laid down in an earlier court hearing. U. S. District Judge Fred M. Taylor refused to order construction halted on April 12.

Interior Secretary Rogers Morton, Madison County, and Fremont-Madison Irrigation District have filed a counter motion to dismiss the suit. Their motion is based on the Mineral King decision which went against the Sierra Club. That decision by the U. S. Supreme Court held that the Sierra Club was not directly affected by a federal construction project.

Those opposed to the Lower Teton project have not yet appealed their case to a higher court.

In testimony before congressional appropriations committees, H. Tom Davis of Boise urged that funds for construction of the Lower Teton be denied. Davis is vice president of the Idaho Environmental Council.

Davis said the most damaging argument against the dam was on a basis of economics.



On site in the area of the Lower Teton Dam in Idaho. The Bureau of Reclamation dug seven one-acre test holes to provide for inspection of gravel. Preliminary construction work is now underway on the controversial project.



Oregon has a state wild and scenic rivers act similar to the Federal legislation that has set aside several rivers for protection including portions of Oregon's Rogue River. Known as the Scenic Waterways Act, the landmark legislation was initiated by a public petition in 1970 and passed in 1971. Like the Oregon Bike Bill of the same season (which provides 1% of the highway revenue for development and maintenance of bicycle paths), the Scenic Waterways Act is administered by the Highway Commission.

That may seem like a case of strange bedfellows, but the Highway Commission has funding through gasoline taxes, and a recent series of public hearings on rules and regulations designed to implement the bill suggests that the Highway Commission takes its responsibility seriously. (The Highway Commission also administers the state parks.)

Six Oregon rivers—or portions of them—are included in the Act as it now stands, but under section 390.855 provisions are made for "a continuing study... of additional rivers or segments of rivers" to be designated as scenic waterways. The rivers presently included are the entire Minam (which flows out of the Eagle Cap Wilderness) and portions of the Rogue, the Illinois (a tributary of the Rogue), the Deschutes and the John Day (both of which run into the Columbia), and two segments of the Owyhee, a tributary of the Snake.

The Oregon Scenic Waterways System is protected through six different designations: 1) wild river areas, inaccessible except by river or trail with related adjacent lands and shorelines essentially primitive; 2) scenic river areas, largely primitive and undeveloped except for grazing and agriculture but accessible in places by roads; 3) recreational river areas, readily accessible by road or railroad, areas that may have undergone some impoundment or diversion in the past; 4) natural river view areas, which only one bank qualifies for protection; 5) accessible natural river areas, which are readily accessible but otherwise possess the qualities of a wild or scenic areas; and finally 6) river community areas, in which development has occurred.

Patterned after the Federal Wild and Scenic Rivers Act, the Oregon System has much of the same wording, many of the same provisions. There are the scenic easements of the Federal Act. Dams are outlawed as are placering, dredging and diversions with a few built-in exceptions.

The function of the Highway Commission in the System is to "protect and enhance the values which caused such scenic waterways to be included in the system," to protect "the esthetic, scenic, fish and wildlife, scientific and recreational features."

The rules and regulations developed by the Highway Commission to implement the Act seem sound to me. At one point the Commission says: "These rules do not give to any person the right of trespass or alter the rights of private land holders in regard to trespass."

Timber harvest is allowed, but there are strict regulations regarding when and where and how the logging may occur. Farming and grazing are considered "a part of the scenic beauty of the waterway," and any change in use is subject to regulations. All prospecting and mining, dredging or quarrying operations are subject to regulations, and "the submerged and submersible lands along scenic waterways shall not be modified by placering, dredging, or by any other means."

There are restrictions for structures and buildings (muted tones, no metal siding or roofing, little or no exposed soil) and for transportation, utilities and housing. No signs or other forms of outdoor advertising are allowed, and "No dam or reservoir or other water impoundment facility shall be constructed on waters within scenic waterways."

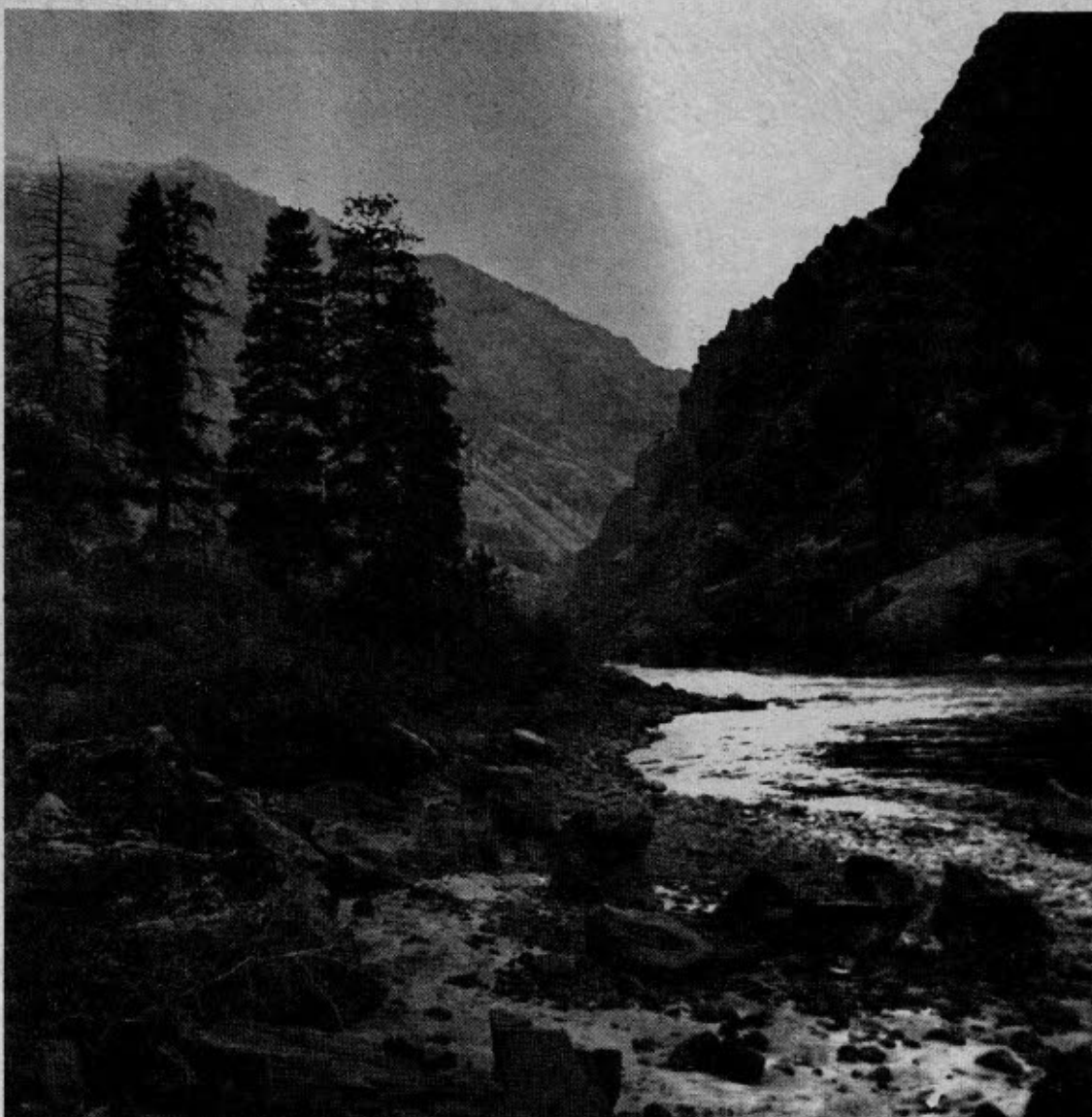
Specific segments of the rivers include the entire Minam, which heads in the Eagle Cap Wilderness and is currently under consideration for almost total inclusion in the National Wilderness System through the National Forest re-evaluation of roadless areas. The Wallowa-Whitman National Forest Supervisor has recommended a small segment of the lower Minam for addition to the Eagle Cap Wilderness, and local conservationists support an additional 55,000-acre area. Oregon Senator Mark Hatfield and Congressman Al Ullman, who represent the area, both support its inclusion as wilderness.

A 33-mile segment of the Rogue River between Grave Creek and Watson Creek has been classified wild, and a 7 1/2 mile segment below Blue Jay Creek has been classified as scenic. A 26-mile segment in Hellgate Canyon, a 10-mile stretch from Watson Creek to Blue Jay Creek, and a 7-mile stretch immediately above the Lobster Creek Bridge have all been designated as recreational. Other smaller segments have been classified as natural river view areas and as river community areas: Galice, Rogue Riffles, Burnette, Ferry Park, Peaceful Valley, Greentree, Cathcart, Agness. The Rogue, which is also partially designated wild under the Federal Act, has the most versatile designation of any of the rivers in the Oregon Scenic Waterways System.

Two segments of the Owyhee, a frequently-floated river of southeastern Oregon, have been classified as wild: the South Fork from the Idaho-Oregon border downstream 25 miles to Three Forks, where the main Owyhee forms; and

Photo by Verne Huser

High Country News-13



A stretch of Hells Canyon along the Middle Snake River below Hells Canyon Dam.

... Voice of the Citizen

meeting be held. In a letter to the Bureau of Reclamation on Oct. 28, 1971, Sherman Bloom, representing over 600 members of the Wasatch Mountain Club of Salt Lake City, requested a meeting in Salt Lake City to hear the views of the recreational users of the area. On Nov. 6, 1971, I also requested in writing that a Salt Lake City meeting be held to hear the views of the more than 600 members of the Sierra Club in Utah and the large numbers of members outside of Utah who make recreational use of the Uinta Mountains.

The above requests have not been met. Only a non-public meeting with representatives of agencies and the Bureau of Reclamation has been held. We feel that this is a violation of the intent of NEPA, since adequate opportunities for a balanced input to the environmental statement from the public has not been sought. Only the people who would directly benefit from the construction of the proposed project have been given an adequate opportunity to be heard. We feel that until a public meeting has been held in Salt Lake City where the recreational users of

Wild World...

the main Owyhee from Crooked Creek (six miles below Rome) downstream roughly 45 miles to the mouth of Birch Creek. The Deschutes and the John Day, longest of the six designated rivers, run roughly parallel northward into the Columbia in northcentral Oregon. An even hundred miles of the Deschutes from Pelton Dam to the Columbia (also a reservoir at this point) is included, 96 miles as recreational and 4 miles as river community. (The Columbia River is a series of reservoirs throughout its border length.)

The John Day is a wild river for 45 miles upstream from Highway 206 bridge over Cottonwood Canyon. Two segments of the John Day totaling 102 miles upstream and downstream from the wild river section are classified as scenic, a total of 147 miles of wild and scenic river.

Some local landowners oppose the Oregon Scenic Waterways System, and a series of public meetings and hearings have been held throughout the state. There has been a notable paucity of hearings in population centers where most of the river users live. Much of this opposition results from misunderstanding and from the closed minds of people who still live a frontier philosophy and aren't about to be told how to use their land, even if it means using it as it has always been used. The Act, however, has many built-in protections for the landowners, and many property owners along these scenic waterways—992 miles of them (both sides of the rivers)—embrace the concept of leaving their lands in their present state, protected from overdevelopment.

the area will have an opportunity to be heard along with others who have strong concerns about the quality of our environment, the requirements of NEPA will not have been satisfied.

In summary, for a number of reasons we oppose the construction of China Meadows Dam and Reservoir and feel that the Draft Environmental Statement is inadequate. First, the most economical site (as determined by the Bureau of Reclamation's 1950 feasibility study) has not been utilized and the project has undergone drastic change and expansion from that which was authorized by the Congress. Second, there has not been an adequate analysis of the costs and benefits and environmental impact of all of the alternatives. In addition, the stated benefit-cost ratio for the proposed project is subject to serious question. Third, a careful weighing of the economic benefits against the environmental costs has not been accomplished as required by NEPA. Fourth, there has not been an adequate opportunity for a balanced input to the environmental statement, since only the water users have been served by the single public meeting which has been held. Finally, it is well known that agencies of the State of Utah have been reluctant to publicly express their opposition to the project because of a fear of disrupting negotiations of a compact on the use of water in the Bear River. If such political considerations were not involved, the agencies of the State of Utah would be free to express the true strength of their opposition.

We, therefore, request that no further action be taken until a complete reappraisal of the proposed China Meadows Reservoir and all of the alternatives, including abandonment of the project, is undertaken.

Enclosed is \$10.00. Please send

High Country News

to:

Name _____

Street _____

City _____ State _____ Zip _____

If a gift, please indicate how to sign the gift card:

High Country News

Box K Lander, Wyo. 82520

14-High Country News
Friday, May 12, 1972

Thoughts

from the
Distaff Corner

By Marge Higley

I Am a River

I am a river. Wild, I flow
Through steep-walled canyons
To grasslands below.
I am born of a glacier
And nurtured by snow.

I quench the thirst of this parched land.
The blossoms burst
From desert sand
And mountain soil,
Where aspens stand.

My valley shelters elk and deer.
Wolf and coyote
Linger near,
To prey on
Smaller creatures here.

A slender weasel quickly darts
Between the rocks.
His foe departs
In silence unbroken
'Til a birdsong starts.

In shaded pool, a big trout turns
With silver flash.
The water churns
And small waves lap
At feathery ferns.

Buds open. As the leaves unfold
I reflect, like a mirror
What I behold
Of spring's pale green
Or autumn's gold.

Sometimes I flow with gentle grace
In great wide arcs.
Sometimes I race
Down rock-strewn slopes
At madcap pace.

I am a river -- wild and free.
I pray that man
Will heed the plea
To let me live.
Don't harness me!



High Country...

Furthermore, the Committee report says, "The adoption of economically more rational agricultural programs, the pricing of water closer to cost, and improved ways of handling the sale of existing water rights would greatly increase the efficiency of current water use. The political feasibility of maintaining large price and water subsidies for agriculture will be put on a free market basis. It is possible that as much as one-third of the water currently being used in irrigation in arid areas will become available for sale to expanding municipal and industrial uses."

There has to be a rethinking of the entire water picture in the West. The demands for energy in the next 25 years are going to change the maps of many states. Foremost among them are Montana and Wyoming, and possibly Colorado and Utah depending upon the necessity of developing oil shale.

A recent publication, *Appraisal Report on Montana-Wyoming Aqueducts* (Bureau of Reclamation, Billings, April, 1972), is an eye-opener. It is a report of extensive studies by the Bureau of Reclamation from 1969 through 1971 of the availability of water resources for the development of vast coal resources.

The report says, "Projected water requirements show that about 2.6 million acre-feet may be required annually to meet a development level that may be attained in less than 30 years."

There can be no doubt that the "engineering mentality" is going to be around for some time to come. We're not going to change that mentality overnight, especially when it is an essential ingredient of political pork-barrel and enormous profits.

But neither do the people of this region need to lie supinely and allow the rape of our countryside. We have the power of the ballot box and the enormous impact of a National Environmental Policy Act. We should use them both.

Most of all we need to look beyond our own selfish desires. What kind of world our children will have will depend upon what we do with ours here and now. We need to broaden our horizons and our thinking.



"In those vernal seasons of the year, when the air is calm and pleasant, it were an injury and sullenness against Nature not to go out and see her riches, and partake in her rejoicing with heaven."

John Milton: OF EDUCATION

Ecology Courses To Be Taught

BOULDER, COLORADO. The Valley Center for Ecology in conjunction with the University of Colorado's Division of Continuing Education is announcing field seminars to be given this summer at Valley Center for Ecology in Wyoming.

The Center is about 40 miles southwest of Cody on the A22 Ranch. It is located in a beautiful glacial valley along the south fork of the Shoshone River and is surrounded by the great Absaroka Range. "Rocky Mountain Ecology" will be the subject of a seminar carrying two hours credit in biology to be lead by Dr. John W. Marr from July 24-29, 1972. Emphasis will be on the dynamic processes operating to produce vegetation patterns in the regions of the area.

"Rocky Mountain Geology" will be taught by Mr. William D. Page from July 31 to August 5, 1972. The two hours credit will be in geology. Emphasis will be placed on principles and methods of interpreting geologic history and ancient environments. Considerable attention will also be given physical geologic processes exemplified in the region.

"Ecological Community Modeling", instructed by Dr. Curtis Johnson, will be held July 10-15, 1972. The purpose of this course is to help social and biological scientists understand the techniques used by mathematicians and engineers in developing community models. Everything in the environment, both natural and man-created is taken into account in creating such models. The course carries two hours credit in experimental studies.

"Field Methods for Elementary Teachers" will be held August 7-12, 1972. This seminar will deal with field studies most useful to teachers of elementary age children. It will stress both science and art activities that relate to nature and natural materials.



	High	Low	
Sun.	45	39	Drizzle
Mon.	51	38	Drizzle
Tues.	57	37	Drizzle

Last week it was so bright and pretty we could hardly wait for the weekend, so we could work in the yard, or head for the hills. But by Saturday it had started to rain, and it rained, and rained, and rained! But the air smells fresh and clean, and the grass turns greener with each shower. Trees are starting to leaf out, and there are lots of spring flowers to brighten up a dull day.

Techniques for teaching children to observe various aspects of their environment will also be studied.

For further information please contact Thorne Ecological Institute, 1229 University Avenue, Boulder Colo. 80302 tel. 303-443-4480.

Reduce the Suds

The amount of detergent phosphates entering the nation's waterways could be cut by 90 percent if people used only the amount of detergent necessary to clean clothes, not the full amount recommended by the manufacturers. According to a report in the Washington Post, October 29, Ronald O. Ostrander, who developed Tide for Proctor and Gamble, told the House Conservation Subcommittee that one-tenth the recommended level of Tide will give "clean, bright, sanitary laundry with minimum of color fading and loss of fabric tensile strength." Ostrander implied that manufacturers recommend more detergent than necessary to please housewives who like billowing suds and to increase detergent sales.

ENVIRONMENT Dec. 1971

Coalition...

Rockefeller's estimates, Diamond said, were based on the costs of cleaning up not only industrial and municipal wastes, but agricultural and storm drain runoff wastes, items not covered by the federal legislation.

Both Russell Train, head of the Council on Environmental Quality, and William D. Ruckelshaus, head of the Environmental Protection Agency, said their objections to the Senate version of the bill resulted from their questioning of its economic impact and the technological practicality of achieving zero discharge. A White House spokesman took the same line, "We don't believe we should mislead the public by promising too much."

Rep. Edward J. Roush, D-Ind., a supporter of the so-called clean water amendments designed to beef up the House bill, said, "one thing that can't be overlooked is that, weak as it is, the bill itself is quite a document, quite a step forward." Trousell of the Manufacturers' Association agrees: "This thing is no cream puff. We don't like it, but we think we've done as well as we're going to do."

The significant thing about both bills is that they shift the focus away from water quality standards and toward regulating discharges at their sources.

The problems facing the conference committee are such that Friends of the Earth fears there will be no bill at all. Trousell suggests that both houses will reach an agreement "because this is an election year and it wouldn't look very good if they didn't." Others, like Reid, say local and state officials, eager for sewer construction money will force passage.

Environmental Eavesdropper

LOONEY LIMERICKS

by Zane E. Cology

Lake Havasu's bridge, brought from London Town
Gives Arizona a bridge of renown.
But as Lake Powell rises,
There have been surmises
That their OWN Rainbow Bridge might fall down!

The California Coastal Alliance has pointed out that California's public beaches have shrunk from 1,062 miles to 200 in a 200-year span. The Alliance is working to create a Coastal Zone Commission to try to save what is left.

Federal standards relating to release of human wastes from boats have just been drastically weakened. The downgrading of standards came in response to a flood of protests from boat owners. The proposed standards were designed to prevent boat wastes from making lakes and rivers too filthy for swimming.

A National Floodplain Policy has been introduced into legislative hoppers by Congressman Ben Blackburn. H.R. 13206 would establish policy and authorize the Secretary of the Interior, in cooperation with federal agencies and the states, to encourage the dedication of the nation's floodplains as natural floodways to protect, preserve, and restore their natural functions and resources.

The U. S. Department of Agriculture has announced 12 states will participate in a new Water Bank program. It is aimed at helping to preserve wetland habitat in areas where it is rapidly disappearing. North Dakota will have 15 counties participating, while South Dakota will have 12 and Montana, 6.

Officials from 30 countries recently met in Iceland to discuss plans for halting pollution of the open seas. Dr. Gordon MacDonald of the Council on Environmental Quality led the U.S. delegation at the closed-door conference. The meeting was to draft a convention on ocean dumping, main source of pollution.

General Electric Corporation has announced plans for an experimental plant to convert animal feedlot manure into a high-protein dietary supplement for animals. The plant, to be built at Casa Grande, Arizona, could also utilize other diodegradable wastes such as sawdust, wastes from rice, sugar, pineapple, straw or grain processing, and sulfite waste liquors. The process utilizes "heat loving" bacteria to convert cellulose and lignin. It eventually may be used to convert wood, paper, and human wastes into valuable commodities.

The University of Illinois has announced a Japanese firm may manufacture a DDT substitute developed by University researchers. The new material has all of DDT's assets without the undesirable side effects on other life forms. U.S. Department of agriculture officials have also announced successful tests on a DDT substitute. It is labelled SBP-1390, a derivative of pyrethrum which is a natural insecticide in some plants. The new chemical does not persist in the environment, nor do insects build up resistance to it.



...of Books and Art

High Country News-15
Friday, May 12, 1972



A scene along the Middle Snake River near Hells Canyon, from the book SNAKE RIVER COUNTRY.

For the Love of a River...

SNAKE RIVER COUNTRY, by Bill Gulick, 196 pages, Caxton Printers, Ltd., \$30.00.

Reviewed by Pat Hall

Since Time began, men have sung the praises of rivers. For a river, after all, is inland Man's umbilical cord to Mother Sea.

"Take almost any path you please," wrote Herman Melville, "and ten to one it carries you down in a dale and leaves you there, by a pool in the stream. There is magic in it."

Author Bill Gulick has followed Melville's advice. His "path" begins near Two Ocean Pass, in Wyoming, where the winding Snake River is born.

But Gulick's trek through SNAKE RIVER COUNTRY doesn't leave the reader "by a pool in the stream." It is rather, a journey through both time and space.

There is very little reverie in Gulick's narrative. It is filled with action - Indian fights, explorations, the discovery of gold - as befits a river as active and filled with life as the Snake. And there is magic in that, too.

Bill Gulick first became interested in the Snake River in 1945, when a train trip carried him along its banks briefly. Then a regular contributor to many national magazines, Gulick became so intrigued with the Snake that he moved west in 1951 and settled near its mouth. Six of his 15 books have been based on the colorful past and present of Snake River Country and its people. Two of them, "The Hallelujah Trail" and "Bend of the River" have been translated into motion pictures.

SNAKE RIVER COUNTRY is illustrated by 106 superbly printed color photographs by Earl Roberge, though in all honesty I believe the concept of the photos to be somewhat pedestrian. The book design, reproduction and binding are in keeping with the high quality of workmanship the reading public has come to expect from Caxton Printers. This Caldwell, Idaho, publishing company maintains a standard of printing excellence that is demanded by the very name of their firm.

"A great river influences the lives of people in its watershed," Gulick writes in the introduction, "just as the acts of those people influence the life of the river." This point is made time and again throughout the book as Gulick follows the Snake through recorded history. It was a River of Exploration until 1813 - a River of Empire from 1813 through 1830. Other periods in the eddies and currents of time show the Snake to have been a river of settlement, treasure, life, transport and power.

Today, the Snake is a River of Controversy, sparked by Pacific Northwest Power's proposed Hell's Canyon Dam and the resultant public outcry against it. Environmentalists claim Hell's Canyon is one of only two wild stretches of the Snake where the river still runs as free as it did before the White man.

Hell's Canyon has become a rallying point for conservationists from all over the country. The matter has gone as high as the Supreme Court where Justice William O. Douglas wrote the majority opinion in 1967 about a dam in Hell's Canyon: "The test is whether the project will be

in the public interest."

The only other wild stretch of the Snake lies in Wyoming "where for twenty-five miles or so from the mouth of the Hoback to the Idaho border the Snake still tumbles beautiful and free through a fearsome gorge."

Wyoming residents and officials have opposed a dam suggested here by the Bureau of Reclamation, three miles upstream from the Idaho border. Such a dam would, of course, destroy the free-flowing beauty of the Snake as it rambles through the Jackson Hole country.

"The forces determined to tame it once and for all are formidable," Gulick writes about the Snake, "but for the first time in its long history... it has staunch, able defenders sitting at its table in court."

Gulick points out that the greatest problem in Snake River Country may be the pollution of rivers and streams from chemicals and fertilizers used to enhance the fertility of the irrigated land. Paradoxically, the Snake itself whose waters have made livable the desert country around it, may now be polluted by land which, in its turn, was unlivable desert before man used the Snake to turn it into "incredible fertility."

Author Gulick makes no preachment for saving the environment in this book. At least, not in that many words. He tells the story of SNAKE RIVER COUNTRY well and steers clear of the white water of controversy. But no man who loves a river as Bill Gulick does the Snake can help but make his point, and that point is better made with love than preachment.

"Nothing on the face of the earth is as fascinating as a living river. To live, it must run free. So 'balanced use' to me means that a portion - preferably several portions - of the Snake must be left in a natural state forever."



Read About Conference

The United Nations Conference on the Human Environment is scheduled for June 5-16 in Stockholm, Sweden. In anticipation of the conference, the Conservation Foundation has prepared a series of five booklets on MAN'S HOME. The booklets were prepared in cooperation with the Secretariat of the U. N. Conference of the Human Environment.

The series is intended to provide the layman with a general understanding of major environmental issues that will be discussed at Stockholm. Some 1200 delegates and advisors from 131 countries are expected to participate. The task will be to advance actions at the international and national levels which, taken collectively, could establish wise stewardship of this small planet and its delicately balanced life support systems.

The set of five booklets may be obtained for \$1.00 from the United Nations Sales Section, U. N. Headquarters, 42nd St. and 1st Ave., N. Y., N. Y. 10017.

16-High Country News
Friday, May 12, 1972

Photo by Jeff Clack



A girl and her horse on a summer swim. Nona Schrader of Lander, Wyoming, took her horse into the deep waters of the Big Sandy River on the Bridger National Forest. Rivers

and lakes of the West are important for many kinds of recreation, not the least of which is swimming by man and beast.

Fly Fish the South Fork of the Shoshone

Back in March, I wrote that we would try to run some fun-articles. Since then, I have had response from readers as well as some of our correspondents. So there will be up-coming articles on rockhunting, back-packing, camping, fishing, and so on.

To initiate such articles, reader Dick Withington of Birmingham, Michigan, has indicated what he would like to see by writing an article on fishing. Reader Withington's article is on Wyoming's South Fork of the Shoshone River, west of Cody. Our readers would also be interested in an article on fishing the North Fork of the Shoshone in the current issue, May, 1972 Wyoming Wildlife Magazine (Box 1589, Cheyenne, Wyoming 82001, 35 cents per single copy). U.S. Highways 14-16-20 between Cody and Yellowstone National Park parallel the North Fork for some 30 miles.

The editor.

by Dick Withington

Lots of trout and scenery; little pressure or publicity. That's the story of this sporty Wyoming "sleep-er" that rates as one of the "great" unknowns among western trout streams and a flyfisherman's "Camelot."

From its headwaters on the eastern slope of the Continental Divide (near the southeast corner of Yellowstone Park), the South Fork angles 50 miles northeastward to Buffalo Bill reservoir, 7 miles west of Cody, Wyoming.

The "Cody Country" valley through which it flows provides an awesome "wide-screen" backdrop of assorted butte-topped and jagged-peaked mountains ranging up to 13,000 feet.

A paved road follows the stream for the first 17 miles or so above the reservoir, then gives way to two gravel roads that flank the river for about another 10 miles.

In the stretch accessible by road, the South Fork varies from 30 to 60 feet in width, with a depth easily wadable in most locations. Extremely wide and brush-free shoulders leave lots of room for

backcasting.

A "just-right" gradient results in a virtually unbroken sequence of productive riffles, pools and runs in the manner of eastern trout streams, yet the current is definitely "western"—fast enough to keep the trout from being too critical about the flies drifted over them.

The lower stretch of the river holds Browns up to 18 inches, but your catch will consist mainly of rainbows, cutthroat and browns in the 10 to 12 inch range, with enough 14-17 inch browns and rainbows to keep things exciting. Natives tell of 5 and 6 pound browns caught on bait and sculpin-imitation flies, and the ever present whitefish are plentiful to the point of becoming a nuisance at times.

From the end of the road that parallels the east side of the stream, a trail leads to a meadow area good for more 10 to 13 inch rainbows and cutts, with larger 14-16 inch cutts available for those willing to follow rough trails up Clark Fork and East Fork tributaries.

Along the lower stretches of the river, the sight of old "junkie" cars occasionally used to line the bank as an erosion control measure detracts somewhat from the spectacular scenery. But this aesthetic drawback becomes unimportant the first time a 15-inch brown darts out of a car trunk to slam your passing Muddler Minnow.

Excepting a couple of public access areas near the end of the road, the lower stretches of the South Fork flow through private land where a polite request stands a good chance of receiving a friendly "sure". The meadow stretches accessible by trail are on government land in the Shoshone National Forest.

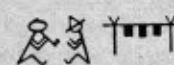
Game is abundant along the entire length of the stream. As hunting season approaches, you will pass mailmen, linemen and road workers pausing to "glass" the game with binoculars. Take time to do the same and you'll see herds of antelope as large as 20 to 30 browsing in security on a ranch hillock. With the upper meadow stretches rated excellent for elk, you also might come across a pack train winding its way back to the road with a trophy.

LOCATION: Southwest of Cody, Wyoming, about 40 miles east of Yellowstone National Park. Frontier Airlines flies into Cody from Billings and Denver. Rental cars available at airport.

PLACES TO STAY: Ample supply of motels, hotels and restaurants in Cody to handle Yellowstone Park traffic. Many campgrounds along Highway 14-16-20 between Cody and Yellowstone Park.

LOCAL INFORMATION: Shoshone National Forest Supervisor's Office in Cody. Cody sporting goods stores.

FLIES: Hairwing Royal Coachman, Black Wulff, Adams, Renegade, Nearnuff, Blue Quill, Muddler Minnow, sculpin imitations such Spuddler, Whitlock Sculpin, etc.



Degraded Air

The once high air quality of the Southwest "will be increasingly and significantly degraded" by projected electric power plants in a four-state area according to a study prepared by the Environmental Protection Agency.

"If present emission - control technology is projected into the future, ambient (national) air-quality standards for SO₂ (sulfur dioxide) and NO_x (nitrogen oxides) can be expected to be violated soon at several locations, causing threats to human health, terrestrial biota, and surface water quality," says the report. It is part of a "Southwest Energy Study" ordered by Interior Secretary Rogers Morton in May, 1971.

A news release prepared by the Office of Air Programs at the time the study was submitted a month ago was squelched. No one will say who killed it and an EPA official refused to say if it was done because of pressure from the Interior Department.

Projections are for the power plants to be generating some 30,352 megawatts by 1990. The North Central Power Study in Montana and Wyoming is projected to produce some 53,000 megawatts.